## TUESDAY, JULY 11, 2017  
### MEETING AGENDA

Landon State Office Bld.  
900 SW Jackson St.  
Board Room, Ste 102  
Topeka, KS 66612

**AI**—Action Item  
**RI**—Receive Item, for possible action at a future date  
**DI**—Discussion Item  
**IO**—Information Only

### 10:00 a.m.
1. Call to Order  
2. Roll Call  
3. Mission Statement, Moment of Silence and Pledge of Allegiance  
   (AI) 4. Approval of Agenda  
   (AI) 5. Approval of June Minutes

### 10:05 a.m.
6. Commissioner’s Report  
7. Citizens’ Open Forum

### 10:30 a.m.
8. Update on Transition to College Algebra Pilot

### 10:45 a.m.
9. Act on Kansas curricular standards for World Language

### 11:05 a.m.
10. Act on higher education educator preparation program standards for Elementary Education K-6

### 11:15 a.m.
11. Discuss establishment of Kansas State Board of Education school mental health advisory council

### 11:30 a.m.
Break

### 11:40 a.m.
12. Receive recommendation from Coalition of Innovative School Districts for issuing Specialized Certificate for USD 364 Marysville

### Noon
Lunch  
*(Board Policy Committee will meet in Conference Room 600 North)*

### 1:30 p.m.
13. Receive Science assessment performance levels and cut scores

### 1:40 p.m.

### 2:00 p.m.
15. Receive recommendations of the State Board Policy Committee

### 2:10 p.m.
16. Discuss 2018 and 2019 State Board meeting dates
Break

3:05 p.m.  (IO)  17. Legislative Matters  page 221

3:35 p.m.  18. Consent Agenda

Routine Items

- (RI) a. Receive monthly personnel report  page 223
- (AI) b. Act on personnel appointments to unclassified positions  page 225
- (AI) c. Act on higher education program approval recommendations of the Evaluation Review Committee  page 227
- (AI) d. Act on recommendations of the Licensure Review Committee  page 239
- (AI) e. Act on recommendation for funding a new Kansas 21st Century Community Learning Center for 2017-18  page 243
- (AI) f. Receive and act on proposed grant awards for the Kansas Parent Educator Program for FY 2018  page 245
- (AI) g. Receive and act on proposed Early Learning Preschool Aged At-Risk slots for FY 2018  page 247
- (AI) h. Act on Charter School renewals  page 249
- (AI) i. Act on recommendations for Visiting Scholar licenses  page 251
- (AI) j. Act on school district applications for 2017-18 Extraordinary Need State Aid  page 257
- (AI) k. Act to reallocate funds from the federal IDEA Part D State Personnel Development Grant  page 259
- (AI) l. Act to continue a contract with Smoky Hill Education Service Center for professional learning services  page 261
- (AI) m. Act on vendor contract for providing kindergarten entry snapshot tool
- (AI) n. Authorize out-of-state tuition contracts for students attending Kansas State School for the Deaf for the 2017-18 school year  page 265
- (AI) o. Authorize out-of-state tuition contracts for students attending Kansas State School for the Blind for the 2017-18 school year  page 267
- (AI) p. Authorize KSSB contract renewal with Providence Medical Center for physical and occupational therapy services  page 269
- (AI) q. Authorize KSSB contract renewal with Baer Wilson and Company, LLC, for counseling/evaluation services  page 271
- (AI) r. Authorize KSSB contract with USD 500 Kansas City Kansas Public Schools to use KSSB facilities for Head Start classrooms  page 273

3:45 p.m.  (IO)  19. Board Reports and Requests for Future Agenda Items  page 275

4:30 p.m.  (AI)  20. Act on Board Travel  page 277

4:45 p.m.  RECESS
WEDNESDAY, JULY 12, 2017
MEETING AGENDA

Landon State Office Bld.
900 SW Jackson St.
Board Room, Ste 102
Topeka, KS 66612

AI—Action Item
RI—Receive Item, for possible action at a future date
DI—Discussion Item
IO—Information Only

9:00 a.m.
1. Call to Order
2. Roll Call
(AI) 3. Approval of Agenda

9:05 a.m.
(RI) 4. Receive Kansas curricular standards for Mathematics page 273

9:25 a.m.
(IO) 5. Information on Kansans Can vision outcome: postsecondary completion/attendance page 375

11:00 a.m.
(DI) 6. Tentative continued work session discussion led by Chair and Vice Chair

ADJOURN

Next Meeting: Aug. 8 and 9 in Topeka
MISSION
To prepare Kansas students for lifelong success through rigorous, quality academic instruction, career training and character development according to each student's gifts and talents.

VISION
Kansas leads the world in the success of each student.

MOTTO
Kansans CAN.

SUCCESSFUL KANSAS HIGH SCHOOL GRADUATE
A successful Kansas high school graduate has the
- Academic preparation,
- Cognitive preparation,
- Technical skills,
- Employability skills and
- Civic engagement
to be successful in postsecondary education, in the attainment of an industry recognized certification or in the workforce, without the need for remediation.

OUTCOMES FOR MEASURING PROGRESS
- Social/emotional growth measured locally
- Kindergarten readiness
- Individual Plan of Study focused on career interest
- High school graduation rates
- Postsecondary completion/attendance
CALL TO ORDER
Chairman Jim Porter called the monthly meeting of the Kansas State Board of Education to order at 10 a.m. Tuesday, June 13, 2017, in the Board Room at the Landon State Office Building, 900 S.W. Jackson St., Topeka, Kansas. He welcomed everyone and made brief announcements.

ROLL CALL
All Board members were present:
John Bacon  Jim McNiece
Kathy Busch  Jim Porter
Sally Cauble  Steve Roberts
Deena Horst  Janet Waugh
Ann Mah  Ken Willard

STATE BOARD MISSION STATEMENT, MOMENT OF SILENCE AND PLEDGE OF ALLEGIANCE
Chairman Porter read both the Board’s Mission Statement and Kansans Can Vision Statement. He then asked for a moment of silence after which the Pledge of Allegiance was recited.

APPROVAL OF AGENDA
Mrs. Busch moved to approve the Tuesday agenda. Mrs. Horst seconded. Motion carried 9-0-1 with Mr. Roberts abstaining.

APPROVAL OF THE MAY MEETING MINUTES
Mr. Willard moved to approve the minutes of the May Board meeting. Mr. McNiece seconded. Motion carried 9-0-1 with Mr. Roberts abstaining.

COMMISSIONER’S REPORT
Commissioner Randy Watson provided an update on Kansas’ application for its state plan as required by the Every Student Succeeds Act (ESSA). The application is expected to be posted online for public comment in July and submitted to the US Department of Education in September. There were questions about the makeup of the agency’s ESSA Advisory Council. Dr. Watson also discussed the School Redesign Project. Aug. 1 is the deadline for demonstration school applications to be submitted. In addition, he announced the two individuals who will be working with schools selected to participate in the project — Tammy Mitchell (elementary) and Todd Wiedemann (secondary). He asked Board members to encourage districts in their areas to consider applying. The redesign project’s study and learn phase will be in 2017-18 followed by the launch phase.

CITIZENS’ OPEN FORUM
Chairman Porter declared the Citizens’ Forum open at 10:34 a.m. Speakers and their topics were: Emma Baker, Rose Hill — recommendation to add CPR certification as a high school graduation requirement; Leah Fliter, Kansas Association of School Boards — cuts to Medicaid reimbursement for in-school services; Janice Smith, Children’s Cabinet Trust Fund — school district partnerships and promotion of redesign project. Chairman Porter declared the Citizens’ Forum closed at 10:44 a.m.

RECEIVE HIGHER EDUCATION PROGRAM STANDARDS FOR ELEMENTARY EDUCATION K-6
Dr. Amy Hogan, Ottawa University, represented the committee reviewing the educator preparation program standards for Elementary Education K-6. These content standards help establish what is
taught in higher education teacher preparation programs. Board members received draft revised standards for review, the previous standards and a comparison of the two versions. Dr. Hogan highlighted recommended revisions. Discussion followed about grade divisions of students, licensure levels, consideration of English as a Second Language training, and a suggestion to use the term post-secondary instead of college. The Board is expected to vote on the standards in July.

RECOMMENDATION ON CULTURAL DIVERSITY AND ETHNIC STUDIES

State Representatives John Alcala and Valdenia Winn were present to discuss draft legislation (House Bill 2207) that addresses instruction on ethnic studies in Kansas classrooms. They outlined a proposed Ethnic Studies Curriculum Development Project that would bring scholars together to create curriculum guides aligned to the current standards and the Rose Standards, lesson plans and assessment tools for use with grades 7-12. Christina Valdivia Alcala assisted with the presentation. Discussion followed about funding, training and the need to include all cultural backgrounds. More information on refinement of the curriculum development project is expected later in the fall.

BREAK

Board members took a break until 11:45 a.m.

RECOGNITION OF SUPERINTENDENT AND PRINCIPALS OF THE YEAR

Deputy Commissioner Dale Dennis introduced the Kansas Superintendent of the Year and Principals of the Year as selected and recognized by their peers. Each honoree briefly shared with the Board about special activities and programs occurring in their schools. These included Chamber of Commerce members adopting a class, self-directed professional development, individual learning plans, and addressing the social-emotional needs of students. All speakers praised the work of their teachers, staff and students.

The recipients are: Sue Givens, Superintendent at El Dorado USD 490, the 2017 Kansas Superintendent of the Year as named by the Kansas School Superintendents Association; Britton Hart, Principal at Emporia High School (Emporia USD 253), the 2016-2017 Kansas High School Principal of the Year as named by the Kansas Association of Secondary School Principals; Terrell Davis, Principal at Truesdell Middle School (Wichita USD 259), and Tony Helfrich, Principal at Liberty Middle School (Pratt USD 382), both 2016-2017 Kansas Middle School Principals of the Year as named by the Kansas Association of Middle School Administrators; and Dana Sprinkle, Principal at Ell-Saline Elementary School (Ell-Saline USD 307), the 2017 National Distinguished Principal of the Year as named by the Kansas Association of Elementary School Principals.

LUNCH

Following photos with the honorees, Chairman Porter recessed the meeting for lunch at 12:35 p.m. The Board’s Policy Committee met during this time.

ACTION ON 2017-18 ASSESSMENT CONTRACT RECOMMENDATION

Chairman Porter called the afternoon session to order. Deputy Commissioner Brad Neuenswander summarized the history of state assessment services, options for administering, national assessment issues and long-term considerations. Mrs. Cauble moved to approve a 2017-18 assessment contract with the Center for Educational Testing and Evaluation for an amount not to exceed $6 million. Mrs. Horst seconded. During discussion, Board members’ questions included the topics of interim assessments, privacy laws with student data, system testing capacity levels and assurances. Chairman Porter called for the vote. Motion carried 10-0.

PRESENTATION ON EDUCATIONAL USE OF UNMANNED AIRCRAFT SYSTEMS

Board members received a presentation on how Unmanned Aircraft Systems (UAS), better known as drones, can be used as a creative tool for learning. Agriculture education instructors Paul Lierz, USD 335, and David Holliday, USD 232, talked about drone facts, aviation regulations, technology in agri-
culture and ethics of use. Bob Brock, Director of UAS with the Kansas Department of Transportation, spoke about safety, privacy, standardizing curriculum programs and opportunities for drone business growth in Kansas.

Board members took a 10-minute break at 3:37 p.m.

**ACTION ON RECOMMENDATIONS FROM COALITION OF INNOVATIVE SCHOOL DISTRICTS FOR ISSUING 2017-18 SPECIALIZED CERTIFICATES**

USD 364 Superintendent Bill Mullins, who chairs the Coalition of Innovative School Districts, asked for Board approval on 16 applications for Specialized Certificates. The applicants are all for USD 500 Kansas City Kansas and were presented for consideration at the May State Board meeting. The Specialized Certificate is effective for one year. Once approved, the Coalition member district may hire the individual as a non-licensed professional employee. Mrs. Waugh moved to approve the Specialized Certificate applications as presented for use in USD 500 Kansas City Kansas. Mrs. Busch seconded. Motion carried 10-0.

**INFORMATION ON COMPREHENSIVE SCHOOL MENTAL HEALTH FRAMEWORK**

Director Colleen Riley provided a preview of the next day’s work session to discuss the vision outcome on students’ social-emotional growth. She began with a chronological overview of regulations and statutes related to this topic. A focus of the work session will be creation of an integrated, comprehensive school mental health framework to include meeting requirements of relevant legislation, such as Senate Bill 367 and House Bill 2408. In addition, discussions will occur on building resource partnerships. Discussions are timely since the 2012 social-emotional character development standards are due for review soon. Members stressed the importance of communicating with legislators.

**ACTION ON APPOINTMENTS TO SPECIAL EDUCATION ADVISORY COUNCIL**

Colleen Riley presented the recommendations for three new appointments and four reappointments to serve on the Special Education Advisory Council (SEAC). One of the major functions of the SEAC is to serve as a liaison between the statewide populace and the Kansas State Board of Education. Mr. McNiece made the motion, which was read for the record by Mrs. Cauble, to reappoint Joan Macy, Kathy Kersenbrock-Ostmeyer, Dr. Marcy Aycock and Dr. Marvin Miller for their second three-year terms, and to appoint Laura Thompson, Kelly McCauley and Chelle Kemper to the Special Education Advisory Council for their first terms, all to run from July 1, 2017 through June 30, 2020. Motion carried 10-0.

**ACTION ON NEGOTIATED AGREEMENT WITH KANSAS STATE SCHOOL FOR THE DEAF NEA**

Board Attorney Mark Ferguson presented the negotiated Professional Agreement between the Kansas State School for the Deaf NEA and the Kansas State Board of Education. He reported that the document reflects minimal substantive changes. Mrs. Waugh moved to adopt the Professional Agreement between the Kansas State School for the Deaf NEA and the Kansas State Board of Education for the term Aug. 1, 2017 to July 31, 2018. Mrs. Busch seconded. Motion carried 10-0.

**LEGISLATIVE MATTERS**

Deputy Commissioner Dale Dennis addressed several areas of legislative action affecting education. He began by highlighting major policy provisions of Senate Bill 19, the proposed school finance plan, in addition to providing the committee report on the bill. Mr. Dennis provided information on issuance of bonds and criteria for bond election approval. Other handouts and discussions focused on changes to rules for working after retirement, guideline updates to the Kansas At-Risk Pupil Assistance Program including the definition of an at-risk student, and the appropriated amount of funds allotted for districts with extraordinary need due to declining enrollment. A question and answer period followed.
EXECUTIVE SESSION

Mrs. Busch moved to enter into Executive Session for 10 minutes for the purpose of discussing personnel matters of non-elected personnel in order to protect the privacy interests of the individual(s) to be discussed. The session would begin at 5:20 p.m. following a 10-minute break. Commissioner Watson and Wendy Fritz were invited to join the session. Mrs. Cauble seconded. Motion carried 10-0.

The Board returned to open session at 5:30 p.m.

ACTION ON RECOMMENDATION FOR INTERIM SUPERINTENDENT OF KANSAS STATE SCHOOL FOR THE DEAF AND KANSAS STATE SCHOOL FOR THE BLIND

A series of motions followed the executive session. Mrs. Busch moved to confirm the recommendation of Ms. Luanne Barron as Interim Superintendent to serve the Kansas State School for the Deaf, effective July 1, 2017, at a salary of $106,000. Mr. Bacon seconded. Motion carried 10-0.

Mrs. Busch moved to confirm the recommendation of Mr. Jon Harding as Interim Superintendent to serve the Kansas State School for the Blind, effective July 1, 2017, at a salary of $106,000. Mrs. Waugh seconded. Motion carried 10-0.

Mrs. Busch moved that the Interim Superintendents work together and with the Kansas Association of School Boards to bring back to the Kansas State Board of Education, no later than December of 2017, recommendations on administrative structures to serve both schools now and in the future. Mrs. Horst seconded. Motion carried 10-0.

CONSENT AGENDA

Mr. McNiece moved to approve the Consent Agenda as presented. Mr. Willard seconded. Motion carried 9-0-1 with Mr. Roberts abstaining. In the Consent Agenda, the Board:

- received the monthly Personnel Report for May.
- confirmed unclassified personnel appointments of Amanda Sales as Communications Specialist serving the teams of Communications and Recognition plus Child Nutrition and Wellness, effective May 24, 2017, at an annual salary of $53,414.40; and Kelly Steele as Education Program Consultant on the Early Childhood, Special Education and Title Services team, effective May 30, 2017, at an annual salary of $56,118.40.
- approved maintaining the current educator licensure fees for 2017-18, effective July 1, 2017.
- issued Calendar Year 2017 licenses to two commercial driver training schools — BuckleUp School, LLC, Lawrence, and EcoDriver School, Lenexa.
- issued a 2017 license to Behind the Wheel Defensive Driving School, effective from the date of approval through Dec. 31, 2017.
- approved IDEA Title VI-B Special Education Targeted Improvement Plan grants for 2017-18 as follows: USD 115 Marshall/Nemaha $16,675; USD 202 Turner School District $31,443; USD 207 Ft. Leavenworth $14,386; USD 229 Blue Valley $118,200; USD 230 Spring Hill School District $12,761; USD 231 Gardner-Edgerton-Antioch School District $21,887; USD 232 De Soto $29,134; USD 233 Olathe School District $145,814; USD 234 Ft Scott $18,986; USD 244 Coffey County SpEd Coop - Burlington $17,741; USD 253 Flint Hills SpEd Coop - Emporia $60,213; USD 259 Wichita Public Schools $346,381; USD 260 Derby Public Schools $50,609; USD 261 Haysville Public Schools $33,813; USD 263 Mulvane Special Education $18,094; USD 273 Beloit SpEd Coop $22,801; USD 282 West Elk $17,225; USD 290 Ottawa Public Schools $19,229; USD 305 Central
Kansas Coop - Salina $111,383; USD 308 Hutchinson Public Schools $42,846; USD 320 Special Svcs Coop Wamego $25,870; USD 321 Kaw Valley Schools $12,978; USD 330 Mission Valley $10,865; USD 333 Learning Coop North Central KS $35,407; USD 336 Holton SpEd Coop $30,887; USD 345 Seaman Public Schools $25,035; USD 353 Wellington Public Schools $16,708; USD 364 Marshall County Coop - Marysville $14,402; USD 368 East Central KS SpEd Coop - Paola $69,962; USD 372 Silver Lake $11,420; USD 373 Harvey County SpEd Coop - Newton $39,845; USD 379 Twin Lakes Coop - Clay Center $26,142; USD 383 Manhattan-Ogden School District $43,550; USD 389 Eureka $12,315; USD 405 Rice County Sp Svc Coop - Lyons $22,084; USD 407 Russell County $13,693; USD 409 Atchison Public Schools $20,908; USD 418 McPherson Co SpEd Coop - McPherson $38,785; USD 428 Barton County SpEd Coop - Great Bend $39,231; USD 437 Auburn-Washburn $37,066; USD 450 Shawnee Heights $25,193; USD 453 Leavenworth- Lansing $24,953; USD 457 Garden City $77,319; USD 458 Basehor-Linwood $17,283; USD 465 Cowley County Sp Svc Coop - Winfield $53,477; USD 469 Lansing $19,440; USD 475 Junction City/Geary County $48,398; USD 480 Liberal $31,084; USD 489 Hays West Central KS SpEd Coop - Hays $34,343; USD 495 Tri County Sp Svc - Larned $17,136; USD 497 Lawrence $75,744; USD 500 Wyandotte County SpEd Coop $175,158; USD 501 Topeka Public Schools $133,195; USD 512 Shawnee Mission $211,822; DO 602 NW KS Svc Center - Oakley $57,642; DO 603 ANW Coop - Humboldt $54,770; DO 605 South Central KS SpEd Coop - Pratt $64,064; DO 607 Tri County SpEd Coop - Independence $71,872; DO 608 NE KS Svc Center - Lecompton $43,710; DO 610 Reno County Coop - Hutchinson $41,148; DO 611 High Plains Coop - Ulysses $75,601; DO 613 SW Area Coop - Ensign $76,691; DO 614 East Central KS Coop - Baldwin City $27,097; DO 615 Brown County SpEd - Hiawatha $20,703; DO 616 Doniphan County SpEd Coop - Bendena $15,426; DO 617 Marion County SpEd Coop - Florence $26,637; DO 618 Sedgwick County - Goddard $117,123; DO 619 Sumner County Interlocal - Wellington $19,012; DO 620 Three Lakes Coop - Lyndon $33,019; DO 636 NCK Special Ed Coop - Glade $37,736; DO 637 SEK Interlocal - Pittsburg $95,872; DO 638 Butler Co SpEd Interlocal - El Dorado $96,827; SO 319/DO 629 Kansas Juvenile Correctional Complex $16,434; SO 507/DO 609 Parsons State Hospital $3,705; SO 525/DO 609 KS State Penitentiary $3,006; SO 604 KS School for the Blind $5,300; SO 610 KS School for the Deaf $10,235. Total funding: $3,635,949.

- approved recommendations for funding of the Migrant Family Literacy Grants for 2017-18 as follows: USD 102 Cimarron $78,000; USD 214 Ulysses $50,000; USD 215 Lakin $70,136; USD 218 Elkhart $72,000; USD 219 Deerfield $72,000; USD 221 Elkhart $22,059; USD 445 Coffeyville $20,000; USD 457 Garden City $75,153; USD 500 Kansas City $75,000; Johnson County Community College $125,000. Total funding: $587,348.

- approved recommendations for funding the Kansas 21st Century Community Learning Centers Continuation Grants for 2017-18 as follows: USD 108 Washington County $125,000; USD 210 Hugoton $75,000; USD 214 Ulysses $74,978; USD 218 Elkhart $75,000; USD 244 Burlington $74,001; USD 252 Southern Lyon $124,949; USD 257 Iola (Jefferson) $75,000; USD 261 Haysville (Middle School) $73,000; USD 282 West Elk $119,120; USD 352 Goodland $74,945; USD 374 Sublette $87,590; USD 379 Clay County (Lincoln/Garfield) $75,000; USD 383 Manhattan-Ogden (Bergman) $75,000; USD 383 Manhattan-Ogden (Ogden) $75,000; USD 386 Madison-Virgil $94,329; USD 435 Abilene $75,000; USD 443 Dodge City $99,980; USD 445 Coffeyville $75,000; USD 446 Independence $75,000; USD 461 Neodesha $94,059; USD 475 Geary County (Washington/Grandview) $100,000; USD 499 Galena $75,000; USD 500 Kansas City (New Stanley) $75,000; USD 500 Kansas City (Silver City) $75,000; USD 500 Kansas City (Whittier) $75,000; USD 501 Topeka (Quincy) $75,000; USD 501 Topeka (Robinson) $75,000; Boys & Girls Club of Lawrence (Hillcrest) $75,000; Boys & Girls Club of Lawrence (Kennedy) $75,000; Boys & Girls Club of Lawrence (Woodlawn) $75,000; Boys & Girls Club of Manhattan (Eisenhower) $100,000; Boys & Girls Club of Manhattan (Lee) $75,000; Boys & Girls Club of Manhattan (Roosevelt) $75,000; Boys & Girls Club of Topeka (Tecumseh North) $100,000; Boys & Girls Club of Topeka
approved recommendations for funding new Kansas 21st Century Community Learning Centers Grants for 2017-18 as follows: USD 101 Erie $98,331; USD 209 Moscow Public Schools $71,256; USD 225 Fowler Public Schools $71,016; USD 248 Girard $74,970; USD 257 Iola $75,000; USD 259 Wichita (Adams) $74,971; USD 259 Wichita (Ortiz) $61,813; USD 259 Wichita (Cleaveland) $61,813; USD 259 Wichita (Park) $72,305; USD 290 Ottawa (Sunflower/Lincoln) $74,875; USD 290 Ottawa (Garfield) $63,354; USD 349 Stafford (Middle School) $98,676; USD 387 Altoona-Midway $113,509; USD 445 Coffeyville (Preschool) $88,424; USD 466 Scott City, $74,977; USD 475 Geary County (Wichita) $75,000; USD 498 Valley Heights $80,382. Total funding: $1,330,672.

approved recommendations for continuation funding of Kansas After School Enhancement Grants for the 2017-18 as follows: USD 204 Bonner Springs $14,336; USD 310 Fairfield $11,156; USD 373 Newton $13,223; USD 383 Manhattan-Ogden $14,222; USD 445 Coffeyville $18,223, USD 446 Independence $11,627, USD 498 Valley Heights $18,223, USD 500 Kansas City $18,223, Boys & Girls Club of Hutchinson $18,223, Boys & Girls Club of Manhattan $14,097, Cherry Street Youth Center (Chanute) $17,724, Wichita YMCA $18,223. Total funding: $187,500.

approved recommendations for continuation funding of the Kansas Middle School After School Advancement Grants for the 2017-18 as follows: USD 491 Eudora $21,801, USD 497 Lawrence $21,800, USD 500 Kansas City $21,800, Boys & Girls Club of Hutchinson $18,223, Boys & Girls Club of Manhattan $19,427, Boys & Girls Club of Topeka $21,801. Total funding: $125,000.

approved the Kansas Volunteer Commission’s recommendations for 2017-18 Kansas AmeriCorps subgrantees as follows: Boys & Girls Club of Lawrence $343,250; Harvesters Community Food Network $69,150; Kansas City Kansas Public School District $156,717; Kansas Department of Wildlife and Parks $402,961; Rosedale Development Association $70,560; United Way of Douglas County $268,600; Topeka Habitat for Humanity $27,830; Wichita State University Community Engagement Institute $28,855. Total funding: $1,367,923.

authorized the Commissioner of Education to negotiate and

• continue a contract with the Kansas Department of Heath and Environment for the support of an interagency information/resource service for persons with disabilities to provide toll-free telephone and website access to information on health, social services and education services, and resources available from public supported programs and special grant projects, in an amount not to exceed $25,000 annually for three years;

• enter into a contract with KU Medical Center’s Area Health Education Center to provide state advisor services for Kansas HOSA in an amount not to exceed $39,980 from July 1, 2017 through June 30, 2021;

• enter into a contract with the Kansas Chapter of Future Business Leaders of America to provide state advisor services in an amount not to exceed $100,000 from July 1, 2017 through June 30, 2021;

• continue a contract with Amber McNew for her services as the state advisor for Kansas Business Professionals of America in an amount not to exceed $60,000 from July 1, 2017 through June 30, 2021;

• continue a contract with Fort Hays State University to provide state advisor services for Kansas DECA in an amount not to exceed $80,000 from July 1, 2017 through June 30, 2021;
• continue a contract with Kansas State University to provide Carl D. Perkins leadership grant activities for the position of Executive Director of FFA in an amount not to exceed $226,281 from July 1, 2018 to June 30, 2021 (extending from the contract approved in February 2017).

BOARD REPORTS
Legislative — Mr. McNiece announced that the State Board will report to the legislature next January on the implementation of the systems accreditation model and its connection to accountability.

Communications — Mr. McNiece noted the Communications Committee would meet the next day.

Policy — Mrs. Waugh reported that the committee’s recommended changes to State Board Policies would be presented to the Board in July as a receive item. The committee will meet in July to review guidelines.

Board Attorney Mark Ferguson offered to answer questions about the summary reports for April and May.

Individual Board member reports: Mrs. Mah attended local school board meetings in her district and participated in the New Member Institute hosted by the National Association of State Boards of Education (NASBE). Mrs. Horst commented on her work at the legislature. Mrs. Cauble completed presenting Challenge Awards and commented on work with the Teacher Vacancy and Supply Committee. Mrs. Waugh attended several graduations as well as the Confidence in Public Education Task Force meeting, noting that G.A. Buie will be the new chair. Mrs. Busch reported on NASBE policy committee work, the Teacher Vacancy and Supply Committee, a meeting with the Educators Rising organization, and the agenda for KSHSAA’s meeting this month. Mr. Roberts attended the Kansas Excellence in Math and Science Teaching Conference in Hutchinson. Mr. Willard, Mrs. Horst and Mr. McNiece attended the NASBE nominations committee meeting. Mr. McNiece also reported on the NASBE Board of Directors’ meeting.

Chairman Porter assigned Ann Mah as the Board’s ESSA representative, and Jim McNiece and Ken Willard as the Board’s representatives on the School Redesign Committee. He also reported on attending a professional development conference at KU. He offered final comments on the Board’s responsibility for education policy and the need to be proactive in working with the legislature.

Requests for Future Agenda Items:
Mrs. Waugh requested a presentation by the Kansas Alliance for the Arts in Education.

BOARD MEMBER TRAVEL
Additions to the travel requests were: Mrs. Horst—July 18 and 19 Impact Institute at Great Bend. Mrs. Horst moved to approve the travel requests and addition. Mrs. Busch seconded. Motion carried 10-0.

RECESS
Chairman Porter recessed the meeting at 6:12 p.m. until 9 a.m. Wednesday at the Kansas Association of School Boards offices.

Jim Porter, Chairman

Peggy Hill, Secretary
WORK SESSION — WEDNESDAY, JUNE 14, 2017

The Kansas State Board of Education convened at 9 a.m. on Wednesday, June 14, for a work session, which was held at the Kansas Association of School Boards in Topeka. Board members in attendance were: Chairman Porter, Vice Chair Busch, Mr. Bacon, Mrs. Cauble, Mrs. Horst, Mrs. Mah, Mr. McNiece, Mr. Roberts, Mrs. Waugh and Mr. Willard.

Presentations and discussions centered on the Kansans Can vision outcome for addressing students’ social/emotional growth. The concept of creating a comprehensive school mental health framework would incorporate statutory and regulatory requirements targeted at youth suicide, sexual abuse, juvenile justice, bullying, etc. To aid in building the framework, a cross-sector workgroup was tasked with looking at trauma-informed care, including training needed for pre-service teachers and recommendations from other organizations. Mr. McNiece asked to see the report. Multiple presenters shared information and research during the work session. There were discussions about intervention models, social-emotional character development standards, the multi-tier system of supports (MTSS), involving community partners and available resources. Speakers from the Seaman, Emporia and Abilene school districts shared specific practices they’ve implemented to train staff and help students.

Board members then talked about actionable implementation and ways to work with the legislature. They also discussed trainings required and how to assist schools. A draft of a comprehensive school mental health framework with recommendations for action, task force composition and addressing Erin’s Law is expected in the near future.

The work session ended at 1:40 p.m.

____________________________________
Jim Porter, Chairman

____________________________________
Peggy Hill, Secretary
CALL TO ORDER
Chairman Jim Porter called the monthly meeting of the Kansas State Board of Education to order at 10 a.m. Tuesday, May 9, 2017, in the Board Room at the Landon State Office Building, 900 S.W. Jackson St., Topeka, Kansas. He acknowledged the observance of National Teacher Appreciation Day and congratulated this year’s graduates.

ROLL CALL
All Board members were present:
John Bacon          Jim McNiece
Kathy Busch         Jim Porter
Sally Cauble        Steve Roberts
Deena Horst         Janet Waugh
Ann Mah             Ken Willard

STATE BOARD MISSION STATEMENT, MOMENT OF SILENCE AND PLEDGE OF ALLEGIANCE
Chairman Porter read both the Board’s Mission Statement and Kansans Can Vision Statement. He then asked for a moment of silence after which the Pledge of Allegiance was recited.

APPROVAL OF AGENDA
Mrs. Busch moved to approve the Tuesday agenda. Mrs. Horst seconded. Motion carried 9-0-1 with Mr. Roberts abstaining.

APPROVAL OF THE APRIL MEETING MINUTES
Mr. McNiece moved to approve the minutes of the April 18-19 regular Board meeting. Mr. Roberts seconded. Motion carried 10-0.

Mrs. Busch moved to approve the minutes of the April 22 special Board meeting. Mrs. Mah seconded. Motion carried 9-0-1 with Mr. Willard abstaining.

COMMISSIONER’S REPORT
Commissioner Randy Watson previewed segments of the Kansans Can, and I Am video series featuring graduating high school seniors, noting this is one of several ways student achievement is being recognized around the state. He continued his regular updates on the state assessment cycle, which concluded April 28. Test results will be available for students and school reports before summer. Commissioner Watson announced plans for a Kansans Can School Redesign project in which seven volunteer districts will select one elementary and one secondary school to model new design principles structured around the Kansans Can vision and outcomes. He also noted two new positions were being created at KSDE to work with the elementary and secondary demonstration schools participating in the redesign project. He then explained the ambitious timeline and answered questions.

CITIZENS’ OPEN FORUM
Chairman Porter declared the Citizens’ Forum open at 10:29 a.m. Speakers and their topics were:
Kirk Fast, Ozawkie — proposed new course in current events for differentiating between factual news and fake news; Phyllis Farrar, Lawrence — status of World Language infrastructure in Kansas as compared to national reports. Chairman Porter declared the Citizens’ Forum closed at 10:38 a.m.
ACTION ON KANSAS CURRICULAR STANDARDS FOR DANCE AND CREATIVE MOVEMENT
Last month, Board members received proposed revisions to the standards for Dance and Creative Movement as part of the cyclical review process. Curricular standards provide teachers in the content area with information on what students need to know and be able to do in relationship to the subject matter. Education Program Consultant Joyce Huser was present to answer questions. Mr. McNiece moved to approve the adoption of the Kansas Curricular Standards for Dance and Creative Movement. Mrs. Cauble seconded. Motion carried 10-0.

MOTION
(00:39:24)

ACTION ON NEW APPOINTMENTS TO THE PROFESSIONAL STANDARDS BOARD AND PROFESSIONAL PRACTICES COMMISSION

MOTION
(00:41:28)


MOTION
(00:42:20)

ACTION ON HIGHER EDUCATION PREPARATION PROGRAM STANDARDS FOR ESOL
Institutions of Higher Education utilize program standards to develop and improve their educator preparation programs. Board members received proposed revisions to the English for Speakers of Other Languages higher education standards in April. Director of Teacher Licensure and Accreditation Dr. Scott Myers and standards revision committee member Dr. Ramona Stowe of MidAmerica Nazarene University reviewed changes and answered questions. Discussion followed about whether ESOL teacher candidates should be required to learn a second language, plus questions about English learner strategies and specific classes for ESOL teachers. Mrs. Cauble moved to approve the new educator preparation program standards for English for Speakers of Other Languages (ESOL) K-6, 5-8, 6-12, PreK-12. Mr. Willard seconded. Motion carried 8-2 with Mr. Roberts and Mrs. Mah in opposition.

MOTION
(00:50:09)

BREAK
Board members took a break until 11:05 a.m.

UPDATE ON EARLY LEARNING ROADSHOWS AND KINDERGARTEN READINESS
KSDE Assistant Director Tamra Mitchell provided an overview of the work taking place to support Kindergarten Readiness, one of the five outcomes used to measure progress of the Kansans Can vision. She talked about the Early Learning Roadshows taking place across the state during which school district participants work through questions about early learning opportunities in their community, available resources and collaboration options. The presentation included updates on committee work to prepare a Full-Day Kindergarten Guide and progress on the developmental snapshot implementation. There was discussion about delaying a child’s entry into kindergarten, wording on an informational handout and building relationships with multiple stakeholders.

LUNCH
At 11:45 a.m., Chairman Porter recessed the meeting for lunch until 1:30 p.m. The Board’s Policy Committee met during the lunch break.

PUBLIC HEARING ON EMERGENCY SAFETY INTERVENTION REGULATIONS
At 1:30 p.m., Chairman Porter called the afternoon session to order and opened the public hearing on K.A.R. 91-42-1, 91-42-2, 91-42-4 and 91-42-7 (Emergency Safety Interventions). One speaker addressed the Board: Rocky Nichols, Disability Rights Center of Kansas— in support of the clarifying language. Written testimony was submitted by the Joint Committee on Administrative Rules and Regulations, Stateside Associates, and the Disability Rights Center of Kansas. The hearing ended at 1:33 p.m.
PUBLIC HEARING ON SCHOOL BUS SAFETY REGULATIONS
At 1:34 p.m., Chairman Porter opened the public hearing on K.A.R. 91-38-1, 91-38-2, 91-38-3, 91-38-4, 91-38-5, 91-38-6, 91-38-7 and 91-38-8 (School Bus Safety). There were no speakers for this hearing. However, written testimony was provided by the Joint Committee on Administrative Rules and Regulations and the Kansas Chiropractic Association. This public hearing was then closed.

PUBLIC HEARING ON HIGHER EDUCATION ACCREDITATION REGULATIONS
At 1:35 p.m., Chairman Porter opened the public hearing on K.A.R. 91-1-70a, 91-1-208, 91-1-221 and 91-1-235 (Higher Education Accreditation). One speaker addressed the Board: Idalia Shuman, Kansas National Education Association — in opposition to a change on the license application. Written testimony was submitted by the Joint Committee on Administrative Rules and Regulations and KNEA. The public hearing concluded at 1:40 p.m.

(See Wednesday’s minutes for staff response and action on each set of regulations).

ACTION ON RECOMMENDATIONS OF THE PROFESSIONAL PRACTICES COMMISSION
Linda Sieck, Chair of the Professional Practices Commission, brought forth a case concerning application for an emergency substitute license. Mrs. Cauble moved to adopt the findings of the PPC and its recommendation that it grant Kris Bailey’s application. Mr. McNiece seconded. Motion carried 10-0.

Ms. Sieck then presented two separate licensure cases for disciplinary action. They were voted on individually. Mrs. Horst moved to adopt the PPC recommendation and revoke Jon Froehlich’s license. Mr. Roberts seconded. Motion carried 10-0. Next, Mrs. Cauble moved to adopt the PPC recommendation and publicly censure Julie Abellera. Mr. McNiece seconded. Discussion followed on how public censure is defined and carried out. Motion carried 10-0.

INFORMATION ON EDUCATE KANSAS TEACHER RECRUITMENT CAMPAIGN
A Blue Ribbon Task Force was created in 2016 to study issues related to teacher vacancy and supply in Kansas. One of the task force’s recommendations was to implement a marketing campaign for teacher recruitment and retention. Through work of the Professional Standards Board and Teacher Vacancy and Supply committee, a campaign is being implemented to advocate for the teaching profession and to reach prospective teachers. Dr. Debbie Mercer, Dean of the College of Education at Kansas State University and Chair of the Professional Standards Board, highlighted these efforts by introducing the new website www.educatekansas.org, which includes information about pathways to licensure and frequently asked questions. She also talked about upcoming dialogue summits to address such topics as retention and micro-credentialing. Board members offered other suggestions for increasing the teacher pipeline and positive communications.

REPORT ON CIVIC ENGAGEMENT INITIATIVES IN SCHOOLS
The State Board previously authorized the implementation of a Civic Advocacy Network to promote civic engagement and award schools that intentionally create civic engagement learning opportunities for their students. This pilot will begin in the 2017-18 school year. Education Program Consultant Don Gifford outlined the six proven practices for making civic engagement part of the school’s culture. He also revealed that information on the Civic Advocacy Network award process will be distributed to schools in August, with the first recipients to be announced in September 2018.

RECEIVE RECOMMENDATIONS FROM COALITION OF INNOVATIVE SCHOOL DISTRICTS FOR ISSUING 2017-18 SPECIALIZED CERTIFICATES
The Coalition of Innovative School Districts presented 16 applications for specialized certificates to be considered by the State Board of Education based on Board-approved specifications. The applicants are all for USD 500 Kansas City Kansas and are effective for one-year. Coalition Chair Bill Mullins noted
that the applicants have been vetted, interviewed and approved by both the USD 500 school board and the Coalition board. He also indicated the possibility of an additional applicant to be considered for Coalition member USD 364 Marysville. A vote is anticipated in June.

**BREAK**

Board members took a break until 3:10 p.m.

**LEGISLATIVE MATTERS**

Deputy Commissioner Dale Dennis discussed the current status of selected House and Senate bills. He reviewed specific policy provisions of HB 2410, a proposed school finance plan. There were Board comments about provisions related to at-risk funding and a requirement that districts provide applied behavior analysis therapy for students diagnosed with autism spectrum disorder. Mr. Dennis gave updates on other bills that addressed working after retirement and school training to identify sexual abuse victims. He answered questions throughout his report.

**CONSENT AGENDA**

Mrs. Cauble moved to approve the Consent Agenda as presented. Mrs. Waugh seconded. Motion carried 8-0-1 with Mr. Roberts abstaining and Mr. McNiece absent for the vote. In the Consent Agenda, the Board:

- received the monthly Personnel Report for April.
- confirmed unclassified special projects personnel appointments to the Child Nutrition and Wellness team as follows: Linnea Rieger, Consultant, effective April 10, 2017, at an annual salary of $48,484.80; and Jill Ladd, Consultant, effective April 10, 2017 at a rate of $35 per hour with varying hours each pay period.
- received third quarter written reports (FY 2017) from the Kansas State School for the Deaf and Kansas State School for the Blind.
- approved recommendations for funding of the Migrant Summer Services Grants as follows: USD 102 Cimarron $7,000; USD 200 Greeley $1,744; USD 216 Deerfield $5,501; USD 223 Barnes $2,070; USD 250 Pittsburg $12,412; USD 253 Emporia $30,062; USD 374 Sublette $11,732; USD 443 Dodge City $21,235; USD 445 Coffeyville $16,150; USD 457 Garden City $23,789; USD 466 Scott County $475; USD 467 Wichita Co. $1,450; USD 468 Healy $3,050; USD 480 Liberal $10,700; USD 494 Syracuse $12,000; USD 500 Kansas City Kansas $50,000; USD 501 Topeka $14,642; USD 507 Satanta $6,972; D0 602 Northwest Kansas Educational Service Center $18,170. Total $249,154.
- accepted the following recommendation for a licensure waiver valid for one school year: High Incidence Special Education -- Sarah Farnet, USD 231.
- accepted the following recommendations of the Evaluation Review Committee for program approval: **Fort Hays State University** — Agriculture (I, 6-12) continuing program approved through Dec. 31, 2024; **MidAmerica Nazarene University** — Elementary (I, K-6), English Language Arts (I, 6-12), Physical Education (I, PreK-12), all continuing programs approved through Dec. 31, 2024; **Tabor College** — Biology (I, 6-12), English Language Arts (I, 6-12), History, Government, Social Studies (I, 6-12), Mathematics (I, 6-12), all continuing programs approved through Dec. 31, 2024; **University of Saint Mary** — Innovative/Experimental (I, 6-12) MA Secondary Education, new program approved through Dec. 31, 2019; **Washburn University** — Biology (I, 6-12), Elementary Education (I, K-6), English Language Arts (I, 6-12), Music (I, PreK-12), Physical Education (I, PreK-12), Reading Specialist (A, PreK-12), all continuing programs approved through Dec. 31, 2024.
accepted recommendations of the Licensure Review Committee as follows: Approved Cases — 3113 Terry Azamber (PreK-12 high incidence special education), 3122 Brenda Gonzalez, 3136 Nadia Ji, 3141 John Paxton (extension of restricted technical education certificate through June 30, 2018), 3142 Richard Yocum, 3143 Chelsea Millar, 3144 Jessica Tickle, 3146 Joseph Hanks, 3148 Lucia Hagerman, 3149 Carrie Braun.

approved recommendations of the School Breakfast Program Waiver Review Committee to grant breakfast waivers for the 2017-18 school year to the following: Prairie Ridge Elementary in USD 232; Arbor Creek Elementary, Cedar Creek Elementary, Madison Place Elementary, Manchester Park Elementary, Meadow Lane Elementary, Sunnyside Elementary and Regency Park Elementary in USD 233; Garden Plain Elementary, St. Marks Elementary, Andale Elementary, Colwich Elementary, Garden Plain High and Andale High in USD 267; Southeast of Saline Elementary and Southeast of Saline Junior/Senior High in USD 306; Elmont Elementary, North Fairview Elementary and West Indianola Elementary in USD 345; Conway Springs Middle School in USD 356; Silver Lake Junior/Senior High in USD 372.

approved the revised Kansas School Wellness Policy Model Guidelines.

authorized USD 380, Vermillion, Marshall County, to hold an election on the question of issuing bonds in excess of the district’s general bond debt limitation.

authorized USD 380, Vermillion, Marshall County, to receive capital improvement (bond and interest) state aid as authorized by law.

authorized the Commissioner of Education to negotiate and enter into a contract with a vendor, to be selected through a competitive bid process, to implement a statewide system of professional development for the tiered social/emotional supports framework of College and Career Competencies for the period of July 1, 2017 through June 2021 in an amount not to exceed $800,000.

EXECUTIVE SESSION
Mrs. Busch moved to enter into Executive Session for 20 minutes for the purpose of discussing personnel matters of non-elected personnel in order to protect the privacy interests of the individual(s) to be discussed. The session would begin at 3:45 p.m. Commissioner Watson, Wendy Fritz, Mark Ferguson and Kelli Broers were invited to join the session. Mr. Bacon seconded. Motion carried 10-0.

The Board returned to open session at 4:05 p.m., at which time Chairman Porter recessed the meeting until 9 a.m. on Wednesday.
KANSAS STATE BOARD OF EDUCATION
Meeting Minutes
May 10, 2017

CALL TO ORDER
Chairman Jim Porter called the Wednesday meeting of the State Board of Education to order at 9 a.m. on May 10, 2017 in the Board Room at the Landon State Office Building, 900 S.W. Jackson St., Topeka, Kansas.

ROLL CALL
All Board members were present:
John Bacon
Kathy Busch
Sally Cauble
Deena Horst
Ann Mah
Jim McNiece
Jim Porter
Steve Roberts
Janet Waugh
Ken Willard

APPROVAL OF AGENDA
Mr. McNiece moved to approve the day’s agenda. Mrs. Busch seconded. Motion carried 8-0-1 with Mr. Roberts abstaining and Mr. Willard absent for the vote.

ACTION ON EMERGENCY SAFETY INTERVENTION REGULATIONS
Laura Jurgensen provided the staff response to comments given during the previous day’s hearing and to written testimony submitted on amendments to Emergency Safety Intervention regulations. She addressed suggestions, questions and clarifications. Mrs. Horst moved to adopt proposed amendments to Emergency Safety Intervention regulations K.A.R. 91-42-1, 91-42-2, 91-42-4 and 91-42-7. Mrs. Busch seconded. Motion carried 9-1 on a roll call vote recorded as follows:

Mr. Bacon  "yes"  Mr. McNiece  "yes"
Mrs. Busch  "yes"  Mr. Porter  "yes"
Mrs. Cauble  "yes"  Mr. Roberts  "no"
Mrs. Horst  "yes"  Mrs. Waugh  "yes"
Mrs. Mah  "yes"  Mr. Willard  "yes"

ACTION ON SCHOOL BUS SAFETY REGULATIONS
Kelli Broers and Keith Dreiling provided the staff response to written testimony submitted on amendments to School Bus Safety regulations. There were no speakers during the previous day’s hearing. Mrs. Busch moved to adopt proposed amendments to School Bus Safety regulations K.A.R. 91-38-1, 91-38-2, 91-38-3, 91-38-4, 91-38-5, 91-38-6, 91-38-7 and 91-38-8. Mr. McNiece seconded. Motion carried 9-1 on a roll call vote recorded as follows:

Mr. Bacon  "yes"  Mr. McNiece  "yes"
Mrs. Busch  "yes"  Mr. Porter  "yes"
Mrs. Cauble  "yes"  Mr. Roberts  "no"
Mrs. Horst  "yes"  Mrs. Waugh  "yes"
Mrs. Mah  "yes"  Mr. Willard  "yes"

ACTION ON HIGHER EDUCATION ACCREDITATION REGULATIONS
Kelli Broers and Susan Helbert provided the staff response to comments given during the previous day’s hearing and to written testimony submitted on amendments to Higher Education Accredita-
tion regulations. Board members had questions about regulation 91-1-208 which would require license application forms to include a completed Child Abuse and Neglect Central Registry release so KSDE could access the registry. There was discussion about due process and protections for all involved. Mrs. Busch moved to adopt proposed amendments to Higher Education Accreditation regulations 91-1-70a, 91-1-208, 91-1-221 and 91-1-235. Mr. Willard seconded. Motion carried 8-2 on a roll call vote recorded as follows:

Mr. Bacon "yes"  Mr. McNiece "yes"
Mrs. Busch "yes"  Mr. Porter "yes"
Mrs. Cauble "yes"  Mr. Roberts "no"
Mrs. Horst "yes"  Mrs. Waugh "no"
Mrs. Mah "yes"  Mr. Willard "yes"

PRESENTATION BY 2017 KANSAS SENATE YOUTH DELEGATES
Dale Dennis introduced the 2017 Senate Youth Program delegates from Kansas. — Tel Wittmer of Holton High School, USD 336, and Jack Campbell, Mill Valley High School, USD 232. These two high school seniors were selected to represent the state in Washington D.C. and were each awarded a $10,000 scholarship from the William Randolph Hearst Foundation. They told of their experiences during a week in D.C. witnessing the political process in action and touring historic sites. They also talked about their interests in public service.

KANSANS CAN HIGHLIGHT: NESS CITY HIGH SCHOOL TINY HOUSE AND PROJECT-BASED LEARNING
Mrs. Cauble introduced the Ness City High School guests in attendance who then presented on the entrepreneurship project of constructing a tiny house living space from design to the finished product. Students in Brent Kerr’s class talked about “Tiny House Big Learning” and how the year-long endeavor integrated various academic standards, including math and English language arts, plus other skills in technical reading, publication writing and communication. The students described specific work and challenges experienced during phases of construction, the soft skills they acquired and their goal of selling the house.

BREAK
Board members took a break until 10:50 a.m. to tour the tiny house and visit with students.

BOARD REPORTS AND REQUESTS FOR FUTURE AGENDA ITEMS
Legislative — Mr. McNiece commented on attending committee meetings, recent legislative actions and stressing the importance of accountability through accreditation.

Policy — Mrs. Waugh reported that the committee is working to prepare recommendations for the Board to review possibly in July. The Policy Committee will meet in June.

KSHSAA — Mrs. Busch reported that the Kansas State High School Activities Association named Bill Faflick as Executive Director-elect to work with retiring executive Gary Musselman for the next year.

Student Voice — Mrs. Horst distributed potential questions to share with high school students in the student council leadership program this summer. Chairman Porter asked Mrs. Mah and Mrs. Cauble to assist with the Student Voice committee.

BOARD ATTORNEY REPORT
Board Attorney Mark Ferguson reported on the status of Kansas School for the Deaf NEA negotiations. He anticipates the 2017-18 negotiated agreement will be ready for a State Board vote next month. He noted that his monthly summary would be provided after this month’s meeting.
**Individual Board member reports:** Mr. McNiece visited Maize South Middle School, met with Congressman Ron Estes, and presented Challenge Awards to USD 259. Mr. Roberts participated in a teacher appreciation lunch. Mrs. Busch presented Challenge Awards in several districts and attended the Derby Board of Education meeting. Mrs. Waugh attended legislative meetings and will be serving on an education committee for the University of Saint Mary. Mrs. Cauble provided a follow-up report from Senator Moran’s office concerning Pell Grants for high school students and helped with a National Student Clearinghouse presentation with the Commissioner. Mrs. Horst attended History Day at Royal Valley Middle School and presented several Challenge Awards. Mrs. Mah presented Challenge Awards in Lawrence, attended Shawnee Heights Hall of Fame event and toured schools in Olathe.

Chairman Porter presented Challenge Awards, commented on the April 22 special Board meeting with Senator Moran, reported on the Governor’s Scholars ceremony, and announced the breakfast with new superintendents is June 1 as part of the USA-Kansas annual conference.

**Requests for Future Agenda Items:**
Mrs. Waugh requested the topic of bullying and how to help students; Mrs. Busch wants cyber bullying included. Mrs. Horst would like history day contest winners from Royal Valley to speak at a meeting.

**BOARD MEMBER TRAVEL**
Additions to the travel requests were: Mrs. Busch, Mrs. Cauble, Mr. McNiece — May 31-June 2 USA-Kansas Annual Conference; Mr. McNiece Mr. Roberts and Mr. Willard — June 12 Presidential Awards for Math and Science dinner; Mr. Willard—June 9-10 NASBE Selection Committee meeting. Mrs. Busch moved to approve the travel requests and additions. Mrs. Waugh seconded. Motion carried 10-0.

**ACTION ON SCHOOL FOR THE DEAF/SCHOOL FOR THE BLIND SUPERINTENDENT POSITION**
Mr. Willard moved to reopen the search for a KSSD/KSSB superintendent at some point in the near future and asked Commissioner Watson to bring a recommendation to the Board for an interim superintendent to serve at least one year. Mrs. Busch seconded. Motion carried 10-0.

**EXECUTIVE SESSION**
Mrs. Busch moved to enter into Executive Session for 20 minutes for the purpose of discussing personnel matters of non-elected personnel in order to protect the privacy interests of the individual(s) to be discussed and to consult with an attorney which would be deemed privileged in the Attorney-Client relationship, in order to protect the privilege and the Board’s communications with an attorney on legal matters. The session would begin at 11:50 a.m. Commissioner Watson, Mark Ferguson and Kelli Broers were invited to join the session. Mrs. Cauble seconded. Motion carried 10-0.

Open session resumed at 12:10 p.m. at which time Chairman Porter immediately adjourned the meeting.

____________________________________  ___________________________________
Jim Porter, Chairman                  Peggy Hill, Secretary
Subject: Citizens’ Open Forum

Board Goals: Develop active communication and partnerships with families, communities, business stakeholders, constituents and policy partners

During the Citizens’ Open Forum, the State Board of Education provides an opportunity for citizens to share views about topics of interest or issues currently being considered by the State Board.

Each speaker shall be allowed to speak for three minutes. Any person wishing to speak shall complete a presenter’s card, giving his or her name and address, and the name of any group he or she is representing. (Ref. Board Policy 1012) The speaker’s card should be completed prior to 10:30 a.m.

If written material is submitted, 13 copies should be provided.
To: Commissioner Randy Watson
From: Melissa Fast
Subject: Update on Transition to College Algebra Pilot
Board Goals: Provide a flexible and efficient delivery system to meet our students’ varied and changing needs

Melissa Fast will present an update on the Transition to College Algebra Pilot that is entering into year two. This class was developed by high school and two-year college math faculty. It is a one-year course delivered by high school math teachers to seniors who based on placement test scores would need to take remedial math classes prior to entering into College Algebra. Information will be shared around both the year one and year two participating schools.

A list of the high school pilot participants is provided.
## Transition to College Algebra Year One Participants

<table>
<thead>
<tr>
<th>High School</th>
<th>City</th>
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<tbody>
<tr>
<td>St. Mary's Colgan Catholic High</td>
<td>Pittsburg</td>
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<tr>
<td>USD 204 Bonner Springs High</td>
<td>Bonner Springs</td>
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<tr>
<td>USD 224 Clifton Clyde High</td>
<td>Clyde</td>
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<tr>
<td>USD 229 Blue Valley High</td>
<td>Overland Park</td>
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<tr>
<td>USD 229 Blue Valley West</td>
<td>Overland Park</td>
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<tr>
<td>USD 247 Southeast High</td>
<td>Cherokee</td>
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<td>USD 250 Pittsburg High</td>
<td>Pittsburg</td>
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<tr>
<td>USD 251 Northern Heights High</td>
<td>Allen</td>
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<tr>
<td>USD 259 Wichita North</td>
<td>Wichita</td>
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<tr>
<td>USD 259 Wichita Southeast</td>
<td>Wichita</td>
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<tr>
<td>USD 260 Derby High</td>
<td>Derby</td>
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<tr>
<td>USD 261 Campus High</td>
<td>Wichita</td>
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<tr>
<td>USD 303 Ness City High</td>
<td>Ness City</td>
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<tr>
<td>USD 305 Salina Central</td>
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<td>USD 305 Salina South</td>
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<td>Langdon</td>
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<td>USD 313 Buhler High</td>
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<td>USD 315 Colby High</td>
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<td>USD 337 Royal Valley High</td>
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<td>USD 355 Ellinwood High</td>
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<td>USD 363 Holcomb High</td>
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<td>USD 382 Pratt High</td>
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<td>USD 383 Manhattan High</td>
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<td>USD 386 Madison High</td>
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<td>USD 389 Eureka High</td>
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<td>USD 423 Moundridge High</td>
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<td>USD 428 Great Bend High</td>
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<td>USD 443 Dodge City High</td>
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<td>USD 445 Field Kindley High</td>
<td>Coffeyville</td>
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<td>USD 449 Pleasant Ridge High</td>
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<tr>
<td>USD 500 Wyandotte High</td>
<td>Kansas City</td>
</tr>
<tr>
<td>USD 503 Parsons High</td>
<td>Parsons</td>
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</tbody>
</table>
What is TCA?

- One-year course delivered by high school math teachers to seniors who, based on placement test scores, would need to take remedial math classes prior to entering into College Algebra.
- Developed by high school and two-year college math faculty.
- Blended curriculum
  - Online
  - Paper-Pencil
- It is NOT an introduction to College Algebra Class.
Year One Participants

- 37 School Districts
- 39 High Schools
- 19 Postsecondary Institutions
- All 10 districts represented by the SBOE

Year Two Participants

- 14 School Districts
- 16 High Schools
- 10 Postsecondary Institutions
Resources for districts

- KSDE researched and purchased curriculum
- Website to house resources:
  - Course Outline/Pacing Guides
  - Standards and KBOR Outcome Alignment
  - TCA Standards and Outcomes
  - Unit Formative Items Bank
  - Content Training Materials

Where are we in the pilot process?

Year One Participants

- One-day training in Wichita - May
  - Feedback on Class
  - Modify/Update Class Resources
  - Submit Data to KSDE

Year Two Participants

- Three-day training in Salina - May
  - Curriculum introduction
  - Content training
  - Partnership between HS and PS
- Online Training - May/June
  - Online curriculum
Data Requirement for High Schools

Each school will submit:

1. State Student ID#
2. Pre- and Post test scores of (ACT, Accuplacer, or COMPASS) for each student enrolled in class
3. Number of students who took class AND number of students who completed the class
4. Grade received in Transition to College Algebra Class
5. Student’s Post-Secondary Plans

What lies ahead?

Data analysis

- Did we decrease the amount of developmental classes needed by students?
- What are the student’s post-secondary plans?
- Was the blended platform a good choice in curriculum?
- What content areas do teachers need more training to assist them in delivering the class?
Questions or Comments?

Melissa Fast
mfast@ksde.org

Kansas leads the world in the success of each student.

Kansans CAN
#KansansCan

KANSAS STATE DEPARTMENT OF EDUCATION | www.ksde.org
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Item Title:
Act on Kansas Curricular Standards for World Language

Board Goals:
Provide an effective educator in every classroom

Recommended Motion:
It is moved that the Kansas State Board of Education approve the adoption of the Kansas Curricular Standards for World Language.

Explanation of Situation Requiring Action:
The Kansas Curricular Standards for World Language were presented to the Kansas State Board of Education at its April meeting by committee co-chairs Phyllis Farrar, Lawrence, and Elke Lorenz, Manhattan. The standards were presented for review with the expectation of possible State Board approval in June or July, 2017.

Curricular standards provide teachers in the content area with information on what students need to know and be able to do in relationship to the content. Curricular standards are used by schools to develop their local curriculum.

Curricular standards are reviewed every seven years and require approval for adoption by the State Board of Education.
Kansas Curricular Standards for World Languages

July 2017
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<td>Standards</td>
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<table>
<thead>
<tr>
<th>Last Name, First Name</th>
<th>Language(s)</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Beard, Christina</td>
<td>French</td>
<td>Washburn Rural HS, Auburn-Washburn, USD 437</td>
</tr>
<tr>
<td>Bergen, Nanette</td>
<td>German</td>
<td>Newton High School, USD 373</td>
</tr>
<tr>
<td>*Colling, Lindsey</td>
<td>Spanish, Language Coordinator</td>
<td>Olathe, USD 233</td>
</tr>
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<td>Denning, Jan</td>
<td>French</td>
<td>Salina Central High School, USD 305</td>
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<td>**Farrar, Phyllis</td>
<td>All languages</td>
<td>Kansas State Department of Education, Topeka</td>
</tr>
<tr>
<td>*Lorenz, Elke, PhD</td>
<td>German</td>
<td>Manhattan High School, USD 383</td>
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<tr>
<td>McQueen, Melanie</td>
<td>Spanish</td>
<td>Eudora Middle &amp; High School, USD 491</td>
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<td>Meneley, Meagan</td>
<td>German</td>
<td>Abilene High School, USD 435</td>
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<td>Gonzalez-Abellas, Miguel, PhD</td>
<td>Spanish, Modern Languages</td>
<td>Washburn University</td>
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<td>Miller, Kassy</td>
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<td>Louisburg Middle School, USD 416</td>
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<td>Reavis, Allison</td>
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<td>Baxter Springs High School, USD 508</td>
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<td>Robinette, Lauren</td>
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<td>Rumple, Alyssa</td>
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<td>Thornton, Stephanie</td>
<td>Heritage Spanish</td>
<td>Westridge Middle School, USD 512; Johnson Co. Com.College</td>
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<td>Thrasher, Daniela</td>
<td>German</td>
<td>Junction City High School, USD 475</td>
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<td>Ward, Leah</td>
<td>French</td>
<td>Northeast Magnet High School, Wichita, USD 259</td>
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<td>Willis, Sheree</td>
<td>Chinese</td>
<td>University of Kansas Confucius Institute &amp; K-12 Chinese</td>
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<td>Wilson, Karen</td>
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<td>Plainville Jr/Sr. High School, USD 270</td>
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<tr>
<td>Zhu, Lijun</td>
<td>Chinese</td>
<td>South High School, Wichita, USD 259</td>
</tr>
</tbody>
</table>

*Committee Co-Chair
**KSDE Consultant/Facilitator
Introduction

Vision

The vision of the Kansas World Language Standards Review Committee is that each student will be proficient in a language other than English and able to communicate successfully in a global setting.

This vision supports the mission of the State Board of Education “to prepare Kansas students for lifelong success through rigorous, quality academic instruction, career training and character development according to each student's gifts and talents.” It also supports the Kansans CAN Vision to “Lead the World in the Success of Each Student.” The World-Readiness Standards for Learning Languages published in 2015 by the American Council on the Teaching of Foreign Languages (ACTFL) state that the success of each student on the world stage must include being able “to communicate with respect and cultural understanding in more than one language…” (Appendix A.) In addition, these rigorous language-learning standards support the vision of the Kansas Board of Education “that a successful Kansas high school graduate has the academic preparation, cognitive preparation, technical skills, employability skills, and civic engagement to be successful in postsecondary education, in the attainment of an industry recognized certification or the workforce, without the need for remediation.” They also support a curriculum tying proficiency in a language other than English to a student’s educational goals or career pathway.

The committee tried to provide a set of standards that is easy to follow, rigorous, proficiency based, and that supports authentic assessments. Since the Committee found all of these characteristics in the World-Readiness Standards referenced above and strongly supports the ACTFL philosophy, we sought and graciously received permission to use major portions of that document to provide the framework for language learning in our State.

Goals

The Committee felt that the goal of language learners, teachers, schools, and districts should be that all students reach at least a level of “functional proficiency,” as defined by the World-Readiness Standards. This should be possible in three to four years of standards based coursework. Knowing that some students have opportunities to learn languages independent of the courses offered, should make it be possible that students with prior language skills achieve even higher proficiency.

The standards are organized into five goal areas, covering eleven standards, all of which align to the seven “Rose Capacities,” passed by Kansas legislators to emphasize expectations for Kansas education. (Appendix B).

Goal Area: Communication. Realizing the Board’s vision would include the ability to communicate with the rest of the world. Effective communication is a skill the business community considers essential. The Communication goal area includes three standards. These standards relate primarily to three modes of communication (interpersonal, interpretive, and presentational) and
secondarily to four means of communication (listening, speaking, reading, and writing.) Interpersonal communication focuses on exchanging information, reactions, feelings, and opinions by negotiating and clarifying meaning. Interpretive communication focuses on determining what the author, speaker, or creator of media wants to convey. Presentational communication focuses on creating a message for a specific purpose and for a specific audience. Rather than using grade levels to identify benchmarks, language proficiency levels identify them, so that instruction can be organized with entry points at various grades. (Appendix C)

**Goal Area: Cultures.** Students cannot become truly proficient in the language until they have experienced and understand the cultures that use that language. Language learning builds understanding and acceptance, which in turn reduces conflict and exclusion. This goal includes two standards. They emphasize practices and products of cultures, both in relationship to cultural perspectives. Without understanding underlying perspectives, learners may be tempted to view certain practices or products as isolated or strange elements of a particular culture and thereby acquire the stereotypes that their language study should be precluding. The rationale for the culture standards is also to “interact with cultural competence and understanding,” which underscores the link of language and culture. Neither the students nor their teachers can know every product, practice or related perspective of target cultures. However, it is important that they become skilled observers and interpreters of other cultures and that they reflect upon their current knowledge and skills while also acquiring new information and experiences. Teachers must help students recognize that products and practices may be the most obvious cultural factors, but similar to the tip of an iceberg, it is the unseen perspectives that must be realized in order to safely navigate meaningful and appropriate communication. (Appendix D)

**Goal Area: Connections.** Learning a language provides access to additional bodies of knowledge that are only available through languages other than English. Any career field can be enhanced through knowing a second language. Simply put, languages open doors. Multilingualism fosters critical thinking, problem solving, and global, political, and economic advantages. The connections goal includes two standards. The first focuses on exploring content from other disciplines through the target language. The second focuses on using multimedia and print sources in the target language to gain diverse perspectives not provided by English sources. The committee deviated from the *World-Readiness* standards in order to make additional connections to current content standards in Kansas. This includes English Language Arts, Social Studies, Math, and Science standards, and Career and Technical Education foundational skills. (Appendix E)

**Goal Area: Comparisons.** This goal has two standards as well. Students develop greater insight into their own language and culture through comparison with and contrast to the language and culture studied; this leads to awareness of multiple ways of viewing the world. Language learners discover, come to understand, and use diverse patterns and perspectives inherent in both language systems and cultures in order to function competently in varied linguistic and cultural contexts. Through the study of a new language system and of how such a system expresses meanings in culturally appropriate ways, learners gain insights into the nature of language and the communicative functions of language in society, as well as the multifaceted nature of interaction between language and culture.
**Goal Area: Communities.** Students join multilingual communities at home and around the world in culturally appropriate ways, and in a variety of contexts. This goal includes two standards. The first emphasizes active use of the target language to collaborate face-to-face and virtually, while the second focuses on goal setting to achieve personal enrichment and interests.

**Can-Do Statements**

Indicators supporting each standard are written as “can-do” statements of what a student should be able to do at each specific proficiency level to function as self-assessment checklists. Checklists are best used by learners and learning facilitators as part of an overall reflective learning process that includes setting goals, selecting strategies, self-assessing, providing evidence, and reflecting before setting new goals. This process, as outlined in NCSSFL LinguaFolio®, has proven to be a highly motivating and successful approach to language learning.

**How to use the Standards**

State standards in Kansas serve as a framework upon which to build curriculum. This provides one set of standards for all languages which are taught, potentially taught, or learned by K-12 students in Kansas. Languages currently taught in KS, (in order of student numbers) are: Spanish, French, German, American Sign Language, Latin, Chinese, Japanese, Arabic, Russian, and Italian. These standards are applicable to a wide variety of programs to set goals, develop curriculum, plan instruction, and assess results. As much as possible, they are comparable to standards set by other states and by other countries where these languages are taught as a foreign language. They are rigorous and based on current research.

The World Language Standards should be used to differentiate language instruction from social studies or other classes that teach about social and cultural groups and their histories, practices, or products. The essential difference is that a language course uses the language to teach the language, culture, and all related content. “Research indicates that effective language instruction must provide significant levels of meaningful communication and interactive feedback in the target language in order for students to develop language and cultural proficiency…. ACTFL therefore recommends that language educators and their students use the target language as exclusively as possible (90% plus) at all levels of instruction during instructional time and, when feasible, beyond the classroom. In classrooms that feature maximum target-language use, instructors use a variety of strategies to facilitate comprehension and support meaning making.” (ACTFL Position Statement, 2010 [emphasis added]).

The ACTFL Leadership Initiative for Language Learning (LILL) has identified six core practices that represent current best practices for teaching world languages. The standards review committee encourages Kansas world language teachers to consistently include these practices in their teaching.

1. Use the Target Language as the vehicle and content for instruction.
2. Design and implement interpersonal tasks.
3. Design lessons that have functional goals and objectives.
4. Teach grammar as a concept and use it in context.
5. Practice authentic and interactive reading and listening comprehension.
6. Provide appropriate feedback in speech and writing.

When creating learning targets, assessments, or communicative activities, it is imperative for world language teachers to bear in mind the difference between **proficiency** and **performance** in a language. Proficiency refers to what a learner can do with the language on his/her own, without the comfort of a classroom setting. Proficiency is spontaneous, independent of a specific classroom unit or theme of study, and covers a wide range of content and context. Performance, on the other hand, is what learners are able to do in the classroom with all the support that accompanies that setting, including a sympathetic listener/reader in the teacher, vocabulary that is familiar and repeated within the unit being studied, and multiple opportunities to practice functions, structures and vocabulary before the final performance assessment tasks. It is expected that a learner’s performance level in the language will be higher than his or her true proficiency level. This is an important part of the process of language learning. World Language teachers should provide input and create tasks that help learners to perform above their actual proficiency level. Thus, if a teacher is working with a class of mostly novice-mid learners, the teacher should create language tasks at the novice-mid level at the beginning of the unit of study and progressively work through novice-high and perhaps even intermediate-low levels by the end of the unit.

**Program models**

These standards are structured around proficiency levels that can be applied to a variety of programs and correlated with other national and international proficiency scales. Indicators describe what a student should know and be able to do in a sequence of growing proficiency, but what is achievable depends on the amount of time and intensity of instruction. The chart below depicts program models and corresponding proficiency levels based on the amount of instructional time associated with each model.

<table>
<thead>
<tr>
<th>Program Models and Proficiency Goals</th>
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<tbody>
<tr>
<td><strong>Proficiency</strong></td>
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<td><strong>ILR (FSI) Scale</strong></td>
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<td><strong>European Framework (CEFR)</strong></td>
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<td><strong>ACTFL Proficiency Guidelines</strong></td>
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<tr>
<td>Low</td>
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<td>Mid</td>
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<td>High</td>
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<td>4 years 9-12</td>
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<td>MS &amp; HS 6-12</td>
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<td>Elem-HS 3-12</td>
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<tr>
<td>Elem-HS K-12</td>
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<tr>
<td>Heritage 5-12</td>
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</table>

1. Interagency Language Roundtable (ILR) also known as the FSI was developed for U.S. Government agencies.
For **high school** courses, use Novice Low indicators for first semester and Novice Mid for second semester of Level 1; use Novice High indicators for Level 2, Intermediate Low indicators for Level 3, and Intermediate Mid for Level 4.

If instruction in a language begins in **middle school**, then apply Novice Low indicators to approximately the first 100 hours of instruction; Novice Mid to approximately the next 100 hours, then follow with Novice High indicators for Level 2 (freshmen), Intermediate Low indicators for Level 3 (sophomores), Intermediate Mid indicators for Level 4 (juniors), and Intermediate High indicators for Level 5 (seniors).

If instruction in a language begins in **elementary school** by grade 3 or later, then use Novice Low indicators for approximately 100-200 hours of instruction, Novice Mid for 100-200 hours, then Novice High indicators for instruction through the middle school years, and a sequence of Intermediate Low - Mid - and High through the high school years. If instruction in a language begins in Kindergarten, build the curriculum in a similar fashion, with Intermediate Low as the target for end of grade 6 and Advanced Mid as the target for grade 12.

If instruction in a language is in an **immersion, dual language or two-way immersion** program model, then build the second-language arts curriculum with Intermediate Mid indicators as the target for end of grade 6, Intermediate High (AP) as the target for grade 8, and Advanced indicators for high school courses. The latter courses could be facilitated using dual credit agreements for 300 level courses at postsecondary institutions.

**Heritage language courses** for native speakers should begin at appropriate proficiency levels. Generally speaking, Intermediate Low indicators would be suitable for a Heritage Level 1 class. In any of the curriculum articulation plans described above, once heritage speakers have experienced a course geared to their particular needs, they should be able to progress with non-native learners, provided the course indicators (i.e. Advanced Placement Language and Culture or International Baccalaureate) are at the next proficiency level.

**Assessment**

Once targets, or indicators, for a unit of instruction have been set, then they should become the basis of assessment. Since the indicators are stated in terms of what a student can do, the assessment should provide situations that allow the student to demonstrate what they can do. The assessment drives the instruction; indeed, it can be embedded in instruction by using an assessment model called Integrated Performance Assessment (IPA), characterized by authentic tasks that

- include all three modes of communication,
- include cultural knowledge, and
- blend communication tasks with other goal areas of the standards.

This assessment model involves a cyclical approach that can be applied to each unit. An IPA can also be standardized to serve as a common assessment for particular levels, across a district, across languages, and across the state. (Appendix F)
Curriculum Planning

Standards-based curriculum provides a core component to education for all students. It meets real world needs, develops 21st century learning skills, develops literacy and numeracy skills, and prepares learners in STEM areas. Standards-based language learning engages learners through practical applications for special purposes. It strengthens college and career readiness. These benefits are essential for and are within reach of all learners.

In their widely-acclaimed book *Understanding by Design*, Wiggins and McTighe (1998) describe backward planning. In Stage One, the planner identifies desired results by choosing specific indicators from the standards on which to focus. In Stage Two, the planner determines what will be acceptable evidence of student learning. In Stage Three, the planner identifies overarching themes or big ideas to unify learning experiences and instructional activities. All of the learning experiences and activities are aligned with the big ideas and the final product or performance benchmark. Depending on the final product or performance, the teacher will lay out lessons by thinking like a storyteller, giving the unit narrative structure, or by thinking like a coach, developing the unit by task analysis. In either case, the unit has a clear-cut beginning, middle, and end. A sample unit framework for standards-based backward planning is provided. (Appendix G)

Seal of Biliteracy Certificate

The Kansas Board of Education has approved the Seal of Biliteracy certificate for Kansas graduates. This recognition is awarded through KSDE to any student who attains proficiency in English and one or more other world languages by the time the student graduates high school. The recognition for attaining biliteracy becomes part of a student’s high school record. It explicitly addresses 21st century communication skills, and the Career and Technical Education foundational skill of communicating “...respectfully and effectively with people of different cultures and diverse perspectives.” The certificate recognizes a student’s readiness for career and college, and for engagement as a global citizen.

“Biliteracy” refers to having a functional level of proficiency in two or more languages. This award will not be based on number of credits earned or courses offered or taken, but on how well a person functions in two languages. It is not limited to languages taught in Kansas schools, but encourages students and their families to value, preserve, and develop heritage language skills. (Appendix H) The Kansas World Language Readiness Standards and indicators provided in this document define the proficiency the award entails. Kansas has adopted a two-tier Seal of Biliteracy, awarding a Gold seal for “Intermediate Mid” proficiency or above in all three modes of communication and a Platinum seal for “Advanced Low” proficiency or above in all three modes of communication. For further details refer to “Guidelines for the Kansas Seal of Biliteracy” posted at ksde.org.

Conclusion

This is an exciting time for learning languages. National attention is being focused on the topic. The American Academy of Arts and Sciences Commission on Learning Languages, in their February 2017 Executive Summary recommended “a national strategy to improve access to as many languages as possible for people of every region, ethnicity, and socioeconomic background—
that is, to value language education as a persistent national need similar to education in math or English, and to ensure that a useful level of proficiency is within every student's reach.” Being proficient in a language other than English enhances any career in business, research, science, politics, the arts, and international relations. Thus, career advantages from knowing a foreign language are numerous. Our revised Kansas Standards for World Languages will serve as a fundamental, yet challenging, framework to support the vision of multilingualism for all Kansas students.
<table>
<thead>
<tr>
<th>GOAL AREA</th>
<th>STANDARDS</th>
</tr>
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</table>
| COMMUNICATION  
*Communicate effectively in the target language in order to function in a variety of situations and for multiple purposes* | 1.1 **Interpersonal:** Learners interact and negotiate meaning in spoken, signed, or written conversations to share information, reactions, feelings, and opinions.  
1.2 **Interpretive:** Learners understand, interpret, and analyze what is heard, read, or viewed on a variety of topics.  
1.3 **Presentational:** Learners present information, concepts, and ideas to inform, explain, persuade, and narrate on a variety of topics using appropriate media and adapting to various audiences of listeners, readers, or viewers. |
| CULTURES  
*Interact with cultural competence and understanding* | 2.1 **Relating Cultural Practices to Perspectives:** Learners use the language to investigate, explain, and reflect on the relationship between the practices and perspectives of the cultures studied.  
2.2 **Relating Cultural Products to Perspectives:** Learners use the language to investigate, explain, and reflect on the relationship between the products and perspectives of the cultures studied. |
| CONNECTIONS  
*Connect with other disciplines and acquire information and diverse perspectives in order to use the language to function in academic and career-related situations* | 3.1 **Making Connections:** Learners build, reinforce, and expand their knowledge of other disciplines while using the language to develop critical thinking and to solve problems creatively.  
3.2 **Acquiring Information and Diverse Perspectives:** Learners access and evaluate information and diverse perspectives that are available through the language and its cultures. |
| COMPARISONS  
*Develop insight into the nature of language and culture in order to interact with cultural competence* | 4.1 **Language Comparisons:** Learners use the language to investigate, explain, and reflect on the nature of language through comparisons of the language studied and their own.  
4.2 **Cultural Comparisons:** Learners use the language to investigate, explain, and reflect on the concept of culture through comparisons of the cultures studied and their own. |
| COMMUNITIES  
*Communicate and interact with cultural competence in order to participate in multilingual communities at home and around the world* | 5.1 **School and Global Communities:** Learners use the language both within and beyond the classroom to interact and collaborate in their community and the globalized world.  
5.2 **Lifelong Learning:** Learners set goals and reflect on their progress in using languages for enjoyment, enrichment, and advancement. |
**Goal Area: COMMUNICATION**
*Communicate effectively in more than one language in order to function in a variety of situations and for multiple purposes.*

**Standard 1.1 Interpersonal**
Learners interact and negotiate meaning in spoken, signed, or written conversations to share information, reactions, feelings, and opinions.

<table>
<thead>
<tr>
<th>Novice Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses self in conversations on very familiar topics using a variety of words, phrases, simple sentences, and questions that have been highly practiced and memorized.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Performance Descriptors</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Novice Low Learners</strong> can communicate on some very familiar topics using single words and phrases that they have practiced and memorized.</td>
<td><strong>Novice Low Learners can...</strong></td>
</tr>
<tr>
<td><strong>Novice Mid Learners</strong> can communicate on very familiar topics using a variety of words and phrases that they have practiced and memorized.</td>
<td><strong>Novice Mid Learners can...</strong></td>
</tr>
<tr>
<td><strong>Novice High Learners</strong> can communicate and exchange information about familiar topics using phrases and simple sentences, sometimes supported by memorized language. They can usually handle short social interactions in everyday situations by asking and answering simple questions.</td>
<td><strong>Novice High Learners can...</strong></td>
</tr>
</tbody>
</table>

**Novice Low Learners can...**
- greet peers.
- introduce self to someone.
- answer a few simple questions.

**Novice Mid Learners can...**
- greet and leave people in a polite way.
- introduce self and others.
- answer a variety of simple questions.
- make some simple statements in a conversation.
- ask some simple questions.
- communicate basic information about self and people they know.
- communicate some basic information about their everyday lives.

**Novice High Learners can...**
- exchange some personal information.
- exchange information using texts, graphs, or pictures.
- ask for and give simple directions.
- make plans with others.
- interact with others in everyday situations.
Sample Performance Tasks – Novice Range

- Learners give and follow simple instructions in order to participate in age-appropriate classroom and/or cultural activities.
- Learners ask and answer questions about topics such as family, school events, and celebrations in person or via letters, email, voice chats, video-chat, or instant messages.
- Learners share likes and dislikes with one another.
- Learners exchange descriptions of people and tangible products of the culture such as toys, clothing, types of dwellings, foods, with classmates.
- Learners exchange greetings, leave takings, and common classroom interactions using culturally appropriate gestures and oral expressions.

Intermediate Range

Expresses self and participates in conversations on familiar topics using sentences and series of sentences. Handles short social interactions in everyday situations by asking and answering a variety of questions. Can communicate about self, others, and everyday life.

Performance Descriptors

**Intermediate Low Learners** can participate in conversations on a number of familiar topics using simple sentences. They can handle short social interactions in everyday situations by asking and answering simple questions.

**Intermediate Mid Learners** can participate in conversations on familiar topics using sentences and series of sentences. They can handle short social interactions in everyday situations by asking and answering a variety of questions. They can usually say what they want to say about self and their everyday lives.

**Intermediate High Learners** can participate with ease and confidence in conversations on familiar topics. They can usually talk about events and experiences in various time frames. They can usually describe people, places, and things. They can handle social interactions in everyday situations, sometimes even when there is an unexpected complication.

**Indicators**

**Intermediate Low Learners can…**
- have a simple conversation on a number of everyday topics.
- ask and answer questions on factual information that is familiar to them.
- use the language to meet their basic needs in familiar situations.

**Intermediate Mid Learners can…**
- start, maintain, and end a conversation on a variety of familiar topics.
- talk about their daily activities and personal preferences.
- use their language to handle tasks related to their personal needs.
- exchange information about subjects of special interest to them.

**Intermediate High Learners can…**
- exchange information related to areas of mutual interest.
- use their language to do a task that requires multiple steps.
- use their language to handle a situation that may have a complication.
Sample Performance Tasks - Intermediate Range

- Learners follow and give directions for participating in age-appropriate cultural activities and investigating the function of products of the foreign culture. They ask and respond to questions for clarification.
- Learners exchange information about personal events, memorable experiences, and other school subjects with peers and/or members of their target cultures.
- Learners compare, contrast, and express opinions and preferences about the information gathered regarding events, experiences, and other school subjects.
- Learners acquire goods, services, or information orally and/or in writing.
- Learners develop and propose solutions to uses and problems related to the school or community through group work.

Advanced Range

Expresses self fully to maintain conversations on familiar topics and new concrete social, academic, and work-related topics. Can communicate in paragraph-length conversation about events with detail and organization. Confidently handles situations with an unexpected complication. Shares point of view in discussions.

Performance Descriptors

Advanced Low Learners can participate in conversations about familiar topics that go beyond their everyday lives. They can talk in an organized way and with some detail about events and experiences in various time frames. They can describe people, places, and things in an organized way and with some detail. They can handle a familiar situation with an unexpected complication.

Advanced Mid Learners can express themselves fully not only on familiar topics but also on some concrete social, academic, and professional topics. They can talk in detail and in an organized way about events and experiences in various time frames. They can confidently handle routine situations with an unexpected complication. They can share their points of view in discussions on some complex issues.

Advanced High Learners can express themselves freely and spontaneously, and for the most part accurately, on concrete topics and on most complex issues. They can usually support

Indicators

Advanced Low Learners can...
- participate in conversations on a wide variety of topics that go beyond their everyday lives.
- compare and contrast life in different locations and in different times.
- resolve an unexpected complication has arises in a familiar situation.
- conduct or participate in interviews.

Advanced Mid Learners can...
- communicate effectively on a wide variety of present, past, and future events.
- exchange general information on topics outside their fields of interest.
- handle an complication or unexpected turn of events.

Advanced High Learners can...
- exchange complex information about academic and professional tasks.
their opinion and develop hypotheses on topics of particular interest or personal experience.

• exchange detailed information on topics within and beyond their fields of interest
• support their opinion and construct hypotheses

Sample Performance Tasks- Advanced Range

• Learners discuss, orally or in writing, current or past events that are of significance in the target culture or that are being studied in another subject.
• Learners develop and propose solutions to issues and problems that are of concern to members of their own and the target cultures through group work.
• Learners share their analyses and personal reactions to expository and literary texts with peers and/or speakers of the target language.
• Learners exchange, support, and discuss their opinions and individual perspectives with peers and/or speakers of the target language on a variety of topics dealing with contemporary and historical issues.

Superior Range

Performance Descriptors

Superior Learners can communicate with ease, accuracy, and fluency. They can participate fully and effectively in discussions on a variety of topics in formal and informal settings. They can discuss at length complex issues by structuring arguments and developing hypotheses.

Indicator

Superior Learners can...

• support opinions clearly and precisely.
• discuss complex information in debates or meetings.
• participate with ease in complex discussions with multiple participants on a wide variety of topics.
**Goal Area: COMMUNICATION**
Communicate effectively in the target language in order to function in a variety of situations and for multiple purposes.

**Standard 1.2 Interpretive Communication**
Learners understand, interpret, and analyze what is heard, read, or viewed in the target language on a variety of topics.

### 1.2.A Listening

<table>
<thead>
<tr>
<th>Novice Range</th>
<th>Performance Descriptors</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Novice Low Learners</strong> can recognize a few memorized words and phrases when they hear them spoken.</td>
<td><strong>Novice Low Learners can...</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Novice Mid Learners</strong> can recognize some familiar words and phrases when they hear them spoken.</td>
<td><strong>Novice Mid Learners can...</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Novice High Learners</strong> can often understand words, phrases, and simple sentences related to everyday life. They can recognize pieces of information and sometimes understand the main topic of what is being said.</td>
<td><strong>Novice High Learners can...</strong></td>
</tr>
</tbody>
</table>

- occasionally identify the sound of a character or a word.
- occasionally understand isolated words that they have memorized, particularly when accompanied by gestures or pictures.
- understand a few courtesy phrases.
- recognize and sometimes understand basic information in words and phrases that they have memorized.
- recognize and sometimes understand words and phrases that they have learned for specific purposes.
- sometimes understand simple questions or statements on familiar topics.
- understand simple information when presented with pictures and graphs.
- sometimes understand the main topic of conversations that they overhear.
## Sample Performance Tasks – Novice Range

- Learners list key actions from developmentally appropriate narratives such as personal anecdotes, familiar fairy tales, and narratives based on familiar themes.
- Learners identify people and objects in their environment or from other school subjects, based on oral and written descriptions.
- Learners report out the content of brief, written messages and short personal notes on familiar topics such as family, school events, and celebrations.
- Learners identify the principal characters of stories or children's literature and dramatize the main themes and ideas.
- Learners identify the principal message contained in various media such as illustrated texts, posters, or advertisements.
- Learners interpret the meaning of gestures, intonation, and other visual or auditory cues.

## Intermediate Range

**Understands main ideas and some supporting details on familiar topics from a variety of texts.**

<table>
<thead>
<tr>
<th>Performance Descriptors</th>
<th>Indicators</th>
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</thead>
</table>
| **Intermediate Low Learners** can understand the main idea in short, simple messages and presentations on familiar topics. They can understand the main idea of simple conversations that they overhear. | **Intermediate Low Learners can...**  
  - understand the basic purpose of a message.  
  - understand messages related to their basic needs.  
  - understand questions and simple statements on everyday topics when they are part of the conversation. |

| **Intermediate Mid Learners** can understand the main idea messages and presentations on a variety of topics related to everyday life and personal interests and studies. They can understand the main idea in conversations that they overhear. | **Intermediate Mid Learners can...**  
  - understand basic information in ads, announcements, and other simple recordings.  
  - understand the main idea of what they listen to for personal enjoyment.  
  - understand messages related to their everyday life. |

| **Intermediate High Learners** can easily understand the main idea in messages and presentations on a variety of topics related to everyday life and personal interests and studies. They can usually understand a few details of what they overhear in conversations, even when something unexpected is expressed. They can sometimes follow what they hear about events and experiences in various time frames. | **Intermediate High Learners can...**  
  - easily understand straightforward information or interactions.  
  - understand a few details in ads, announcements, and other simple recordings.  
  - sometimes understand situations with complicating factors. |
### Sample Performance Tasks - Intermediate Range

- Learners restate information from short articles and postings related to other school subjects.
- Learners react to messages in video clips from the target culture on current issues of interest to peers.
- Learners locate key information from announcements and messages connected to daily activities in the target culture.
- Learners relate the main themes and significant details on topics from other subjects and products of the cultures as presented on TV, radio, video, or live presentations.
- Learners describe the main themes and significant details on topics from other subjects and products of the cultures as found in newspapers, magazines, websites, or other printed sources for target language audiences.
- Learners identify the principal characters and discuss the main ideas and themes in selected literary texts.
- Learners use knowledge acquired in other setting sand from other subject areas to comprehend spoken and written messages in the target languages.

### Advanced Range

**Understands main ideas and supporting details on familiar and some new concrete topics from a variety of more complex texts that have a clear, organized structure.**

<table>
<thead>
<tr>
<th><strong>Performance Descriptors</strong></th>
<th><strong>Indicators</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Advanced Low Learners</strong></td>
<td><strong>Advanced Low Learners can...</strong></td>
</tr>
</tbody>
</table>
| can understand the main idea and some supporting details in organized speech on a variety of topics of personal and general interest. They can follow stories and descriptions of some length and in various time frames. They can understand information presented in a variety of genres on familiar topics, even when something unexpected is expressed. | - understand descriptions and stories of events that have happened or will happen.  
- understand the main idea of popular genres. |
| **Advanced Mid Learners**  | **Advanced Mid Learners can...**  |
| can understand the main idea and most supporting details on a variety of topics of personal and general interest, as well as some topics of professional interest. They can follow stories and descriptions of some length and in various time frames. They can understand information presented in most genres, even when not familiar with the topic. | - understand the main idea and many details of descriptions or interviews.  
- understand accounts of events.  
- understand directions and instructions on everyday tasks. |
**Advanced High Learners** can easily follow narrative, informational, and descriptive speech. They can understand discussions on most topics that deal with special interests, unfamiliar situations, and abstract concepts. They can sometimes follow extended arguments and different points of view.

**Advanced High Learners can...**
- easily understand detailed reports and exposés.
- often understand various viewpoints in extended arguments.
- understand discussions and presentations on many concrete and abstract topics.

<table>
<thead>
<tr>
<th>Sample Performance Tasks - Advanced Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Learners discuss the main ideas and significant details of live and recorded discussions, lectures, and presentations on current or past events from the target culture or that are being studied in another class.</td>
</tr>
<tr>
<td>• Learners summarize the principal elements of nonfiction articles in newspapers, magazines, and websites on topics of current and historical importance to members of the culture.</td>
</tr>
<tr>
<td>• Learners analyze the main plot, subplot, characters, their descriptions, roles, and significance in authentic literary texts.</td>
</tr>
<tr>
<td>• Learners compare and contrasts cultural nuances of meaning in written and spoken language as expressed by speakers of the target language in formal and informal setting.</td>
</tr>
<tr>
<td>• Learners describe cultural nuances of meaning in expressive products of the culture; including selections from various literary genres and the visual arts.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Superior Range</th>
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</table>

**Performance Descriptors**

**Superior Learners** can follow a wide range of academic and professional discourse on abstract and specialized topics. They can understand all standard dialects. They can sometimes infer complex meaning that requires deep understanding of the culture.

<table>
<thead>
<tr>
<th>Indicators</th>
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</table>

**Superior Learners can...**
- understand a variety of abstract and technical topics within their field of expertise.
- understand discussions on various issues of general interest.
- understand implications and inferences in discussions or presentations.
Goal Area: COMMUNICATION
Communicate effectively in the target language in order to function in a variety of situations and for multiple purposes.

Standard 1.2 Interpretive Communication
Learners understand, interpret, and analyze what is heard, read, or viewed on a variety of topics.

1.2.B. Reading

**Novice Range**
Understands words, phrases, and formulaic language that have been practiced and memorized to get meaning of the main idea from simple, highly predictable oral or written texts with strong visual support.

**Performance Descriptors**

**Novice Low Learners** can recognize a few letters or characters. They can identify a few memorized words and phrases when they read.

**Novice Mid Learners** can recognize some letters or characters. They can understand some learned or memorized words and phrases when they read.

**Novice High Learners** can understand familiar words, phrases, and sentences within short and simple texts related to everyday life. They can sometimes understand the main idea of what they have read.

**Indicators**

**Novice Low Learners can...**
- recognize a few letters or characters.
- connect some words, phrases, or characters to their meanings.

**Novice Mid Learners can...**
- recognize words, phrases, and characters with the help of visuals.
- recognize words, phrases, and characters when they associate them with things they already know.

**Novice High Learners can...**
- usually understand short, simple messages on familiar topics.
- sometimes understand short simple descriptions with the help of pictures or graphs.
- sometimes understand the main idea of published materials.
- understand simple everyday notices in public places on topics that are familiar to them.

**Sample Performance Tasks – Novice Range**
- Learners list key actions from developmentally appropriate narratives such as personal anecdotes, familiar fairy tales, and narratives based on familiar themes.
- Learners identify people and objects in their environment or from other school subjects, based on oral and written descriptions.
- Learners report out the content of brief, written messages and short personal notes on familiar topics such as family, school events, and celebrations.
• Learners identify the principal characters of stories or children’s literature and dramatize the main themes and ideas.
• Learners identify the principal message contained in various media such as illustrated texts, posters, or advertisements.
• Learners interpret the meaning of gestures, intonation, and other visual or auditory cues.

<table>
<thead>
<tr>
<th>Intermediate Range</th>
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<tbody>
<tr>
<td>Understands main ideas and some supporting details on familiar topics from a variety of texts.</td>
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</table>

<table>
<thead>
<tr>
<th>Performance Descriptors</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intermediate Low Learners</strong> can understand the main idea in short and simple texts when the topic is familiar.</td>
<td><strong>Intermediate Low Learners can</strong>…</td>
</tr>
<tr>
<td><strong>Intermediate Mid Learners</strong> can understand the main idea of texts related to everyday life and personal interests or studies.</td>
<td><strong>Intermediate Mid Learners can</strong>…</td>
</tr>
<tr>
<td><strong>Intermediate High Learners</strong> can easily understand the main idea of texts related to everyday life, personal interests, and studies. They can sometimes follow stories and descriptions about events and experiences in various time frames.</td>
<td><strong>Intermediate High Learners can</strong>…</td>
</tr>
</tbody>
</table>

**Sample Performance Tasks - Intermediate Range**

• Learners restate information from short articles and postings related to other school subjects.
• Learners react to messages in video clips from the target culture on current issues of interest to peers.
• Learners locate key information from announcements and messages connected to daily activities in the target culture.
• Learners relate the main themes and significant details on topics from other subjects and products of the cultures as presented on TV, radio, video, or live presentations.
• Learners describe the main themes and significant details on topics from other subjects and products of the cultures as found in newspapers, magazines, websites, or other printed sources for target language audiences.
• Learners identify the principal characters and discuss the main ideas and themes in selected literary texts.
• Learners use knowledge acquired in other settings and from other subject areas to comprehend spoken and written messages in the target languages.

## Advanced Range

Understands main ideas and supporting details on familiar and some new concrete topics from a variety of more complex texts that have a clear, organized structure.

### Performance Descriptors

**Advanced Low Learners** can understand the main idea and some supporting details on a variety of topics of personal and general interest. They can follow stories and descriptions of some length and in various time frames and genres.

**Advanced Mid Learners** can understand the main idea and most supporting details in texts on a variety of topics of personal and general interest, as well as some professional topics. They can follow stories and descriptions of considerable length and in various time frames. They can understand texts written in a variety of genres, even when they are unfamiliar with the topic.

**Advanced High Learners** can easily follow narrative, informational, and descriptive texts. They can understand what they read on most topics that deal with special interests, unfamiliar situations, and abstract concepts. They can sometimes understand extended arguments and different points of view.

### Indicators

**Advanced Low Learners can...**
- find and use information for practical purposes.
- read texts that compare and contrast information.
- follow simple written instructions.

**Advanced Mid Learners can...**
- follow the general idea and some details of what is written in a variety of stories and autobiographical accounts.
- understand general information on topics outside their field of interest.
- understand messages on a wide variety of past, present, and future events.

**Advanced High Learners can...**
- understand narrative, descriptive, and informational texts of any length.
- read about most topics of special interest.
- read most general fiction and non-fiction.

### Sample Performance Tasks - Advanced Range

• Learners discuss the main ideas and significant details of live and recorded discussions, lectures, and presentations on current or past events from the target culture or that are being studied in another class.
• Learners summarize the principal elements of nonfiction articles in newspapers, magazines, and websites on topics of current and historical importance to members of the culture.
• Learners analyze the main plot, subplot, characters, their descriptions, roles, and significance in authentic literary texts.
• Learners compare and contrast cultural nuances of meaning in written and spoken language as expressed by speakers of the target language in formal and informal settings.
• Learners describe cultural nuances of meaning in expressive products of the culture; including selections from various literary genres and the visual arts.

<table>
<thead>
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</thead>
<tbody>
<tr>
<td><strong>Performance Descriptors</strong></td>
<td><strong>Superior Learners</strong> can follow academic, professional, and literary texts on a wide range of both familiar and unfamiliar subjects. They can sometimes infer complex meaning that requires analysis and deep understanding of the culture.</td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
<td><strong>Superior Learners</strong> can…</td>
</tr>
<tr>
<td></td>
<td>• analyze the primary argument and supporting details.</td>
</tr>
<tr>
<td></td>
<td>• understand detailed information within and beyond their fields of interest.</td>
</tr>
<tr>
<td></td>
<td>• comprehend complex texts on abstract topics of interest to them.</td>
</tr>
</tbody>
</table>
**Goal Area: COMMUNICATION**  
*Communicate effectively in the target language in order to function in a variety of situations and for multiple purposes.*

**Standard 1.3 Presentational Communication**  
Learners present information, concepts, and ideas to inform, explain, persuade, and narrate on a variety of topics using appropriate media and adapting to various audiences of listeners, readers, or viewers.

**1.3.A Speaking**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Performance Descriptors</strong></td>
<td><strong>Novice Low Learners can...</strong></td>
</tr>
</tbody>
</table>
| **Novice Low Learners** can present information about themselves and some other very familiar topics using single words or memorized phrases. | - recite words and phrases that they have learned.  
- state the names of familiar people, places, and objects in pictures and posters using words or memorized phrases.  
- introduce self to a group.  
- recite short memorized phrases, parts of poems, and rhymes. |
| **Novice Mid Learners** can present information about themselves and some other very familiar topics using a variety of words, phrases, and memorized expressions. | **Novice Mid Learners can...** |
| **Novice High Learners** can present basic information on familiar topics using language they have practiced using phrases and simple sentences. | **Novice High Learners can...** |
| **Novice High Learners** can... | - present information about their lives using phrases and simple sentences. |
Sample Performance Tasks – Novice Range

- Learners prepare illustrated stories about activities or events in their environment and share these stories and events with an audience in the school or community or post them on a website.
- Learners dramatize and video songs, short anecdotes, or poetry commonly known by peers in the target culture and post them to the school website or to a video sharing website.
- Learners record short oral notes and messages about people and things in their school environment and post the information for a partner language class either locally or abroad.
- Learners produce a video ad about products and/or practices of their own culture to peers in the target language.

Intermediate Range

Communicate information and expresses own thoughts about familiar topics using sentences and series of sentences.

**Performance Descriptors**

**Intermediate Low Learners** can present information on most familiar topics using a series of simple sentences.

**Intermediate Mid Learners** can make presentations on a wide variety of familiar topics using connected sentences.

**Indicators**

**Intermediate Low Learners** can…
- talk about people, activities, events, and experiences.
- express their needs and wants.
- present information on plans, instructions, and directions.
- present songs, short skits, or dramatic readings.
- express their preferences on topics of interest.

**Intermediate Mid Learners** can…
- make a presentation about their personal and social experiences.
- make a presentation on something they have learned or researched.
Intermediate High Learners can make presentations in a generally organized way on school, work, and community topics, and on topics they have researched. They can make presentations on some events and experiences in various timeframes.

Intermediate High Learners can…
- present information on academic and work topics.
- make a presentation on events, activities, and topics of particular interest.
- present their points of view and provide reasons to support them.

Sample Performance Tasks - Intermediate Range

- Learners dramatize short plays, original skits, recite selected poems and anecdotes, and perform songs in the language for a school-related event such as a board meeting or PTA meeting or campus festival.
- Learners prepare video recorded messages to share locally or with school peers and/or members of the target culture on topics of personal interest.
- Learners create and narrate a PowerPoint presentation on a current global concern.
- Learners prepare an oral summary of the plot and characters in selected pieces of age-appropriate literature.

Advanced Range

Communicates information and expresses self with detail and organization on familiar and some new concrete topics using paragraphs.

**Performance Descriptors**

**Advanced Low Learners** can deliver organized presentations appropriate to their audience on a variety of topics. They can present information about events and experiences in various time frames.

**Advanced Mid Learners** can deliver well-organized presentations on concrete social, academic, and professional topics. They can present detailed information about events and experiences in various timeframes.

**Indicators**

**Advanced Low Learners can…**
- deliver short presentations on a number of academic and workplace topics.
- deliver short presentations on social and cultural topics.
- explain issues of public and community interest, including different viewpoints.
- deliver presentations for a specific audience.

**Advanced Mid Learners can…**
- present information about events of public or personal interest.
- convey their ideas and elaborate on a variety of academic topics.
- give presentations with ease and detail on a wide variety of topics related to professional interests.
**Advanced High Learners** can deliver detailed presentations, usually with accuracy, clarity, and precision, on a variety of topics and issues related to community interests and some special fields of expertise.

**Advanced High Learners can…**
- present complex information on many concrete topics and related issues.
- present a viewpoint with supporting arguments on a complex issue.
- use appropriate presentational conventions and strategies.

**Sample Performance Tasks - Advanced Range**

- Learners perform scenes from a play and/or recite poems or excerpts from short stories commonly read by speakers of the target language.
- Learners create stories and poems, short plays, or skits based on personal experiences and exposure to themes, ideas, and perspectives from the target culture.
- Learners design a video production that analyzed the expressive products of the culture, from literary genres or the fine arts.
- Learners prepare a research-based analysis of a current event from the perspective of both the United States and target cultures.

**Superior Range**

**Performance Descriptors**
**Superior Learners** can deliver detailed presentations with accuracy, clarity, and precision to a wide variety of audiences on topics and issues ranging from broad general interests to areas of specialized expertise.

**Indicators**
**Superior Learners can…**
- give a clearly articulated and well-structured presentation on a complex topic or issue.
- adapt the language in a presentation for casual, professional, or general public audiences.
- depart from the prepared text of a presentation when appropriate.
Goal Area: COMMUNICATION
Communicate effectively in more than one language in order to function in a variety of situations and for multiple purposes.

Standard 1.3 Presentational Communication
Learners present information, concepts, and ideas to inform, explain, persuade, and narrate on a variety of topics using appropriate media and adapting to various audiences of listeners, readers, or viewers.

1.3.B Writing

Novice Range
Communicates information on very familiar topics using a variety of words, phrases, and sentences that have been practiced and memorized.

**Performance Descriptors**

**Novice Low Learners** can copy some familiar words, characters, or phrases.

**Novice Mid Learners** can write lists and memorized phrases on familiar topics.

**Novice High Learners** can write short messages and notes on familiar topics related to everyday life.

**Indicators**

**Novice Low Learners can...**
- copy some characters or letters and words that they see on the wall or board, in a book, or on the computer.
- write words and phrases that they have learned.
- label familiar people, places, and objects in pictures and posters.

**Novice Mid Learners can...**
- fill out a simple form with some basic personal information.
- write about themselves using learned phrases and memorized expressions.
- list their daily activities and write lists that help them in their day-to-day lives.
- write notes about something they have learned using lists, phrases, and memorized expressions.

**Novice High Learners can...**
- write information about their daily life in a letter, blog, discussion board, or email message.
- write short notes using phrases and simple sentences.
- write about a familiar experience or event using practiced material.
- write basic information about things they have learned.
• ask for information in writing.

Sample Performance Tasks – Novice Range

• Learners prepare illustrated stories about activities or events in their environment and share these stories and events with an audience in the school or community or post them on a website.
• Learners write reports about people and things in their school environment and post the information for a partner language class either locally or abroad.
• Learners create a poster for Do’s and Don’ts for Earth Day.
• Learners draw or produce a video ad about products and/or practices of their own culture to peers in the target language.

Intermediate Range

Communicate information and expresses own thoughts about familiar topics using sentences and series of sentences.

Performance Descriptors

Intermediate Low Learners can write briefly about most familiar topics and present information using a series of simple sentences.

Intermediate Mid Learners can write on a wide variety of familiar topics using connected sentences.

Intermediate High Learners can write on topics related to school, work, and community in a generally organized way. They can write some simple paragraphs about events and experiences in various time frames.

Indicators

Intermediate Low Learners can:
• write about people, activities, events, and experiences.
• prepare materials for a presentation.
• write about topics of interest.
• write basic instructions on how to make or do something.
• write questions to obtain information.

Intermediate Mid Learners can:
• write messages and announcements.
• write short reports about something they have learned or researched.
• compose communications for public distribution.

Intermediate High Learners can:
• write about school and academic topics.
• write about work and career topics.
• write about community topics and events.
• write about entertainment or a social event.

Sample Performance Tasks - Intermediate Range

• Learners write short plays and original skits in the language for a school-related event such as a board meeting or PTA meeting or campus festival.
• Learners create a brochure that highlights things to see and do in their community for visitors from the target culture.
• Learners prepare stories or brief written reports about personal experiences, events, or other school subjects to share with classmates and/or members of the target cultures.
• Learners create a PowerPoint presentation on a current global concern.
• Learners prepare a written summary of the plot and characters in selected pieces of age-appropriate literature.

Advanced Range

Communicates information and expresses self with detail and organization on familiar and some new concrete topics using paragraphs.

Performance Descriptors

Advanced Low Learners can write on general interest, academic, and professional topics. They can write organized paragraphs about events and experiences in various time frames.

Advanced Mid Learners can write on a wide variety of general interest, professional, and academic topics. They can write well-organized, detailed paragraphs in various time frames.

Advanced High Learners can write extensively with significant precision and detail on a variety of topics, most complex issues, and some special fields of expertise.

Indicators

Advanced Low Learners can…
• meet basic school and academic writing needs.
• meet basic work and career writing needs.
• meet basic social and civic writing needs.

Advanced Mid Learners can…
• write well-organized texts for a variety of academic purposes.
• write well-organized texts for a variety of professional purposes.
• write well-organized texts for a variety of general interest purposes.

Advanced High Learners can…
• write using target language and culture conventions to present and elaborate a point of view.
• write using target language and culture conventions for informal purposes.
• write using target language and culture conventions for formal purposes.

Sample Performance Tasks - Advanced Range

• Learners write a news article or critique on a topic from another discipline, such as world history, geography, the arts, or mathematics.
• Learners create stories and poems, short plays, or skits based on personal experiences and exposure to themes, ideas, and perspectives from the target culture.
• Learners design a written production that analyzed the expressive products of the culture, from literary genres or the fine arts.
• Learners summarize the content of an article or documentary intended for native speakers for a school or local publication or blog.
Learners write a letter or an article describing and analyzing an issue for a student publication.
Learners prepare a research-based analysis of a current event from the perspective of both the United States and target cultures.

**Superior Range**

**Performance Descriptors**

Superior Learners can write about complex and abstract issues ranging from topics of broad general interests to areas of specialized expertise using standard structures, lexicon, and writing protocols.

**Indicators**

Superior Learners can...
- write effectively about complex and abstract issues of general interest.
- write about complex and abstract issues on academic and professional topics.
- develop an argument using the writing mechanics and organizational style of the target language and culture.
**Goal Area: CULTURES**

*To interact with cultural competence and understanding*

**Standard 2.1 Relating Cultural Practices to Perspectives**

Learners use the language to investigate, explain, and reflect on the relationship between the practices and perspectives of the cultures studied.

<table>
<thead>
<tr>
<th><strong>Performance Descriptors</strong></th>
<th><strong>Indicators</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Novice Learners can</strong> engage in age-appropriate and culturally appropriate practices.</td>
<td><strong>Novice Learners can</strong>…</td>
</tr>
<tr>
<td></td>
<td>• use expressions for greetings, leave takings, and common classroom or social interactions.</td>
</tr>
<tr>
<td></td>
<td>• participate in or simulate games, birthday celebrations, storytelling, and dramatizations.</td>
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<tr>
<td></td>
<td>• express, either in simple language, symbols, or actions, the connections among cultural practices, products, and perspectives.</td>
</tr>
<tr>
<td><strong>Intermediate Learners can</strong> build a fundamental repertoire of age-appropriate and culturally appropriate practices.</td>
<td><strong>Intermediate Learners can</strong>…</td>
</tr>
<tr>
<td></td>
<td>• observe, analyze, and exchange information on patterns of behavior typical of their peer group in the culture, such as observing and analyzing interactions in daily life.</td>
</tr>
<tr>
<td></td>
<td>• participate in practices such as games, sports, and entertainment.</td>
</tr>
<tr>
<td></td>
<td>• create “cultural triangles” of practices, products, and perspectives and suggest factors in their relationships.</td>
</tr>
<tr>
<td><strong>Advanced Learners can</strong> expand their repertoire of age-appropriate and culturally appropriate practices.</td>
<td><strong>Advanced Learners can</strong>…</td>
</tr>
<tr>
<td></td>
<td>• use formal and informal forms of address with ease.</td>
</tr>
<tr>
<td></td>
<td>• engage in discussions with native speakers using culturally appropriate behaviors and language to express agreement and disagreement in a variety of situations.</td>
</tr>
<tr>
<td></td>
<td>• connect practices to associated products, giving evidence-based reasons for the perspectives proposed.</td>
</tr>
</tbody>
</table>
Goal Area: CULTURES

To interact with cultural competence and understanding

Standard 2.2  Relating Cultural Products to Perspectives

Learners use the language to investigate, explain, and reflect on the relationship between the products and perspectives of the cultures studied.

<table>
<thead>
<tr>
<th>Performance Descriptors</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Novice Learners can</strong></td>
<td><em>Novice Learners can...</em></td>
</tr>
<tr>
<td>observe and identify tangible products of the target culture.</td>
<td>- identify and observe tangible products of the culture such as toys, dress, homes, monuments, currency, famous people, and art.</td>
</tr>
<tr>
<td></td>
<td>- identify, discuss, and produce types of artwork, crafts, or graphic representations enjoyed or made by their peer group within the target culture such as models of monuments, mosaics, murals, traditional recipes, etc.</td>
</tr>
<tr>
<td></td>
<td>- express, either in simple language, symbols, or actions, the connections among cultural practices, products, and perspectives.</td>
</tr>
<tr>
<td><strong>Intermediate Learners can</strong></td>
<td><em>Intermediate Learners can...</em></td>
</tr>
<tr>
<td>observe and experience expressive products of the culture and analyze their importance.</td>
<td>- observe, read, listen to, and perform cultural products such as stories, poetry, music, paintings, dance, drama, and architecture, and explain the origin and importance of these products in today's culture.</td>
</tr>
<tr>
<td></td>
<td>- perform samples of expressive products of the culture such as poetry, music, art, dance, storytelling and drama; explore the role of these products in the larger community.</td>
</tr>
<tr>
<td></td>
<td>- create &quot;cultural triangles,&quot; connecting products to associated practices along with suggested perspectives based on background information.</td>
</tr>
<tr>
<td><strong>Advanced Learners can</strong></td>
<td><em>Advanced Learners can...</em></td>
</tr>
<tr>
<td>identify, discuss, and analyze both tangible and intangible products of the culture, and are able to create samples of expressive products that relate appropriately to cultural perspectives.</td>
<td>- identify, discuss and analyze such intangible products as social, economic, and political institutions, and describe relationships among these institutions and perspectives of the culture.</td>
</tr>
<tr>
<td></td>
<td>- analyze literature, music, visual arts, dance, media and film of the culture and the unique perspective conveyed.</td>
</tr>
<tr>
<td></td>
<td>- create samples of expressive products of the culture such as poetry, music, art, dance, storytelling and drama.</td>
</tr>
<tr>
<td></td>
<td>- create &quot;cultural triangles&quot; connecting products to associated practices and giving evidence-based insights to the cultural perspective.</td>
</tr>
</tbody>
</table>
Goal Area: CONNECTIONS

Connect with other disciplines and acquire information and diverse perspectives in order to use the language to function in academic and career-related situations.

Standard 3.1 Making Content Connections
Learners build, reinforce, and expand their knowledge of other disciplines while using the target language to develop critical thinking and to solve problems creatively.

3.1.A English Literacy and Social Studies

<table>
<thead>
<tr>
<th>Performance Descriptors</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Learners can transfer literacy and analytic skills developed in English and Social Studies to apply with their emerging literacy in the target language.</td>
<td>Novice Learners can...</td>
</tr>
</tbody>
</table>

- read or listen to stories from the target culture and compare them to familiar stories from the same genre.
- present short biographical sketches of people who have had a positive influence locally or globally.
- read and view different text types and genres in order to interpret content.
- identify and label maps of cities, states, or countries with civic and geographic features where the target language is used.

Intermediate Learners can...
- read, view, compare, and classify different text types and genres.
- write original poems, stories, and plays using their understanding of the characteristics of these genres.
- seek out authentic articles or multimedia on topics being studied in other classes and enter target language notes on main ideas in a journal.
- make oral or written presentations in the target language on topics studied in other classes.
- describe and compare key characteristics of target language countries.
- create timelines of historic events in the target language countries.
- use their knowledge of geography to create maps of countries where the target language is spoken.
- maintain a blog comparing attitudes and reactions to current events of global importance in target language countries.

Advanced Learners can...
- write and produce an original play to highlight a challenge facing people who speak the target language.
use their knowledge of subjects taught in their schools to tutor English language learners whose first language is the target language.
use their knowledge of different forms of government to compare how leaders of countries where the target language is spoken are chosen or elected.

3.1.B Science, Technology, Engineering, and Math (STEM)

**Performance Descriptors**
Language Learners explore and apply Math and Science “Practices” to help develop diverse approaches to language learning.

**Indicators**

**Novice Learners can…**
- use appropriate tools strategically.
- attend to precision.
- look for and make use of structure.
- look for and express regularity in repeated reasoning.
- obtain, evaluate, and communicate information.
- plan and carry out investigations in the target language.
- use mathematics skills to convert U.S. dollars to the currencies of the target language countries in order to understand prices of items.
- use mathematics skills to convert weights and measurements from the American system to the metric system in order to understand distances, quantities etc.
- use authentic resources about a region or ecosystem introduced in science class to create a target language poster that highlights plants, animal life, geographical features, and weather in the area.
- use science knowledge and skills to record daily temperatures and weather in different locations around the world based on location and time of year.

**Intermediate Learners can…**
- research, compare, and evaluate impacts of environmental, social, and economic decisions in target language countries.
- use knowledge from health and science classes plus research to compare and evaluate healthy lifestyles in target language countries.
- research and report on contributions of the target language cultures to science and medicine.
- analyze and interpret data.

**Advanced Learners can…**
- define problems, ask questions to make sense of problems in the target language, and persevere in solving them.
- develop and use models incorporating mathematics and computational thinking in the target language.
- construct viable arguments from evidence and critique the reasoning of others in the target language.
- reason abstractly and quantitatively in the target language.
3.1.C Arts
Performance Descriptors

Language Learners can explore artistic expression through the target language.

Indicators

Novice Learners can...
• interact with authentic examples of culture, such as music, art, dance, visual arts, architecture, and cultural movements or styles originating from target language countries.
• identify key creators or innovators in the arts from target language countries.

Intermediate Learners can...
• research and present authentic examples of culture from target language countries.
• compare authentic art work of the same time period, style, or movement by different artists of target language countries.

Advanced Learners can...
• write critical analysis of a movie, political cartoon, or piece of art from a target language country.
• write and produce an original play to highlight a challenge or issue facing people in a target language countries.

3.1.D Career, and Technical Education (CTE)

Performance Descriptors

Language Learners can exercise foundational skills of career pathways, exhibited and communicated using their emerging proficiency in a language other than English.

Indicators

Novice - Intermediate – Advanced Learners can...
• act as a responsible and contributing citizen and employee.
• use technology to enhance productivity.
• demonstrate creativity and innovation.
• model integrity, ethical leadership and effective management, apply appropriate academic and technical skills.
• attend to personal health and financial well-being.
• communicate clearly, effectively and with reason.
• employ valid and reliable research strategies.
• work productively in teams while using cultural and global competence (see Culture and Communities).
Goal Area: CONNECTIONS

Connect with other disciplines and acquire information and diverse perspectives in order to use the target language to function in academic and career-related situations.

Standard 3.2 Acquiring Information and Diverse Perspectives
Learners access and evaluate information and diverse perspectives that are available through the target language and its cultures.

**Performance Descriptors**

**Learners can** use authentic materials, i.e. those made by and for speakers of the target language, to access new information and gain diverse perspectives.

**Indicators**

**Novice Learners can...**
- read, listen to, or talk about age-appropriate school content in the target language.
- expand vocabulary through exploration of illustrations, infographics, video clips, websites, and print.
- identify the main idea(s) of authentic target language texts on current events or familiar topics.
- explore websites of schools in target language countries to identify courses, schedules, and special projects, and compare the information to their school’s website.
- identify, explore, and discuss authentic instructional websites, materials, news media, short texts, and videos created for speakers of the target language.

**Intermediate Learners can...**
- use sources intended for same-age speakers of the target language to prepare presentations on familiar topics.
- research how a major figure from history, science, or the arts is described in the target language and use it to expand what they already know.
- access survey results or research preferences of people in a target language community.
- view publicity for products sold in target language countries and compare the publicity to the way similar products are marketed in the US.
- compare news articles on front pages of newspapers from countries where the target language is spoken.
- compare listings of living spaces for sale or rent in target language countries in terms of cost, size, location, and what features are showcased.
- analyze instructional websites and materials created for speakers of the target language and compare them to instructional resources in the US.
- find, compare, and discuss coverage of current events in the target culture and in the US.

**Advanced Learners can...**
- research an issue of global importance in order to provide insights from the perspective of a country or countries where the target language is spoken.
- read a piece of literature in the target language and analyze the universality of the message.
- prepare a virtual exhibit of artwork from a target language country, situating the contents historically, and explaining the importance of the artwork to the country of origin.
• research and debate global issues as represented in target language news sources with different political slants.
• compare, analyze, and present on how and why publicity for the same product differs in the target culture and the US.
Goal Area: COMPARISONS

Develop insight into the nature of language and culture in order to interact with cultural competence.

Standard 4.1 Language Comparisons

Learners use the language to investigate, explain, and reflect on the nature of language through comparisons of the language studied and their own.

**Performance Descriptors**

**Learners can** accept that there are language families with strong similarities or few similarities, and that no two language systems are alike.

**Indicators**

**Novice Learners can…**
- observe and compare registers of language (e.g., formal and informal) in greetings and leave-takings and other common social interactions in the language they are learning and their own.
- recognize similarities and differences between the sound and writing systems in the language they are learning and their own.
- identify cognates between the target language and their native language and cite the patterns that connect them, and they detect false cognates within the context in which they see them suggests a misfit.
- inventory idiomatic expressions in both their native language and the language being learned and talk about how idiomatic expressions work in general.

**Intermediate Learners can…**
- identify and compare language appropriate to specific social groups and situations in the language they are learning and their own.
- identify patterns and explain discrepancies between the sound and writing systems in both their native language and the language being learned.
- hypothesize about the similarities of languages based on their awareness of cognates and similar idioms.
- compare syntax functions (e.g., word order, inflections, and verb tense) to express meaning in both their native language and the language being learned.

**Advanced Learners can…**
- analyze and compare differences between spoken and written grammar and lexicon in both their native language and the language being learned, taking into account audience, purpose, and genre.
- recognize that idioms may include cognates as well as false cognates.
- analyze elements of the language being learned such as time and tense, and comparable linguistic elements in the native language, and conjecture about how languages use forms to express time and tense relationships.
Goal Area: COMPARISONS
Develop insight into the nature of language and culture in order to interact with cultural competence.
Standard 4.2 Cultural Comparisons
Learners use the language to investigate, explain, and reflect on the concept of culture through comparisons of the cultures studied and their own.

**Performance Descriptors**

**Indicators**

**Learners can** accept differences between the target language culture and their own.

**Novice Learners can...**
- demonstrate and compare/contrast appropriate gestures and oral expressions for greetings, leave takings, and other common social interactions in the target cultures and their own.
- compare daily routines and celebrations (i.e. birthdays and holidays) in the target cultures to their own.
- compare/contrast tangible products (i.e. toys, sports, equipment, and food) of the target cultures to their own.
- compare/contrast expressive products (i.e. rhymes, songs, and folktales) of the target cultures to their own.

**Intermediate Learners can...**
- document and contrast verbal and nonverbal behavior in daily activities among peers or mixed groups in the target cultures to their own.
- hypothesize about the relationship between cultural perspectives and practices (i.e. holidays, celebrations, work habits, play, role of family, schooling, social networking, career choices, and free time) by analyzing selected practices from the target cultures compared to their own.
- compare/contrast the function of everyday objects (i.e. household items, tools, clothing) and authentic materials (i.e. creative works, news, and social media) produced in target cultures and speculate on why certain products originate in and/or are important to particular cultures.
- hypothesize about the relationship between cultural perspectives and expressible products (i.e. music, visual arts, and forms of literature) by analyzing selected products from the target cultures and their own.

**Advanced Learners can...**
- identify, discuss, and analyze social, economic, and political institutions and related perspectives in the target cultures and their own.
- identify, discuss, and analyze tangible and intangible products and their use in the target cultures and their own, as represented in authentic materials, such as literary texts, films, social media, interviews, and news stories.
- identify, examine, and analyze the relationship between cultural products, practices, and perspectives in the target cultures and their own by conduction research, observations, and interviews.
Goal Area – Communities

Communicate and interact with cultural competence in order to participate in multilingual communities at home and around the world.

Standard 5.1 – School and Global Communities

Learners use the language both within and beyond the classroom to interact and collaborate in their community and the globalized world.

**Performance Descriptors**

### Communicate and interact with cultural competence in order to participate in multilingual communities at home and around the world.

- Learners share their knowledge of language and culture with other language learners.
- Learners interact on a regular basis through digital media tools available to them, either individually or in school communities.
- Learners engage in language and culture-related events and projects within both real and virtual communities at both the local and global level.

### Indicators

#### Novice Learners can...

- attempt to interact in the target language with members of their community.
- identify professions that require proficiency in the target language.
- exchange basic information about themselves, their studies, or their family, with speakers of the target language and/or students in other classes, in face-to-face or virtual settings, such as social media, instant messaging, and video conferencing, etc.

#### Intermediate Learners can...

- communicate on a personal level with speakers of the language in person or via email, video chats, instant messaging, and shared video clips.
- discuss steps to becoming a professional in a field requiring the ability to communicate in the target language.
- write and illustrate stories to present to others.
- discuss topics of personal interest through interpersonal oral or written exchanges with speakers of the target language and/or students in other classes in face-to-face or virtual settings, such as social media, instant messaging, and video conferencing, etc.

#### Advanced Learners can...

- demonstrate a well-developed target language and cultural application, which increase the marketability of the employee and the ability of the employer to meet the expectations of the customer.
- communicate orally or in writing with members of the other culture regarding topics of personal interest, community issues, or world concern.
- conduct research in the target language or assist in the translation of resources for the benefit of a community organization.
- discuss and express opinions on current events and issues through interpersonal oral or written exchanges with speakers of the target language and/or students in other classes, and in face-to-face or virtual settings, such as social media, instant messaging, and video conferencing.
Goal Area – Communities

*Communicate and interact with cultural competence in order to participate in multilingual communities at home and around the world.*

Standard 5.2 – Lifelong Learning

Learners set goals and reflect on their progress in using languages for enjoyment, enrichment, and advancement.

<table>
<thead>
<tr>
<th>Performance Descriptors</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate and interact with cultural competence in order to participate in multilingual communities at home and around the world.</td>
<td>Novice Learners can…</td>
</tr>
<tr>
<td>• Learners use everyday skills and activities to access various entertainment and information sources available to speakers of the other language.</td>
<td>• interpret materials and/or use media from the target language and culture for enjoyment.</td>
</tr>
<tr>
<td>• Learners explore opportunities for personal enrichment and/or professional advancement through online and digital resources or through travel to countries where the target language is spoken.</td>
<td>• play sports or games from the culture.</td>
</tr>
<tr>
<td>• Learners maintain and increase their proficiency and cultural knowledge to prepare to live and work in the increasingly multilingual communities of the 21st century.</td>
<td>• listen to music, sing songs, or play musical instruments from the target culture.</td>
</tr>
<tr>
<td>Intermediate Learners can…</td>
<td>• exchange information about topics of personal interest.</td>
</tr>
<tr>
<td>• access news and entertainment media in the target language.</td>
<td>Advanced Learners can…</td>
</tr>
<tr>
<td>• attend or use media to view cultural events and social activities.</td>
<td>• explore the internet to find sites of personal interest where they can use the target language to maintain and to increase their communication skills.</td>
</tr>
<tr>
<td>Advanced Learners can…</td>
<td>• establish and/or maintain interpersonal relations with speakers of the target language in face-to-face or virtual settings.</td>
</tr>
</tbody>
</table>

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Bibliography


Kansas English Language Proficiency Standards, Kansas State Department of Education, 2013.


Language Educator, January/February 2016, Volume 11, Issue 1. (focus issue on new standards)

- “My Journey Following the Path of the World-Readiness Standards”, Andrea Behn, p. 41-44.
- “Putting the “I” in IPA”, Kate Falvey, p. 52-53.


NCSSFL-ACTFL Collaboration website for LinguaFolio®: http://ncssfl.org/linguafolio/ncssfl-actfl-collaboration/

Glossary

**ACTFL:** The American Council on the Teaching of Foreign Language is dedicated to the improvement and expansion of the teaching and learning of all languages at all levels of instruction. Founded in 1967, ACTFL is an individual membership organization of more than 12,500 language educators and administrators from elementary through graduate education, as well as government and industry.

**Advanced Placement (AP):** Through a system of rigorous courses and College Board exams juniors and seniors have the opportunity to earn credit or advanced standing at most of the nation's colleges and universities.

**ASL:** American Sign Language, recognized as a foreign language in Kansas according to state statute 72-1121, L1990 Ch. 253. P.2, July 1, 1990.

**Articulation:** planned, progressive transition from one level of language proficiency to the next higher level, regardless of grade level or institution.

**Authentic sources:** written, aural, or visual texts created by a native speaker with the intent to be read, listened to, or watched by native speakers; representative of the real world.

**Authentic speech:** language spoken by native speakers to other native speakers within a cultural context.

**Authentic text:** language written by native speakers for other native speakers within a cultural context; can be in print or multi-media format.

**Cognate:** a word is cognate with another if both derive from the same word in an ancestral language.

**Cultural triangle:** cultural analysis that makes connections between a product from the target culture, how it is used (practice), and what that tells us about the target culture (perspective).

**Graphic organizer:** an organizational picture, such as Venn diagram or webbing, that helps the learner identify the elements critical for comprehension.

**Heritage speaker:** a person who has learned a non-English language through exposure at home or in the community, but may not have any formal instruction in the language, and may prefer use of the English language in many/most situations.
Idiom: (also called idiomatic expression) is an expression, word, or phrase that has a figurative meaning conventionally understood by native speakers. This meaning is different from the literal meaning of the idiom's individual elements. In other words, idioms don't mean exactly what the individual words say.

International Baccalaureate (IB): The International Baccalaureate (IB) Diploma Programme is a challenging two-year curriculum, primarily aimed at students aged 16 to 19. It leads to a qualification that is widely recognized by the world’s leading universities.

Language acquisition: a subconscious process similar, if not identical, to the way children develop ability in their native language.

Native speaker: a person who speaks the language as their first language.

Nuance: shades of meaning.

Minimal functional proficiency: the ability to describe things in one's immediate environment, order a meal, ask a simple question, or tell a simple story. The speaker is not necessarily able to use language for professional purposes, though they may be able to, for example, greet a customer or handle a phone call in another language.

Performance: communicative ability in all forms of language and in cultural interaction, but which takes place in a classroom or other studied context. Student language performance level is generally more advanced than actual proficiency level.

Proficiency: communicative ability in all forms of language and in cultural interaction.

Register: the use of appropriate formal and informal terms of address (in some languages 'you' for one or more family and friends would be quite different from 'you' for teachers, judges, or police officers).

Scaffolding: coaching or modeling provided by a teacher to increase students' likelihood of success as they develop new skills or learn new concepts. Scaffolding in education is analogous to scaffolding in construction: just as a building's scaffolding is a temporary framework that is withdrawn when the structure is strong enough to stand on its own, so too is scaffolding in the classroom removed when students achieve competence in the targeted area.

Sympathetic listener/speaker/signer: a person accustomed to adapting, modifying and/or simplifying language for the language learner; a person who actively attempts to construct meaning from language that varies from native speech in content and/or structure.

Syntax: the branch of grammar concerned with the placement or order of words in forming phrases, clauses, and sentences.

Target language and culture: the language being studied and the cultures related to it.
Appendix A: Statement of Philosophy

Language and communication are at the heart of the human experience. The United States must educate students who are equipped linguistically and culturally to communicate successfully in a pluralistic American society and abroad. This imperative envisions a future in which ALL students will develop and maintain proficiency in English and at least one other language, modern or classical. Learners who come from non-English-speaking backgrounds should also have opportunities to develop further proficiencies in their first language.

Supporting this vision are three assumptions about language and culture, learners of language and culture, and language and culture education.

Competence in more than one language and culture enables people to
• communicate with people in other cultures in a variety of settings,
• look beyond their customary borders,
• develop insight into their own language and culture,
• act with greater awareness of self, of other cultures, and their own relationship to those cultures, and
• gain direct access to additional bodies of knowledge, and participate more fully in the global community and marketplace.

All students can be successful language and culture learners, and they must
• have access to language and culture study that is integrated into the entire education experience,
• benefit from the development and maintenance of proficiency in more than one language,
• learn in a variety of ways and settings, and
• acquire proficiency at varied rates.

Language and culture education [should be] part of the core curriculum, and [should be tied to program models that]
• incorporate effective strategies, assessment procedures, and technologies,
• reflect evolving standards at the national, state, and local levels, and
• develop and enhance basic communication skills and higher order thinking skills.

(World-Readiness Standards for Learning Languages, American Council on the Teaching of Foreign Languages, Alexandria, VA, 2015, p. 7)
Appendix B:

<table>
<thead>
<tr>
<th>Rose Capacities</th>
<th>Standards for World Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sufficient oral and written communication skills to enable students to function in a complex and rapidly changing civilization</td>
<td>Communication: 1.1 Interpersonal, 1.2 Interpretive, 1.3 Presentational</td>
</tr>
<tr>
<td></td>
<td>Connections: 3.1 Making Content Connections 3.2 Acquiring Information and Diverse Perspectives</td>
</tr>
<tr>
<td></td>
<td>Communities: 5.1 School and Global Communities</td>
</tr>
<tr>
<td>2. Sufficient knowledge of economic, social and political systems to enable the students to make informed choices</td>
<td>Cultures: 2.2 Relating Cultural Products to Perspectives</td>
</tr>
<tr>
<td></td>
<td>Connections: 3.1 Making Content Connections 3.2 Acquiring Information and Diverse Perspectives</td>
</tr>
<tr>
<td></td>
<td>Comparisons: 4.2 Cultural Comparisons</td>
</tr>
<tr>
<td></td>
<td>Communities: 5.2 Lifelong Learning</td>
</tr>
<tr>
<td>3. Sufficient understanding of governmental processes to enable the student to understand the issues that affect his or her community, state and nation</td>
<td>Cultures: 2.1 Relating Cultural Practices to Perspectives</td>
</tr>
<tr>
<td></td>
<td>Connections: 3.1 Making Content Connections</td>
</tr>
<tr>
<td>4. Sufficient self-knowledge and knowledge of his or her mental and physical wellness</td>
<td>Communications: 1.1 Interpersonal, 1.3 Presentational</td>
</tr>
<tr>
<td></td>
<td>Connections: 3.1 Making Content Connections, Communities: 5.1 School and Global Communities,</td>
</tr>
<tr>
<td></td>
<td>5.2 Lifelong Learning</td>
</tr>
<tr>
<td>5. Sufficient grounding in the arts to enable each student to appreciate his or her cultural and historical heritage</td>
<td>Cultures: 2.1 Relating Cultural Practices to Perspectives</td>
</tr>
<tr>
<td></td>
<td>Connections: 3.1 Making Content Connections</td>
</tr>
<tr>
<td></td>
<td>Comparisons: 4.2 Cultural Comparisons</td>
</tr>
<tr>
<td></td>
<td>Communities: 5.2 Lifelong Learning</td>
</tr>
<tr>
<td>6. Sufficient training or preparation for advanced training in either academic or vocational fields so as to enable each child to choose and pursue life work intelligently</td>
<td>Communication: 1.1 Interpersonal, 1.2 Interpretive, 1.3 Presentational</td>
</tr>
<tr>
<td></td>
<td>Cultures: 2.1 Relating Cultural Practices to Perspectives</td>
</tr>
<tr>
<td></td>
<td>Connections: 3.1 Making Content Connections</td>
</tr>
<tr>
<td></td>
<td>Comparisons: 4.2 Cultural Comparisons</td>
</tr>
<tr>
<td></td>
<td>Communities: 5.1 School and Global Communities, 5.2 Lifelong Learning</td>
</tr>
<tr>
<td>7. Sufficient levels of academic or vocational skills to enable public school students to compete favorably with their counterparts in surrounding states, in academics or in the job market.</td>
<td>Communication: 1.1 Interpersonal, 1.2 Interpretive, 1.3 Presentational</td>
</tr>
<tr>
<td></td>
<td>Cultures: 2.1 Relating Cultural Practices to Perspectives</td>
</tr>
<tr>
<td></td>
<td>Connections: 3.1 Making Content Connections</td>
</tr>
<tr>
<td></td>
<td>Comparisons: 4.1 Language Comparisons, 4.2 Cultural Comparisons</td>
</tr>
<tr>
<td></td>
<td>Communities: 5.1 School and Global Communities, 5.2 Lifelong Learning</td>
</tr>
</tbody>
</table>
Appendix C:

Survive and cope: minimal functional proficiency

Satisfies most work requirements
Appendix D: Cultural Triangle and Iceberg
# Appendix E: Proficiency in the Workplace


## Oral Proficiency Levels in the Workplace

<table>
<thead>
<tr>
<th>ACTFL Level</th>
<th>ILR</th>
<th>Language Functions</th>
<th>Corresponding Professions/Positions*</th>
<th>Examples of Who Is Likely to Function at This Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distinguished</td>
<td>5</td>
<td>Ability to tailor language to specific audience, persuade, negotiate. Deal with nuance and subtlety.</td>
<td>Foreign Service Diplomat, Contractor Negotiator, International Specialist, Intelligence Specialist</td>
<td><em>Highly articulate, professionally specialized native speakers&lt;br&gt;Language learners with extended (17 years) and current professional and/or educational experience in the target culture</em></td>
</tr>
<tr>
<td>Superior</td>
<td>3</td>
<td>Discuss topics extensively, support opinions, hypothesize. Deal with linguistically unfamiliar situations.</td>
<td>University Language Professor, Financial Services Marketing Consultant, Foreign Area Office, Lawyer, Judge, Court Interpreter</td>
<td><em>Well-educated native speakers&lt;br&gt; Educated language learners with extended professional and/or educational experience in the target language environment</em></td>
</tr>
<tr>
<td>Advanced High</td>
<td>2+</td>
<td>Narrate and describe in past, present, and future. Deal effectively with an unanticipated complication.</td>
<td>Physician, Human Resources Communications Consultant, Financial Services Senior Consultant, Quality Assurance Specialist, Marketing Manager, Financial Advisor, Broker, Military Linguist, Translation Officer</td>
<td><em>Language learners with graduate degrees in language or a related area and extended educational experience in target environments</em></td>
</tr>
<tr>
<td>Advanced Mid</td>
<td>2</td>
<td>Create with language, initiate, maintain, and bring to a close simple conversations by asking and responding to simple questions.</td>
<td>Banking and Investment Services Customer Service Representative, Fraud Specialist, Account Executive, Medical Interpreter, Patient Advocate, Court Stenographer, Court Interpreter, Human Resources Benefits Specialist, Technical Service Agent, Collections Representative, Estimating Coordinator</td>
<td><em>Heritage speakers, informal learners, non-academic learners who have significant contact with language&lt;br&gt;Undergraduate majors with year-long study in the target language culture</em></td>
</tr>
<tr>
<td>Advanced Low</td>
<td>1+</td>
<td>Create with language, initiate, maintain, and bring to a close simple conversations by asking and responding to simple questions.</td>
<td>K-12 Language Teacher, Nurse, Social Worker, Claims Processor, Police Officer, Maintenance Administrator, Billing Clerk, Legal Secretary, Legal Documenter, 911 Dispatcher, Consumer Products Customer Service Representative, Retail Services Personnel</td>
<td><em>Undergraduate language majors</em></td>
</tr>
<tr>
<td>Intermediate High</td>
<td>1</td>
<td>Create with language, initiate, maintain, and bring to a close simple conversations by asking and responding to simple questions.</td>
<td>Fire Fighter, Utilities Installer, Auto Inspector, Aviation Personnel, Missionary, Tour Guide</td>
<td><em>Language learners following 6-8 year sequences of study (e.g., AP) or 2-6 semester college sequences</em></td>
</tr>
<tr>
<td>Intermediate Mid</td>
<td>0+</td>
<td>Communicate minimally with formulaic and role utterances, lists, and phrases.</td>
<td>Cashier, Sales Clerk (highly predictable contexts), Receptionist</td>
<td><em>Language learners following 4-year high school sequence or 2-semester college sequence&lt;br&gt;Language learners following an immersion language program in Grades K-6</em></td>
</tr>
<tr>
<td>Intermediate Low</td>
<td>0</td>
<td>Communicate minimally with formulaic and role utterances, lists, and phrases.</td>
<td>Fire Fighter, Utilities Installer, Auto Inspector, Aviation Personnel, Missionary, Tour Guide</td>
<td><em>Language learners following content-based language program in Grades K-6&lt;br&gt;Language learners following 2 years of high school language study</em></td>
</tr>
</tbody>
</table>

*The levels of proficiency associated with each of the positions above are minimal levels of oral proficiency based on task analyses. The minimal levels were determined by subject matter experts from companies and agencies who use ACTFL proficiency tests.*

---

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Appendix F: Integrated Performance Assessment (IPA) Format

I. Interpretive Communication Phase
Students listen to or read an authentic text (e.g., newspaper article, radio broadcast, etc.) and answer questions about literal comprehension and interpretation, including making inferences. Students also identify cultural perspectives and offer personal opinions and points of view. Teacher provides students with feedback before continuing to the next phase.

III. Presentational Communication Phase
Students engage in formal, one-way, presentational communication by sharing their research/ideas/options. Sample presentational formats: speeches, drama skits, radio broadcasts, posters, brochures, essays, websites, etc. The presentation should be based on the topic and information obtained in the previous two tasks, and the intended audience should include someone other than the teacher.

II. Interpersonal Communication Phase
After receiving feedback regarding Interpretive Phase, students engage in interpersonal oral communication about a particular topic which relates to the interpretive text; each speaker comes to the task with information the other may not have, creating a real need for communication. These tasks should allow for speakers to communicate in a spontaneous manner without using a script. This phase should be either audio- or videotaped.

(Adair-Hauck, Glisan, & Troyan, 2013, pp. 10-13).
Appendix G: Understanding by Design Unit Planning Template

<table>
<thead>
<tr>
<th>STAGE 1 – DESIRED RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established Goals:</td>
</tr>
<tr>
<td>Standard – (name standards addressed)</td>
</tr>
<tr>
<td>Standard</td>
</tr>
<tr>
<td>Standard</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Understandings:</th>
<th>Essential Questions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students understand that</td>
<td>• What?</td>
</tr>
<tr>
<td>• Students understand that.</td>
<td>• Why?</td>
</tr>
<tr>
<td>• Students understand that</td>
<td>• How? Etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students will know:</th>
<th>Students will be able to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STAGE 2 – ASSESSMENT EVIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Task(s):</td>
</tr>
<tr>
<td>•</td>
</tr>
<tr>
<td>•</td>
</tr>
<tr>
<td>•</td>
</tr>
</tbody>
</table>

<p>| STAGE 3 – LEARNING TASKS     |</p>
<table>
<thead>
<tr>
<th>Students will:</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td></td>
</tr>
<tr>
<td>•</td>
<td></td>
</tr>
<tr>
<td>•</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grading:</th>
<th>Notes: Consider giving a progress grade for in-class work ea day to keep students on task.</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td></td>
</tr>
<tr>
<td>•</td>
<td></td>
</tr>
<tr>
<td>•</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Line</th>
<th>Notes: What are students expected to do each day inside or outside of class?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
</tr>
</tbody>
</table>

### Appendix H:

**First Languages** (other than English) of K-12 Students in Kansas Schools, 2015-2016*

<table>
<thead>
<tr>
<th>Language</th>
<th>Number</th>
<th>Language</th>
<th>Number</th>
<th>Language</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish</td>
<td>53,940</td>
<td>Nepali</td>
<td>267</td>
<td>NAL</td>
<td>92</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>2,329</td>
<td>Urdu</td>
<td>260</td>
<td>Japanese</td>
<td>84</td>
</tr>
<tr>
<td>Khmer</td>
<td>1,892</td>
<td>Russian</td>
<td>224</td>
<td>Thai</td>
<td>84</td>
</tr>
<tr>
<td>Chinese</td>
<td>1,050</td>
<td>Somali</td>
<td>189</td>
<td>Farsi</td>
<td>70</td>
</tr>
<tr>
<td>Arabic</td>
<td>896</td>
<td>Hindi</td>
<td>184</td>
<td>Dinka</td>
<td>48</td>
</tr>
<tr>
<td>Lao</td>
<td>744</td>
<td>Amharic</td>
<td>169</td>
<td>Kinyarwanda</td>
<td>32</td>
</tr>
<tr>
<td>High German</td>
<td>540</td>
<td>French</td>
<td>153</td>
<td>Turkish</td>
<td>26</td>
</tr>
<tr>
<td>Burmese</td>
<td>398</td>
<td>ASL</td>
<td>156</td>
<td>Haitian</td>
<td>24</td>
</tr>
<tr>
<td>Hmong</td>
<td>359</td>
<td>Punjabi</td>
<td>119</td>
<td>Quiche</td>
<td>15</td>
</tr>
<tr>
<td>Korean</td>
<td>352</td>
<td>Portuguese</td>
<td>115</td>
<td>Bosnian</td>
<td>13</td>
</tr>
<tr>
<td>Swahili</td>
<td>337</td>
<td>Chuukese</td>
<td>101</td>
<td>Serb</td>
<td>12</td>
</tr>
<tr>
<td>Filipino/Tagalog</td>
<td>296</td>
<td>Gujarati</td>
<td>101</td>
<td>Others</td>
<td>2,936</td>
</tr>
</tbody>
</table>

* Of these students about 42,823 are identified as English Language Learners, the rest are assumed to be bilingual.

**TOTAL** 68,607
Mission
To prepare Kansas students for lifelong success through rigorous, quality academic instruction, career training and character development according to each student's gifts and talents.

Vision
Kansas leads the world in the success of each student.

Motto
Kansans CAN.

Successful Kansas High School Graduate
A successful Kansas high school graduate has the
• Academic preparation,
• Cognitive preparation,
• Technical skills,
• Employability skills and
• Civic engagement

Outcomes for Measuring Progress
• Kindergarten readiness
• Individual Plan of Study focused on career interest
• High school graduation rates
• Postsecondary completion/attendance
• Social/emotional growth measured locally
REQUEST AND RECOMMENDATION FOR BOARD ACTION  

Agenda Number: 10  
Meeting Date: 7/11/2017

Staff Initiating: Catherine Chmidling  
Director: Scott Myers  
Commissioner: Randy Watson

---

**Item Title:**  
Act on Higher Education Educator Preparation Program Standards for Elementary Education K-6

**Board Goals:**  
Provide an effective educator in every classroom

**Recommended Motion:**  
It is moved that the Kansas State Board of Education approve the new educator preparation program standards for Elementary Education K-6.

**Explanation of Situation Requiring Action:**  
Educator Preparation Program Standards establish program approval requirements to ensure that preparation programs in Kansas provide educator candidates with the opportunity to learn the knowledge and skills educators need for today’s learning context. The Institutions of Higher Education (IHEs) utilize program standards to develop their preparation programs and submit them for approval, and for continuous monitoring and improvement of their programs. The standards also help to establish professional learning requirements for licensure renewal.

Standards revision work groups are completing the task of revising all program standards to ensure they reflect new knowledge and skills educators need for effectiveness in today’s world. In June, a completed set of revised standards was presented for review: Elementary Education K-6. Approval of the standards is requested. Once approved, the IHEs have access to develop new programs around the standards or to revise their current programs to align to the updated standards.

The proposed standards, the previous standards and a crosswalk were provided at the June 2017 meeting. Staff and representatives from the standards revision committee will be available to answer questions.
Crosswalk: Previous versus New Elementary Education K-6 Program Standards

General Information about this Revision:
- Learning readiness, student wellness and healthy environment were combined into Standard 1 (St 1) to emphasize student wellness, acceptance, equitable conditions and classroom.
- Standards for (St 2) English Language Arts, (St 3) Mathematics, (St 4) Science, (St 5) Social Studies, (St 6) The Arts, and (St 7) Health, Movement, and Physical Activity were brought to currency through KS-CCR standards (Kansas College Career Readiness standards), content-specific professional associations, and STEM notions.
- Standards 2, 3, 4, 5 and 6 are divided by the following functions: (Function 1) Content, (Function 2) Assessment and (Function 3) Instruction including Instructional Strategies.
- The functions for Assessment and Instruction are inclusive of each content area.

Standard 1

<table>
<thead>
<tr>
<th>PREVIOUS STANDARDS</th>
<th>NEW STANDARDS</th>
<th>WHAT CHANGED?</th>
</tr>
</thead>
<tbody>
<tr>
<td>The kindergarten through sixth grade teacher demonstrates a high level of competence in use of the English language arts and knows, understands and uses concepts from emerging literacy, reading, language and child development to teach reading, writing, speaking, viewing, listening, and thinking skills, and to help all students successfully apply their developing literacy skills to many different situations, materials, and ideas.</td>
<td>Learning: The teacher candidate understands how learner development uses understanding of individual differences while creating an environment inclusive of high standards that supports individual and collaborative learning, and encourages positive social interaction, active engagement in learning, and self-motivation.</td>
<td>Learning moved from old Standard 7 to new Standard 1.</td>
</tr>
</tbody>
</table>

Standard 2

<table>
<thead>
<tr>
<th>PREVIOUS STANDARDS</th>
<th>NEW STANDARDS</th>
<th>WHAT CHANGED?</th>
</tr>
</thead>
<tbody>
<tr>
<td>The kindergarten through sixth grade teacher knows, understands, and uses the major concepts, procedures, and reasoning processes of mathematics that define numbers and operations,</td>
<td>English/Language Arts: The teacher candidate understands and uses the central concepts, tools of inquiry, and structures of the English/language arts (Reading, Writing, Speaking</td>
<td>Standard was brought to currency through KS-CCR standards (Kansas College Career Readiness standards), content-specific professional associations, and STEM notions.</td>
</tr>
</tbody>
</table>
geometry, measurement, data analysis and probability, and algebra so that all students understand relationships that can represent phenomena, solve problems, and manage data.

and Listening, and Language) to plan, implement, and assess language arts learning experiences that engage all students in critical thinking, creativity, and collaborative problem solving.

- Standard is divided by the following functions: (Function 1) Content, (Function 2) Assessment and (Function 3) Instruction including Instructional Strategies.
- English moved from old Standard 1 to new Standard 2.

## Standard 3

<table>
<thead>
<tr>
<th>PREVIOUS STANDARDS</th>
<th>NEW STANDARDS</th>
<th>WHAT CHANGED?</th>
</tr>
</thead>
</table>
| The kindergarten through sixth grade teacher knows, understands, and uses fundamental concepts in the subject matter of science— including physical, life, and earth and space sciences—as well as concepts in science and technology, science in personal and social perspectives, the history and nature of science, the unifying concepts of science, and the inquiry processes scientists use in discovery of new knowledge to build a base for scientific and technological literacy for all students. | Mathematics: The teacher candidate understands and uses the central concepts, tools of inquiry, and structures of mathematics (counting and cardinality, operations and algebraic thinking, number and operation in base ten and fractions, measurement and data, geometry, ratios and proportional relationships, statistics and probability) to plan, implement, and assess mathematical learning experiences that engage all students in critical thinking, creativity, and collaborative problem solving. | - Standard was brought to currency through KS-CCR standards (Kansas College Career Readiness standards), content-specific professional associations, and STEM notions.  
- Standard is divided by the following functions: (Function 1) Content, (Function 2) Assessment and (Function 3) Instruction including Instructional Strategies.  
- Mathematics moved from old Standard 2 to new Standard 3. |

## Standard 4

<table>
<thead>
<tr>
<th>PREVIOUS STANDARDS</th>
<th>NEW STANDARDS</th>
<th>WHAT CHANGED?</th>
</tr>
</thead>
</table>
| The kindergarten through sixth grade teacher knows, understands, and uses the major concepts and modes of inquiry from the social studies - the integrated study of history, geography, the social sciences, and other related areas - to promote all students’ abilities to make informed decisions as citizens of a culturally diverse democratic society and interdependent world. | Science The teacher candidate understands and uses scientific disciplinary core ideas, cross-cutting concepts, and science and engineering practices to plan, implement, and assess science learning experiences that engage all elementary learners in curiosity, exploration, sense-making, conceptual development, and problem solving. | - Standard was brought to currency through KS-CCR standards (Kansas College Career Readiness standards), content-specific professional associations, and STEM notions.  
- Standard is divided by the following functions: (Function 1) Content, (Function 2) Assessment and (Function 3) Instruction including Instructional Strategies.  
- Science moved from old Standard 3 to new Standard 4. |
### Standard 5

<table>
<thead>
<tr>
<th>PREVIOUS STANDARDS</th>
<th>NEW STANDARDS</th>
<th>WHAT CHANGED?</th>
</tr>
</thead>
</table>
| The kindergarten through sixth grade teacher can design, implement, and evaluate arts experiences that are developmentally appropriate, meaningful and challenging for all students, that lead to positive learning outcomes, and that develop positive dispositions toward artistic explorations and expression. | Social Studies: The teacher understands and uses the central concepts, tools of inquiry, and structures of the social studies (people and places, civics and government, geography, economics, history), to plan, implement, and assess social studies learning experiences that engage all learners in critical thinking, creativity, and collaborative problem solving. | • Standard was brought to currency through KS-CCR standards (Kansas College Career Readiness standards), content-specific professional associations, and STEM notions.  
• Standard is divided by the following functions: (Function 1) Content, (Function 2) Assessment and (Function 3) Instruction including Instructional Strategies.  
• Social Studies moved from old Standard 4 to new Standard 5. |

### Standard 6

<table>
<thead>
<tr>
<th>PREVIOUS STANDARDS</th>
<th>NEW STANDARDS</th>
<th>WHAT CHANGED?</th>
</tr>
</thead>
</table>
| The kindergarten through sixth grade teacher knows, understands, and uses the major concepts of health education and human movement and physical activity as central elements to foster active, healthy life styles and enhanced quality of life for all students. | The Arts: The teacher candidate understands and uses the central concepts, tools of inquiry, and structures of the arts (music, visual arts, dance, and theatre) to plan, implement, and assess artistic learning experiences that engage all learners in critical thinking, creativity, and collaborative problem solving. | • Standard was brought to currency through KS-CCR standards (Kansas College Career Readiness standards), content-specific professional associations, and STEM notions.  
• Standard is divided by the following functions: (Function 1) Content, (Function 2) Assessment and (Function 3) Instruction including Instructional Strategies.  
• Art moved from old Standard 5 to new Standard 6. |

### Standard 7

<table>
<thead>
<tr>
<th>PREVIOUS STANDARDS</th>
<th>NEW STANDARDS</th>
<th>WHAT CHANGED?</th>
</tr>
</thead>
</table>
| The kindergarten through sixth grade teacher uses his/her understanding of children's characteristics and needs and of multiple interacting influences on children's development and learning to create environments that are healthy, | Health, Movement, and Physical Activity  
The teacher candidate understands and uses health, human movement and physical activity. | • Standard was brought to currency through KS-CCR standards (Kansas College Career Readiness standards), content-specific professional associations, and STEM notions.  
• Aspects of Physical Education were expanded to consider movement in the classroom and to |
<table>
<thead>
<tr>
<th>respectful, supportive and challenging for all students.</th>
<th>use current research which has shown that healthy activities assist with better academic performance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Physical Education moved from old Standard 6 to new Standard 7.</td>
<td></td>
</tr>
</tbody>
</table>
**Learner(s) is defined as children including those with disabilities or exceptionalities, who are gifted, and students who represent diversity based on ethnicity, race, socioeconomic status, gender, language, religion, and geographic origin.**

### Standard 1: Learning
The teacher candidate understands how learner development uses understanding of individual differences while creating an environment inclusive of high standards that supports individual and collaborative learning, and encourages positive social interaction, active engagement in learning, and self-motivation.

#### Function 1: The Learner and Learner Development.
The teacher candidate understands how learners grow and develop recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate, relevant, and rigorous learning experiences.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1 CK The teacher candidate understands how learning occurs-- how learners construct knowledge, acquire skills, and develop disciplined thinking processes.</td>
<td>1.1.4 PS The teacher candidate collaborates with families, communities, colleagues, and other professionals to promote learner growth and development.</td>
</tr>
<tr>
<td>1.1.2 CK The teacher candidate understands the role of language and culture in learning.</td>
<td>1.1.5 PS The teacher candidate identifies readiness for learning (including, but not limited to, second language acquisition, culture, and family/community values) and understands how development in any one area may affect performance in others.</td>
</tr>
<tr>
<td>1.1.3 CK The teacher candidate knows the importance of the collaborative roles of adults in the lives of students, and demonstrates readiness to work with families, colleagues, other school professionals, and external community agencies to promote the intellectual, social, emotional, and physical growth and well-being of all children.</td>
<td>1.1.6 PS The teacher candidate communicates and collaborates in variety of ways with families and school staff about student learning, expanded learning opportunities, community service, and civic participation.</td>
</tr>
</tbody>
</table>

#### Function 2: Learner Differences.
The teacher candidate uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.1 CK The teacher candidate recognizes their own frames of reference and their impact on expectations for and relationships with learners and their families.</td>
<td>1.2.4 PS The teacher candidate advocates for the needs of the learner based on data to analyze practice and differentiates instruction accordingly.</td>
</tr>
</tbody>
</table>
1.2.2 CK  The teacher candidate understands the aspects of differentiation and intervention strategies and theories.

1.2.5 PS  The teacher candidate evaluates the effects of their professional decisions and actions on students, families and other professionals in the learning community.

1.2.3 CK  The teacher candidate knows the characteristics, strengths, and challenges of exceptional, gifted, and English language learners.

1.2.6 PS  The teacher candidate demonstrates a commitment to the equitable and ethical treatment of learners and their families.

1.2.7 PS  The teacher candidate accesses resources and incorporates strategies for planning, instruction, and assessment to provide services for addressing varying learning differences or needs (i.e., English language learners, exceptionalities, disabilities and gifted learners).

**Function 3: Learner Environment.**
The teacher candidate works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3.1 CK  The teacher candidate is thoughtful and responsive to establishing a culture for learning and creating an environment of respect and rapport.</td>
<td>1.3.2 PS  The teacher candidate reflects on teaching, co-teaching, learning, collaboration, and professional experiences, and provides evidence for continued improvement and renewal.</td>
</tr>
<tr>
<td>1.3.3 PS  The teacher candidate collaborates with learners, families, and colleagues to build a safe, positive learning climate of openness, mutual respect, support, and inquiry.</td>
<td>1.3.4 PS  The teacher candidate promotes responsible learning of interactive technologies to extend the possibilities for learning locally and globally.</td>
</tr>
<tr>
<td>1.3.5 PS  The teacher candidate effectively organizes physical space, establishes classroom rules, routines, and responsibilities to manage student behavior and provides an environment conducive to learning.</td>
<td></td>
</tr>
</tbody>
</table>

**Standard 2: English/Language Arts**
The teacher candidate understands and uses the central concepts, tools of inquiry, and structures of the English/language arts (Reading, Writing, Speaking and Listening, and Language) to plan, implement, and assess language arts learning experiences that engage all students in critical thinking, creativity, and collaborative problem solving.
**Function 1: Content.** The teacher candidate understands and uses the central concepts, tools of inquiry, and structures of the English/language arts (Reading, Writing, Speaking, Listening, Language, Viewing, and Visual Representation) and creates learning experiences that make these aspects of the discipline accessible and meaningful for students to assure mastery of the content.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1 CK  The teacher candidate understands and uses the central concepts, tools of inquiry, and structures of the English/language arts.</td>
<td>2.1.2 PS  The teacher candidate provides clarity in terms of word-level instructional reading strategies (phonemic basis for oral language, phonics instruction, syntax and semantics), text-level comprehension strategies (word meaning, fluency, critical analysis, multiple perspectives), reading-writing connections as a support for comprehension in order to guide students through appropriate learning progressions and to promote each student’s achievement.</td>
</tr>
<tr>
<td>2.1.3 PS  The teacher candidate designs and provides English/language arts learning experiences that encourage students to understand, question, and analyze ideas from diverse perspectives.</td>
<td>2.1.4 PS  The teacher candidate creates English/language arts lessons inclusive of appropriate time, materials, technology and instructional support for students’ learning.</td>
</tr>
<tr>
<td>2.1.5 PS  The teacher candidate provides clarity for elementary students in terms of writing.</td>
<td>2.1.6 PS  The teacher candidate provides clarity for elementary students in terms listening.</td>
</tr>
<tr>
<td>2.1.7 PS  The teacher candidate provides clarity for elementary students in terms language.</td>
<td>2.1.8 PS  The teacher candidate provides clarity for elementary students in terms viewing.</td>
</tr>
<tr>
<td>2.1.9 PS  The teacher candidate provides clarity for elementary students in terms visual representation.</td>
<td>2.1.10 PS  The teacher candidate integrates concepts, processes, and examples from science, literature, mathematics, music, art, and social studies.</td>
</tr>
</tbody>
</table>
**Function 2: Assessment.**
The teacher understands and uses a variety of appropriate English/language arts assessments strategies to engage students in their own growth, monitor progress, communicate meaningful feedback to relevant stakeholders, evaluate instructional effectiveness, and guide instructional decisions.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.1 CK The teacher candidate demonstrates knowledge of students, student learning, and assessment in English/language arts.</td>
<td>2.2.3 PS The teacher candidate balances the use of formative and summative assessment as appropriate to support, verify, and document English/language arts learning.</td>
</tr>
<tr>
<td>2.2.2 CK The teacher candidate demonstrates their understanding of the importance of appropriate English/language arts assessment techniques to support responsible decision making.</td>
<td>2.2.4 PS The teacher candidate engages students in multiple ways of demonstrating English/language arts knowledge and skill as part of the assessment process.</td>
</tr>
<tr>
<td>2.2.5 PS The teacher candidate designs reading/language arts assessments that match learning objectives with assessment methods and minimizes sources of bias that can distort assessment results.</td>
<td>2.2.6 PS The teacher candidate assures that the students self assess their English/language arts knowledge and skills.</td>
</tr>
<tr>
<td>2.2.7 PS The teacher candidate determines student learning profiles in order to proactively plan instruction to address students’ varied English/language arts learning needs and goals.</td>
<td>2.2.8 PS As the teacher candidate observes, listens, questions, and responds, the candidate adjusts instruction to meet the diverse needs of students.</td>
</tr>
<tr>
<td>2.2.9 PS The teacher candidate models and structures processes that guide students in examining their own thinking and learning as well as the performance of others.</td>
<td></td>
</tr>
</tbody>
</table>

**Function 3: Instruction.**
The teacher uses a variety of instructional strategies to plan and implement instruction that supports every student in meeting rigorous learning goals and encourage all learners to develop deep understanding of the English Language Arts and their cross-disciplinary connections, and to build skills to apply knowledge in meaningful ways.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3.1 CK</td>
<td>The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.</td>
</tr>
<tr>
<td>2.3.5 PS</td>
<td>The teacher candidate stimulates learner reflection on prior content knowledge, links new concepts to familiar concepts, and makes connections to students’ experiences.</td>
</tr>
<tr>
<td>2.3.2 CK</td>
<td>The teacher candidate knowledge of a variety of instructional strategies appropriate for elementary English/language arts.</td>
</tr>
<tr>
<td>2.3.6 PS</td>
<td>The teacher candidate provides developmentally appropriate English/language arts strategies within STEM (science, technology, engineering, and mathematics) activities and programs that require critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.</td>
</tr>
<tr>
<td>2.3.3 CK</td>
<td>The teacher candidate knowledge of cross-disciplinary connections between English/language arts and other elementary content areas.</td>
</tr>
<tr>
<td>2.3.7 PS</td>
<td>The teacher candidate is able to describe, and use appropriately, a variety of instructional strategies and materials to impact student learning in elementary English/language arts.</td>
</tr>
<tr>
<td>2.3.4 CK</td>
<td>In English/language arts, the teacher candidate demonstrates knowledge of the variety of instructional strategies appropriate for varied levels of instruction.</td>
</tr>
<tr>
<td>2.3.8 PS</td>
<td>The teacher candidate provides appropriate connections of English/language arts activities within the English/language arts domain (reading, writing, speaking, listening, viewing, and visual representation).</td>
</tr>
<tr>
<td>2.3.9 PS</td>
<td>Within the English/language arts curriculum, the teacher candidate uses cross-disciplinary connections to make knowledge of varied content areas connected and meaningful.</td>
</tr>
<tr>
<td>2.3.10 PS</td>
<td>The teacher candidate uses their knowledge of [Bloom’s] levels of learning to plan and implement instruction specific to each student, groups of students or the whole group to support their meeting goals and objectives, while developing a deep understanding of English/language arts.</td>
</tr>
<tr>
<td>2.3.11 PS</td>
<td>The teacher candidate adjusts English/language arts instruction to meet the needs of individuals and groups of students.</td>
</tr>
<tr>
<td>2.3.12 PS</td>
<td>The teacher candidate demonstrates an ability to motivate, engage, and support the students in their study of English/language arts.</td>
</tr>
<tr>
<td>2.3.13 PS</td>
<td>The teacher candidate uses cross-disciplinary connections to make knowledge of varied content areas connected and meaningful.</td>
</tr>
</tbody>
</table>
**Standard 3: Mathematics**
The teacher candidate understands and uses the central concepts, tools of inquiry, and structures of mathematics (counting and cardinality, operations and algebraic thinking, number and operation in base ten and fractions, measurement and data, geometry, ratios and proportional relationships, statistics and probability) to plan, implement, and assess mathematical learning experiences that engage all students in critical thinking, creativity, and collaborative problem solving.

**Function 1: Content.**
The teacher candidate understands and uses the central concepts, tools of inquiry, and structures of mathematics and creates learning experiences that make these aspects of the discipline accessible and meaningful for students to assure mastery of the content.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.1 CK The teacher candidate knows and identifies the K-6 student mathematical content standards counting and cardinality, operations and algebraic thinking, number and operation in base ten and fractions, measurement and data, geometry, ratios and proportional relationships, statistics and probability) and learning progressions as appropriate.</td>
<td>3.1.4 PS The teacher candidate uses multiple representations and explanations within the mathematical domains to guide students through appropriate learning progressions and to promote each student’s achievement.</td>
</tr>
<tr>
<td>3.1.2 CK The teacher candidate understands the basic strands of mathematics developmentally appropriate for K-6 students in the following domains: counting and cardinality, operations and algebraic thinking, number and operation in base ten and fractions, measurement and data, geometry, ratios and proportional relationships, statistics and probability).</td>
<td>3.1.5 PS The teacher candidate designs and provides mathematical learning experiences that encourage students to understand, question, and analyze ideas from diverse perspectives.</td>
</tr>
<tr>
<td>3.1.3 CK The teacher knows the academic language of the mathematical discipline and how to make it accessible to all elementary students.</td>
<td>3.1.6 PS The teacher candidate creates mathematics lessons inclusive of appropriate time, materials, technology and instructional support for students’ learning.</td>
</tr>
<tr>
<td>3.1.7 PS Within mathematics lessons, the teacher candidate provides time, materials, and instructional support for elementary students to use English/language arts skills in the mathematics in terms of graphically representing information, narrative statements related to graphs of data, and descriptions of processes students use to solve problems.</td>
<td></td>
</tr>
</tbody>
</table>
### Function 2: Assessment.
The teacher candidate understands and uses a variety of assessment areas, appropriate to the field of mathematics counting and cardinality, operations and algebraic thinking, number and operation in base ten and fractions, measurement and data, geometry, ratios and proportional relationships, statistics and probability, to engage students in their own growth, monitor progress, communicate meaningful feedback to relevant stakeholders, evaluate instructional effectiveness, and guide instructional decisions surrounding mathematics.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.1 CK  The teacher candidate knows how to design use formative and summative assessments to address specific learning goals and individual differences while minimizing sources of bias.</td>
<td>3.2.7 PS  The teacher candidate balances the use of formative and summative assessment as appropriate to support, verify, and document mathematical learning.</td>
</tr>
<tr>
<td>3.2.2 CK  The teacher candidate knows when and how to evaluate and report learner progress against standards.</td>
<td>3.2.8 PS  The teacher candidate engages students in multiple ways of demonstrating mathematical knowledge and skill as part of the assessment process.</td>
</tr>
<tr>
<td>3.2.3 CK  The teacher candidate understands the positive impact of effective descriptive feedback for learners and knows a variety of strategies for communicating this feedback.</td>
<td>3.2.9 PS  The teacher candidate designs mathematical assessments that match learning objectives with assessment methods and minimizes sources of bias that can distort assessment results.</td>
</tr>
<tr>
<td>3.2.4 CK  The teacher candidate understands the positive impact of effective descriptive feedback for learners and knows a variety of strategies for communicating this feedback.</td>
<td>3.2.10 PS  The teacher candidate assures that the students self-assess their mathematical knowledge and skills.</td>
</tr>
<tr>
<td>3.2.5 CK  The teacher knows how to analyze assessment data to understand patterns and gaps in learning, to guide planning and instruction, and to provide meaningful feedback to all learners.</td>
<td>3.2.11 PS  The teacher candidate determines student learning profiles in order to proactively plan instruction to address students’ varied mathematical learning needs and goals.</td>
</tr>
<tr>
<td>3.2.6 CK The teacher candidate knows when and how to engage learners in analyzing their own assessment results and in helping to set goals for their own learning.</td>
<td>3.2.12 PS  As the teacher candidate observes, listens, questions and responds, the candidate adjusts instruction to meet the diverse needs of students. The teacher candidate models and structures processes that guide students in examining their own thinking and learning as well as the performance of others.</td>
</tr>
</tbody>
</table>

### Function 3: Instruction.
The teacher candidate plans instruction using a variety of instructional strategies that support all learners in meeting meaningful and rigorous learning goals by drawing upon knowledge of
mathematical content areas counting and cardinality, operations and algebraic thinking, number and operation in base ten and fractions, measurement and data, geometry, ratios and proportional relationships, statistics and probability), curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3.1 CK The teacher understands how to connect concepts and use differing</td>
<td>3.3.5 PS The teacher candidate stimulates learner reflection on prior content</td>
</tr>
<tr>
<td>perspectives to engage learners in critical thinking, creativity, and collaborative</td>
<td>knowledge, links new concepts to familiar concepts, and makes connections to</td>
</tr>
<tr>
<td>mathematical problem solving related to authentic local and global issues.</td>
<td>students’ experiences, as applied to mathematics.</td>
</tr>
<tr>
<td>3.3.2 CK The teacher candidate knows the variety of mathematical practices</td>
<td>3.3.6 PS The teacher candidate provides developmentally appropriate mathematical</td>
</tr>
<tr>
<td>(problem solving, reasoning, modeling, attending to precision, identifying</td>
<td>activities and programs that required critical thinking, creativity, and collaborative</td>
</tr>
<tr>
<td>elements of structure, generalizing, engaging in mathematical communication,</td>
<td>problem solving related to authentic local and global issues.</td>
</tr>
<tr>
<td>making connections).</td>
<td></td>
</tr>
<tr>
<td>3.3.3 CK The teacher candidate identifies developmentally appropriate</td>
<td>3.3.7 PS The teacher candidate is able to describe, and use appropriately, a variety</td>
</tr>
<tr>
<td>manipulatives, tools (rulers, compasses, geoboards, number lines, calculators,</td>
<td>of instructional strategies and materials to impact student learning in elementary</td>
</tr>
<tr>
<td>etc.), as well as and iPhone, iPad and other apps related to mathematics.</td>
<td>mathematics.</td>
</tr>
<tr>
<td>3.3.4 CK The teacher candidate has a working knowledge of the variety of</td>
<td>3.3.8 PS The teacher candidate demonstrates and monitors appropriate use of the</td>
</tr>
<tr>
<td>instructional strategies appropriate for varied levels of instruction within the</td>
<td>mathematical tools by the students.</td>
</tr>
<tr>
<td>variety of mathematical concepts.</td>
<td></td>
</tr>
<tr>
<td>3.3.5 PS The teacher candidate stimulates learner reflection on prior content</td>
<td>3.3.9 PS The teacher candidate matches the mathematical problems to be solved to the</td>
</tr>
<tr>
<td>knowledge, links new concepts to familiar concepts, and makes connections to</td>
<td>appropriate tools that are required.</td>
</tr>
<tr>
<td>students’ experiences, as applied to mathematics.</td>
<td></td>
</tr>
<tr>
<td>3.3.10 PS The teacher candidate uses their knowledge of [Bloom’s] levels of</td>
<td>3.3.11 PS The teacher candidate adjusts mathematics instruction to meet the needs of</td>
</tr>
<tr>
<td>learning to plan and implement instruction specific to each student, groups of</td>
<td>individuals and groups of students.</td>
</tr>
<tr>
<td>students or the whole group to support their meeting goals and objectives, while</td>
<td></td>
</tr>
<tr>
<td>developing a deep understanding of mathematics.</td>
<td></td>
</tr>
<tr>
<td>3.3.11 PS The teacher candidate adjusts mathematics instruction to meet the needs</td>
<td></td>
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<tr>
<td>of individuals and groups of students.</td>
<td></td>
</tr>
<tr>
<td>3.3.12 PS The teacher candidate demonstrates an ability to motivate, engage, and</td>
<td></td>
</tr>
<tr>
<td>support the students in their study of mathematics.</td>
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</tr>
</tbody>
</table>
3.3.13 PS The teacher candidate uses cross-disciplinary connections to make knowledge of varied content areas connected and meaningful.

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**Standard 4: Science**
The teacher candidate understands and uses scientific disciplinary core ideas, cross-cutting concepts, and science and engineering practices to plan, implement, and assess science learning experiences that engage all elementary learners in curiosity, exploration, sense-making, conceptual development, and problem solving.

**Function 1: Content.**
The teacher candidate understands and uses scientific disciplinary core ideas, cross-cutting concepts, and science and engineering practices in order to engage elementary learners in science concept and skill development.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.1 CK The teacher candidate demonstrates understanding of disciplinary core ideas related to elementary concepts in physical sciences (matter and its interactions; motion and stability – forces and interactions; energy; waves and their applications in technologies for information transfer).</td>
<td>4.1.8 PS The teacher candidate generates curiosity, exploration, and understanding of science phenomena that guide learners to increasingly sophisticated conceptual understandings based on evidence and explanatory reasoning.</td>
</tr>
<tr>
<td>4.1.2 CK The teacher candidate demonstrates understanding of disciplinary core ideas related to elementary concepts in life sciences (organisms – structures and processes; ecosystems – interactions, energy, and dynamics; heredity – inheritance and variation of traits; biological evolution – unity and diversity).</td>
<td>4.1.9 PS The teacher candidate designs and provides learning experiences that foster creativity in solving engineering problems, and that focus on testing and optimizing design solutions.</td>
</tr>
<tr>
<td>4.1.3 CK The teacher candidate demonstrates understanding of disciplinary core ideas related to elementary concepts in earth and space sciences (Earth’s place in the universe; Earth’s systems; Earth and human activity).</td>
<td>4.1.10 PS The teacher candidate designs and provides learning experiences that encourage learners to engage in asking questions and defining problems; developing and using models; planning and carrying out investigations; analyzing and interpreting data; using mathematics and computational thinking; constructing explanations and designing solutions; engaging in argument from evidence; obtaining, evaluating, and communicating information.</td>
</tr>
<tr>
<td>4.1.4 CK The teacher candidate demonstrates understanding of disciplinary core ideas related to elementary concepts in engineering, technology, and applications of science (engineering design;</td>
<td>4.1.11 PS The teacher candidate plans and conducts lessons that actively engage elementary learners in accessible and meaningful learning experiences in physical sciences, life sciences,</td>
</tr>
<tr>
<td>Function 2: Assessment.</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>The teacher candidate understands and uses a variety of assessment strategies appropriate to science and engineering fields to engage learners in their own growth, monitor learning progress, communicate meaningful feedback to relevant stakeholders, evaluate instructional effectiveness, and guide instructional decisions.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Content Knowledge</strong></th>
<th><strong>Professional Skills</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.1 CK The teacher candidate demonstrates knowledge of the uses of formative and summative assessments, and informal and formal assessments, to address science learning goals and individual learner differences.</td>
<td>4.2.7 PS The teacher candidate balances the uses of formative and summative assessments as appropriate to support, verify, and document science learning, and to adjust and revise instructional practices.</td>
</tr>
<tr>
<td>4.2.2 CK The teacher candidate demonstrates an understanding of how to evaluate learner progress against standards.</td>
<td>4.2.8 PS The teacher candidate designs formative assessments to elicit learners’ prior thinking about science concepts and to recognize common</td>
</tr>
</tbody>
</table>

| 4.1.5 CK The teacher candidate demonstrates understanding of cross-cutting concepts integrated throughout the different science and engineering disciplines (patterns; cause and effect; scale, proportion, and quantity; systems and system models; energy and matter; structure and function; stability and change). | 4.1.12 PS The teacher candidate plans and conducts lessons that focus on identifying elementary concepts that cut across all science and engineering disciplines (cross-cutting concepts). |
| 4.1.6 CK The teacher candidate demonstrates understanding of the nature of science and uses scientific and engineering practices as operational tools of inquiry (asking questions and defining problems; developing and using models; planning and carrying out investigations; analyzing and interpreting data; using mathematics and computational thinking; constructing explanations and designing solutions; engaging in argument from evidence; obtaining, evaluating, and communicating information). | 4.1.13 PS The teacher candidate integrates concepts, practices, and examples from other disciplines (e.g., literacy, mathematics, physical education, music, art, social studies) into science lessons. |
| 4.1.7 CK The teacher candidate demonstrates understanding that the nature of scientific inquiry is based on deep curiosity and conceptual understandings of phenomena that have become more sophisticated over time based on increasing sources of evidence and explanatory reasoning. | 4.1.14 PS Within science lessons, the teacher candidate provides time, materials, and instructional support for elementary students to use English/language arts skills in the sciences in terms of graphically representing information, narrative statements related to graphs of data, and descriptions of processes students use to solve problems. |

| links among engineering, technology, science, and society). |  |
misconceptions and naïve understandings in elementary science.

| 4.2.3 CK | The teacher candidate understands the positive impact of effective descriptive feedback for learners and knows a variety of strategies for communicating this feedback. |
| 4.2.9 PS | The teacher candidate designs performance-based assessments that document conceptual and skill development while learners engage in science practices. |

| 4.2.4 CK | The teacher candidate understands how to communicate assessment findings to relevant stakeholders. |
| 4.2.10 PS | The teacher candidate designs science assessments that align with the science and engineering practices, the disciplinary core ideas, and the cross-cutting concepts integrated within each science standard. |

| 4.2.5 CK | The teacher candidate understands the importance of metacognitive approaches for learners to be engaged in monitoring and guiding their own learning. |
| 4.2.11 PS | The teacher candidate provides constructive and descriptive feedback to learners in ways that support concept and skill development. |

| 4.2.6 CK | The teacher candidate understands common sources of bias in assessing science learning and the impacts such biases have on learners. |
| 4.2.12 PS | As the teacher candidate observes, listens, questions, and responds, the candidate adjusts instruction to meet the diverse needs of learners. |

| 4.2.13 PS | The teacher candidate assures that learners self-assess their science conceptual learning and skill development. |

### Function 3: Instruction.
The teacher candidate plans and implements instruction that supports all learners to engage with curiosity, creativity, and increasing skill in science and engineering practices; that supports learners in developing increasingly more sophisticated science and engineering core ideas and cross-cutting concepts; and that integrates other disciplines.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
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</tr>
</thead>
<tbody>
<tr>
<td>4.3.1 CK</td>
<td>The teacher candidate demonstrates knowledge of science and engineering practices and how they relate to elementary learners.</td>
</tr>
<tr>
<td>4.3.10 PS</td>
<td>The teacher candidate stimulates learner reflection on prior conceptual understanding, links new concepts to familiar concepts, and makes connections to learner experiences, as appropriate to elementary science and engineering concepts.</td>
</tr>
</tbody>
</table>

<p>| 4.3.2 CK | The teacher candidate demonstrates knowledge of the central roles that curiosity, creativity, evidence, and sense-making have in elementary science learning. |
| 4.3.11 PS | The teacher candidate provides authentic phenomena that foster curiosity and creativity, and guides learners in evidence gathering and sense-making to develop deeper understandings. |</p>
<table>
<thead>
<tr>
<th>4.3.3 CK</th>
<th>The teacher candidate understands how to connect prior concepts with new challenges that stimulate science learning.</th>
<th>4.3.12 PS</th>
<th>The teacher candidate provides developmentally appropriate science activities that engage elementary learners in asking questions and defining problems; developing and using models; planning and carrying out investigations; analyzing and interpreting data; using mathematics and computational thinking; constructing explanations and designing solutions; engaging in argument from evidence; obtaining, evaluating, and communicating information.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3.4 CK</td>
<td>The teacher candidate demonstrates an understanding of the importance of learning progressions, concept development with increasing levels of sophistication, and constructivist learning theory in relation to science learning.</td>
<td>4.3.13 PS</td>
<td>The teacher candidate guides activities (e.g., discussion, writing, drawing, modeling, and presenting) that engage learners in constructing their own understandings with increasing levels of sophistication.</td>
</tr>
<tr>
<td>4.3.5 CK</td>
<td>The teacher candidate demonstrates knowledge of the importance of aligning instruction with learning cycles.</td>
<td>4.3.14 PS</td>
<td>The teacher candidate incorporates scientific tools, materials, and technology in developmentally appropriate science investigations.</td>
</tr>
<tr>
<td>4.3.6 CK</td>
<td>The teacher candidate demonstrates knowledge of developing inquiry-based science and engineering lessons.</td>
<td>4.3.15 PS</td>
<td>The teacher candidate demonstrates an ability to motivate, engage, and support learners by providing science activities that align with a learning cycle, such as the 5E learning cycle (Engage, Explore, Explain, Elaborate, Evaluate).</td>
</tr>
<tr>
<td>4.3.7 CK</td>
<td>The teacher candidate demonstrates an understanding of engaging learners in collaborative thinking and problem-solving related to authentic science and engineering phenomena and issues.</td>
<td>4.3.16 PS</td>
<td>The teacher candidate adjusts science instruction to meet the needs of diverse individuals and groups of learners, including those of traditionally under-represented groups in science and engineering.</td>
</tr>
<tr>
<td>4.3.8 CK</td>
<td>The teacher candidate demonstrates an understanding of instructional factors that commonly contribute to bias in learner engagement and achievement in science.</td>
<td>4.3.17 PS</td>
<td>The teacher candidate incorporates an understanding of [Bloom’s] levels of learning to engage learners in individual, small group, and large group configurations to support deep understanding of science.</td>
</tr>
<tr>
<td>4.3.9 CK</td>
<td>The teacher candidate demonstrates an understanding of safety considerations in relation to elementary science instruction.</td>
<td>4.3.18 PS</td>
<td>The teacher candidate incorporates cross-disciplinary connections (e.g., literacy, mathematics, physical education, music, art, social studies) into science learning.</td>
</tr>
<tr>
<td>4.3.19 PS</td>
<td>The teacher candidate incorporates best practices to ensure the safety of all learners, maintains equipment properly, stores and disposes of chemicals safely, and handles and cares for animals in an appropriate manner.</td>
<td></td>
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</tr>
</tbody>
</table>
4.3.20 PS  The teacher candidate provides developmentally appropriate scientific inquiry strategies within STEM (science, technology, engineering, and mathematics) activities and programs that require critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

Standard 5 Social Studies.
The teacher understands and uses the central concepts, tools of inquiry, and structures of the social studies (people and places, civics and government, geography, economics, history), to plan, implement, and assess social studies learning experiences that engage all learners in critical thinking, creativity, and collaborative problem solving.

Function 1 Content. The teacher understands the central concepts, tools of inquiry, and structures of social studies (people and places, civics and government, geography, economics, history), and creates learning experiences that make these aspects of the discipline accessible and meaningful for students to assure mastery of the content.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.1 CK  The teacher candidate knows and identifies the Kansas social studies content standards for students: 1. choices have consequences; 2. individuals have rights and responsibilities; 3. societies are shaped by beliefs, ideas, and diversity; 4. societies experience continuity and change over time; and 5. relationships among people, places, ideas, and environments are dynamic.</td>
<td>5.1.9 PS  The teacher candidate uses multiple representations and explanations within knowledge and methodology from the social studies discipline to guide students through appropriate learning progressions and to promote each student’s achievement.</td>
</tr>
<tr>
<td>5.1.2 CK  The teacher candidate has a substantial understanding of the information, concepts, theories, analytical approaches and differing values perspectives, including global and multicultural perspectives, important to teaching social studies.</td>
<td>5.1.10 PS  The teacher candidate demonstrates substantial understanding of the information, concepts, theories, analytical approaches and differing values perspectives, including global and multicultural perspectives, important to teaching social studies.</td>
</tr>
<tr>
<td>5.1.3 CK  The teacher candidate has a clear understanding of the process involved to teach problem-solving, critical-thinking, and application skills related to the social studies.</td>
<td>5.1.11 PS  The teacher candidate creates social studies lessons inclusive of appropriate time, materials, technology and instructional support for students’ learning.</td>
</tr>
</tbody>
</table>
5.1.4 CK  The teacher candidate has a firm foundation in multicultural education so that they can teach about it, and they need to be sensitive to the needs of minority children.

5.1.12 PS  Within social studies lessons, the teacher candidate provides time, materials, and instructional support for elementary students to use English/language arts skills in the social studies in terms of graphically representing information, timelines, narrative statements related to graphs of data, and descriptions of processes students use to solve problems.

5.1.5 CK  The teacher candidate has a firm foundational knowledge of civics and government including (a) individuals, groups, and institutions, (b) power, authority, and governance, and (c) civic ideals and practices.

5.1.13 PS  The teacher candidate integrates concepts, processes, and examples from science, literature, mathematics, music, art, and social studies.

5.1.6 CK  The teacher candidate has a firm foundational knowledge of geography (Kansas and regions of the world) including (a) people, places, and environments, and (b) local, regional, national, and global connections.

5.1.7 CK  The teacher candidate has a firm foundational knowledge economics (Kansas and regions of the world) including (a) production, distribution, and consumption, and (b) science, technology, and society.

5.1.8 CK  The teacher candidate understands how to teach students to be informed, thoughtful, engaged citizens as they enrich their communities, state, nation, world, and themselves, including culture, families and sense of self.

**Function 2 Assessment.** The teacher candidate understands and uses a variety of appropriate assessments for the social studies, in a natural and ongoing manner, to engage learners in their own growth, monitor progress, communicate meaningful feedback to relevant stakeholders, evaluate instructional effectiveness, and guide instructional decisions.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2.1 CK  The teacher candidate demonstrates an understanding that assessment practices should be goal oriented, appropriate in level of difficulty, feasible, and cost effective.</td>
<td>5.2.4 PS  The teacher candidate balances the use of formative and summative assessment as appropriate to support, verify, and document social studies learning.</td>
</tr>
<tr>
<td>5.2.2 CK  The teacher candidate understands the variety assessments appropriate to each field of social studies: people and places, civics and government, geography, economics, and history.</td>
<td>5.2.5 PS  The teacher candidate engages students in multiple ways of demonstrating social studies knowledge and skill as part of the assessment process.</td>
</tr>
</tbody>
</table>
5.2.3 CK  To interpret student understanding of social studies content, the elementary teacher candidate knows a variety of assessments to assess student understanding of the content. Activities may call for speech (recitation, discussion, role playing), writing (short answers, longer compositions as students acquire the necessary competencies), or other kinds of goal-oriented action.

5.2.6 PS  The teacher candidate designs social studies assessments that match learning objectives with assessment methods and minimizes sources of bias that can distort assessment results.

5.2.7 PS  The teacher candidate assures that the students self-assess their social studies knowledge and skills.

5.2.8 PS  The teacher candidate determines student learning profiles in order to proactively plan instruction to address students’ varied social studies learning needs and goals.

5.2.9 PS  As the teacher candidate observes, listens, questions, and responds, the candidate adjusts instruction to meet the diverse needs of students.

5.2.10 PS  The teacher candidate models and structures processes that guide students in examining their own thinking and learning as well as the performance of others.

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### Function 3 Instruction

The teacher candidate plans social studies instruction using a variety of instructional strategies that support all learners in meeting meaningful and rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3.1 CK  The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.</td>
<td>5.3.4 PS  The teacher candidate stimulates learner reflection on prior content knowledge, links new concepts to familiar concepts, and makes connections to students’ experiences.</td>
</tr>
<tr>
<td>5.3.2 CK  The teacher candidate demonstrates a thorough understanding of inquiry based learning that engage learners in critical thinking, creativity and collaborative problem solving.</td>
<td>5.3.5 PS  The teacher candidate provides developmentally appropriate social science inquiry strategies within STEM (science, technology, engineering, and mathematics) activities and programs that require critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.</td>
</tr>
<tr>
<td>5.3.3 CK  The teacher candidate demonstrates knowledge of the developmentally appropriate</td>
<td>5.3.6 PS  The teacher candidate is able to describe, and use appropriately, a variety of</td>
</tr>
</tbody>
</table>
ways of creating experiences to help students understand the social studies standards (sense of self, families, then and now, community, Kansas and regions of the US, a new nation through the 1800s, and ancient world history).

instructional strategies and materials to impact student learning in elementary social studies.

| 5.3.7 PS | The teacher candidate uses their knowledge of [Bloom’s] levels of learning to plan and implement instruction specific to each student, groups of students or the whole group to support their meeting goals and objectives, while developing a deep understanding of social studies. |
| 5.3.8 PS | The teacher candidate adjusts social studies instruction to meet the needs of individuals and groups of students. |
| 5.3.9 PS | The teacher candidate demonstrates an ability to motivate, engage, and support the students in their study of social studies. |
| 5.3.10 PS | The teacher candidate uses cross-disciplinary connections and social studies interconnections to make knowledge of varied content areas connected and meaningful. |

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**Standard 6 The Arts**
The teacher candidate understands and uses the central concepts, tools of inquiry, and structures of the arts (music, visual arts, dance, and theatre) to plan, implement, and assess artistic learning experiences that engage all learners in critical thinking, creativity, and collaborative problem solving.

**Function 1: Content.**
The teacher candidate understands the central concepts, tools of inquiry, and structures of the arts and creates learning experiences that make these aspects of the discipline accessible and meaningful for students to assure mastery of the content.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1.1 CK</td>
<td>The teacher candidate understands the traditions and language of the arts (music, visual arts, dance, and theatre).</td>
</tr>
<tr>
<td>6.1.2 CK</td>
<td>The teacher candidate understands the basic styles and thematic influences or artists, designs, traditions, and movements on one another.</td>
</tr>
<tr>
<td>6.1.3 CK</td>
<td>The teacher candidate knows and uses the vocabulary and processes used in the arts.</td>
</tr>
</tbody>
</table>
6.1.7 PS  The teacher candidate identifies the general steps, styles, and techniques associated with the various arts.

6.1.8 PS  The teacher candidate creates integrated lessons using the aspects of the arts inclusive of appropriate time, materials, technology and instructional support for students’ learning.

6.1.9 PS  Within integrated art lessons, the teacher candidate provides time, materials, and instructional support for elementary students to use English/Language arts skills in the arts in terms of graphically representing information and descriptions of processes students use to solve problems.

6.1.10 PS  The teacher candidate integrates concepts, processes, and examples from science, literature, mathematics, music, art, and social studies.

### Function 2: Assessment.
The teacher candidate understands and uses a variety of appropriate assessments, appropriate to the field of the arts, to engage learners in their own growth, monitor progress, communicate meaningful feedback to relevant stakeholders, evaluate instructional effectiveness, and guide instructional decisions.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2.1 CK  The teacher candidate understands the key components of being an art critic to allow students to analyze, describe, discuss, interpret, and critique their own works and the works of others.</td>
<td>6.2.3 PS  The teacher candidate balances the use of formative and summative assessment as appropriate to support, verify, and document fine arts learning.</td>
</tr>
<tr>
<td>6.2.2 CK  The teacher candidate analyzes the arts experiences, and provides direction and guidance to ensure that students are actively engaged in the lesson, its purpose and objectives.</td>
<td>6.2.4 PS  The teacher candidate engages students in multiple ways of demonstrating fine arts knowledge and skill as part of the assessment process.</td>
</tr>
<tr>
<td>6.2.5 PS  The teacher candidate designs fine arts assessments that match learning objectives with assessment methods and minimizes sources of bias that can distort assessment results.</td>
<td>6.2.6 PS  The teacher candidate assures that the students self-assess their fine arts knowledge and skills.</td>
</tr>
<tr>
<td>Content Knowledge</td>
<td>Professional Skills</td>
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<tr>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6.2.7 PS The teacher candidate determines student learning profiles in order to</td>
<td>6.2.8 PS As the teacher candidate observes, listens, questions, and responds, the</td>
</tr>
<tr>
<td>proactively plan instruction to address students’ varied fine arts learning needs</td>
<td>candidate adjusts instruction to meet the diverse needs of students.</td>
</tr>
<tr>
<td>and goals.</td>
<td></td>
</tr>
<tr>
<td>6.2.9 PS The teacher candidate models and structures processes that guide</td>
<td>6.2.9 PS The teacher candidate uses student knowledge and skills to provide events</td>
</tr>
<tr>
<td>students in examining their own thinking and learning as well as the performance</td>
<td>for children to describe, use, and touch; and manipulate materials and supplies to</td>
</tr>
<tr>
<td>of others.</td>
<td>determine the methods and organization of lessons.</td>
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<tr>
<td><strong>Function 3: Instruction.</strong></td>
<td></td>
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<tr>
<td>The teacher candidate plans effective instructional strategies that actively</td>
<td></td>
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<tr>
<td>engage students in creating, performing, and responding to the arts, in</td>
<td></td>
</tr>
<tr>
<td>developing interrelationships of the arts with other disciplines, to help</td>
<td></td>
</tr>
<tr>
<td>students understand the role of the arts historically and in everyday living.</td>
<td></td>
</tr>
<tr>
<td><strong>6.3.1 CK</strong> The teacher understands how to connect concepts and use differing</td>
<td>6.3.8 PS The teacher candidate sets appropriate, meaningful, and rigorous learning</td>
</tr>
<tr>
<td>perspectives to engage learners in critical thinking, creativity, and</td>
<td>goals for the arts experiences, integrating information as the experiences.</td>
</tr>
<tr>
<td>collaborative problem solving related to authentic local and global issues.</td>
<td></td>
</tr>
<tr>
<td>6.3.2 CK The teacher candidate identifies the various tools, supplies, and apps</td>
<td>6.3.9 PS The teacher candidate uses student knowledge and skills to provide events</td>
</tr>
<tr>
<td>used in music, art, dance, and theatre, locally, nationally, and internationally</td>
<td>for children to describe, use, and touch; and manipulate materials and supplies to</td>
</tr>
<tr>
<td>as appropriate.</td>
<td>determine the methods and organization of lessons.</td>
</tr>
<tr>
<td>6.3.3 CK The teacher candidate explores the steps of art making (music, visual</td>
<td>6.3.10 PS Within lessons related to the arts, the teacher candidate provides time,</td>
</tr>
<tr>
<td>arts, dance, and theatre), and develops the beginning skills of the critic.</td>
<td>materials, and instructional support for elementary students to:</td>
</tr>
<tr>
<td></td>
<td>• examine art works and write fictional stories about their origins and travels;</td>
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<tr>
<td></td>
<td>• compare and contrast indoor or outdoor spaces represented in works of art;</td>
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<tr>
<td></td>
<td>• describe how hands, faces, and feet are depicted in works of art;</td>
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<tr>
<td></td>
<td>• create songs, dances, or other artifacts, to define, describe, and/or picture a</td>
</tr>
<tr>
<td></td>
<td>variety of events, places, times.</td>
</tr>
<tr>
<td>6.3.4 CK The teacher candidate provides for literacy with the fine arts setting(s).</td>
<td>6.3.11 PS The teacher candidate sets appropriate, meaningful, and rigorous learning</td>
</tr>
<tr>
<td></td>
<td>goals for the arts experiences, integrating information as the experiences.</td>
</tr>
<tr>
<td>S.No</td>
<td>6.3.5 CK</td>
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<tr>
<td>------</td>
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</tr>
<tr>
<td>6.3.5 CK</td>
<td>The teacher candidate identifies the various tools, supplies, and apps used in music, art, dance, and theatre, locally, nationally and internationally as appropriate.</td>
</tr>
</tbody>
</table>
## STANDARD 7 Health, Movement, and Physical Activity
The teacher candidate understands and applies health, human movement and physical activity.

**Function 1:** Candidates use their understanding of the major concepts of health, human movement and physical activity as a part of a well-rounded education.

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Professional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1.1 CK The teacher candidate identifies basic health, nutrition, and safety procedure that promotes a healthy lifestyle.</td>
<td>7.1.4 PS The teacher candidate through integrative practice applies basic health, nutrition, and safety procedure that promotes a healthy lifestyle to meet the needs of individuals and groups of students.</td>
</tr>
<tr>
<td>7.1.2 CK The teacher candidate explores developmentally appropriate strategies for healthy lifestyles that include play and physical activity.</td>
<td>7.1.5 PS The teacher candidate models developmentally appropriate strategies for healthy lifestyles that include play and physical activity to meet the needs of individuals and groups of students.</td>
</tr>
<tr>
<td>7.1.3 CK The teacher candidate understands the impact of movement on brain development and learning when working with students.</td>
<td>7.1.6 PS The teacher candidate uses movement, using appropriate learning theories, across the curriculum to meet the needs of individuals and groups of students.</td>
</tr>
</tbody>
</table>
Standard #1   The kindergarten through sixth grade teacher demonstrates a high level of competence in use of the English language arts and knows, understands and uses concepts from emerging literacy, reading, language and child development to teach reading, writing, speaking, viewing, listening, and thinking skills, and to help all students successfully apply their developing literacy skills to many different situations, materials, and ideas.

**Knowledge**

1. The teacher knows that literacy skills are essential to help students understand texts, themselves and others, acquire new information, respond to the need and demands of society and the workplace, and experience personal fulfillment.
2. The teacher understands language arts acquisition and development.
3. The teacher knows how to assess and evaluate student progress in language arts.
4. The teacher has knowledge of a variety of genres, of children’s literature, including works written for K-6 students by ethnically diverse writers.
5. The teacher understands the composing processes for different forms of oral and written discourse.
6. The teacher understands the research process and how to use data from a variety of sources to communicate information to different audiences.
7. The teacher recognizes multiple indicators of reading and writing disabilities.
8. The teacher has knowledge of the significance of social, economic, cultural, and linguistic diversity for development and learning of literacy skills, and recognizes that children are best understood in the contexts of family, culture, and society.
9. The teacher understands the interrelationships among culture, language, and thought and the function of the home language in the development of young children.
10. The teacher understands the various purposes of reading and writing (narrative, expository, technical, and persuasive).

**Performance**

1. The teacher designs, implements, and evaluates literacy experiences that are developmentally appropriate.
2. The teacher models a variety of effective instructional strategies that aid students in developing their reading, writing, speaking, listening, and viewing abilities.
3. The teacher uses effective instructional strategies to help students make cross-curricular connections.
4. The teacher develops and uses criteria for evaluating and selecting a variety of materials for language arts instruction, recognizing issues of equity in gender, age, ethnicity, lifestyle, and socioeconomic status.
5. The teacher demonstrates an understanding of the various purposes for reading and writing (narrative, expository, technical, and persuasive).
6. The teacher demonstrates an understanding of the phonemic, morphemic, semantic, syntactic, and pragmatic systems of language and their relation to the reading and writing process.
7. The teacher creates literacy rich environments and experiences that promote individually and culturally responsive approaches throughout the curriculum.
8. The teacher evaluates and selects assessment to fit diverse learner strengths and needs.
9. The teacher uses a variety of assessment tools, analyzes the results, and applies the results to instruction.

Standard #2   The kindergarten through sixth grade teacher knows, understands, and uses the major concepts, procedures, and reasoning processes of mathematics that define numbers and operations, geometry, measurement, data analysis and probability, and algebra so that all students understand relationships that can represent phenomena, solve problems, and manage data.
Knowledge
1. The teacher knows and understands the mathematical concepts of number sense, number systems and their properties, computation, geometric figures and their properties, transformational geometry, measurement, data analysis, data representations, probability, patterns, functions, and representations of algebraic and geometric situations/solutions.
2. The teacher understands the five process standards (problem solving, reasoning and proof, communication, connections and representations).
3. The teacher is aware of effective, developmentally appropriate instructional strategies to help all students learn and use their mathematical skills in many different situations and applications to solve real life problems.
4. The teacher knows a variety of developmentally appropriate assessment tools that align with curriculum and instruction.

Performance
1. Appropriate to students' age and development, the teacher can use and apply, demonstrate, and teach the concepts of number sense, number systems and their properties, computation, geometric figures and their properties, transformational geometry, measurement, data analysis, data representations, probability, patterns, functions, representations of algebraic and geometric situations/solutions.
2. The teacher integrates the five process standards (problem solving, reasoning and proof, communication, connections and representations) into math instruction.
3. The teacher demonstrates the ability to use effective, developmentally appropriate instructional strategies to help all students learn and use their mathematical skills in many different situations and applications to solve real life problems.
4. The teacher uses diverse and developmentally appropriate assessments that align with curriculum and instruction.

Standard #3 The kindergarten through sixth grade teacher knows, understands, and uses fundamental concepts in the subject matter of science—including physical, life, and earth and space sciences—as well as concepts in science and technology, science in personal and social perspectives, the history and nature of science, the unifying concepts of science, and the inquiry processes scientists use in discovery of new knowledge to build a base for scientific and technological literacy for all students.

Knowledge
1. The teacher understands how to plan and conduct authentic research using the process skills.
2. The teacher understands how to design science activities, using the science process skills, to teach developmentally appropriate science content.
3. The teacher has knowledge of the basic concepts of life science, physical science, and earth and space science that are developmentally appropriate.
4. The teacher understands how science concepts and processes are used in real life situations.
5. The teacher understands the application of science concepts to technological and societal issues.
6. The teacher is familiar with current science curricular materials and understands the interconnectedness of the science disciplines.
7. The teacher knows a variety of assessment tools including open-ended questions and performance tasks, to assess student learning.

Performance
1. The teacher selects real life problems for students to investigate.
2. The teacher facilitates student planned and conducted investigations.
3. The teacher provides the opportunity for students’ discovery and application of knowledge.
4. The teacher selects, uses, and maintains equipment properly, stores and disposes of chemicals safely, and handles and cares for animals in an appropriate manner.
5. The teacher can articulate priorities for developmentally appropriate science experiences for all students.
6. The teacher demonstrates the design, implementation and evaluation of scientific experiences that are developmentally appropriate, meaningful and challenging for all students, that lead to positive
developmental outcomes, and that develop positive dispositions toward science and scientific investigation.

7. The teacher uses a variety of assessment tools including open-ended questions and performance tasks, to assess student learning.

**Standard #4** The kindergarten through sixth grade teacher knows, understands, and uses the major concepts and modes of inquiry from the social studies—the integrated study of history, geography, the social sciences, and other related areas—to promote all students’ abilities to make informed decisions as citizens of a culturally diverse democratic society and interdependent world.

**Knowledge**
1. The teacher knows how experiences may be interpreted by people from diverse cultural perspectives and frames of reference and how experiences contribute to a sense of self.
2. The teacher understands culture as an integrated whole that explains the functions and interactions of language, literature, the arts, traditions, beliefs, values, and behavioral patterns.
3. The teacher is aware of significant historical periods and change within and across cultures.
4. The teacher is aware of appropriate resources, data sources, and geographic tools to generate and manipulate charts, graphs and maps, and to interpret information such as atlases, databases, and grid systems.
5. The teacher understands the relationship among various regional and global patterns of geographic phenomena.
6. The teacher understands group and institutional influences on people, events, and elements of culture in both historical and contemporary settings.
7. The teacher understands concerns, standards, issues, and conflicts related to universal human rights.
8. The teacher understands the origins and influence of key ideals of the democratic form of government such as individual human dignity, liberty, justice, equality, and the rule of law.
9. The teacher knows macro and micro economic concepts and can differentiate and compare basic economic systems.
10. The teacher understands differences in family structures and social and cultural backgrounds.
11. The teacher understands the importance of social studies and social understanding in student's development and learning, and is able to observe and describe students’ interest in their social worlds and build on those interests.
12. The teacher understands conditions and motivations that contribute to conflict, cooperation, and interdependence among societies, groups, and nations.

**Performance**
1. The teacher demonstrates the design, implementation and evaluation of social studies experiences that are developmentally appropriate, meaningful and challenging for all students, that lead to positive learning outcomes, and that develop positive dispositions toward the investigation of the social studies.
2. The teacher critically interprets and analyzes multiple historical contemporary viewpoints within and across cultures.
3. The teacher uses map skills of distance, scale, area, density, and spatial distribution patterns at developmentally appropriate levels.
4. The teacher applies the use of technology to assist in researching and analyzing historical and contemporary viewpoints within and across cultures.
5. The teacher uses a variety of strategies to encourage children’s physical, social, emotional, aesthetic, and cognitive development.
6. The teacher applies knowledge of economic concepts at the macro and micro levels.
7. The teacher uses individual and group guidance and problem-solving techniques to develop positive strategies of conflict resolution, and to develop personal self-control, self-motivation, and self-esteem.
8. The teacher uses diverse and developmentally appropriate assessments that align with the curriculum and instruction.

**Standard #5** The kindergarten through sixth grade teacher can design, implement, and evaluate arts experiences that are developmentally appropriate, meaningful and challenging for all students, that lead
to positive learning outcomes, and that develop positive dispositions toward artistic explorations and expression.

**Knowledge**
1. The teacher understands a variety of arts experiences appropriate to multiple readiness stages of students.
2. The teacher knows effective instructional strategies that actively engage students in creating, performing, and responding to the arts.
3. The teacher knows a basic vocabulary specific to the arts.
4. The teacher understands the role of the arts historically, culturally, and in every day living.
5. The teacher assesses arts activities, products, and performances and involves students in self-assessment.
6. The teacher understands the interrelationships of the arts with other disciplines.

**Performance**
1. The teacher selects arts experiences appropriate to developmental levels of students.
2. The teacher uses effective instructional strategies that actively engage students in creating, performing, and responding to the arts.
3. The teacher uses vocabulary specific to the arts.
4. The teacher facilitates experiences that help students understand the role of the arts historically and in every day living.
5. The teacher assesses arts activities, products, and performances and involves students in self-assessment.
6. The teacher demonstrates the interrelationships within the arts and with other disciplines.

**Standard #6** The kindergarten through sixth grade teacher knows, understands, and uses the major concepts of health education and human movement and physical activity as central elements to foster active, healthy lifestyles and enhanced quality of life for all students.

**Knowledge**
1. The teacher understands basic health, nutrition, safety, and sanitation management practices for children, and procedures regarding childhood illness and communicable diseases.
2. The teacher understands the impact of movement on brain development and learning.

**Performance**
1. The teacher implements basic health, nutrition, safety, and sanitation management practices for children, including specific procedures regarding childhood illness, communicable diseases, and universal health precautions.
2. The teacher uses appropriate health appraisal procedures and follows appropriate reporting requirements.
3. The teacher integrates movement and learning theories across curriculum and instruction.
4. The teacher implements strategies for healthy lifestyles that include play and physical activity.

**Standard #7** The kindergarten through sixth grade teacher uses his/her understanding of children's characteristics and needs and of multiple interacting influences on children's development and learning to create environments that are healthy, respectful, supportive and challenging for all students.

**Knowledge**
1. The teacher is fully grounded in current research in all areas of child development and learning and knows how to use this knowledge to inform his/her teaching practices.
2. The teacher understands the many influences on children's development and learning and how those influences may interact to affect development in both positive and negative ways.
3. The teacher understands the developmental consequences of stress and trauma, risk factors, protective factors, resilience, on the development of mental and social health, and the importance of supportive relationships.
4. The teacher understands how children differ in their development and approaches to learning and knows how to create instructional opportunities that are adapted to diverse students.
5. The teacher understands his or her role in the Individual Education Plan (IEP) process, how to collaborate in the design of intervention strategies and how to integrate goals from the IEP into daily activities and routines.

6. The teacher understands and values the function of the home language in the total development of children and the interrelationships among culture, language and the involvement of family in the school.

**Performance**

1. The teacher creates a learning environment that promotes children's physical and psychological health and safety.

2. The teacher creates a learning environment that reflects respect and adaptations for children's culture, home languages, individual abilities and disabilities, family contexts, and communities.

3. The teacher creates a learning environment that reflects the belief that all children can learn.

4. The teacher as an integral member of a multiple discipline team, intervention strategies.

5. The teacher integrates goals from IEPs into daily activities and routines.

6. The teacher recognizes and reports signs of stress, trauma, child abuse and neglect and other risk factors and seeks appropriate help or intervention.

7. The teacher creates learning environments that appropriately and individually challenge children to stretch their abilities to higher levels of accomplishments.

8. The teacher uses developmental theory, brain research, and learning theory to design appropriate instruction, assessment, curriculum and learning environments.
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Staff Initiating: Colleen Riley
Director: Colleen Riley
Commissioner: Randy Watson

Meeting Date: 7/11/2017

Agenda Number: 11

Item Title:
Discuss establishment of the Kansas State Board of Education School Mental Health Advisory Council

Board Goals:
Develop active communication and partnerships with families, communities, business stakeholders, constituents and policy partners

Recommended Motion:
It is moved that the Kansas State Board of Education act to approve setting up the Kansas State Board of Education School Mental Health Advisory Council to inform the Kansas State Board of Education of current issues and unmet needs regarding school mental health.

Explanation of Situation Requiring Action:
The Kansas State Board of Education requested that Kansas State Department of Education staff put together an advisory council to discuss issues related to school mental health. This advisory council is intended to address school mental health topics in a comprehensive, integrated manner.

The advisory council will include broad stakeholder representation, including legislative and district representatives, and be comprised of both implementers and advocates. The Kansas State Board of Education School Mental Health Advisory Council will convene its first meeting in August 2017. Staff will provide a draft list of membership roles for input from the State Board.
To: Kansas State Board of Education

From: Coalition of Innovative School Districts

Subject: Receive recommendation for issuing Specialized Certificate in USD 364

At the June 22, 2017 meeting of the Coalition of Innovative School Districts, Coalition members gave their approval for issuing a Specialized Certificate for use in USD 364 Marysville. The application is now being presented for consideration to the State Board of Education. The Specialized Certificate is effective for a one-year period and is non-transferrable to any other Kansas school district.

Background:

The current seven approved Innovative School Districts are: USD 418 McPherson, USD 333 Concordia, USD 500 Kansas City Kansas, USD 229 Blue Valley, USD 201 Hugoton, USD 364 Marysville and USD 484 Fredonia.

At the July 14, 2015 State Board of Education meeting, members approved on a 6-4 vote the Coalition of Innovative School Districts’ Specialized Teaching Certificate application and process for use by the approved Innovative School Districts for one year to hire non-licensed professional employees or licensed professional employees in areas outside of their area(s) of licensure and to allow the Kansas State Board of Education to give final approval.

Enclosures:

- Application for 2017-18 school year and rationale for filling vacancy with a certificated professional
- Specialized Teaching Certificate Program of Support for USD 364 Marysville
- Mentoring Plan
Date of Application: 6/22/17

CISD District Name: USD 364 - Marysville

Applicant Full Legal Name: Elizabeth Winter Stewart

Recommended Professional Employee assignment and content area(s): Marysville Junior/Senior High - Spanish

Does applicant hold a valid Kansas Teaching License?

Yes __ Content area(s) ___________; __________________;
Effective Dates of Licenses _____/____/____ to _____/____/____

No __

X

Applicant completed and passed all LEA pre-employment hiring procedures including Background Check

Yes __

X

No __

X

DATE applicant approved by local BOE: 4/12/2017

Term of Specialized Certificate:

One Year __
X

Renewal __

Approval Dates: 8/15/2017 to 5/25/2018

Approval Dates: _____/____/_____ to _____/____/____

Rationale for Filling Vacancy with Certified Professional (attach additional sheet if necessary):
Spanish is a hard to fill position. Elizabeth has a Bachelor's Degree in Spanish from UMKC and is pursuing a Master's Degree in Romance Languages - Spanish from UNO.

Name: Bill Mullins
Position: Superintendent
Signature:
Date: 6/19/2017

Specialized Certificate Approval:

Yes __
X

June 22, 2017

No __

Authorized by: Sonya Stones
Position: USD 364 Board President
Signature:
Date: 6/19/2017
Coalition of Innovative School Districts
Specialized Teaching Certificate Program of Support
USD 364 – Marysville

This program of support will be provided for Elizabeth Stewart, candidate for Specialized Teaching Certificate – Spanish, within USD 364 – Marysville.

- The USD 364 Mentoring Plan approved by KSDE will be followed with fidelity.
- The candidate will enroll in the Fort Hays State University Transition to Teaching Program and attend their four day summer program in July 2017.
- The candidate will continue to pursue her Master’s Degree Program while teaching and waiting to complete the Transition to Teaching Program.
- The candidate will attend Professional Development as directed by the District to include appropriate classes through Fort Hays State University as needed to help the candidate be successful in the classroom.
- The candidate will receive extra support above and beyond the USD 364 Mentoring Plan and scheduled teacher evaluations from District Superintendent or a designee assigned by Fort Hays State University.
- The candidate, District, and Fort Hays State University will work together to develop a support plan that allows the candidate to complete her Master’s Degree Program and the Transition to Teaching Program within four years.
ADDENDUM TO TEACHER MENTORING AND INDUCTION PLAN

Effective 7-1-2017

Each item in this addendum is a change or addition to this plan's contents. This addendum DOES NOT replace the contents of this plan. These items DO supersede any contradictory information found within the contents of this plan.

1. Teachers new to the profession and working under a license that is not professional level will participate for two full calendar years in this formal, KSDE-approved mentoring and induction program. (adds one year to minimum length of program)

2. Formal mentoring beyond the second year may be provided as determined by building and/or system administration. (changes "first year" to "second year")

3. Each mentee will complete a needs assessment at the beginning of each year of formal mentoring, and the results of this needs assessment will drive the content of each individual participant's mentoring experience. (adds annual needs assessment requirement)

4. This education system will establish a pool of mentors by the end of each school year. (new requirement)

5. Mentors will be trained prior to the start of the school year (changed from "by October 1") or before being assigned a mentee if such assignment occurs after the start of the school year (clarifying language for mid-year staffing).

6. Mentors and mentees will be paired by the date of the mentee's first contract day. (adds this deadline)

7. Support for mentees will include "regular communication" with mentor and observations of other classrooms (removes specificity of communication frequency, which was previously "on a weekly basis").

8. Mentor training and professional learning will address, but not necessarily be limited to, the following state-required components (replaces previous list of 9 items):
   i. Learning to observe, coach, and give constructive feedback to peers, including strategies for self-reflection
   ii. Utilizing best instructional practices, classroom management, and organization;
   iii. Dealing with difficult or resistant people and conflict resolution;
   iv. Enhancing communication skills and building relationships;
   v. Clarifying mentor's roles and responsibilities;
   vi. Practicing time management; and
   vii. Developing knowledge of school/system policies and procedures including student assessment, curriculum, guides and supplemental resources.

9. Accountability measures of program effectiveness will include, but not necessarily be limited to, retention data, evaluation of mentee progress on needs assessment, and feedback by the building principal (adds these three measures).
USD #364 – Marysville, KS
Mentoring Plan for Probationary Teachers and School Specialists
May 18, 2015

It is the goal of USD #364 to provide support and training for all teachers and school specialists who are new to the district. The administration of USD #364 believes that hiring good teachers is one of, if not the most important task that we do on a regular basis. Likewise, the administration believes that it is our responsibility to help all teachers grow professionally whether they are probationary or non-probationary. As administrators, we believe that a well-developed mentoring program that includes a focus on educational research, educational trends, and the vision of the local school district is the most important first step in supporting teachers and helping them grow professionally.

We believe that a mentoring program should be structured enough to guide the mentor and the mentee, while remaining flexible enough to meet the unique needs of each probationary teacher.

Guideline I – Content
Our plan will address all four areas of the Kansas Professional Education Standards with mentees through the formal structure of our program. The following list of topics will be specifically included in the Mentoring Plan for USD #364:

- Orientation to the School and Community
- McRel Teacher Evaluation System
- Balancing Professional and Personal Time and Relationships
- Creating a Safe Learning Environment
- Creating Relationships with Parents and Community Members
- Planning Instruction using High-Yield Instructional Strategies
- Developing a Deeper Understanding of Content Standards
- Developing a Deeper Understanding of Relevant Content Knowledge
- Using Technology to Enhance Student Engagement and Learning
- Evaluating Student Work compared to Grading Papers
- Managing Student Behaviors to Promote Learning
- Collecting and Using Evidence to Make Decisions
- Differentiating Instruction in the Classroom
- Multi-Tiered Systems of Support
- Legal Requirements of IEP’s and Special Education

To support our mentors and mentees, we will maintain a professional library in each of our buildings that includes multiple copies of the following professional books that are aligned with the focus areas listed above:

- First Days of School – Harry Wong
- Using Technology with Classroom Instruction That Works – Howard Pitler
- Classroom Instruction That Works – Robert Marzano
- Looking Together at Student Work – Tina Blythe
- Facilitator’s Book of Questions – David Allen
• The Key Elements of Classroom Management — Joyce McLeod
• So What Do They Really Know? — Cris Tovani
• The Differentiated Classroom: Responding to the Needs of All Learners — Carol Ann Tomlinson
• Negotiating the Special Education Maze — Deidre Hayden
• The Essential Special Education Guide for the Regular Education Teacher — Edward Burns
• Work with Parents: Building Relationships for Student Success — Ruby Payne

After each mentee completes their McRel Self-Assessment and discusses this with their mentor and principal, the mentor and mentee will both receive two of the books listed above for their own professional library.

We have developed a series of eight activities to be completed during the first year of employment in our district. The activities will be differentiated based on the prior experience of the teacher, training received by the teacher prior to entering the profession, and the content area that they will be teaching.

We would like to work with Greenbush, Baker University, and Kansas State University to further develop this Mentoring Program into a program that would train and support any non-traditional teachers that we may choose to employ in the future. We plan on developing a professional development program that will include summer professional development and job-embedded professional development. Teachers who are classified as non-traditional will remain in this Mentoring Program until they meet the exit criteria for each of the thirteen focus areas that comprise our program. The exit criteria will be established by a committee of individuals representing the following groups 1) school and district administration, 2) Marysville Education Association, 3) Greenbush, 4) Baker University, and 5) Kansas State University.

The eight activities that comprise our mentoring program are outlined on the following pages.

**Guideline 2 — Mentor Selection and Training**

A. Selection Criteria:

All mentors must have a minimum of three years of successful experience in the district and must hold a professional license.

The district may choose to utilize out of district personnel to mentor school specialists if necessary.

B. Training:

All mentors are required to participate in a Mentor Training program prior to serving as a mentor. The initial training is required prior to October 1 of the year that they will serve as a mentor. All mentors will be required to participate in the initial training once every five years in order to continue serving as a mentor.

All mentors will be provided ongoing professional learning that:

• Addresses the role of the mentor
• Develops strategies for building relationships with new teachers
• Develops skills for the observation of a new teacher’s practice, assessment of needs, and strategies to address those needs
• Coaching language and practice
- Strategies for guiding new teachers to use reflection in their practice
- Skills for guiding new teachers in using various types of formative assessment to focus instruction and differentiate for student needs
- Guiding new teachers in collecting and analyzing various types of student data to show evidence of learning
- Guiding new teachers in their use of content standards when planning lessons/units
- Skills in using the professional education standards as a measure of assessing teacher practice

**Guideline 3 – Structured, Intensive, Ongoing Support for the Mentee**

All mentors will be expected to communicate with mentees a minimum of once per week throughout the school year. This communication should be primarily face to face throughout the first semester and it can transition to primarily other forms of communication during the second semester depending on the needs of the mentee. The mentor should ensure that some of this communication includes time for reflective dialogue between the mentor and mentee.

All mentors will be expected to observe the mentee in action twice during the first semester and once during the second semester. The length of each observation will be based on the individual needs of each mentee. If needed, additional observations may be requested by the mentee or recommended by the mentor. Following each observation, the mentor should provide specific feedback to help the mentee become more reflective and grow as a professional.

Each mentee will have to meet the exit criteria before they will be released from our mentoring program. The exit criteria is still under development, but the main idea is that we will continue to provide mentoring and support for all new teachers until we are confident that the mentee no longer needs the extra support provided by our mentoring program.

**Guideline 4 - Program Evaluation**

USD #364 is a member of the Coalition of Innovative School Districts. The Coalition is in the process of working with higher education institutions across the state of Kansas to develop a way to evaluate our mentoring and support programs for teachers who do not hold a Kansas Teaching Certificate. The evaluation process for our mentoring program will align with the model developed in cooperation with higher education and we will likely ask our partners in higher education to measure the effectiveness of our mentoring program. As such, we expect that our higher education partners will develop all of the criteria and processes related to program evaluation. We will provide a written report to our Board of Education every three years and we will work with our higher education and Greenbush partners to update our mentoring program yearly in order to meet the needs of our staff.
USD # 364 New Teacher Mentor Program
Activity #1
Due: August 31st

_________________ (Mentee)  ________________________ (Mentor)

Many of the following topics will be covered by the building principals, secretaries, and the faculty handbook; however, please go over each point to make sure that they have been thoroughly explained.

Upon completion, the mentor and the mentee need to sign at the bottom of the page to confirm that this information has been covered.

Administrative Personnel:

___ Superintendent
___ High School Principal
___ High School Assistant Principal/Activities Director
___ Special Ed. Director
___ Activities Director
___ Elementary Principal

Office Personnel, Functions and Procedures:

___ Secretarial Staff - who are they; who does what?
  High School Secretary
  Student Data Coordinator
  Activities Office Secretary
  Special Services Secretary
  Elementary Secretaries

___ Teacher mail boxes
___ Interschool mail (where, times, process)
___ Printers/Copiers
___ Paper and supplies
___ Fax machines
___ Laminator
___ Activity Fund Accounting
___ Outgoing Business Mail
**Faculty and Support Staff:**
- Teachers (Class schedule attached)
- Nurse
- Elementary Counselor
- High School Counselor
- School Psychologist
- Director of Technology
- Technology Assistant
- Director of Buildings and Grounds
- Transportation Director
- Food Service Director
- Food Service Personnel
- Custodians (stress teacher/custodian relationships: custodians are invaluable – cultivate friendships)

**The First Day:**
- Classroom behavioral expectations, outline, procedures and guidelines
- Procedures and routines --- share yours & others
Textbook checkout – form is in Teacher Resources folder (T:/Teacher Resources/2012-13/Faculty Handbook & Resources/Office Paperwork/Book Checkout Form) – it might be a good idea to give each student an index card and have them write their name, book number and condition of book.
- Planners
- Lockers
- Restroom
- Media Center
- Classrooms
- Sign-out/sign-in sheets
- Review charges for damaged/lost books
- 1st Days’ Activities - share yours & others
- Seating charts

**Daily Routines:**
- Bell schedules (1st Day and Regular Daily Schedule attached) - classes, passing periods
- Lunch schedules
- Attendance - Taking and submitting — imperative that you take and submit at the beginning of each hour
- Tardies
- Announcements – how do you turn in announcements? When are they read?
- Active Supervision – write dates on calendar
- Routines for hallway behavior, lunch, etc.
**Classroom and Organization:**
- Room Set-Up - seating arrangement, bulletin boards, etc.
- Locating Class Rosters
- Class size – when, how, and who to ask for help!
- Identify students who are on an IEP
- Identify students who are on a SAT plan
- Help organize time—encourage use of daily planner to keep track of meetings, events, etc.

**Classroom Management:**
- Managing Student Behavior – Classroom management strategies/procedures/forms
- Parent Communication
- Establish Parent Contact Logs (phone, e-mail, letters)—Jeanne Bruna has a great example to use
- Positive notes home and positive phone calls – “Catch them being good!”
- Teacher given 8th hours - consequences
- Office Referrals (PowerSchool) – use laminated list that has name of behaviors

**McRel Teacher Evaluation:**
- Set one goal with department for Professional Growth Plan
- Create a folder to start collecting evidence for Professional Growth Plan

**Curriculum:**
- Locating Aligned Curriculum
- Understanding use of curriculum
- Textbooks and Resources
- Help prepare lesson plans for the first 3 days
- Provide relevant “early activity” for students as they enter the classroom (posted on board)
- Assist in setting up Substitute Folder, if not already done

**Leave:**
- Substitutes – necessary forms and procedures for obtaining a sub—MUST HAND DELIVER LEAVE FOR REQUEST FORM TO HIGH SCHOOL OFFICE
- Arrival/departure times - what to do if you need to leave early (between 3:35 – 4:00) or arrive late (between 8:00 -8:15)
- Leaving building during the school day if an emergency arises

**Technology:**
- E-mail
- PowerSchool – setup categories, weighting and S1 & S2
- Creating a folder and saving files to server (H:Drive)—if you save your information to the desktop or hard drive it will be lost if computer crashes
- Technology support —...how to request service (workorder@marysvilleschools.org)
- Go through Teacher Resources folder

**Transportation:**
- Visit with Gina about filling out Transportation Requests
**Use of Equipment:**
- Phones – how you use – policies for teachers & students
- List of room numbers and phone extensions
- How to run the copier and copier rules
- Laminator

**Lunch:**
- Cafeteria Routine
- Dismissing and picking up students
- Lunch - Ala Carte

**Facilities:**
- Parking - where, what restrictions apply
- Location of special places: printer/copier, mailboxes, lounge, restrooms, cafeteria, computer labs, media center, professional library, student information bulletin boards

**General:**
- Extra-duty sign-up sheets (what, where, why)
- Social dues & committees explanation (building specific)
- Location of supplies
- Professional dress code—jeans can be worn on Friday or at the end of the week

**Emergency Procedures:**
- Fire drill; tornado drill; lock down, bomb threat, etc. (We will have a fire drill each month and 1 tornado drill in the fall and two in the spring)
- Evacuation Routes - review floor plans in Faculty Handbook

**Upcoming Event: Open House**
- Explain the format will be used
- Develop handout or use class outline to pass out to parents
- Discuss the information that should be shared with parents

**Other items that would have been helpful at this time:**

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**Any other suggested changes:**

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Mentee's signature

Mentor’s signature

Date

Date

135
USD # 364 New Teacher Mentor Program
Activity #2
Due: September 20th

____________________ (Mentee)  ______________________ (Mentor)

Please check off each item as they are discussed and turn the completed check list to the building administrator. Upon completion, the mentor and the mentee need to sign at the bottom of the page to confirm that this information has been covered.

Meetings/Committees:

_____ Faculty Advisory Committee
_____ Faculty Meetings
_____ Board of Education Meeting
_____ Site Council Meetings
_____ MEA
_____ PDP Toolbox (login and update preferences)
_____ SAT – Check to see how meetings are going and assignment of students
_____ Other – Building Specific

Important Dates:

_____ Review first semester important dates and mark them on your calendar

Teacher Evaluation Process:

_____ Overall view of Evaluation Process
_____ Help mentee with plans for first formal observation from principal
_____ Help mentee develop Professional Growth Plan and submit using McRel Repository

Student Assessment:

_____ Be aware of students with special health concerns (a list will be provided by school nurse)
_____ Check for questions regarding PowerSchool
_____ Update grades weekly in PowerSchool – minimum of two grades per week
_____ Address alternative assessments, rubrics, other evaluations of student performance- work on collecting portfolio or folders of student work for parent conferences
_____ Calls and notes going home – positives and concerns - how to approach parents

Specific Building Procedures:

_____ Elementary:

_____ Secondary:
**Student Academic Progress:**
- Special student/class concerns - Help mentee problem-solve solutions to challenges, possibly check student cumulative records
- Student Assistance Team referral process

**Special Education:**
- Special Services Director - who, where - review their role in IEP’s & paper work. (SPED)
- School Psychologist - who, where - review their role in IEP’s & paper work. (SPED)
- Look over IEP’s and review the IEP process. (SPED)
- IEP’s and SPED communication & procedures
- Accommodating and modifying tests and assignments in all classrooms. (SPED)

**Media Center:**
- Media Center - point out materials/equipment that are available
- Appropriate behavior in media center, computer lab, getting to and from - if not done earlier

**Computer Labs:**
- Computer labs – how to sign up, protocol, teacher supervision, student behavior expectations

**Supplies and Materials:**
- Help obtain needed supplies/materials - show how to do requisitions, if necessary, at this point

**Workshops:**
- PDP Toolbox and forms

**Field Trips:**
- Field Trips - rules/regulations concerning them; forms that need to be completed
- Notify Cafeteria in advance if students will not be eating lunch

**Active Supervision:**
- Check calendar provided at the beginning of the year

**Other items that would have been helpful at this time:**

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**Any other suggested changes:**

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Mentee’s signature

Mentor’s signature

Date

Date
USD # 364 New Teacher Mentor Program
Activity #3
Due: October 15th

____________________ (mentee)  ______________________ (mentor)

Please check off each of the following items as they are discussed.

**Instructional Planning:**
- How are classes going? Do you have enough for them to do? Map out the rest of the 9 weeks.
- Include all of the interruptions that you anticipate (assessments & building activities).
- How are lesson plans working? What do they need to be more effective?
- Ideas for early work and closing activities. (Keeping the students engaged from bell to bell.)
- Discuss Q1 successes, grades, challenges, concerns for the rest of the semester.
- Make sure Q2 & S1 grades are set-up.

**Student Progress:**
- Make sure you are updating grades in PowerSchool once a week with a minimum of two grades.
- Communicate student concerns to parents (E-mail, hard copies, phone calls, etc).
- Calls and notes going home – positives and concerns - how to approach parents.
- Log Entries on PS – make sure you know how to log both positive and negative behaviors.
- Nominate a student for a Top Dawg Award if appropriate.

**Other:**
- Continue to discuss media center procedures: scheduling computer labs, sending students to and from - if not done earlier.
- Field Trips - rules/regulations concerning them; check calendar first; schedule through Activities Office; forms that need to be completed; consent forms; transportation; notify cafeteria.
- Collect evidence for SMART goals – these will be turned in at the end of the year with evidence supporting the goals.

**Special Education:**
- Address accommodating and modifying tests and assignments in all classrooms. (SPED)

**Specific Building Procedures:**
- Elementary:

- Secondary:
Upcoming Deadlines:

___ End of 1st 9 Weeks
___ Grades must be updated by ____________

Other items that would have been helpful at this time:

____________________________________________________________________
____________________________________________________________________

Any other suggested changes:

____________________________________________________________________
____________________________________________________________________

Mentee's signature  Mentor's signature

Date  Date
USD # 364 New Teacher Mentor Program
Activity #4
Due: November 7th

________________________ (mentee)  _________________________ (mentor)

Please check off each of the following items as they are discussed.

**Instructional Planning:**
___ Discuss classroom adaptations for special students; brainstorm ways to structure the class to accommodate learning styles and student differences.
___ Continue to share ideas and problem solve on planning, instruction, classroom management, and student-management issues.

**Student Progress:**
___ Discuss importance of communication with parents in regards to student progress.
   Communicate early and often if a student is not performing well.
___ Begin discussing Parent/Teacher conferences. Give mentee tips on communicating with parents. Discuss format of our P/T Conferences
___ Dates of P/T Conferences ______________________________
___ Plan to print off grades for P/T Conferences.
___ Talk about other information to share with parents at P/T Conferences.

**Other:**
___ Help with PDC process and PDP Toolbox.
___ Explain calling tree/ISIS.

**Special Education:**
___ Address accommodating and modifying tests and assignments in all classrooms. (SPED)
___ Complete IEP Progress Reports for Goals and Objectives. (SPED)

**Progress Check Related to McRel Teacher Evaluation and Professional Growth Plan**

**Questions:**

**Needs:**
Other items that would have been helpful at this time:


Any other suggested changes:


Mentee’s signature

Date

Mentor’s signature

Date
USD # 364 New Staff Mentor Program
Activity #5
Due: Last Day before Winter Break

____________________ (mentee)  _____________________ (mentor)

**Instructional Planning:**
_____ Help with preparing semester exams, if applicable.
_____ Make a general plan for second semester, and a specific plan for January.
_____ Review classroom management strategies. Are they working? Discuss new ideas if applicable.

**Student Progress:**
_____ Help with PowerSchool
    Finalizing S1
    Setting up Q3
_____ Q1 & S1 end on __________________
_____ Grades are due on ______________ at ____________.

**Other:**
_____ Guide through the “Holiday Madness”.
_____ Find way to CELEBRATE! You have completed the first semester!
_____ Help complete PDC process for the semester.
_____ Return to school on __________________
_____ Discuss state testing strategies and schedules (as applicable for those grades involved)

**Special Education:**
_____ Review accommodations and modifications for state testing. (SPED)

**Progress Check Related to McRel Teacher Evaluation and Professional Growth Plan**

__________________________  ______________________
Mentee’s signature  Mentor’s signature

__________________________  ______________________
Date  Date
USD # 364 New Staff Mentor Program
Activity #6
Due January 31st

________________________ (mentee)  _________________________ (mentor)

Instructional Planning:
___ Evaluate the successes and weaknesses of first semester.
___ Try making resolutions for changes – brainstorm ideas to improve instruction, classroom environment, planning & preparation, or professional responsibilities.
___ Challenge each other to try a new or innovative strategy - check on each other.

Student Progress:
___ Make sure that Third Quarter and Spring Semester are weighted properly.
___ Call parents of those students who are struggling in your classroom and invite them to P/T Conferences.
___ Plan for conferences in January. What parents do you need to communicate with early and often so there are no surprises at the end of the nine weeks/semester?
___ Conferences are scheduled for ____________________________
___ Reflect on SAT Team process.

Other:
___ Review Important dates for Spring Semester
   In-Service Dates
   Parent Teacher Conferences
   End of Third Quarter
___ Discuss state testing strategies and schedules (as applicable for those grades involved).

Special Education:
___ Discuss challenges that mentee has experienced related to modifications and accommodations

Progress Check Related to McRel Teacher Evaluation and Professional Growth Plan

________________________
Mentee's signature

________________________
Mentor’s signature

__________   ____________
Date         Date
USD # 364 New Staff Mentor Program
Activity #7
Due March 7th

________________________ (mentee)  _________________________ (mentor)

**Instructional Planning:**
___ Discuss successes and accomplishments as well as remaining challenges.

**Student Progress:**
___ Make sure that you are updating grades in PS on a weekly basis for progress reports.
___ Make sure Q4 is ready in PowerSchool.

**Other:**
___ Inventories – These aren't due until teacher checkout time but some may want to begin early – help your mentee! Review the difference between classroom & district inventory.
___ Requisitions
___ Make sure you are aware of testing schedules.
___ Upcoming dates to remember
    - Spring Break
    - Good Friday

**Special Education:**

**Progress Check Related to McRel Teacher Evaluation and Professional Growth Plan**

________________________
Mentee's signature

________________________
Mentor's signature

________________________
Date

________________________
Date
USD # 364 New Staff Mentor Program
Activity #8
Due May 7th

_______________________ (mentee)  ______________________ (mentor)

**Instructional Planning:**
_____ Reflect on the year as a whole and begin discussing what you plan to do differently next year

**Student Progress:**
_____ Contact parents of any students who are failing or performing poorly in your class.
(Communicate early and often).
_____ Share any student evaluation forms or ideas that you have for the end of the year.

**Other:**
_____ Review Teacher check out procedures.
_____ Access the Year End Check Out Form located in Teacher Resources.
_____ Review seniors last day – check Important Dates for deadlines.
_____ Make sure you have plans to enjoy the summer!!!!

**Special Education:**

**Progress Check Related to McRel Teacher Evaluation and Professional Growth Plan**
_____ Complete the McRel Self-Assessment in preparation for the next school year

_______________________  ______________________
Mentee’s signature  Mentor’s signature

_______________________  ______________________
Date  Date
To: Commissioner Randy Watson
From: Beth Fultz
Subject: Receive Science assessment performance levels and cut scores

Board Goals: Provide a flexible and efficient delivery system to meet our students’ varied and changing needs

At the July meeting, the Kansas State Board of Education will receive the performance levels and cut score recommendations for the new Kansas State Assessments in Science and Dynamic Learning Map (DLM) science. The cut scores for the state science assessment were developed during a standard-setting meeting on June 20 and 21, which brought together 40 teachers from across the state. Staff from the Center for Educational Testing and Evaluation (CETE) ran the standard-setting process, and they will explain the process used to determine cut scores for the four performance levels. Performance level information on the DLM science assessment will also be presented.
Item Title:

Act on recommendations of the Professional Practices Commission

Board Goals:

Governmental Responsibility

Recommended Motion:

It is moved that the Kansas State Board of Education adopt the findings of the Professional Practices Commission and: 1. Deny Sarah Kennington’s application; and, 2. Revoke the licenses of Jamanshua Howell, Jessica Laster, Terry McMurry, Claire Torres and Todd Kaiser.

Explanation of Situation Requiring Action:

1. Sarah Kennington 17-PPC-08

Sarah Kennington applied for an emergency substitute license. After learning she had been convicted of and remained on probation for seven theft-related misdemeanors and four felonies, KSDE filed a complaint asking that her application be denied. The complaint was delivered to Kennington and she did not request a hearing or file an answer. The Professional Practices Commission considered the matter and voted 6 – 0 to recommend the State Board deny her application.

2. Jamanshua Howell 17-PPC-09

While holding a Kansas teaching license, Jamanshua Howell was convicted of misdemeanor child endangerment. KSDE filed a complaint and it was delivered. Howell did not request a hearing or file an answer. The Professional Practices Commission considered the matter and voted 7 - 0 to recommend the State Board revoke Howell’s license.

3. Jessica Laster 17-PPC-10 (voluntary surrender)

While holding a Kansas teaching license, Jessica Laster was convicted of felony aggravated battery. As a result, Laster submitted a voluntary surrender of her teaching license for revocation by the State Board. The Professional Practices Commission considered the matter and voted 6 - 0 to recommend the State Board accept Laster’s voluntary surrender and revoke her license.

4. Terry McMurry 17-PPC-11

While holding a Kansas teaching license, Terry McMurry was convicted of five drug-related felonies including aggravated endangering a child. KSDE filed a complaint and it was delivered. McMurry did not request a hearing or file an answer. The Professional Practices Commission considered the matter and voted 6 – 0 to recommend the State Board revoke McMurry’s license.

(continued)
5. Claire Torres 17-PPC-13

While holding a Kansas teaching license, Claire Torres engaged in sexual activity with a student. KSDE filed a complaint and it was delivered to Torres’s legal counsel. She did not request a hearing or file an answer. The Professional Practices Commission considered the matter and voted 6 – 0 to recommend the State Board revoke Torres's license.

6. Todd Kaiser 17-PPC-15 (voluntary surrender)

While holding a Kansas teaching license, Todd Kaiser was found guilty of felony sexual exploitation of a child. As a result, Kaiser submitted a voluntary surrender of his teaching license for revocation by the State Board. The Professional Practices Commission considered the matter and voted 6 - 0 to recommend the State Board accept Kaiser’s voluntary surrender and revoke his license.
BEFORE THE KANSAS STATE BOARD OF EDUCATION
PROFESSIONAL PRACTICES COMMISSION

In the Matter of
the Application of
Sarah Kennington

17-PPC-08

INITIAL ORDER

The above-captioned case comes before the Professional Practices Commission (Commission) of the Kansas State Department of Education (KSDE) upon the complaint seeking denial of Sarah Kennington’s application for an emergency substitute license.

The Commission reviewed this matter on June 2, 2017. Appearing for the Commission were Chairman Linda Sieck and members Dorsey Burgess, John McKinney, Vici Jennings, Sylvia Ramirez, and Jessica Snider. Kelli Broers appeared as counsel for KSDE. Kennington did not appear.

FINDINGS OF FACT

1. Sarah Kennington, age 40, applied for an emergency substitute teaching license. Her last known address is 1306 N. Road Ingalls, Kansas 67853.

2. Kennington did not disclose on her application that she had a criminal history. But she did submit documents evidencing the existence of such. Those documents show that in 2011, Kennington was convicted in Hodgeman County, Kansas, for the following crimes:
   a. Seven counts of theft by deception in violation of K.S.A. 21-3701(a)(2) (misdemeanor); and
   b. Four counts of making a false information in violation of K.S.A. 21-3711 (felony).

3. Kennington received a 12-month probation term and 12 months postrelease supervision. Her underlying prison term was 8 months. And she was ordered to pay $23,941.61 restitution.

4. Kennington did not complete the terms of her probation in a timely manner. As a result, her probation was extended to November 14, 2014, and then November 16, 2019.

5. As of March 10, 2017, Kennington owes the Hodgeman County District Court clerk, $13,106.61.
6. KSDE filed a complaint pursuant to K.A.R. 91-22-5a on April 6, 2017. That complaint was placed in the mail, by certified mail, return receipt requested, to Kennington’s last known address. It was delivered on April 15, 2017.

7. Kennington did not request a hearing or file an answer to KSDE’s complaint.

CONCLUSIONS OF LAW

1. In Kansas, teaching and school administration are considered professions with all the similar rights, responsibilities, and privileges accorded other legally recognized professions. K.S.A. 72-8501.

2. The Kansas State Board of Education (State Board) is responsible for the general supervision of education, including the certification and licensure of teachers, in Kansas. K.S.A. 72-7513 and Kan. Const., Art. VI.

3. By order of the State Board, the Commission shall investigate and conduct hearings pertaining to allegations of misconduct.

4. Mailing notice to a party’s last known address is a permissible form of service. A written certificate of service is sufficient to presume service. Furthermore, service by mail is complete upon mailing. See K.S.A. 77-531.

5. A party must request a hearing within 15 days of service of a complaint. K.S.A. 77-542.

6. A party has 20 days to file an Answer upon receipt of a complaint. If no answer is filed, the person is deemed to have admitted the allegations contained in the complaint and to have acquiesced in the proposed action. K.A.R. 91-22-9.

7. The State Board may deny an application for licensure for a theft-related conviction or a felony conviction. K.A.R. 91-22-1a.

8. The Commission, after reviewing the evidence in this matter and considering the applicable law, believes denial of Kennington’s application is appropriate.
THEREFORE the Professional Practices Commission recommends to the State Board, by a vote of 6 - 0, that Kennington’s application for an emergency substitute license be denied.

This Initial Order is made and entered this June 2, 2017.

PROFESSIONAL PRACTICES COMMISSION

[Signature]
Linda Sieck, Chairperson
Order signed on June 14, 2017.

NOTICE

This Order is not a final order. The Kansas State Board of Education must review the order in accordance with the provisions of the Kansas Administrative Procedure Act. The State Board will review all issues. Notice of review with the specific date and time will be provided to the parties within 15 days of the review.

You may submit to the State Board for its consideration as part of its review of the Initial Order, a written brief citing legal authority as to why the above recommendation should not be accepted. You must file the brief with the State Board Secretary at the address indicated below within ten calendar days after service of the Initial Order for transmittal to the State Board. You must also make any request for oral argument at that time.

Peggy Hill
Secretary, Kansas State Board of Education
900 SW Jackson Street, Suite 600
Topeka, Kansas 66612

Response briefs are due within ten calendar days after service of the legal brief upon the opposing party.

Any reply brief is due five calendar days after service of any response brief upon the opposing party. Any response or reply briefs must also be filed with the State Board Secretary at the address indicated above.
CERTIFICATE OF SERVICE

I hereby certify that on this 15th day of June 2017, I filed a true and correct copy of the above and foregoing with the Secretary for the Kansas State Board of Education and I mailed one copy by certified mail, return receipt requested, to:

Sarah E. Kennington
1306 N. Road
Ingalls, Kansas 67853

and via interoffice mail to:

Kelli Broers
Kansas State Department of Education
900 SW Jackson Street, Suite 102
Topeka, Kansas 66612

[Signature]

Gwen Kramer
Secretary, Professional Practices Commission
BEFORE THE KANSAS STATE BOARD OF EDUCATION
PROFESSIONAL PRACTICES COMMISSION

In the Matter of
the License of
Jamanshua Howell

17-PPC-09

INITIAL ORDER

The above-captioned case comes before the Professional Practices Commission (Commission) of
the Kansas State Department of Education (KSDE) upon the complaint seeking revocation of Jamanshua
Howell's teaching license and any associated endorsements.

The Commission reviewed this matter on April 3, 2017. Appearing for the Commission were
chairman, Linda Sieck, and members Dorsey Burgess, Justin Henry, John McKinney, Sylvia Ramirez, Maret
Schrader, and Jessica Snyder.

Kelli Broers appeared as counsel for KSDE.

Jamanshua Howell did not appear.

FINDINGS OF FACT

1. Jamanshua Howell, age 29, holds an initial school leadership license. His last known address

is 8461 Renner Boulevard, Apt. 4101, Lenexa, Kansas, 66219.

2. On February 9, 2017, Howell entered a plea agreement wherein he agreed to plead guilty to

one count of misdemeanor child endangerment in Case No. 16 CR 2857 in the District Court of Johnson

County, Kansas.

3. On March 8, 2017, the court entered the Journal Entry of Judgment in Case No. 16 CR

2857. Howell pleaded guilty to one count of misdemeanor child endangerment and was sentenced to 12-

months probation.

4. KSDE filed a complaint pursuant to K.A.R. 91-22-5a on March 10, 2017. That complaint

was placed in the mail, by certified mail, return receipt requested, to Howell's last known address. It was
delivered on March 11, 2017.
5. Howell did not request a hearing or file an answer to KSDB's complaint.

CONCLUSIONS OF LAW

1. In Kansas, teaching and school administration are considered professions with all the similar rights, responsibilities, and privileges accorded other legally recognized professions. K.S.A. 72-8501.

2. The Kansas State Board of Education (State Board) is responsible for the general supervision of education, including the certification and licensure of teachers, in Kansas. K.S.A. 72-7513 and Kan. Const., Art. VI.

3. The Commission investigates and conduct hearings pertaining to allegations of misconduct. K.S.A. 72-8507; K.A.R. 91-22-1a et seq.

4. Mailing notice to a party's last known address is a permissible form of service. A written certificate of service is sufficient to presume service. Furthermore, service by mail is complete upon mailing. See K.S.A. 77-531.

5. A party must request a hearing within 15 days of service of a complaint. K.S.A. 77-542.

6. A party has 20 days to file an Answer upon receipt of a complaint. If no answer is filed, the person is deemed to have admitted the allegations contained in the complaint and to have acquiesced in the proposed action. K.A.R. 91-22-9.

7. The State Board may revoke the license of an individual convicted of committing any crime involving a minor. K.A.R. 91-22-1a(a)(2).

8. The Commission, after reviewing the evidence in this matter and considering the applicable law, believes revocation of Howell's license is appropriate.
THEREFORE the Professional Practices Commission recommends to the State Board, by a vote of 7 - 0, that Jamanshua Howell's teaching license and any associated endorsements should be revoked.

This Initial Order is made and entered this April 3, 2017.

PROFESSIONAL PRACTICES COMMISSION

Linda Sieck, Chairman
Order signed on May 30, 2017

NOTICE

This Order is not a Final Order and is required to be reviewed by the Kansas State Board of Education in accordance with the provisions of the Kansas Administrative Procedure Act. The State Board will review all issues. Notice of review with the specific date and time will be provided to the parties within 15 days of the review.

You may submit to the State Board for its consideration as part of its review of the Initial Order, a written brief citing legal authority as to why the above recommendation should not be accepted. You must file the brief with the State Board Secretary at the address indicated below within ten calendar days after service of the Initial Order for transmittal to the State Board. You must also make any request for oral argument at that time.

Peggy Hill
Secretary, Kansas State Board of Education
900 SW Jackson Street, Suite 600
Topeka, Kansas 66612

Response briefs are due within ten calendar days after service of the legal brief upon the opposing party.

Any reply brief is due five calendar days after service of any response brief upon the opposing party. Any response or reply briefs must also be filed with the State Board Secretary at the address indicated above.
CERTIFICATE OF SERVICE

I hereby certify that on this ___ day of May 2017, I filed a true and correct copy of the above and
foregoing with the Secretary for the Kansas State Board of Education and I mailed one copy by certified
mail, return receipt requested, to:

Jamanshua Howell
8461 Renner Boulevard, Apt. 4101
Lenexa, Kansas 66219

and via interoffice mail to:

Kelli Broers
Kansas State Department of Education
900 SW Jackson Street, Suite 102
Topeka, Kansas 66612

Gwen Kramer
Secretary, Professional Practices Commission
BEFORE THE KANSAS STATE BOARD OF EDUCATION
PROFESSIONAL PRACTICES COMMISSION

In the Matter of
the License
of Jessica Laster

17-PPC-10

INITIAL ORDER

The above-captioned case comes before the Professional Practices Commission
(Commission) of the Kansas State Department of Education (KSDE) upon Jessica Laster’s
submission of a voluntary surrender of her teaching license for revocation.

The Commission reviewed this matter on June 2, 2017. Appearing for the Commission were
Chairman Linda Sieck and members Dorsey Burgess, John McKinney, Vici Jennings, Sylvia Ramirez,
and Jessica Snider. Kelli Broers appeared as counsel for KSDE. Laster did not appear.

FINDINGS OF FACT

1. Jessica Laster holds a Kansas teaching license.

2. Laster voluntarily surrendered¹ her teaching license as a consequence of her misconduct and
conviction in District Court of Reno County, Kansas, Case No. 2016 CR 445, for felony aggravated

¹ The voluntary surrender is attached hereo.
CONCLUSIONS OF LAW

1. A member of the teaching or school administration profession may voluntarily surrender her license to the Commission. The Commission shall investigate the surrender and make a recommendation to the Kansas State Board of Education (State Board) for disposition of the license. K.A.R. 91-22-5a(c).

2. Under these circumstances, notice of the possible revocation of Laster's license and the opportunity for her to have a hearing are not required to revoke her license. See K.A.R. 91-22-1a(h) (Before a license is revoked for any act described in K.A.R. 91-22-1a(a), the person shall be given notice and an opportunity for a hearing).

THEREFORE the Professional Practices Commission recommends to the State Board by a vote of 6 – 0 that Jessica Laster’s voluntary surrender of her license be accepted and her teaching license be revoked immediately.

This Initial Order is made and entered this June 2, 2017.

PROFESSIONAL PRACTICES COMMISSION

[Signature]

Linda Sieck, Chairperson
Order signed on June 14, 2017.
NOTICE

This Order is not a final order. The Kansas State Board of Education must review the order in accordance with the provisions of the Kansas Administrative Procedure Act. The State Board will review all issues. Notice of review with the specific date and time will be provided to the parties within 15 days of the review.

You may submit to the State Board for its consideration as part of its review of the Initial Order, a written brief citing legal authority as to why the above recommendation should not be accepted. You must file the brief with the State Board Secretary at the address indicated below within ten calendar days after service of the Initial Order for transmittal to the State Board. You must also make any request for oral argument at that time.

Peggy Hill
Secretary, Kansas State Board of Education
900 SW Jackson Street, Suite 600
Topeka, Kansas 66612

Response briefs are due within ten calendar days after service of the legal brief upon the opposing party. Any reply brief is due five calendar days after service of any response brief upon the opposing party. Any response or reply briefs must also be filed with the State Board Secretary at the address indicated above.
CERTIFICATE OF SERVICE

I hereby certify that on this 15th day of June 2017, I filed a true and correct copy of the above and foregoing with the Secretary for the Kansas State Board of Education and I mailed one copy by certified mail, return receipt requested, to:

Jessica Laster
7943 N. Flintlock Road, Apt. E
Kansas City, Missouri 64158

and via interoffice mail to:

Kelli Broers
Kansas State Department of Education
900 SW Jackson Street, Suite 102
Topeka, Kansas 66612

[Signature]

Gwen Kramer
Secretary, Professional Practices Commission
BEFORE THE KANSAS STATE BOARD OF EDUCATION
PROFESSIONAL PRACTICES COMMISSION

In the Matter of
the License
of Terry McMurry

17-PPC-11

INITIAL ORDER

The above-captioned case comes before the Professional Practices Commission (Commission) of
the Kansas State Department of Education (KSDE) upon the complaint seeking revocation of Terry
McMurry's teaching license.

The Commission reviewed this matter on June 2, 2017. Appearing for the Commission were
Chairman Linda Sieck and members Dorsey Burgess, John McKinney, Vici Jennings, Sylvia Ramirez, and

FINDINGS OF FACT

1. Terry McMurry, 1318 KS Highway 264, Larned, Kansas 67550, currently holds a
   professional teaching license. He has held a Kansas license since 2006.

2. On August 15, 2016, an Amended Complaint was filed in Case No. 2015 CR 1085, District
   Court of Reno County, Kansas, wherein McMurry was charged with seven felonies:
   a. Possession of marijuana with intent to sell; 25 grams -- 450 grams;
   b. Possession of cocaine with intent to sell; < 3.5 grams;
   c. Possession of drug paraphernalia with intent to package a controlled substance for sale;
   d. Unlawful possession of drug proceeds;
   e. Aggravated endangering a child;
   f. Sale of marijuana; < 25 grams; and
   g. Unlawful distribution of a controlled substance using a communication device.

3. Ultimately, the court convicted McMurry of all but two counts listed above: possession of
drug paraphernalia with intent to package a controlled substance for sale and unlawful distribution of a
controlled substance using a communication device. He received varying sentences for each count
convicted. But all sentences ran concurrent to the underlying sentence for his primary offense of conviction,
possession of marijuana with intent to sell. For that, he received a 56-month prison sentence and a 36-
month postrelease supervision term.

4. McMurry is currently incarcerated and his earliest possible release date is April 23, 2020.

5. On April 4, 2017, KSDE filed a complaint under K.A.R. 91-22-5a. That complaint was
placed in the mail, by certified mail, return receipt requested, to McMurry and it was delivered on April 10,
2017.

6. McMurry did not request a hearing or file an answer to KSDE’s complaint.

CONCLUSIONS OF LAW

1. In Kansas, teaching and school administration are considered professions with all the similar
tights, responsibilities, and privileges accorded other legally recognized professions. K.S.A. 72-8501.

2. The Kansas State Board of Education (State Board) is responsible for the general
supervision of education, including the certification and licensure of teachers, in Kansas. K.S.A. 72-7513
and Kan. Const., Art. VI.

3. By order of the State Board, the Commission shall investigate and conduct hearings
pertaining to allegations of misconduct.

4. A written certificate of service is sufficient to presume service. Furthermore, service by mail
is complete upon mailing. See K.S.A. 77-531.

5. A party must request a hearing within 15 days of service of a complaint. K.S.A. 77-542.

6. A party has 20 days to file an Answer upon receipt of a complaint. If no answer is filed, the
person is deemed to have admitted the allegations contained in the complaint and to have acquiesced in the

7. The State Board may revoke a teaching license when a licensee engages in drug-related
crime, any crime involving a child, or any felony crime. K.A.R. 91-22-1a.
8. The Commission, after reviewing the evidence in this matter and considering the applicable law, believes revocation of McMurry’s license is appropriate.

THEREFORE the Professional Practices Commission recommends to the State Board, by a vote of 6 - 0, that McMurry’s license be revoked.

This Initial Order is made and entered this June 2, 2017.

PROFESSIONAL PRACTICES COMMISSION

[Signature]
Linda Sieck, Chairperson
Order signed on June 14, 2017.
NOTICE

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Peggy Hill
Secretary, Kansas State Board of Education
900 SW Jackson Street, Suite 600
Topeka, Kansas 66612

Response briefs are due within ten calendar days after service of the legal brief upon the opposing party.

Any reply brief is due five calendar days after service of any response brief upon the opposing party. Any response or reply briefs must also be filed with the State Board Secretary at the address indicated above.
CERTIFICATE OF SERVICE

I hereby certify that on this 15th day of June 2017, I filed a true and correct copy of the above and foregoing with the Secretary for the Kansas State Board of Education and I mailed one copy by certified mail, return receipt requested, to:

Terry McMurry, KDOC# 0115128
Larned Correctional Mental Health Facility
1318 KS Highway 264
Larned, Kansas 67550

and via interoffice mail to:

Kelli Broers
Kansas State Department of Education
900 SW Jackson Street, Suite 102
Topeka, Kansas 66612

Gwen Kramer
Secretary, Professional Practices Commission
BEFORE THE KANSAS STATE BOARD OF EDUCATION
PROFESSIONAL PRACTICES COMMISSION

In the Matter of
the License of
Claire Torres

17-PPC-13

INITIAL ORDER

The above-captioned case comes before the Professional Practices Commission (Commission) of the Kansas State Department of Education (KSDE) upon the complaint seeking revocation of Claire Torres’s teaching license.

The Commission reviewed this matter on June 2, 2017. Appearing for the Commission were Chairman Linda Sieck and members Dorsey Burgess, John McKinney, Vici Jennings, Sylvia Ramirez, and Jessica Snider. Kelli Broers appeared as counsel for KSDE. Torres did not appear.

FINDINGS OF FACT

1. Claire Torres, age 29 and residing at 2411 Ridge Road, Liberal, Kansas, 67901, holds a Kansas professional teaching license. She has held various Kansas teaching licenses since 2008, with only one small break in licensure in 2009. Her current license was scheduled to expire on April 22, 2017.

2. Torres worked as an educator in Tyrone, Oklahoma, during the 2014 – 2015 and 2015 – 2016 school years. She is believed to have engaged in sexual activity with a student during that time.

3. As a result, Oklahoma, where Torres is also licensed as an educator, suspended her Oklahoma teaching license on January 28, 2016.

4. Prior to the expiration of Torres’s license, KSDE filed a complaint pursuant to K.A.R. 91-22-5a. That complaint was placed in the mail, by certified mail, return receipt requested, to Torres’s attorney, Ed Blau. It was delivered on April 21, 2017.

5. Torres did not request a hearing or file an answer to KSDE’s complaint.
CONCLUSIONS OF LAW

1. In Kansas, teaching and school administration are considered professions with all the similar rights, responsibilities, and privileges accorded other legally recognized professions. K.S.A. 72-8501.

2. The Kansas State Board of Education (State Board) is responsible for the general supervision of education, including the certification and licensure of teachers, in Kansas. K.S.A. 72-7513 and Kan. Const., Art. VI.

3. By order of the State Board, the Commission shall investigate and conduct hearings pertaining to allegations of misconduct.

4. A written certificate of service is sufficient to presume service. Furthermore, service by mail is complete upon mailing. See K.S.A. 77-531.

5. A party must request a hearing within 15 days of service of a complaint. K.S.A. 77-542.

6. A party has 20 days to file an Answer upon receipt of a complaint. If no answer is filed, the person is deemed to have admitted the allegations contained in the complaint and to have acquiesced in the proposed action. K.A.R. 91-22-9.

7. The State Board may revoke a teaching license when a teacher engages in sexual activity with a student. K.A.R. 91-22-1a.

8. The Commission, after reviewing the evidence in this matter and considering the applicable law, believes revocation of Torres's license is appropriate.
THEREFORE the Professional Practices Commission recommends to the State Board, by a vote of 6 - 0, that Torres's license be revoked.

This Initial Order is made and entered this June 2, 2017.

PROFESSIONAL PRACTICES COMMISSION

[Signature]
Linda Sieck, Chairperson
Order signed on June 14, 2017.

NOTICE

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Peggy Hill
Secretary, Kansas State Board of Education
900 SW Jackson Street, Suite 600
Topeka, Kansas 66612

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CERTIFICATE OF SERVICE

I hereby certify that on this 15th day of June 2017, I filed a true and correct copy of the above and foregoing with the Secretary for the Kansas State Board of Education and I mailed one copy by certified mail, return receipt requested, to:

Claire Torres
C/O
Edward Blau
101 Park Avenue, Suite 600
Oklahoma City, Oklahoma 73102

and via interoffice mail to:

Kelli Broers
Kansas State Department of Education
900 SW Jackson Street, Suite 102
Topeka, Kansas 66612

Gwen Kramer
Secretary, Professional Practices Commission
BEFORE THE KANSAS STATE BOARD OF EDUCATION
PROFESSIONAL PRACTICES COMMISSION

In the Matter of
the License
of Todd Kaiser

17-PPC-15

INITIAL ORDER

The above-captioned case comes before the Professional Practices Commission (Commission) of the Kansas State Department of Education (KSDE) upon Todd Kaiser's submission of a voluntary surrender of his teaching license for revocation.


FINDINGS OF FACT

1. Todd Kaiser holds a Kansas teaching license.

2. Kaiser voluntarily surrendered¹ his teaching license as a consequence of his misconduct and having been found guilty of felony Sexual Exploitation of a Child in violation of K.S.A. 21-5510(a)(2) in the District Court of Barton County, Kansas, Case No. 2017 CR 46.

¹ The voluntary surrender is attached hereto.
CONCLUSIONS OF LAW

1. A member of the teaching or school administration profession may voluntarily surrender his license to the Commission. The Commission shall investigate the surrender and make a recommendation to the Kansas State Board of Education (State Board) for disposition of the license. K.A.R. 91-22-5a(e).

2. Under these circumstances, notice of the possible revocation of Kaiser's license and the opportunity for him to have a hearing are not required to revoke his license. See K.A.R. 91-22-1a(h) (Before a license is revoked for any act described in K.A.R. 91-22-1a(a), the person shall be given notice and an opportunity for a hearing).

THEREFORE the Professional Practices Commission recommends to the State Board by a vote of 6 – 0 that Todd Kaiser's voluntary surrender of his license be accepted and his teaching license be revoked immediately.

This Initial Order is made and entered this June 2, 2017.

PROFESSIONAL PRACTICES COMMISSION

[Signature]

Linda Sieck, Chairperson
Order signed on June 14, 2017.
NOTICE

This Order is not a final order. The Kansas State Board of Education must review the order in accordance with the provisions of the Kansas Administrative Procedure Act. The State Board will review all issues. Notice of review with the specific date and time will be provided to the parties within 15 days of the review.

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Peggy Hill
Secretary, Kansas State Board of Education
900 SW Jackson Street, Suite 600
Topeka, Kansas 66612

Response briefs are due within ten calendar days after service of the legal brief upon the opposing party. Any reply brief is due five calendar days after service of any response brief upon the opposing party. Any response or reply briefs must also be filed with the State Board Secretary at the address indicated above.
CERTIFICATE OF SERVICE

I hereby certify that on the 15th day of June 2017, I filed a true and correct copy of the above and foregoing with the Secretary for the Kansas State Board of Education and I mailed one copy by certified mail, return receipt requested, to:

Todd Kaiser
1019 Wilson
Great Bend, Kansas 67530

and via interoffice mail to:

Kelli Broers
Kansas State Department of Education
900 SW Jackson Street, Suite 102
Topeka, Kansas 66612


Gwen Kramer
Secretary, Professional Practices Commission
BEFORE THE KANSAS STATE BOARD OF EDUCATION
PROFESSIONAL PRACTICES COMMISSION

In the Matter of
the License
of Todd Kaiser

17-PPC-15

VOLUNTARY SURRENDER

I, Todd Kaiser, hereby acknowledge that in the District Court of Barton County, Kansas, Case No. 2017 CR 46, I pleaded no contest to and was found guilty of felony Sexual Exploitation of a Child in violation of K.S.A. 21-5510(a)(2).

I now surrender my teaching license (No. 2247428169) to the Kansas State Board of Education (State Board) for revocation as a consequence of my misconduct and having been found guilty in Case No. 2017 CR 46 described above. I understand the Professional Practices Commission (Commission) and the State Board will review all relevant information in this case. I waive any right to a hearing I may have had in this matter. I waive any objection to or contestation of findings made by the Commission or the State Board related to this surrender.

I acknowledge and understand that notice of my license revocation will be provided to all Kansas local education agencies and to the agency responsible for issuing educator licenses/certificates in each of the other states.

	Signature

TODD E. KAISER
(Printed or typed name)

1019 WILSON
(Street address)

GREAT BEND 67530
(City) (Zip)

Kaiser Page 1 of 2
VERIFICATION

STATE OF Kansas
COUNTY OF Barton

BE IT REMEMBERED that on this 16th day of May, 2017, before me, the undersigned, a notary public in and for the county and state aforesaid, came Todd Kaiser, who is personally known to me to be the same person who executed the within instrument and such person duly acknowledged the execution of the same.

IN TESTIMONY WHEREOF, I have set my hand and affixed my official seal the day and year last above written.

_________________________________
Notary Public

My appointment expires:

_________________________________

Kaiser Page 2 of 2
To: Kansas State Board of Education
From: Board Policy Committee
Subject: Receive recommendations of the State Board Policy Committee

The Policy Committee of the Board shall review Board policies at least every two years and shall suggest to the Board any changes deemed necessary. (Policy 1001)

Policy Committee members Janet Waugh, Steve Roberts and Ann Mah have been working to review and update the State Board Policies. They are assisted by Board Attorney Mark Ferguson and Board Secretary Peggy Hill. The complete redline version of recommended revisions is provided for Board consideration this month. Committee Chair Janet Waugh will give the overview.

A vote is anticipated in August.
KANSAS STATE BOARD OF EDUCATION

POLICIES
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PROVISIONS FROM THE CONSTITUTION OF
THE STATE OF KANSAS

ARTICLE VI

Section 2. State board of education. (a) The legislature shall provide for a state board of education which shall have general supervision of public schools, educational institutions and all the educational interests of the state, except educational functions delegated by law to the state board of regents. The state board of education shall perform such other duties as may be provided by law.

Section 3. Members of state board of education. (a) There shall be ten members of the state board of education with overlapping terms as the legislature may prescribe. The legislature shall make provision for ten member districts, each comprised of four contiguous senatorial districts. The electors of each member district shall elect one person residing in the district as a member of the board. The legislature shall prescribe the manner in which vacancies occurring on the board shall be filed.

Section 4. Commissioner of education. The state board of education shall appoint a commissioner of education who shall serve at the pleasure of the board as its executive officer.
72-7513. General powers of state board. In general, but not by way of limitation, consonant with other applicable statutory provisions, the state board of education shall:
   (a) Adopt and maintain standards, criteria, guidelines or rules and regulations for the following:
       (1) School libraries and other educational materials with the exception of textbooks;
       (2) Course of study and curriculum;
       (3) Accreditation of schools including elementary and secondary, public and nonpublic;
       (4) Certification of administrators, teachers, counselors, school nurses and supervisors of school districts and of the state department of education and of teachers and administrators of nonpublic schools.
   (b) Administer the laws of this state concerning the matters named in this section and all other matters relating to the general supervision of the public schools and institutions under supervision of the state board of education.

72-7514. Rules and regulations; authorization to adopt. The state board is hereby authorized to adopt rules and regulations not in conflict with law on any and all matters within its jurisdiction, except as is otherwise specifically provided by law.

76-1001a. State board of education; control and supervision; rules and regulations. The Kansas state school for the deaf is a state institution under the control and supervision of the state board of education. For such control and supervision, the state board of education may enter into contracts, adopt rules and regulations and do or perform such other acts as are authorized by law or are necessary for such purposes.

76-1101a. State board of education; control and supervision; rules and regulations. The Kansas state school for the blind is a state institution under the control and supervision of the state board of education. For such control and supervision, the state board of education may enter into contracts, adopt rules and regulations and do or perform such other acts as are authorized by law or are necessary for such purposes.
MISSION & VISION

The Kansas State Board of Education is charged with the general supervision of public schools and all the other educational interests of the state. While clearly acknowledging the role and importance of local control, the State Board of Education has the responsibility to provide direction and leadership for the supervision of all the state educational interests under its jurisdiction.

With this in mind, the State Board has adopted the following mission:

   To prepare Kansas students for lifelong success through rigorous, quality academic instruction, career training and character development according to each student’s gifts and talents.

In September 2015, the State Board adopted the following vision:

   Kansas leads the world in the success of each student.

ESTABLISHING GOALS

1. Towards accomplishment of its mission, the State Board, biennially, shall review and establish the goals of the Board biennially.

2. The State Board shall annually regularly monitor its progress and performance towards accomplishment of the State Board’s goals and objectives. The Board will be responsible for its performance.

BOARD CONTRIBUTIONS

The work of the Board shall be to:

1. Link the State Board and the people of Kansas.
2. Develop policies that address:
   a. Governance process (Policies 1001 et seq.) – how the Board conceives, carries out and monitors its own tasks.
   b. Board/Commissioner relationships (Policies 2001 et seq.) – delegation authority and monitoring the authority thus delegated.
   c. Commissioner limitations (Policies 3001 et seq.) – constraints and boundaries which define the acceptable area of executive authority.
GOVERNANCE PROCESS
POLICY REVIEW

Policy Type: Governance Process

The Policy Committee of the Board shall review Board policies at least every two years and shall suggest to the Board any changes deemed necessary.

Adopted: August 9, 1989
Amended: March 10, 1998
POLICY: GOVERNING STYLE

Policy Type: Governance Process

The Kansas State Board of Education (also referenced in this document as the State Board or the Board) will focus on its mission and vision, and approach its task in a manner which emphasizes strategic leadership, not administrative detail. It will make a clear distinction between its role and that of the Commissioner. The Board will make decisions utilizing past results and current information and be proactive rather than reactive.

Accordingly, the Board will:

1. Set direction for education in Kansas by focusing on the careful initiation and establishment of policies.

2. Adhere to Board policies.

3. Be accountable to the public for competent, conscientious and effective accomplishment of its obligations as a Board. No member of the Board shall represent a minority position as that of the full Board.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: March 14, 2000
Amended: March 11, 2014
POLICY:  STATE BOARD POLICIES, REGULATIONS AND GUIDELINES

Policy Type:  Governance Process

The State Board of Education shall adopt policies, regulations and guidelines necessary to carry out the responsibilities of the State Board and to achieve the goals of the Board.

Any proposal to adopt or to amend or suspend an existing State Board policy or guideline shall be presented in written form at a regular meeting of the Board, and be voted upon at the next regular meeting; provided that this procedure may be suspended by a vote of seven members at any meeting. A proposal that is on the agenda for adoption may be amended and adopted at that meeting.

The State Board shall adopt rules and regulations required by law or deemed appropriate by the Board. The State Board shall adopt rules and regulations in the manner required by law.

The State Board of Education may adopt guidelines for advancing the vision or mission of the State Board. The State Board may adopt guidelines for the advancement of the educational interests of the state.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: March 14, 2000
POLICY: ORIENTATION OF NEW MEMBERS

Policy Type: Governance Process

The State Board, in cooperation with the Commissioner, shall orient new State Board members into the work of the State Board of Education and the educational programs throughout the state.

Newly elected members shall be encouraged to attend meetings of the State Board of Education or to listen to the meetings on the Internet. The expenses of members-elect to attend meetings cannot be paid until their term of office begins. Notice of Board meetings, agendas and all supporting materials shall be sent to newly elected Board members in the interim before taking office.

For more information see Procedure A of the Guidelines

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: November 14, 2007
Amended: March 11, 2014
POLICY: BOARD MEMBER DEVELOPMENT

Policy Type: Governance Process

The State Board of Education is responsible for its own development as a Board.

This development may take place in part through membership in national and state educational organizations.

Individual members of the Board are encouraged to participate fully in educational meetings to the extent funds are available.

The appointment of a State Board member to represent the Board on a national association, committee or position shall be by vote of the State Board. Appointment to a subcommittee, task force or other similar group of a national association or committee shall also be approved by vote of the Board if State Board funds will be utilized.

The State Board of Education may authorize Board members to attend in-state or out-of-state meetings for participation in matters of educational interest to the state of Kansas.

For more information see Guideline I.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: March 14, 2000
POLICY: BOARDSMANSHIP EXPECTATIONS

Policy Type: Governance Process

A. Board members are expected to:

1. maintain an open dialogue with each other;
2. listen and show courtesy and respect to each other, the public and staff;
3. respect other Board members and their opinions;
4. not make assumptions about the possible voting preferences of other members and feel free to ask for clarification of positions;
5. accept the fact that there will be differences of opinion and not take dissenting opinions personally;
6. make a good faith effort to find common ground on issues, including consideration of parts of proposals;
7. earn trust from one another; and
8. identify and utilize appropriate press relations, protect the integrity of the Board, and not misrepresent the Board’s official position on issues to the press or in social media.

B. Perceived Violations of Boardsmanship Expectations

1. Any perceived violation of boardsmanship expectations can be voiced to the chairman by any Board member.
2. The chairman shall rule on the alleged violation.
3. If any member is dissatisfied with the ruling of the chair, the member may make a motion on the issue.

C. Board members also expect the chair and vice chair of the Board to work as a team with the Commissioner.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: February 9, 2000
Amended: September 15, 2005
Amended: July 15, 2009
POLICY: OFFICERS - ELECTION, TENURE, AND DUTIES

Policy Type: Governance Process

At its January meeting in odd-numbered years, the State Board shall organize by election of a chairman, vice chairman and appointment of an attorney for the Board and secretary to the Board. Election of officers may be by signed ballot. Each signed ballot shall be open for inspection as provided by law.

A. The immediate past chairman, if available and on the Board, shall be the temporary chairman of the biennial organization meeting and preside for the following purposes:
   1. Call to order
   2. Ensure that newly elected and re-elected members are administered the oath of office.
   3. Roll Call
   4. Election of Board chairman or conduct business of the Board if there is an impasse on election of a Board chairman.

If the immediate past chairman is not available, the immediate past vice chairman, if available and on the Board, shall be the temporary chairman. In the absence of the immediate past chairman and vice chairman, the Board member with the most seniority on the Board shall serve as temporary chairman and preside for the purposes specified in paragraph A. If the temporary chairman cannot be determined based on seniority because two or more Board members have the same level of seniority, the temporary chairman will be determined by lot between those Board members with the most seniority.

If the Board reaches an impasse on election of a Board chairman during its organizational meeting, the temporary chairman, as determined herein, will preside at each subsequent meeting of the Board until a chairman is elected.

B. Chairman: It shall be the duty of the chairman to preside at all meetings of the State Board and perform such other duties as the Board may direct. In case the office of chairman shall become vacant, the vice chairman shall
assume the title, duties, and responsibilities of the chair for the remainder of
the term for which the chairman was originally selected. The chairman
may serve as an ex-officio member of all State Board committees. In the
absence of the commissioner or the inability of the commissioner to act,
the chairman shall appoint a deputy commissioner to act as commissioner
until the next regular meeting of the State Board.

C. Vice chairman: It shall be the duty of the vice chairman to preside at
all meetings of the State Board in the absence of the chairman. In case
the office of vice chairman shall become vacant, the State Board shall
appoint a new vice chairman.

D. In the absence of the chairman and the vice chairman at any meeting of
the Board, the Board member with the most seniority on the Board shall
serve as temporary chairman and preside for the purposes of calling the
meeting to order, taking roll call and serving as temporary chairman to
conduct business at the meeting.

E. Positions attached to the State Board

Commissioner: The State Board of Education shall appoint a Commissioner
of Education who shall serve at the pleasure of the Board as its executive officer.
(Kansas Constitution Article VI, Section 4) The Commissioner of Education
implements the Kansas State Board of Education’s strategic goals and objectives,
and leads the Kansas State Department of Education. The commissioner shall be
evaluated annually by the State Board.

Secretary: The secretary to the State Board of Education shall be appointed by
the State Board at each organizational meeting to serve at the pleasure of the
State Board. The secretary shall not be a member of the Board.
(K.S.A. 72-7508)

The secretary shall attend all meetings of the State Board and perform such
other duties as assigned. The commissioner will provide day-to-day
supervision of the secretary with input from the State Board.
Attorney: The attorney for the State Board of Education shall be appointed by the State Board at each organizational meeting to serve at the pleasure of the State Board. The attorney shall attend all meetings of the State Board and render any legal services which are directed by the State Board or the commissioner. The State Board may appoint an attorney other than the State Board attorney to represent it or members in any litigation. (K.S.A. 72-7512) The Board may enter into a contract for services with the State Board attorney.

Evaluations of Secretary and Attorney: The secretary to the Board shall be evaluated by the commissioner and the State Board. The first evaluation shall be within six months of hiring. Thereafter, the secretary to the Board shall be evaluated annually by the commissioner with input from the Board.

The Board attorney shall be evaluated annually by the Board in consultation with the commissioner.

Position Descriptions: Current position descriptions for the Commissioner of Education and the secretary to the Board are housed in the KSDE Human Resource Department. Evaluation instruments for these positions and the Board attorney are also housed there.

For Additional Information, See Procedure B of the Guidelines.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: March 14, 2000
Amended: November 14, 2001
Amended: December 10, 2002
Amended: September 9, 2003
Amended: November 14, 2007
Amended: September 10, 2008
Amended: October 17, 2012
Amended: March 11, 2014
POLICY: COMMITTEE PRINCIPLES

Policy Type: Governance Process

The Board may establish temporary committees to help carry out its responsibilities. However, the Board normally will operate as a committee of the whole and will rely sparingly on committees.

1. Any temporary committee of the State Board shall be created by vote of the State Board and shall not include more than three Board members.

2. Board committees may not speak or act for the Board except when formally given such authority for specific and time-limited purposes.

3. Board committees are to help the Board do its job, not to help the commissioner do his/her work. Committees will assist the Board chiefly by preparing policy alternatives, including their implications, for Board deliberation. Committees are not to be created by the Board to advise the commissioner.

4. Board committees cannot exercise authority over organization staff except by working through the commissioner.

5. This policy does not apply to committees established by the commissioner. It does apply to committees that are formed by the Board, whether or not the committees include non-Board members.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: December 10, 2003
Amended: October 17, 2012
POLICY: APPOINTMENTS TO COMMITTEES AND COMMISSIONS

Policy Type: Governance Process

A. The State Board makes appointments to the following types of committees:

1. Committees created by the State Board and having State Board membership, e.g., the State Board Policy Committee and the State Board Communications Committee.

2. Committees to which the State Board is required by law to appoint one or more of its members, e.g., KSHSAA's Board of Directors.

3. Committees to which the State Board is required by law to appoint one or more persons who are not members of the State Board, e.g., Professional Standards Advisory Board, Special Education Advisory Board Council and Professional Practices Commission.

4. Committees to which the State Board determines to appoint one or more of its members at the request of some organization, agency or government entity, e.g., the KSHSAA's Executive Board, Kansas Teacher of the Year and Communities in Schools NASBE Government Affairs Committee.

B. Appointments to Standing Committees of the State Board

1. At the organizational meeting, the chairman shall declare all memberships on State Board committees vacant. Then, representation of the State Board on such committees shall be determined by vote of the Board.

2. There shall be a standing State Board Policy Committee which shall be elected by the State Board at its organizational meeting. Three members shall serve on this committee.

3. There shall be a Legislative Coordinator and Assistant Legislative Coordinator who shall be elected by the State Board at its organizational meeting.
C. Appointments to Temporary Committees of the State Board:

The chairman and members of each temporary committee of the State Board shall be appointed by the chairman of the State Board from a list of those Board members who have expressed an interest in serving on the committee.

D. Appointments to Other Committees:

The State Board may appoint persons to committees on which State Board members do not serve in accordance with the following guidelines:

a. Prior to making an appointment, the State Board may receive nominations from statewide organizations, individuals, or State Board members.

b. Nominations may remain open until the time of appointment.

c. In appointment of members, the State Board may provide representation as required by law and seek broad representation by giving consideration to various appropriate factors, including the following:
   - geographic representation;
   - representation by school district enrollment;
   - representation by school level;
   - representation by various educational stakeholders; and
   - special knowledge or expertise.

Adopted: August 9, 1989
Amended: March 13, 1990
Amended: July 10, 1991
Amended: October 13, 1992
Amended: March 10, 1998
Amended: December 12, 2001
Amended: September 9, 2003
Amended: December 10, 2003
Amended: March 11, 2014
POLICY: OPERATION OF THE STATE BOARD OF EDUCATION

Policy Type: Governance Process

1. Meetings

A. Regular Meetings
   The State Board shall hold a regular meeting each month as provided by law. No later than January each year, the Board shall adopt by resolution specifying (1) the hour of commencement, (2) the day of the week, (3) the week of the month, and (4) locations for meetings for the entire year. (K.S.A. 72-7507) This shall include meetings to be held on the campus of each state school governed by the Board.

B. Other Meetings
   The State Board may provide by resolution for (1) additional regular meetings; (2) special meetings; or (3) recessed or adjourned meetings. (K.S.A. 72-7507)

   Special meetings may be called by the chairman or upon the request of four Board members submitted to the chairman.

   Telephone conference meetings may be called by the chairman or at the request of four Board members.

C. Notification of Meetings
   Notice of regular meetings shall be sent at least seven days in advance to members of the State Board and others who have requested notification.

   When the regular meeting date, time or place is changed by resolution, or when additional regular meetings, special meetings, recessed or adjourned meetings are called, the secretary to the Board shall notify members of the Board and others who have requested notification, at least five days before such meetings. However, when the chairman deems the need for an emergency meeting, the chairman may call a meeting. In such event, reasonable notice shall be given to those parties named herein.

   A party receiving notice of any conference shall be advised that this will be an open meeting and the discussion and action may be heard over speakers at the State Department of Education.
If State Board meetings are canceled due to extenuating circumstances the State Board chairman or the chairman’s designee shall notify other members of the State Board, the news media and others who have requested such notification.

D. All official business of the State Board shall be transacted as provided by state law.

E. Agenda
(1) Construction
   (a) A State Board meeting agenda shall be prepared by the chairman of the State Board, the vice chairman of the State Board and the commissioner.

   (b) Any member of the State Board may request that an item related to State Board goals be placed on the agenda by submitting a request to the chairman in advance of the agenda preparation. Any such item shall be considered for the State Board agenda.

   (c) In addition, a member of the State Board may request that any matter be placed on a future agenda of the State Board at a regular meeting. The request shall be discussed at a meeting of the State Board.

       If consensus cannot be reached, the request shall be approved or disapproved by a vote of the State Board.

(2) Advance Delivery
    The agenda for each meeting, along with complete supporting informational material and recommendations, shall be available to each member of the State Board at least seven days before such meeting.

(3) Distribution
    The agenda of each meeting shall be distributed in advance to persons to appear before the State Board and others who have requested notification of meetings.

    One copy of the agenda and supporting materials shall be available on the day of the meeting for persons attending the State Board meeting.
F. Meeting Conduct

(1) Order of Business

The order of business of all meetings may be as follows:
(a) Call to Order
(b) Roll Call
(c) Moment of Silence
(d) Pledge of Allegiance
(e) Approval of Agenda
(f) Approval of Minutes of the Previous Meeting
(g) Citizens’ Open Forum – (See Policy No. 1012)
(h) Agenda Items
(i) Consent Agenda
(j) Recess until Day 2
(k) Call to Order
(l) Roll Call
(m) Approval of Agenda
(n) Agenda Items
(o) Adjournment

(2) Procedure official action by the State Board shall be by motion duly made and seconded. Allowable motions include the principle or initial motion on a matter; a motion to amend an initial motion; a substitute motion to an initial motion; a motion to table a matter; and a motion to remove a matter from the table. Other action regarding any matter may be taken upon an affirmative vote of six members of the Board.

It shall be the practice of the Board to take action only on those items that are noted on the agenda as action items. However, the Board, upon motion duly made and seconded, and upon an affirmative vote of seven members of the Board, may take action on any matter on the Board’s agenda, whether such matter is designated as an action item, receive item, discussion item or information item.

Routine, procedural or noncontroversial action items may be placed on the consent agenda. For items that require clarification, or for which a Board member has a question, that clarification should be requested before the Board meeting. An item should not be pulled from the consent agenda just to have a question answered. That sort of information gathering should
happen before the meeting. If there is an item about which a Board member disagrees, or believes the item requires discussion, then a request is made at the beginning of the Board meeting during the Approval of the Agenda to pull that item from the consent agenda.

G. Records and Minutes
   (1) The secretary to the State Board shall take minutes at each Board meeting, shall record the actions of the State Board, and shall officially certify the minutes of each meeting. (K.S.A. 72-7508)

   (2) On any motion before the State Board, a recorded vote shall be taken and made a part of the public record. (K.S.A. 72-7509) The name of any member voting against a motion or abstaining shall be recorded in the minutes.

   (3) Additions and/or corrections may be made to the minutes by a majority vote of the State Board. (An example of this would be a minority report.)

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: September 14, 1999
Amended: October 12, 1999
Amended: May 10, 2000
Amended: September 9, 2003
Amended: July 11, 2005
Amended: November 14, 2007
Amended: November 10, 2009
Amended: October 17, 2012
Amended: March 11, 2014
POLICY: BOARD MEMBER TRAVEL

Policy Type: Governance Process

The purpose of Board member travel is to accomplish the mission and goals of the Board, and to assist individual Board members in the development and improvement of boardsmanship skills.

Objectives of travel:

(1) To participate in regular monthly and special meetings of the Board.

(2) To travel in-district to maintain communication with constituents.

(3) To attend in-state organization meetings; to develop and improve boardsmanship skills; to participate in assigned in-state committee meetings; and to meet with the legislature.

(4) To attend meetings of national organizations to represent the Board, to develop and improve boardsmanship skills; and to participate in assigned national organizations' activities and/or study groups.

Pursuant to state law, each State Board member is entitled to the same compensation, travel expenses and subsistence allowance as provided for members of the legislature for attendance at meetings authorized by the State Board.

For more information see Guideline I.

Adopted: August 9, 1989
Amended: March 13, 1990
Amended: July 10, 1991
Amended: October 13, 1992
Amended: March 10, 1998
Amended: March 11, 2014
POLICY: CITIZENS’ OPEN FORUM

Policy Type: Governance Process

The Citizens’ Open Forum is an opportunity for the general public to provide input on educational issues in the state of Kansas. Addressing the Board is a privilege and not a right. The Citizens’ Open Forum may be held shortly after the meeting is called to order on the first day of each two-day meeting of the State Board of Education. Procedures for the Citizens’ Open Forum are as follows:

1. Each speaker shall be allowed to speak for three minutes.

2. State Board of Education members may ask clarifying questions of the person making the presentation. The speaker will have up to one minute to respond. The presiding officer may grant additional time at his/her discretion.

3. By consent of the Board, the agenda time may be extended. While offering a public forum is important to the Board, it is also necessary to ensure that the Board allows enough time to conduct its regular business.

4. Information may be submitted to the Board in written form.

5. At the discretion of the chair and with regards to the timeliness of the agenda, the Citizens’ Open Forum may be closed and reopened at a later time or date to be announced.

6. Any person wishing to speak shall sign in prior to the commencement of the Citizens’ Open Forum and shall complete a presenter's card, giving his or her name and address, the subject, and the name of any group he or she is representing. Speakers shall be recognized according to the order in which they signed in.

7. Presentations containing information or comments related to KSDE personnel may be referred for review in executive session.

8. Following the Citizens’ Open Forum, the Chairman will acknowledge the participants and announce that the State Board will determine if any of the issues will be addressed at a future meeting.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: April 12, 2000
Amended: November 14, 2001
Amended: November 14, 2007
Amended: March 11, 2014
POLICY: PUBLIC HEARINGS

Policy Type: Governance Process

The purpose of a Public Hearing is to obtain comments from proponents and opponents on a specific topic that requires such a hearing before a decision is made. Notice of a Public Hearing must be published in advance of the hearing.

Procedures for any Public Hearing of the State Board are as follows:

(1) Any person having an interest in the subject of the hearing shall have a right to provide oral and written testimony to the State Board on the subject of the hearing.

(2) Any person wishing to speak at the hearing shall sign in prior to the commencement of the hearing by providing his/her name, address and identifying whether he/she represents an opinion of a group.

(3) The presiding officer will conduct the hearing. Speakers shall be recognized according to the order in which they signed in. Limiting statements to five minutes encourages speakers to be focused and direct, and permits more people to testify.

(4) If written testimony is submitted, 13 copies should be provided.

(5) State Board of Education members may ask clarifying questions of the person making the presentation. The speaker will have up to one minute to respond. The presiding officer may grant additional time at his/her discretion.

(6) The Public Hearing is not a debate, but an orderly gathering of facts on a particular subject matter. The presiding officer shall rule on comments that are too lengthy. Irrelevant or repetitious testimony is discouraged.

(7) These Public Hearing procedures shall be printed and be made available upon request.

(8) The chairman shall advise persons in attendance of these Public Hearing procedures.
Following each Public Hearing, all comments received shall be analyzed and considered.

COMMUNITY FORUMS

The Board may elect to host informal community forums at locations around the state to receive public input on various education topics. Such events would be at the discretion of the Board and should not be confused with required Public Hearings. The community forum format would be established prior to the event, depending upon time, location and agenda.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: March 14, 2000
Amended: November 14, 2007
Amended: March 11, 2014
BOARD-STAFF LINKAGE
POLICY: DELEGATION TO THE COMMISSIONER

Policy Type: Board-Staff Linkage

The responsibility of the Board is to establish policies, leaving implementation to the commissioner. Board policies relating to the work of the staff on behalf of the State Board direct the commissioner to achieve certain results or limit the commissioner to act within acceptable boundaries. All Board authority delegated to staff is delegated through the commissioner, so that all authority and accountability of staff can be phrased--insofar as the Board is concerned--as authority and accountability of the commissioner.

1. The commissioner is authorized to make all decisions, take all actions and develop all activities which are consistent with the Board's policies. The Board, by amending its policies, may expand or constrict the areas of the commissioner's delegated authority. However, the Board will respect the commissioner's choices so long as the delegation continues. This does not prevent the Board from obtaining information about activities in the delegated areas.

2. The commissioner serves the State Board. Therefore, no Board member, officer or committee shall exercise authority over the commissioner. If any request is made or direction given to the commissioner by a Board member, officer or committee which requires material resources, it may be refused.

3. The commissioner may not perform, allow or cause to be performed any act which is unlawful, insufficient to meet commonly accepted business and professional ethics or the "prudent person" test or contrary to explicit Board constraints on executive authority.

4. The commissioner may employ persons in unclassified special project positions subject to confirmation by the State Board.

5. The commissioner shall not establish the qualifications or method of selection of assistant commissioners without consulting the State Board.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: March 11, 2014
POLICY: MONITORING AND EVALUATING
COMMISSIONER PERFORMANCE

Policy Type: Board-Staff Linkage

1. A formal, cumulative evaluation of the commissioner shall be performed not more than six months after the commissioner is appointed. Thereafter, a formal, cumulative evaluation of the commissioner shall be performed annually by the State Board. Monitoring of the commissioner’s performance will focus on areas of job responsibilities, department performance in response to Board initiatives and policies, and leadership competencies as compared to Board goals and objectives and as stated in the position description for the Commissioner of Education. The purpose of monitoring is to determine the degree to which the commissioner’s performance fulfills the responsibilities for which the commissioner is accountable. The position description for the commissioner shall be presented biennially as part of new Board member orientation.

2. The commissioner’s performance may be monitored by the following:

   A. Monthly observations of, and communications with, the commissioner.

   B. Executive reports from the commissioner.

   C. Board member report where a Board member, a committee of the Board or the Board as a whole reviews information, activities or circumstances to determine accomplishment of responsibilities.

3. The Board, at any time, may request a monitoring report or external audit of the commissioner’s performance.

4. To assist the State Board in performing its evaluation, the commissioner shall submit to the Board by February of each year a list of performance objectives to be considered and approved by the State Board. In October, the commissioner shall provide to the Board a summary of progress on the Board goals objectives. The commissioner may also obtain feedback from KSDE staff and provide the compiled results to the State Board.
For more information see Procedure B of the Guidelines.
COMMISSIONER LIMITATIONS
POLICY: COMMUNICATION AND COUNSEL TO THE BOARD

Policy Type: Commissioner Limitations

The commissioner may not intentionally cause or allow the Board to be uninformed or misinformed. The commissioner shall not accept, on behalf of the State Board, policy or administrative duties concerning any program which has not been assigned to the State Board by law, without the prior approval of the State Board.

The commissioner shall inform the State Board of any program assigned by law to the State Board or to the State Department of Education and shall advise the State Board of the anticipated impact of the program’s assignment to the Board or the Department.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: October 12, 1999
Amended: September 9, 2003
POLICY: STAFF TREATMENT

Policy Type: Commissioner Limitations

With respect to employment and treatment of staff, the commissioner may not cause or allow conditions which that:

1. Withhold from staff an appropriate grievance procedure.
2. Prevent staff from grieving to the Board when the following conditions are met:
   a. internal grievance procedures have been exhausted; and,
   b. the employee states reasonable grounds to believe:
      (i) that Board policy has been violated to his/her detriment; or
      (ii) that Board policy does not adequately protect his/her human rights.

Adopted: August 9, 1989
Amended: March 10, 1998
Amended: September 14, 1999
Amended: July 15, 2009
Amended: March 11, 2014
Policy Type: Commissioner Limitations

With respect to planning fiscal initiatives and legislative recommendations, the commissioner may not jeopardize the integrity of the Department. Accordingly, he or she may not cause or allow:

1. Material deviation from Board-stated policies or priorities in the allocation of funds among competing budgetary needs.

2. Action contrary to the State Board’s legislative recommendations.

Adopted: August 9, 1989
Amended: March 10, 1998
POLICY: EMERGENCY EXECUTIVE SUCCESSION

Policy Type: Commissioner Limitations

With respect to protecting the Board from sudden loss of chief executive services, the commissioner may not allow insufficient executive backup. Accordingly, the commissioner shall have no fewer than two other executives familiar with Board and commissioner issues and processes. (See K.S.A. 72-7601 et seq.)

Adopted: August 9, 1989
Amended: March 10, 1998
To: Kansas State Board of Education
From: Chairman Jim Porter
Subject: Discuss 2018 and 2019 Board meeting dates

Draft schedules of Calendar Years 2018 and 2019 Board meeting dates are provided for review and discussion.

Two-day meetings are indicated as usual on the second Tuesday and Wednesday of each month. The exception is 2019, an odd-numbered year, when statute dictates that the regular monthly meeting and State Board organization occur after the second Monday in January. Therefore, the State Board’s meeting would be the third Tuesday and Wednesday of that month.

Legislative conference calls are currently marked for the last Friday of the month during the session.
Kansas State Board of Education
2018 Meeting Dates - DRAFT

January

May

June

July

August

September

October

November

December

State Holiday
Legis. Conf. Call

Item 16 Attachments
# Kansas State Board of Education

## 2019 Meeting Dates - DRAFT

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- **State Holiday**
- **Legis. Conf. Call**

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- **State Holiday**
- **Legis. Conf. Call**
To: Commissioner Randy Watson
From: Dale Dennis
Subject: Legislative Matters

Board Goals: Governmental Responsibility

A summary of education legislation, which primarily consists of provisions for working after retirement and the new school finance plan, will be reviewed with the State Board.

A Scheduling Order was released by the Supreme Court on June 19, 2017 which provides the following for the school finance case.

- Each party shall file its first brief by Friday, June 30, 2017, 5:00 p.m.
- Each party shall file its response brief by Friday, July 7, 2017, 5:00 p.m.
- The parties are ordered to appear on Tuesday, July 18, 2017 for oral arguments.
Total employees 238 as of pay period ending 6/3/2017. Count excludes classified temporaries and agency reallocations, promotions, demotions and transfers. Includes employees terminating to go to a different state agency (which are not included in annual turnover rate calculations).
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Item Title:
Act on personnel appointments to unclassified positions

Board Goals:
Governmental Responsibility

Recommended Motion:
It is moved that the Kansas State Board of Education confirm the appointment of:

Rachel Beech to the position of Education Program Consultant on the Early Childhood, Special Education, and Title Services team, effective June 8, 2017, at an annual salary of $56,118.40. This position is funded by the Migrant and Title I Consolidated Pool.

Explanation of Situation Requiring Action:
Rachel Beech will manage some requirements of federal programs including Elementary and Secondary Education Act, school improvement, and KSBE requirement of Kansas Accreditation. The employee is responsible for providing technical assistance to ensure proper implementation and compliance with state and federal regulations related to the Elementary and Secondary Education Act (ESEA), Individuals with Disabilities in Education Act (IDEA), the Kansas Exceptional Children’s Act, and other education laws. The employee will provide consultative services in the area of education requirements, facilitation, and technical assistance for local education agency personnel related to improving student results, in accordance with federal and state requirements. The employee will also interact with parents, general education and other human service agency personnel, faculty of institutions of higher education, professional organizations, and advocacy groups for the purpose of participating in committee work and providing information and technical assistance.
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Agenda Number: 18 c
Meeting Date: 7/11/2017

Item Title:
Act on higher education program approval recommendations from the Evaluation Review Committee

Board Goals:
Provide an effective educator in every classroom

Recommended Motion:
It is moved that the Kansas State Board of Education accept the following recommendations of the Evaluation Review Committee for “Program Approval” for Fort Hays State University, MidAmerica Nazarene University, Newman University, Pittsburg State University, Tabor College and Washburn University.

Explanation of Situation Requiring Action:
Following the institutional application and receipt of a complete institutional report, a review team of trained evaluators was appointed to review the education preparation provider or teacher education programs (as appropriate) for the above institutions based on adopted State Board policies, procedures and regulations. These are available for review by any member or members of the State Board. Each review team's report and each institution's response to the report, along with the institutional reports, were submitted to the Evaluation Review Committee (ERC) of the Teaching and School Administration Professional Standards Advisory Board. The ERC, in accordance with procedures adopted by the State Board, prepared written initial recommendations regarding the appropriate status to be assigned to each education preparation provider or teacher education program.

The initial recommendation was submitted to the teacher education institution and the institution was given 30 days to request a hearing to appeal the initial recommendation. If requested, the ERC conducted a hearing and prepared a written final recommendation regarding the appropriate status to be assigned to the teacher education program. If a request for a hearing was not submitted, the initial recommendation became the final recommendation. These final recommendations have been submitted to appropriate representatives of the teacher education institutions and are now submitted to the State Board, as attached, for consideration and approval of the ERC recommendations for accreditation and program approval status.

A copy of the regulations covering this process is also attached. Staff will be on hand to answer any questions.

*If approved, new programs are always assigned the "new program approved with stipulation" status.
June 16, 2017

To: Dr. Randy Watson, Commissioner
From: Evaluation Review Committee
Subject: Final Recommendation for program approval for Fort Hays State University

Introductory Statement:

On June 02, 2017, the Evaluation Review Committee reviewed the application for program approval for Fort Hays State University.

Documents that were received and considered include the Institutional Program Report, KSDE Team Report, and Institutional Rejoinder to the KSDE Team Report.

PROGRAM APPROVAL RECOMMENDATION

Recommend “Approved” for the following program through December 31, 2024.

School Counselor, A, PreK-12 continuing program
Areas for Improvement:
Standards 1-8
None

All New Programs may only be assigned the status of “New Program Approved with Stipulation” or “Not Approved.”
(New programs must be operationalized within two years of KSBE approval.)
June 16, 2017

To: Dr. Randy Watson, Commissioner  
From: Evaluation Review Committee  
Subject: Final Recommendation for program approvals for MidAmerica Nazarene University

Introductory Statement:

On June 02, 2017, the Evaluation Review Committee reviewed the application for program approvals for MidAmerica Nazarene University.

Documents that were received and considered include the Institutional Program Reports, KSDE Team Reports, and Institutional Rejoinders to the KSDE Team Reports.

PROGRAM APPROVAL RECOMMENDATION

Recommend “Approved” for the following programs through December 31, 2024.

History, Government, and Social Studies I, 6-12 continuing program
Areas for Improvement:
Standards 1-9
None

Mathematics I, 5-8 continuing program
Areas for Improvement:
Standards 1-9
None

Mathematics I, 6-12 continuing program
Areas for Improvement:
Standards 1-9
None

Speech/Theatre I, 6-12 continuing program
Areas for Improvement:
Standards 1-6
None

All New Programs may only be assigned the status of “New Program Approved with Stipulation” or “Not Approved.”
(New programs must be operationalized within two years of KSBE approval.)
June 16, 2017

To: Dr. Randy Watson, Commissioner
From: Evaluation Review Committee
Subject: Final Recommendation for program approvals for Newman University

Introductory Statement:

On June 02, 2017, the Evaluation Review Committee reviewed the application for program approvals for Newman University.

Documents that were received and considered include the Institutional Program Reports, KSDE Team Reports, and Institutional Rejoinders to the KSDE Team Reports.

PROGRAM APPROVAL RECOMMENDATION

Recommend “New Program Approved with Stipulation” for the following programs through December 31, 2019.

Innovative/Experimental Elementary Internship I, K-6 NEW program
Areas for Improvement:
Criteria 1-15
None

All New Programs may only be assigned the status of “New Program Approved with Stipulation” or “Not Approved.”
(New programs must be operationalized within two years of KSBE approval.)
June 16, 2017

To: Dr. Randy Watson, Commissioner
From: Evaluation Review Committee
Subject: Final Recommendation for program approvals for Pittsburg State University

Introductory Statement:

On June 02, 2017, the Evaluation Review Committee reviewed the application for program approvals for Pittsburg State University.

Documents that were received and considered include the Institutional Program Reports, KSDE Team Reports, and Institutional Rejoiners to the KSDE Team Reports.

PROGRAM APPROVAL RECOMMENDATION

Recommend “Approved” for the following programs through December 31, 2024.

Speech/Theatre I, 6-12 continuing program

Areas for Improvement:

Standards 1-6

None

All New Programs may only be assigned the status of “New Program Approved with Stipulation” or “Not Approved.”

(New programs must be operationalized within two years of KSBE approval.)
June 16, 2017

To:     Dr. Randy Watson, Commissioner
From:   Evaluation Review Committee
Subject: Final Recommendation for program approvals for Tabor College

Introductory Statement:

On June 02, 2017, the Evaluation Review Committee reviewed the application for program approvals for Tabor College.

Documents that were received and considered include the Institutional Program Reports, KSDE Team Reports, and Institutional Rejoinders to the KSDE Team Reports.

PROGRAM APPROVAL RECOMMENDATION

Recommend “Approved” for the following programs through December 31, 2024.

Chemistry I, 6-12 dormant program
Areas for Improvement:
Standards 1-13
None

Elementary I, K-6 continuing program
Areas for Improvement:
Standards 1-7
None

All New Programs may only be assigned the status of “New Program Approved with Stipulation” or “Not Approved.”
(New programs must be operationalized within two years of KSBE approval.)
June 16, 2017

To: Dr. Randy Watson, Commissioner
From: Evaluation Review Committee
Subject: Final Recommendation for program approvals for Washburn University

Introductory Statement:

On June 02, 2017, the Evaluation Review Committee reviewed the application for program approvals for Washburn University.

Documents that were received and considered include the Institutional Program Reports, KSDE Team Reports, and Institutional Rejoinders to the KSDE Team Reports.

PROGRAM APPROVAL RECOMMENDATION

Recommend “Approved” for the following programs through December 31, 2024.

Chemistry I, 6-12 continuing program
Areas for Improvement: Standards 1-13
None

Early Childhood Unified (ECU) I, Birth – Grade 3 continuing program
Areas for Improvement: Standards 1-13
None

Foreign Language I, PreK-12 continuing program
Areas for Improvement: Standards 1-9
None

High Incidence A, K-6 continuing program
Areas for Improvement: Standards 1-8
None

High Incidence A, 6-12 continuing program
Areas for Improvement: Standards 1-8
None

Mathematics I, 6-12 continuing program
Areas for Improvement: Standards 1-9
None
All New Programs may only be assigned the status of “New Program Approved with Stipulation” or “Not Approved.”
(New programs must be operationalized within two years of KSBE approval.)

PROGRAM REVIEW PROCESS

The responsibilities of the Commissioner and State Board regarding unit accreditation under regulations 91-1-231(d), 91-1-232b and 91-1-70a are as follows:

KSDE’s Evaluation Review Committee (ERC) renders program approval recommendations for the initial teacher preparation and advanced program levels of the unit.

PROGRAM DECISIONS

New program approval decisions are:
• New Program Approved with Stipulation
• Not Approved.

Renewal program decisions are:
• Approved
• Approved with Stipulation
• Not Approved.
The responsibilities of the Commissioner and State Board regarding program approval are under regulations 91-1-235 and 91-1-236.

91-1-235. Procedures for initial approval of teacher education programs.

(a) Application.

(1) Each teacher education institution that desires to have any new program approved by the state board shall submit an application for program approval to the commissioner. The application shall be submitted at least 12 months before the date of implementation.

(2) Each institution shall submit with its application a program report containing a detailed description of each proposed program, including program coursework based on standards approved by the state board, and the performance-based assessment system that will be utilized to collect performance data on candidates' knowledge and skills. Each program report shall be in the form and shall contain the information prescribed by the commissioner. The program report shall include confirmation that the candidates in the program will be required to complete the following:

(A) Coursework that constitutes a major in the subject at the institution or that is equivalent to a major; and

(B) at least 12 weeks of student teaching.

(b) Review team. Upon receipt of a program report, a review team shall be appointed by the commissioner to analyze the program report. The chairperson of the review team shall be designated by the commissioner. The number of review team members shall be determined by the commissioner, based upon the scope of the program to be reviewed. An institution may challenge the appointment of a team member only on the basis of a conflict of interest.

(c) Program review process.

(1) In accordance with procedures adopted by the state board, a review team shall examine and analyze the proposed program report and shall prepare a report expressing the findings and conclusions of the review team. The review team's report shall be submitted to the commissioner. The report shall be forwarded by the commissioner to an appropriate representative of the teacher education institution.

(2) An institution may prepare a response to the review team's report. This response shall be prepared and submitted to the commissioner within 45 days of receipt of the review team's report. The review team's report, any response by the institution, and any other supporting documentation shall be forwarded to the evaluation review committee by the commissioner.

(d) Initial recommendation. The evaluation review committee, in accordance with procedures adopted by the state board, shall prepare a written initial recommendation regarding the appropriate status to be assigned to the proposed program, which shall include a statement of the findings and conclusions of the evaluation review committee. The recommendation shall be submitted to an appropriate representative of the teacher education institution and to the commissioner.

(e) Request for hearing.

(1) Within 30 days of the receipt of an initial recommendation of the evaluation review committee, the teacher education institution may submit a written request to the evaluation review committee for a
hearing before the committee to appeal the initial recommendation. This request shall specify, in detail, the basis for the appeal, including an identification of each item disputed by the institution.

(2) If a request for a hearing is submitted, the evaluation review committee shall conduct a hearing. The committee shall then prepare a written final recommendation regarding the appropriate status to be assigned to the proposed program, which shall include a statement of the findings and conclusions of the evaluation review committee. The final recommendation shall be submitted to an appropriate representative of the teacher education institution and to the commissioner. The final recommendation shall be submitted by the commissioner to the state board for its consideration and determination.

(3) If a request for a hearing is not submitted within the time allowed under paragraph (1) of this subsection, the initial recommendation of the evaluation review committee shall become the final recommendation of the review committee. The committee's final recommendation shall be submitted by the commissioner to the state board for its consideration and determination.

(f) Approval status. Each new program shall be approved with stipulation or not approved.

(g) Annual report.

(1) If a new program is approved with stipulation, the institution shall submit a progress report to the commissioner within 60 days after completion of the second semester of operation of the program, and thereafter in each of the institution's annual reports that are due on or before July 30.

(2) Each progress report shall be submitted by the commissioner to the evaluation review committee for its examination and analysis. Following review of the progress report, the evaluation review committee may remove any areas for improvement and change the status to approved until the institution's next program review.

(h) Change of approval status.

(1) At any time, the approval status of a teacher education program may be changed by the state board if, after providing an opportunity for a hearing, the state board finds that the institution either has failed to meet substantially the program standards or has materially changed the program. For just cause, the duration of the approval status of a program may be extended by the state board. The duration of the current approval status of a program shall be extended automatically if the program is in the process of being reevaluated by the state board. This extension shall be counted as part of any subsequent approval period of a program.

(2) At the time of an institution's next on-site visit, the new program shall be reviewed pursuant to K.A.R. 91-1-236.

(3) For licensure purposes, each teacher education program that is approved with stipulation shall be considered to be approved. (Authorized by and implementing Article 6, Section 2(a) of the Kansas Constitution; effective Aug. 6, 2004; amended Aug. 12, 2011.)
91-1-236. Procedures for renewing approval of teacher education program.

(a) Application for program renewal.

(1) Each teacher education institution that desires to have the state board renew the approval status of one or more of its teacher education programs shall submit to the commissioner an application for program renewal. The application shall be submitted at least 12 months before the expiration of the current approval period of the program or programs.

(2) Each institution shall also submit a program report, which shall be in the form and shall contain the information prescribed by the commissioner. The program report shall be submitted at least six months before the expiration of the current approval period of the program or programs. The program report shall include confirmation that the candidates in the program will be required to complete the following:

(A) Coursework that constitutes a major in the subject at the institution or that is equivalent to a major; and

(B) at least 12 weeks of student teaching.

(b) Review team. Upon receipt of a complete program report, a review team shall be appointed by the commissioner to analyze the program report. The chairperson of the review team shall be designated by the commissioner. The number of review team members shall be determined by the commissioner, based upon the scope of the program or programs to be reviewed. An institution may challenge the appointment of a review team member only on the basis of a conflict of interest.

(c) Program review process.

(1) In accordance with procedures adopted by the state board, each review team shall examine and analyze the program report and prepare a review report expressing the findings and conclusions of the review team. The review team's report shall be submitted to the commissioner. The report shall be forwarded by the commissioner to an appropriate representative of the teacher education institution.

(2) Any institution may prepare a written response to the review team's report. Each response shall be prepared and submitted to the commissioner within 45 days of receipt of the review team's report. The review team's report, any response filed by the institution, and any other supporting documentation shall be forwarded by the commissioner to the evaluation review committee.

(d) Initial recommendation. The evaluation review committee, in accordance with procedures adopted by the state board, shall prepare a written initial recommendation regarding the appropriate status to be assigned to the program or programs, which shall include a statement of the findings and conclusions of the evaluation review committee. The recommendation shall be submitted to an appropriate representative of the teacher education institution and to the commissioner.

(e) Request for hearing.

(1) Within 30 days of the receipt of an initial recommendation of the evaluation review committee, the teacher education institution may submit a written request to the commissioner for a hearing before the evaluation review committee to appeal the initial recommendation of the committee. This request shall specify, in detail, the basis for the appeal, including an identification of each item disputed by the institution.

(2) If a request for a hearing is submitted, the evaluation review committee shall conduct a hearing. The committee shall then prepare a written final recommendation regarding the appropriate status to be
assigned to the program or programs, which shall include a statement of the findings and conclusions of the evaluation review committee. The final recommendation shall be submitted to an appropriate representative of the teacher education institution and to the commissioner. The final recommendation shall be submitted by the commissioner to the state board for its consideration and determination of program approval status according to paragraph (f)(1).

(3) If a request for a hearing is not submitted within the time allowed under paragraph (1) of this subsection, the initial recommendation of the evaluation review committee shall become the final recommendation of the review committee. The committee's final recommendation shall be submitted by the commissioner to the state board for its consideration and determination.

(f) Approval status.

(1) The status assigned to any teacher education program specified in this regulation shall be approved, approved with stipulation, or not approved.

(2) Subject to subsequent action by the state board, the assignment of approved status to a teacher education program shall be effective for seven academic years. However, the state board, at any time, may change the approval status of a program if, after providing an opportunity for a hearing, the state board finds that the institution either has failed to meet substantially the program standards adopted by the state board or has made a material change in a program. For just cause, the duration of the approval status of a program may be extended by the state board. The duration of the approval status of a program shall be extended automatically if the program is in the process of being reevaluated by the state board.

(3) (A) If a program is approved with stipulation, that status shall be effective for the period of time specified by the state board, which shall not exceed seven years.

(B) If any program of a teacher education institution is approved with stipulation, the institution shall include in an upgrade report to the commissioner the steps that the institution has taken and the progress that the institution has made during the previous academic year to address the deficiencies that were identified in the initial program review.

(C) The upgrade report shall be submitted by the commissioner to the evaluation review committee for its examination and analysis. After this examination and analysis, the evaluation review committee shall prepare a written recommendation regarding the status to be assigned to the teacher education program for the succeeding academic years. The recommendation shall include a statement of the findings and conclusions of the evaluation review committee. The recommendation shall be submitted to an appropriate representative of the teacher education institution and to the commissioner. If the institution does not agree with this recommendation, the institution may request a hearing according to the provisions in subsection (e).

(D) For licensure purposes, each teacher education program that is approved with stipulation shall be considered to be approved.

(4) Students shall be allowed two full, consecutive, regular semesters following the notification of final action by the state board to complete a program that is not approved. Summers and interterms shall not be counted as part of the two regular semesters. Students who finish within these two regular semesters may be recommended for licensure by the college or university. (Authorized by and implementing Article 6, Section 2(a) of the Kansas Constitution; effective Aug. 6, 2004; amended Aug. 12, 2011.)
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Staff Initiating: Scott Myers
Director: Scott Myers
Commissioner: Randy Watson
Meeting Date: 7/11/2017

Item Title:
Act on recommendations of the Licensure Review Committee

Board Goals:
Provide an effective educator in every classroom

Recommended Motion:
It is moved that the Kansas State Board of Education accept the recommendations of the Licensure Review Committee as presented.

Explanation of Situation Requiring Action:
Recommendations of the Licensure Review Committee need approval of the State Board of Education. Certificates/licenses will be issued to those applicants whose appeals are granted.
Case 3140
Michelle Babcock requested initial Kansas licensure for PreK-12 French. Bruce Major made a motion to recommend approval of a professional level Kansas license for PreK-12 French based on achievement of certification in California through meeting minimum state requirements, educational background, and 6 years of recent unaccredited teaching experience to count for recency, the completion of an approved teacher preparation program, and the lack of completion of the program verification form 2a. Dale Jean Probst seconded the motion and the Licensure Review Committee approved the motion unanimously.

Case 3145
Deanna Fraley requested the License Review Committee to waive the completion of content and pedagogy testing. Bruce Major made a motion to recommend approval of a professional level Kansas license for PreK-12 music based on the acceptance of a Department of Defense Teaching Certificate issued prior to May 1, 1986 in place of an out of state teaching license issued prior to May 1, 1986 to meet the regulatory exemption from content and pedagogy testing. Heidi Bolt seconded the motion and the License Review Committee approved the motion with Gwen McDonald abstaining.

Case 3147
Sue Davis requested the addition of an endorsement for K-6 elementary education and PreK-12 high-incidence special education to a valid Kansas license. Bruce Major made a motion to recommend approval of the addition of an endorsement for K-6 elementary education to a valid Kansas license based on achievement of certification in Florida through an alternative route, educational background, and teaching experience. The Committee also recommended denial of the addition of an endorsement for PreK-12 high-incidence special education to a valid Kansas license based on lack of knowledge and performance to meet high-incidence special education standards 1, 4, and 6-8. Heidi Bolt seconded the motion and the Licensure Review Committee approved the motion unanimously.

Case 3150
Casey Carroll requested initial Kansas licensure for K-6 elementary education. Heidi Bolt made a motion to recommend approval of this request based on achievement of certification in Texas through an approved teacher preparation program in Texas, educational background, and teaching experience. Dale Jean Probst seconded the motion and the License Review Committee approved the motion unanimously.

Case 3152
Sarah Henning requested initial Kansas licensure for PreK-12 high-incidence special education. Heidi Bolt made a motion to recommend approval of this request based on achievement of certification in Oklahoma through an alternative route, educational background, and teaching experience. Amy DeLaRosa seconded the motion and the Licensure Review Committee approved the motion unanimously.

Case 3153
Joseph Janner requested the renewal of a two-year provisional license for secondary 6-12 and middle level 5-8 English. Gwen McDonald made a motion to recommend approval of this request based on completion of half of the semester credit hours required by the License Review Committee. Bruce Major seconded the motion and the Licensure Review Committee approved the motion unanimously.
Case 3155
Rebecca Clark requested the addition of an endorsement for birth-grade 3 early childhood unified to a valid Kansas license. Bruce Major made a motion to recommend approval of this request based on achievement of certification in Colorado through meeting minimum state requirements, educational background, and experience. Dale Jean Probst seconded the motion and the Licensure Review Committee approved the motion with Amy DeLaRosa abstaining.

Case 3159
Lori English requested professional level Kansas school specialist licensure for PreK-12 school counselor. Dale Jean Probst made a motion to recommend approval of this request based on completion of an approved school counseling program and 8 years of recent unaccredited experience to count for the 1 year of recent accredited experience required by regulation to meet recency for a professional level school specialist license. Heidi Bolt seconded the motion and the Licensure Review Committee approved the motion unanimously.

Case 3161
Pamela Waldrop requested professional level Kansas licensure for K-6 elementary education. Dale Jean Probst made a motion to recommend approval of this request based on completion of an approved elementary education program and 10 years of unaccredited experience to count for the 5 years total of accredited experience required by regulation for a professional level license. Bruce Major seconded the motion and the Licensure Review Committee approved the motion unanimously.
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Staff Initiating: Christine Macy  
Director: Colleen Riley  
Commissioner: Randy Watson  
Meeting Date: 7/11/2017

Item Title:

Act on recommendation for funding a new Kansas 21st Century Community Learning Center for 2017-2018

Board Goals:

Provide a flexible and efficient delivery system to meet our students' varied and changing needs

Recommended Motion:

It is moved that the Kansas State Board of Education approve the recommendation for funding a new Kansas 21st Century Community Learning Centers Grant for 2017-2018.

Explanation of Situation Requiring Action:

The 21st Century Community Learning Centers (21st CCLC) Program began in 1998 as a federal grant program. Competitive grants were awarded directly to local education agencies to create community learning centers, designed to expand learning opportunities for children and community members. When 21st CCLC was reauthorized as Title IV, Part B of the Elementary and Secondary Education Act of 2001, the administration for the grant program was shifted to the states. The grants are awarded on a competitive basis for a period of five years with a minimum award of $50,000 per year and a maximum award of $100,000 per year.

A Grant Review Committee evaluated the new applications based on the use of a scoring rubric. The grant applications were then rank-ordered according to scores. One applicant was inadvertently left off the list of recommended grantees approved at the June Board meeting. The following grant applicant is recommended for funding not to exceed $75,000 for the 2017-2018 school year.

Stafford USD 349 (Elementary program)
Item Title:

Receive and act on proposed grant awards for the Kansas Parent Educator Program for FY 2018.

Board Goals:

Promote and encourage best practices for early childhood programs

Recommended Motion:

It is moved that the Kansas State Board of Education approve the recommendations for funding of the Kansas Parent Educator Program grants for FY 2018 in an amount not to exceed $7,237,635.

Explanation of Situation Requiring Action:

The Kansas Parent Educator Programs (KPEP) provide multiple services to families and expectant parents of any child under the age of eligibility for school attendance. These include evidence-based practices, assistance, resource materials, guidance, parenting skills, positive approach to discipline and development of a positive self-esteem.

KPEP is a home-based program of parent education for families with young children designed to give children the best possible start in life and to prepare them for school success by supporting parents in their role as children's first and most important teachers.
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Agenda Number: 18 g.

Meeting Date: 7/11/2017

Staff Initiating: Colleen Riley
Director: Colleen Riley
Commissioner: Randy Watson

Item Title:
Receive and act on the award of proposed Early Learning Preschool Aged At-Risk slots

Board Goals:
Promote and encourage best practices for early childhood programs

Recommended Motion:
It is moved that the Kansas State Board of Education approve the recommended award of Early Learning Preschool Aged At-Risk slots for FY 2018.

Explanation of Situation Requiring Action:
There are 7,800 Early Learning Preschool Aged At-Risk slots available to fund eligible preschool aged children enrolled in an approved Early Learning Kansans (ELK) program. ELK programs provide evidence-based practices to improve the quality of the early learning experiences provided to all children, resulting in increased readiness for success as children enter kindergarten and the elementary school years.

Slots were awarded to districts based on the results of a quantitative review and scoring of ELK program applications.
Item Title:
Act on Charter School Renewals

Board Goals:
Provide a flexible and efficient delivery system to meet our students’ varied and changing needs

Recommended Motion:
It is moved that the Kansas State Board of Education renew the charter status for West Franklin Learning Center, Yoder Charter School, Walton Rural Life Center, Smoky Valley Virtual Charter School, Lawrence Virtual School and Hope Street Academy.

Explanation of Situation Requiring Action:
Six current charter schools have submitted applications and are requesting renewal. If renewal is granted, the charter status will be renewed for five years in accordance with K.S.A. 72-1907.

Below are the six schools that are requesting renewal of their charter status. All six schools have submitted an application that has been reviewed and is meeting the requirements for charter schools in Kansas. KSDE staff recommends renewal of charter status for all six requests.

No charter school funding is associated with these renewals.

West Franklin Learning Center
USD 287 West Franklin

Yoder Charter School
USD 312 Haven

Walton Rural Life Center
USD 373 Newton

Smoky Valley Virtual Charter School
USD 400 Smoky Valley

Lawrence Virtual School
USD 497 Lawrence

Hope Street Academy
USD 501 Topeka
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Agenda Number: 18 i.

Meeting Date: 7/11/2017

Staff Initiating: Susan Helbert
Director: Scott Myers
Commissioner: Randy Watson

Item Title:
Act on recommendations for Visiting Scholar licenses

Board Goals:
Provide an effective educator in every classroom

Recommended Motion:
It is moved that the Kansas State Board of Education accept the recommendations of Randy Watson, Commissioner of Education, regarding Visiting Scholar licenses.

Explanation of Situation Requiring Action:

Blue Valley USD 229 - Center for Advanced Professional Studies (CAPS) program
Janet Graham

Blue Valley USD 229 is requesting that Janet Graham be granted a renewal of a Visiting Scholar license valid for the 2017-18 school year. Ms. Graham will continue as a CAPS instructor, responsible for Global Business courses within the CAPS Business/Tech/Media Strand. She will continue to teach Global Marketing and Business Development, Global Economics and Operations Management, and World Language and Business Leadership. The CAPS program provides students with the opportunity to explore career opportunities in many core areas and to learn directly from practitioners.

The CAPS Global Business courses receive college credit through Johnson County Community College, College Now Program. The CAPS schedule offers morning and afternoon sessions each 2.5 hours (six periods) every day for a full semester, replicated second semester. Ms. Graham has participated in appropriate professional learning while employed in this position during the past four school years.

Janet Graham continues to provide a unique learning opportunity for students in the CAPS program. I recommend that the request for renewal of a Visiting Scholar license, valid for the 2017-18 school year for Janet Graham be approved, based on continuing to meet two of the three established criteria and completion of appropriate professional learning during her years of teaching as a Visiting Scholar.

Blue Valley USD 229 - Center for Advanced Professional Studies (CAPS) program
Robin Bacon

Blue Valley USD 229 is requesting that Robin Bacon be granted the renewal of a Visiting Scholar license valid for the 2017-18 school year. Ms. Bacon will be responsible for the course Foundations of Medicine I and II that is part of the CAPS Human Services Strand. The CAPS program provides

(continued)
students with the opportunity to explore career opportunities in many core areas. Students experience case-based instruction and will perform in an interprofessional team, responding to computerized human mannequin simulators.

The course is pending to receive college credit through Johnson County Community College, College Now Program. The CAPS schedule offers morning and afternoon sessions (six periods) of 2.5 hours every day for a full semester, replicated second semester. Ms. Bacon participated in appropriate professional learning while employed in this position during the past five school years.

Robin Bacon continues to provide a unique educational opportunity for students in the CAPS program. I recommend that the request for renewal of a Visiting Scholar license valid for the 2017-18 school year for Robin Bacon be approved, based on continuing to meet two of the three established criteria, and appropriate professional learning during her years of teaching as a Visiting Scholar.

Blue Valley USD 229 - Center for Advanced Professional Studies (CAPS) program
Marjorie Holloway

Blue Valley USD 229 is requesting that Marjorie Holloway be granted renewal of a Visiting Scholar license valid for the 2017-18 school year. Ms. Holloway will be responsible for the course Foundations of Medicine Research and Innovation that is part of the CAPS Human Services Strand. This course is the second semester of Foundations of Medicine. She also leads the Certified Nursing Assistant (CNA) program, which allows students to gain the first level of certification and access to patient care while in high school. The CAPS program provides students with the opportunity to explore career opportunities. Students experience case-based instruction and will perform in an interprofessional team, responding to computerized human mannequin simulators.

The course receives college credit through Johnson County Community College, College Now Program. The CAPS schedule offers morning and afternoon sessions (six periods) of 2.5 hours every day for a full semester, replicated second semester. Ms. Holloway participated in appropriate professional learning while employed in this position during the past four school years.

Marjorie Holloway continues to provide a unique educational opportunity for students in the CAPS program. I recommend that the request for renewal of a Visiting Scholar license valid for the 2017-18 school year for Marjorie Holloway be approved, based on continuing to meet all three of the established criteria, and appropriate professional learning during her four years of teaching as a Visiting Scholar.

Blue Valley USD 229 - Center for Advanced Professional Studies (CAPS) program
William Allen Skeens

Blue Valley USD 229 requests that William Allen Skeens be granted a renewal of a Visiting Scholar license valid for the 2017-18 school year. Mr. Skeens will continue to be a CAPS law instructor, responsible for the course CAPS Law & Public Safety which is part of the CAPS Human Services Strand. The CAPS program provides students with the opportunity to explore career opportunities in many core areas. Students are exposed to a broad overview of the criminal justice system through a case study approach and exposure to "real experts" while participating in field visits.

(continued)
The course receives college credit through Johnson County Community College, College Now Program. The CAPS schedule offers morning and afternoon sessions (six periods) every day for a full semester, replicated second semester. Mr. Skeens participated in appropriate professional learning in both education and the legal professional while employed in this position during the last four school years.

William Skeens continues to provide a unique learning opportunity for students in the CAPS program. I recommend that the request for renewal of a Visiting Scholar license valid for the 2017-18 school year for William Skeens be approved, based on continuing to meet two of the three established criteria and appropriate professional learning during his teaching as a Visiting Scholar.

Basehor-Linwood, USD 458
Justin Wieser

The Basehor-Linwood school district requests that Justin Wieser be granted a Visiting Scholar license valid for the 2017-18 school year. Mr. Wieser will be assigned to teach Strength and Conditioning I-IV at Basehor-Linwood High School each day on an alternate block schedule of 85-minute periods. Students are able to take Strength and Conditioning as a PE credit, and the courses involve health units, nutrition and wellness in addition to weightlifting.

Justin Wieser earned a bachelor of science in Business from Emporia State University in 2009. He completed 19 credit hours in the spring of 2011 from Emporia, including three introductory courses to teaching and a survey of exceptionality course. He went on to earn a Master of Education degree from Emporia State in 2013, which included some additional professional education coursework. He is currently enrolled in a Master of Science degree in Health Health/PE/Rec from Emporia State, with a Spring 2018 anticipated completion date.

Mr. Wieser has been employed as an assistant football coach at Emporia State since graduation. During his first two years as a coach, he also taught several lower level sections of classes in the HPER department. This past spring, he taught a 400 level Personal Training class. As a member of the coaching staff, he also served as the Head Strength and Conditioning coach for Emporia State, serving the needs of eight of the athletic teams. Mr. Wieser is a Certified Strength and Conditioning Specialist by the National Strength and Conditioning Association (NSCA), valid through December of 2017.

Justin Wieser’s background will allow him to provide a unique educational experience to high school students completing Strength and Conditioning I-IV at Basehor-Linwood High. His educational background, along with his experiences in teaching, coaching and strength and conditioning coaching for athletic teams at the university level all contribute to a strong background relative to his teaching assignment. Finally, he has earned through examination, his certification from NSCA. He meets the criteria of extensive related experience and an advanced degree in education. I recommend that the request of a Visiting Scholar license valid for the 2017-18 school year for Justin Wieser be approved, based on meeting two of the established criteria.
Thomas More Prep –Marian High School  
Keri Caudle Maricle

Thomas More Prep-Marian High School requests that Keri Maricle be granted a Visiting Scholar license valid for the 2017-18 school year. Ms. Maricle will be assigned to teach Biology, Advanced Biology, and Anatomy and Physiology. She will teach three sections of full-year Biology, two sections of semester-long Anatomy and one section of semester-long Advanced Biology.

Keri Maricle earned a bachelor of science in Biology (Botany) from Fort Hays State University in 2014. She earned a master of science in Biology from Fort Hays in the spring of 2017. During the past seven years of undergraduate and graduate studies, Ms. Maricle conducted extensive research as reflected in an extensive record of her scientific publications, grant awards that funded her research, published abstracts, presentations and awards. To summarize highlights: eight authored peer-reviewed publications and three manuscripts in preparation; 24 abstracts; nine research grants including 2 regional, 2 state, 3 national and 2 international grants; 2 research fellowships totaling $41,496; 21 oral presentations and 48 poster presentations at regional, state, national and international conferences (of which 13 won awards for her as first author).

From 2015-17, she was a graduate teaching assistant in the Department of Biological Science at Fort Hays State. She was the teaching assistant for numerous sections of the Principles of Biology for biology majors’ lab, the Human Biology lab for non-majors, and the Botany lab. She also constructed personalized biology and botany websites to enhance weekly lessons and assignments. One strength noted by a professor was her ability to explain complicated topics in a manner understandable by a diverse audience through the use of pictures and well-designed diagrams and animations. A unique opportunity for the past 6 years has allowed her to be a Scientist Mentor for the Botanical Society of America Planting Science Program, which is an online educational resource where mentors interact with students from middle and high schools across the US through video chats and discussion boards. Mentors assist students in a research project to conduct at their school. She is currently employed at the Kansas Wetlands Education Center in Great Bend conducting educational tours for adults and children and answering questions about biological situations. Ms. Maricle has provided numerous biological and university services since 2010. She has summer experience working as a city horticulturalist and lab manager.

Kari Maricle’s educational background in science, including her graduate degree, as well as her experiences in the classroom as a graduate teaching assistant, in the laboratory, in extensive research, and in her scientific writings and presentations will allow her to provide a unique educational experience to her students at Thomas More Prep-Marian High School. Through her experiences and studies, she meets the criteria for significant experiences and an advanced degree in the subject. Her numerous publications, research grant awards and fellowships also indicate an exceptional talent or distinction in the field of biology/botany for a young scientist. I recommend that the request of a Visiting Scholar license valid for the 2017-18 school year for Kari Maricle be approved, based on meeting all three of the established criteria.

(continued)
Topeka, USD 501  
Nathaniel Terrell

The Topeka school district requests that Nathaniel Terrell be granted a Visiting Scholar license valid for the 2017-18 school year. Mr. Terrell will be assigned to teach two sections of psychology, two sections of Leadership Studies, and a sociology and African American studies course at Highland Park High School. (In addition, he will be teaching four sections of ACT Preparation, which is not relative to the Visiting Scholar license.)

Nathaniel Terrell earned a bachelor of arts in criminal justice/sociology from Central State University (University of Central Oklahoma) in 1986. He earned a master of arts degree in Criminal Justice Management and Administration from CSU in 1988. Mr. Terrell earned a PhD in Sociology from Iowa State University in 1993.

Mr. Terrell has many years of experience teaching at the university level as a research and teaching assistant, instructor, adjunct professor, assistant professor and professor at Iowa State and Emporia State. He began his career at Emporia State in 1994 as an assistant professor and by 1998 was Chair, Department of Sociology, Anthropology, and Crime and Delinquency Studies where he remained until retirement in 2015. During his term as Chair, he authored the Crime and Delinquency Studies Program, which the Board of Regents approved in 2007. He holds the title of Professor Emeritus at Emporia State and continues to serve as an adjunct professor in the Honors College, Emporia State. Mr. Terrell served as Director of Equity for Topeka Public Schools, 2015-2017.

University level courses taught by Mr. Terrell include criminology, social psychology, introductory and honors sociology, social problems, social stratification, social deviance, race and ethnic relations, criminal justice, leadership studies, and other related courses. Mr. Terrell has an extensive catalog of professional publications, products, professional presentations, invited talks/presentations and panelist participation in his fields of expertise, including African American experiences and topics. He has provided extensive service to Emporia State, his communities, to the state of Kansas and at the national level. He has earned many awards and honors. Of note is Kansans You Should Know - voted him one of 50 accomplished Kansans who created the character of state, published in Ingram Magazine, January 2013.

Nathaniel Terrell’s educational background, including graduate degrees in sociology and management, as well as his extensive experiences in the classroom at the university level paired with his related research, writings and presentations will allow him to provide a unique educational experience to students at Highland Park High school enrolled in sociology, African American Studies and Leadership Studies. I recommend that the request of a Visiting Scholar license valid for the 2017-18 school year for Nathaniel Terrell be approved, based on meeting the two criteria of advanced courses of study and significant occupational experience related to the field he is assigned to teach.

Criteria for a Visiting Scholar license:

A. Advanced course of study or extensive training in the area of licensure requested
B. Outstanding distinction or exceptional talent in the field
C. Significant recent occupational experience which is related to the field
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Staff Initiating: Dale Dennis
Deputy Commissioner: Dale Dennis
Commissioner: Randy Watson

Agenda Number: 18j
Meeting Date: 7/11/2017

Item Title:
Act on school district applications for 2017-18 Extraordinary Need State Aid

Board Goals:
Governmental Responsibility

Recommended Motion:
It is moved that the Kansas State Board of Education approve the individual school district allocations for extraordinary need state aid for the 2017-18 school year as recommended by the hearing committee in an amount not to exceed $2,593,452.

Explanation of Situation Requiring Action:
The 2017 Kansas Legislature made funds available for Fiscal Year 2018 for extraordinary need due to declining enrollments.

Guidelines and an application were developed for use by school districts. It is anticipated that approximately 20 school districts will submit applications for extraordinary need for state aid.

Hearings are scheduled for July 5 and 6, 2017 to review the applications with each school district either via conference call or in person.

The hearing committee will consist of the following individuals:
Dale M. Dennis, Deputy Commissioner
Craig Neuenswander, Director, School Finance
Jim Porter, Member, State Board of Education
Ken Willard, Member, State Board of Education
John Rundle, Retired Superintendent of Schools

The hearing committee recommends that the State Board of Education approve the school district allocations of extraordinary need state aid in the amounts provided following the hearings.
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Staff Initiating: Director: Commissioner: Meeting Date: 7/11/2017
Karen Maddox Colleen Riley Randy Watson

Item Title:
Act to reallocate funds from the federal IDEA Part D State Personnel Development Grant

Board Goals:
Provide an effective educator in every classroom

Recommended Motion:
It is moved that the Kansas State Board of Education authorize the Commissioner of Education to reallocate remaining funds from the federal IDEA Part D State Personnel Development Grant in an amount not to exceed $155,000 to the Southeast Kansas Education Service Center.

Explanation of Situation Requiring Action:
The 2012-2017 KSDE IDEA State Personnel Development Plan has an objective on recruitment and retention of special education teachers and related services providers. In 2012, a five-year grant was awarded to the Southeast Kansas Education Service Center (SEKESC) for the purpose of improving the retention of special education teachers by providing early career mentoring. The Kansas Early Career Special Educator Mentoring provides ongoing, online mentoring to teachers beginning their careers in special education. This project represents a partnership among the KSDE-funded Kansas Education Employment Board operated by the SEKESC, the New Teacher Center, and the Kansas Parent Information Resource Center.

In the past four years, 355 early career special educators in 82 Kansas school districts have been impacted by Early Career Special Educator Mentoring. Program measures indicate that two years after participating in mentoring, 98 percent of early career special education teachers are still teaching.

Original outcomes have been achieved, but continued demand for participation has exceeded the projected budgeted need. Reallocation of aforementioned funds will allow more Kansas mentors to be trained, more Kansas mentee teachers to participate in early career mentoring and the supply of effective special education teachers available for hire in Kansas will be increased. After the 2012-2017 state personnel development plan grant, rigorous and effective early career mentoring of special education teachers will continue to be available for each Kansas district through the Kansas Recruitment and Retention Project activities offered by the KSDE Technical Assistance System Network (TASN).
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Agenda Number: 18

Meeting Date: 7/11/2017

Staff Initiating: Brad Neuenswander
Deputy Commissioner: Brad Neuenswander
Commissioner: Randy Watson

Item Title:

Act to continue a contract with Smoky Hill Education Service Center for professional learning services

Board Goals:

Provide a flexible and efficient delivery system to meet our students’ varied and changing needs

Recommended Motion:

It is moved that the Kansas State Board of Education authorize the Commissioner of Education to continue a contract with the Smoky Hill Central Kansas Education Service Center to support KSDE and the Kansas Professional Learning Team in providing professional learning across Kansas.

Explanation of Situation Requiring Action:

The Kansas Professional Learning Team was formed with members from each of the seven Kansas education service centers, an additional seven district/building level persons from each of the seven geographic areas represented by service centers and approximately 10 members from school districts not represented by service centers. Each member has committed to providing days throughout the year to assist KSDE in educating Kansas educators around issues and initiatives of the state department.

Each member will participate in preparation of training materials and the development of a consistent message to be delivered to the field. They will then make themselves available to deliver this message to the schools, districts and educator groups which they represent.

Each of the seven service centers will receive $4,000. Individual regional and school district representatives will receive $1,000.
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Item Title:
Act on vendor contract for providing kindergarten entry snapshot tool

Board Goals:
Promote and encourage best practices for early childhood programs

Recommended Motion:
It is moved that the Kansas State Board of Education approve the recommended vendor for the kindergarten entry snapshot tool and enter into contract negotiations with the vendor in an amount not to exceed $985,000.

Explanation of Situation Requiring Action:
The Kansas State Department of Education engaged in the request for proposal process and reviewed proposals from multiple vendors. Proposals were reviewed to identify the vendor that best met the program and cost objectives. A vendor recommendation has been made to the Department of Administration. The selected vendor will be announced once the contract has been finalized.
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Staff Initiating: Madeleine Burkindinge

Meeting Date: 7/11/2017

Item Title:
Authorize out-of-state tuition contracts for students attending Kansas State School for the Deaf

Board Goals:
Governmental Responsibility

Recommended Motion:
It is moved that the Kansas State Board of Education authorize contracts for out-of-state tuition for the 2017-2018 school year for students attending the Kansas State School for the Deaf.

Explanation of Situation Requiring Action:
In order to prepare for the 2017-2018 school year, it is requested that the Kansas State Board of Education authorize the Interim Superintendent of the Kansas State School for the Deaf (KSSD) to enter into a contract for out-of-state tuition with the two school districts listed below. The contract with Center School District is a long-standing contract.

KSSD WILL RECEIVE TUITION PAYMENTS FROM:

Center School District, Kansas City, Missouri for two (2) students for the 2017-2018 regular school year at a cost of $18,480 per student. Total cost for the two (2) students is $36,960. Additional related services listed on the IEPs (currently none) would be provided at a cost of $60/hour.

Park Hill School District, Kansas City, Missouri for one (1) student for the 2017-2018 regular school year at a cost of $40,000.
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Item Title:

Authorize out-of-state tuition contracts for students attending Kansas State School for the Blind

Board Goals:

Governmental Responsibility

Recommended Motion:

It is moved that the Kansas State Board of Education authorize the contract for out-of-state tuition for the 2017-2018 school year for a student attending the Kansas State School for the Blind.

Explanation of Situation Requiring Action:

In order to prepare for the 2017-2018 school year, it is requested that the Kansas State Board of Education authorize the Interim Superintendent of the Kansas State School for the Blind (KSSB) to enter into a contract for out-of-state tuition with the school district listed below.

KSSB WILL RECEIVE TUITION PAYMENT FROM:

Liberty School District, Liberty, Missouri - 1 Day Student - $20,000
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Staff Initiating: Madeleine Burkindine

Meeting Date: 7/11/2017

Item Title:
Authorize KSSB contract renewal with Providence Medical Center for services

Board Goals:
Governmental Responsibility

Recommended Motion:
It is moved that the Kansas State Board of Education authorize the Interim Superintendent of the Kansas State School for the Blind to renew the contract with Providence Medical Center for physical and occupational therapy services.

Explanation of Situation Requiring Action:
In order to provide occupational therapy and physical therapy services for the 2017-2018 school year, it is requested that the Kansas State Board of Education authorize the Interim Superintendent of the Kansas State School for the Blind to renew the contract with Providence Medical Center in an amount not to exceed $45,000.
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Item Title:
Authorize KSSB contract renewal with Baer Wilson & Company, LLC for counseling/evaluation services for students

Board Goals:
Governmental Responsibility

Recommended Motion:
It is moved that the Kansas State Board of Education authorize the Interim Superintendent of the Kansas State School for the Blind to renew a contract with Baer Wilson & Company, LLC to provide counseling/evaluation services for students who attend KSSB during the 2017-2018 school year.

Explanation of Situation Requiring Action:
In order to provide counseling/evaluation services for students for the 2017-2018 school year, it is requested that the Kansas State Board of Education authorize the Interim Superintendent of the Kansas State School for the Blind to renew a contract with Baer Wilson & Company, LLC in an amount not to exceed $45,000.
REQUEST AND RECOMMENDATION FOR BOARD ACTION

Item Title:
Authorize KSSB contract with USD 500 Kansas City Kansas Public Schools to use KSSB facilities for Head Start classrooms

Board Goals:
Governmental Responsibility

Recommended Motion:
It is moved that the Kansas State Board of Education authorize the Interim Superintendent of the Kansas State School for the Blind to enter into a contract with USD 500 for use of KSSB facilities for the USD 500 local Head Start Program during the 2017-2018 school year in an amount not to exceed $55,000.

Explanation of Situation Requiring Action:
The Kansas State School for the Blind desires to enter into a contract with USD 500 Kansas City Kansas Public Schools for the use of KSSB facilities to house four classrooms of the district Head Start Program, including office space, during the 2017-2018 school year.
To: Kansas State Board of Education
Subject: Monthly Board Reports & Requests for Future Agenda Items

These updates will include:

1. Committee Reports
2. Board Attorney’s Report
3. Individual Board Member Reports and Requests for Future Agenda Items
4. Chairman’s Report
To: Board Members  
From: Peggy Hill  
Subject: Board Member Travel

Travel requests submitted prior to the meeting, and any announced changes, will be considered for approval by the Board.

Upcoming deadlines for reporting salary/payroll information to the Board office are:

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<tr>
<th>Pay Period Begins</th>
<th>Pay Period Ends</th>
<th>Deadline to Report</th>
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## WEDNESDAY, JULY 12, 2017
### MEETING AGENDA

**Landon State Office Bld.**  
900 SW Jackson St.  
Board Room, Ste 102  
Topeka, KS 66612

<table>
<thead>
<tr>
<th>Time</th>
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<tr>
<td>9:00 a.m.</td>
<td>1. Call to Order</td>
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<td>2. Roll Call</td>
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<td>(AI) 3. Approval of Agenda</td>
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<td>9:05 a.m.</td>
<td>(RI) 4. Receive Kansas curricular standards for Mathematics</td>
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<td>9:25 a.m.</td>
<td>(IO) 5. Information on <em>Kansans Can</em> vision outcome: postsecondary completion/attendance</td>
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<td>11:00 a.m.</td>
<td>(DI) 6. Tentative continued work session discussion led by Chair and Vice Chair</td>
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Next Meeting: Aug. 8 and 9 in Topeka
To: Commissioner Randy Watson  
From: Jeannette Nobo  
Subject: Receive Final Draft of the Kansas Curricular Standards for Mathematics  
Board Goals: Provide an effective educator in every classroom

The Mathematics Standards Committee has completed its final review of the Kansas Curricular Standards for Mathematics. KSDE staff member Melissa Fast and committee chair Debbie Thompson will be presenting the final draft of the standards to the State Board of Education. They will provide an overview of the public meeting results and the final changes in the document.

The Kansas Curricular Standards for Mathematics will be presented to the State Board for adoption at its August 2017 meeting.
Kansas Mathematics Standards

Final Draft

July 2017
Kindergarten Content Standards Overview

Critical Areas for Kindergarten

Counting and Cardinality (K.CC)
- Know number names and the count sequence.
  CC.1  CC.2  CC.3
- Count to tell the number of objects.
  CC.4  CC.5
- Compare numbers.
  CC.6  CC.7

Operations and Algebraic Thinking (K.OA)
- Understand addition as putting together and adding to and understand subtraction as taking apart and taking from.
  OA.1  OA.2  OA.3  OA.4
  OA.5

Number and Operations in Base Ten (K.NBT)
- Work with numbers 11-19 to gain foundations for place value.
  NBT.1

Measurement and Data (K.MD)
- Describe and compare measurable attributes.
  MD.1  MD.2
- Classify objects and count the number of objects in each category.
  MD.3

Geometry (K.G)
- Identify and describe shapes.
  G.1  G.2  G.3
- Analyze, compare, create, and compose shapes.
  G.4  G.5  G.6

Standards for Mathematical Practice
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to Kindergarten!
**Counting and Cardinality K.CC**  
*(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 1-5)*

**Know number names and the count sequence.**  
*(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 4-5)*

K.CC.1 Count to 100 by ones and by tens and identify as a growth pattern. *(2017)*

K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1). *(K.CC.1)*

K.CC.3 Read and write numerals from 0 to 20. *(K.CC.2)*

**Count to tell the number of objects.**  
*(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 4-5)*

K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality. *(K.CC.3)*  
K.CC.4a. When counting objects, say each number’s name in sequential order, pairing each object with one and only one number name and each number name with one and only one object *(Click here for a video showing this concept).* *(K.CC.3a)*

K.CC.4b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. *(K.CC.3b)*

K.CC.4c. Understand that each successive number name refers to a quantity that is one larger. *(K.CC.3c)*

K.CC.4d. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). *(K.CC.3d)*

K.CC.5 Count to answer “how many?” up to 20 concrete or pictorial objects arranged in a line, a rectangular array, or a circle, or as many as 10 objects in a scattered configuration *(subitizing)*; given a number from 1–20, count out that many objects. *(K.CC.4)*

**Compare numbers.**  
*(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 5)*

K.CC.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, *(e.g. by using matching and counting strategies.)* Include groups with up to ten objects. *(K.CC.6)*

K.CC.7 Compare two numbers between 1 and 10 presented as written numerals. *(K.CC.7)*

**Operations and Algebraic Thinking K.OA**  
*(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 5 last paragraph)*

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

K.OA.1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds *(e.g. claps)*, acting out situations, verbal explanations, expressions, or equations. *(K.OA.1)*
K.OA.2. Solve addition and subtraction word problems, and add and subtract within 10, e.g. by using objects or drawings to represent the problem. Refer to shaded section of Table 1 for specific situation types. (K.OA.2)

K.OA.3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g. by using objects or drawings, and record each decomposition by a drawing or equation (e.g. $5 = 2 + 3$ and $5 = 4 + 1$). (K.OA.3)

K.OA.4. For any number from 1 to 9, find the number that makes 10 when added to the given number, (e.g. by using objects or drawings, and record the answer with a drawing or equation.). (K.OA.4)

K.OA.5. Fluently (efficiently, accurately, and flexibly) add and subtract within 5. (K.OA.5)

**Number and Operations in Base Ten K.NBT**
(Number & Operations Base 10 Progression K-5 Pg. 5)

Work with numbers 11–19 to gain foundations for place value.

K.NBT.1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, (e.g. by using objects or drawings, and record each composition or decomposition by a drawing or equation

(e.g. $10 + 8 = 18$ and $19 = 10 + 9$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. (K.NBT.1)

**Measurement and Data K.MD**

Describe and compare measurable attributes.

K.MD.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (K.MD.1)

K.MD.2. Directly compare two objects, with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter. (K.MD.2)
Classify objects and count the number of objects in each category.

K.MD.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count (Limit category counts to be less than or equal to 10). (K.MD.3)

Geometry K.G

Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

K.G.1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. (K.G.1)

K.G.2. Correctly gives most precise name of shapes regardless of their orientations (position and direction in space) or overall size. (K.G.2)

K.G.3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (”solid”). (K.G.3)

Analyze, compare, create, and compose shapes.

K.G.4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations (position and direction in space, using informal language to describe their similarities, differences, parts (e.g. number of sides and vertices/“corners”) and other attributes (e.g. having sides of equal length). (K.G.4)

K.G.5. Model shapes in the world by building shapes from components (e.g. sticks and clay balls) and drawing shapes. (K.G.5)

K.G.6. Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?” (K.G.6)
Grade One Content Standards Overview

Critical Areas for Grade One

Operations and Algebraic Thinking (1.OA)
- Represent and solve problems involving addition and subtraction.
  OA.1  OA.2
- Understand & apply properties of operations and the relationship between addition & subtraction.
  OA.3  OA.4
- Add and subtract within 20.
  OA.5  OA.6
- Work with addition and subtraction equations.
  OA.7  OA.8

Number and Operations in Base Ten (1.NBT)
- Extend the counting sequence.
  NBT.1
- Understand place value.
  NBT.2  NBT.3
- Use place value understanding and properties of operations to add and subtract.
  NBT.4  NBT.5  NBT.6

Measurement and Data (1.MD)
- Measure lengths indirectly and by iterating length units.
  MD.1  MD.2
- Tell and write time.
  MD.3
- Represent and interpret data.
  MD.4

Geometry (1.G)
- Reason with shapes and their attributes.
  G.1  G.2  G.3

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to Grade One!
Represent and solve problems involving addition and subtraction.
(Refer to shaded section of Table 1 for specific situation types.)

1.OA.1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, (e.g. by using objects, drawings, and situation equations and/or solution equations with a symbol for the unknown number to represent the problem.) (1.OA.1)

For Example:
A clown had 20 balloons. He sold some and has 12 left. How many did he sell?
Situation Equation: 20 - ? = 12
Solution Equation: 20 - 12 = ?

1.OA.2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, (e.g. by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.) (1.OA.2)

Understand and apply properties of operations and the relationship between addition and subtraction.

1.OA.3. Apply (not necessary to name) properties of operations as strategies to add and subtract. Examples: 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) To add 0 to any number, the answer is that number 7 + 0 = 7 (Additive identity property of 0). Students need not use formal terms for these properties. (1.OA.3)

1.OA.4. Understand subtraction as an unknown-addend problem. For example, subtract 10 − 8 by finding the number that makes 10 when added to 8. (1.OA.4)

Add and subtract within 20.

1.OA.5. Relate counting to addition and subtraction (e.g. by counting on 2 to add 2, counting back 1 to subtract 1). (1.OA.5)

1.OA.6. Add and subtract within 20, demonstrating fluency (efficiently, accurately, and flexibly) for addition and subtraction within 10. Use mental strategies such as counting on; making ten (e.g. 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g. 13 − 4 = 13 − 3 − 1 = 10 − 1 = 9); using the relationship between addition and subtraction (e.g. knowing that 8 + 4 = 12, one knows 12 − 8 = 4); and creating equivalent but easier or known sums (e.g. adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). (1.OA.6)
Work with addition and subtraction equations.

1.OA.7. Understand the meaning of the equal sign (the value is the same on both sides of the equal sign), and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false?

\[
6 = 6; \quad 7 = 8 - 1; \quad 5 + 2 = 2 + 5; \quad 4 + 1 = 3 + 2; \quad 7 - 1 = 4; \quad 5 + 4 = 7 - 2
\]

(1.OA.7)

1.OA.8. Using related equations, determine the unknown whole number in an addition or subtraction equation. For example, determine the unknown whole number that makes the equation true in each of the equations \( \_ - 3 = 7; \quad 7 + 3 = \_ \). (1.OA.8)

Number and Operations in Base Ten 1.NBT

Extend the counting sequence.

1.NBT.1. Count to 120 (recognizing growth and repeating patterns), starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. (1.NBT.1)

Understand place value.

1.NBT.2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

1.NBT.2a. 10 can be thought of as a grouping of ten ones—called a “ten.” (1.NBT.2a)
1.NBT.2b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. (1.NBT.2b)
1.NBT.2c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). (1.NBT.1c)
1.NBT.2d. Show flexibility in composing and decomposing tens and ones (e.g. 20 can be composed from 2 tens or 1 ten and 10 ones, or 20 ones.) (2017)

1.NBT.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the relational symbols >, <, =, and ≠. (1.NBT.3)

Use place value understanding and properties of operations to add and subtract.

1.NBT.4. Add within 100 using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used including:

1.NBT.4a. Adding a two-digit number and a one-digit number (1.NBT.4)
1.NBT.4b. Adding a two-digit number and a multiple of 10 (1.NBT.4)
1.NBT.4c. Understanding that when adding two-digit numbers, combine like base-ten units such as tens and tens, ones and ones; and sometimes it is necessary to compose a ten. (1.NBT.4)

1.NBT.5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. (1.NBT.5)
1.NBT.6. Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. (1.NBT.6)

**Measurement and Data 1.MD**

**Measure lengths indirectly and by iterating length units.**

1.MD.1. Order three objects by length; compare the lengths of two objects indirectly by using a third object. (1.MD.1)

(Measurement and Data (measurement part) Progression K–5 Pg. 8 Paragraph 1.)

1.MD.2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps. (1.MD.2)

(Measurement and Data (measurement part) Progression K–5 Pg. 8, 3rd Section.)

**Tell and write time.**

1.MD.3. Tell and write time in hours and half-hours using analog and digital clocks. (1.MD.3)

**Represent and interpret data.**

1.MD.4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. (1.MD.4)

(Measurement and Data (data part) Progression K–5 Pg. 5).

**Geometry 1.G**

**Reason with shapes and their attributes.**

1.G.1. Distinguish between defining attributes (e.g. triangles are closed and three-sided) versus non-defining attributes (e.g. color, orientation, overall size); build and draw shapes that possess defining attributes. (1.G.1)

1.G.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. Students do not need to learn formal names such as “right rectangular prism.” (1.G.2)

1.G.3. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Note: fraction notation (\(\frac{1}{2}\), \(\frac{1}{4}\)) is not expected at this grade level. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. (1.G.3)
Grade Two Content Standards Overview

Critical Areas for Grade Two

Operations and Algebraic Thinking (2.OA)
- Represents and solves problems involving addition and subtraction
  OA.1
- Add and subtract within 20
  OA.2
- Work with equal groups of objects to gain foundations for multiplication
  OA.3  OA.4

Number and Operations in Base Ten (2.NBT)
- Understand place value.
  NBT.1  NBT.2  NBT.3  NBT.4
- Use place value understanding and properties of operations to add and subtract.
  NBT.5  NBT.6  NBT.7  NBT.8  NBT.9

Measurement and Data (2.MD)
- Measure and estimate lengths in standard units
  MD.1  MD.2  MD.3  MD.4
- Relate addition and subtraction to length
  MD.5  MD.6
- Work with time and money
  MD.7  MD.8  MD.9
- Represent and interpret data
  MD.10  MD.11

Geometry (2.G)
- Reason with shapes and their attributes
  G.1  G.2  G.3

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to Grade Two!
Operations and Algebraic Thinking 2.OA
(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 18)

Represent and solve problems involving addition and subtraction.

2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, (e.g. by using drawings and situation equations and/or solution equations with a symbol for the unknown number to represent the problem.) Refer to shaded section of Table 1 for specific situation types. (2.OA.1)

For Example:
A clown had 20 balloons. He sold 8. Another clown came by and gave him more. He now has 24 balloons. How many did the clown give him?
Situation Equation: \( 20 - 8 = ? \)
\( ? + □ = 24 \)
Solution Equation: \( 20 - 8 = ? \)
\( 24 - ? = □ \)

Add and subtract within 20.

2.OA.2. Fluently (efficiently, accurately, and flexibly) add and subtract within 20 using mental strategies (counting on, making a ten, decomposing a number, creating an equivalent but easier and known sum, and using the relationship between addition and subtraction) Work with equal groups of objects to gain foundations for multiplication. (2.OA.2)

2.OA.3. Determine whether a group of objects (up to 20) has an odd or even number of members, (e.g. by pairing objects or counting them by 2s); write an equation to express an even number as a sum of two equal addends. (2.OA.3)

2.OA.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. (2.OA.4)

Number and Operations in Base Ten 2.NBT
(Numbers & Operations Base 10 Progression K-5 Pg. 8)

Understand place value.

2.NBT.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; (e.g. 706 equals 7 hundreds, 0 tens, and 6 ones.) Understand the following as special cases:

2.NBT.1a. 100 can be thought of as a bundle of ten tens—called a “hundred.” (2.NBT.1a)

2.NBT.1b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (2.NBT.1b)

2.NBT.1c. Show flexibility in composing and decomposing hundreds, tens and ones (e.g. 207 can be composed from 2 hundreds 7 ones OR 20 tens 7 ones OR 207 ones OR 1 hundred 10 tens 7 ones OR 1 hundred 9 tens 17 ones, etc.) (2017)
2.NBT.2. Count within 1000; skip-count by 2s, 5s, 10s, and 100s; explain and generalize the patterns. \textit{(2.NBT.2)}

2.NBT.3. Read and write numbers within 1000 using base-ten \textbf{numerals}, number names, expanded form, and unit form. \textit{(2.NBT.3)}

2.NBT.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using \textbf{>, <, =, and \#} relational symbols to record the results of comparisons. \textit{(2.NBT.4)}

\textbf{Use place value understanding and properties of operations to add and subtract.} \textit{(Numbers & Operations Base 10 Progression K-5 Pg. 8)}

2.NBT.5. Fluently (\textbf{efficiently, accurately, and flexibly}) add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction (\textit{e.g.} composing/decomposing by like base-10 units, using friendly or benchmark numbers, using related equations, compensation, number line, etc.). \textit{(2.NBT.5)}

2.NBT.6. Add up to four two-digit numbers using strategies based on place value and properties of operations. \textit{(2.NBT.6)}

2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, like base-ten units such as hundreds and hundreds, tens and tens, ones and ones are used; and sometimes it is necessary to compose or \textbf{decompose} tens or hundreds. \textit{(2.NBT.7)}

2.NBT.8. Mentally add 10 or 100 to a given number 100 – 900, and mentally subtract 10 or 100 from a given number 100 – 900. \textit{(2.NBT.8)}

2.NBT.9. Explain why addition and subtraction strategies work using place value and the properties of operations. The explanations given may be supported by drawings or objects. \textit{(2.NBT.9)}

\textbf{Measurement and Data 2.MD}

\textbf{Measure and estimate lengths in standard units.}

2.MD.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. \textit{(2.MD.1)}

2.MD.2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. \textit{(2.MD.2)}

\textit{(Measurement and Data (measurement part) Progression K–5 Pg. 12.)}

2.MD.3. Estimate lengths using whole units of inches, feet, centimeters, and meters. \textit{(2.MD.3)}

\textit{(Measurement and Data (measurement part) Progression K–5 Pg. 14-15.)}

2.MD.4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit (inches, feet, centimeters, and meters). \textit{(2.MD.4)}
Relate addition and subtraction to length.
2.MD.5. Use addition and subtraction within 100 to solve one- and two-step word problems involving lengths that are given in the same units, e.g. by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. (2.MD.5)

2.MD.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram. (2.MD.6)

Work with time and money.
2.MD.7. Tell and write time from analog and digital clocks to the nearest five minutes. (2.MD.7)
2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately (Do not use decimal point, if showing 25 cents, use the word cents or ¢). For example: If you have 2 dimes and 3 pennies, how many cents do you have? (2.MD.8)

Represent and interpret data.
2.MD.10. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object using different units. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. (2.MD.9)
2.MD.11. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph (See Table 1). (2.MD.10)

Geometry 2.G
Reason with shapes and their attributes
(Geometry Progression K-6 Pg. 10).
2.G.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. (2.G.1)
2.G.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. (2.G.2)
2.G.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Note: fraction notation $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$ is not expected at this grade level. Recognize that equal shares of identical wholes need not have the same shape. (2.G.3)
Grade Three Content Standards Overview

Critical Areas for Grade Three

Operations and Algebraic Thinking (3.OA)
- Represents and solves problems involving multiplication and division
  OA.1    OA.2    OA.3    OA.4
- Understand properties of multiplication and the relationship between multiplication and division
  OA.5    OA.6
- Multiply and divide within 100
  OA.7
- Solve problems involving the four operations, and identify and explain patterns in arithmetic.
  OA.8    OA.9

Number and Operations in Base Ten (3.NBT)
- Use place value understanding and properties of operations to perform multi-digit arithmetic.
  NBT.1    NBT.2    NBT.3

Number and Operations – Fractions (3.NF)
- Develop understanding of fractions as numbers.
  NF.1    NF.2    NF.3

Measurement and Data (3.MD)
- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
  MD.1    MD.2    MD.3
- Represent and interpret data.
  MD.4    MD.5
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
  MD.6    MD.7    MD.8
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
  MD.9

Geometry (3.G)
- Reason with shapes and their attributes
  G.1    G.2

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to Grade Three!
Operations and Algebraic Thinking 3.OA
(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 22)

Represent and solve problems involving multiplication and division.
(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 22)

3.OA.1. Interpret products of whole numbers, (e.g. interpret $5 \cdot 7$ as the total number of objects in 5 groups of 7 objects each.) (3.OA.1)

3.OA.2. Interpret whole-number quotients of whole numbers, (e.g. interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.) (3.OA.2)

3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, (e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.) Refer to shaded section of Table 2 for specific situation types. (3.OA.3)

3.OA.4. Determine the unknown whole number in a multiplication or division equation by using related equations. For example, determine the unknown number that makes the equation true in each of the equations $8 \cdot ? = 48; \quad 5 = \square \div 3; \quad 6 \times 6 = \_\_\_\_\_\_\_$ (3.OA.4)

Understand properties of multiplication and the relationship between multiplication and division.
(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 24)

3.OA.5. Apply properties of operations as strategies to multiply and divide. Examples: If $6 \cdot 4 = 24$ is known, then $4 \cdot 6 = 24$ is also known. (Commutative property of multiplication.) $3 \cdot 5 \cdot 2$ can be found by $3 \cdot 5 = 15$, then $15 \cdot 2 = 30$, or by $5 \cdot 2 = 10$, then $3 \cdot 10 = 30$. (Associative property of multiplication.) Knowing that $8 \cdot 5 = 40$ and $8 \cdot 2 = 16$, one can find $8 \cdot 7$ as $8 \cdot (5 + 2) = (8 \cdot 5) + (8 \cdot 2) = 40 + 16 = 56$. (Distributive property.) Students need not use formal terms for these properties. (3.OA.5)

3.OA.6. Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8. (3.OA.6)

Multiply and divide within 100 (basic facts up to 10 x 10).

3.OA.7. Fluently (efficiently, accurately, and flexibly) multiply and divide with single digit multiplications and related divisions using strategies (e.g. relationship between multiplication and division, doubles, double and double again, half and then double, etc.) or properties of operations. (3.OA.7)

Solve problems involving the four operations, and identify and explain patterns in arithmetic.
(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 27 Paragraph 2)

3.OA.8. Solve two-step word problems using any of the four operations. Represent these problems using both situation equations and/or solution equations with a letter or symbol standing for the unknown quantity (refer to Table 1 and Table 2 and standard 3.OA.3). Assess the reasonableness of answers using mental computation and estimation strategies including rounding. This standard is limited to problems posed with whole numbers and having whole-number answers. (3.OA.8)
For Example:

A clown had 20 balloons. He sold some and has 12 left. Each balloon costs $2. How much money did he make?

Situation Equation: \(20 - x = 12\)

\(n \times $2 = \square\)

Solution Equation: \(20 - 12 = n\)

\(n \times $2 = \square\)

3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations (See Table 5). For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends. (3.OA.9)

**Number and Operations in Base Ten 3.NBT**

Use place value understanding and properties of operations to perform multi-digit arithmetic.

3.NBT.1. Use place value understanding to round whole numbers to the nearest 10 or 100. (3.NBT.1)

3.NBT.2. Fluently (efficiently, accurately, & flexibly) add and subtract within 1000 using strategies (e.g. composing/decomposing by like base-10 units, using friendly or benchmark numbers, using related equations, compensation, number line, etc.) and algorithms (including, but not limited to: traditional, partial-sums, etc.) based on place value, properties of operations, and/or the relationship between addition and subtraction. (3.NBT.2)

3.NBT.3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g. \(9 \times 80\), \(5 \times 60\)) using strategies based on place value and properties of operations. (3.NBT.3)

**Number and Operations—Fractions 3.NF**

Develop understanding of fractions as numbers.

(Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.) (Number and Operations – Fractions Progression Pg. 3-5)

3.NF.1. Understand a fraction \(\frac{1}{b}\) as the quantity formed by 1 part when a whole is partitioned into \(b\) equal parts; understand a fraction \(\frac{a}{b}\) as the quantity formed by \(a\) parts of size \(\frac{1}{b}\). (3.NF.1)

3.NF.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.

3.NF.2a. Represent a fraction \(\frac{1}{b}\) on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into \(b\) equal parts. Recognize that each part has size \(\frac{1}{b}\) and that the endpoint of the part based at 0 locates the number \(\frac{1}{b}\) on the number line.

Ex: \[
\begin{array}{ccc}
1 & 1 & 1 \\
3 & 3 & 3 \\
\end{array}
\]

(3.NF.2a)
3.NF.2b. Represent a fraction \( \frac{a}{b} \) on a number line diagram by marking off \( a \) lengths \( \frac{1}{b} \) from 0. Recognize that the resulting interval has size \( \frac{a}{b} \) and that its endpoint locates the number \( \frac{a}{b} \) on the number line (\( a \) is the countable units of \( \frac{1}{b} \) that determines the place on the number line). (3.NF.2b)

3.NF.3. Explain **equivalence** of fractions, and compare fractions by reasoning about their size (it is a mathematical convention that when comparing fractions, the whole is the same size).

3.NF.3a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. (3.NF.3a)

3.NF.3b. Recognize and generate simple equivalent fractions, \((e.g. \ \frac{1}{2} = \frac{2}{4}, \frac{4}{6} = \frac{2}{3})\) Explain why the fractions are equivalent, \(e.g. \ by \ a \ visual \ fraction \ model\). (3.NF.3b)

3.NF.3c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. \(Examples: \ Express \ 3 \ in \ the \ form \ \frac{3}{1}; \ recognize \ that \ \frac{6}{1} = 6; \ locate \ \frac{4}{4} \ and \ 1 \ at \ the \ same \ point \ of \ a \ number \ line \ diagram\). (3.NF.3c)

3.NF.3d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the relational symbols \(>, <, =, \) or \(\neq\), and justify the conclusions, \(e.g. \ by \ a \ visual \ fraction \ model\). (3.NF.3d)

**Measurement and Data 3.MD**

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

3.MD.1. Tell and write time to the nearest minute using a.m. and p.m. and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, \(e.g. \ by \ representing \ the \ problem \ on \ a \ number \ line \ diagram\) (3.MD.1)

3.MD.2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l) (Excludes cubed units such as cm\(^3\) and finding the geometric volume of a container). (3.MD.2)

3.MD.3. Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, \(e.g. \ by \ using \ drawings \ (such \ as \ a \ beaker \ with \ a \ measurement \ scale) \ to \ represent \ the \ problem\). (Excludes multiplicative comparison problems) (See Table 1 and Table 2). (3.MD.2)

**Represent and interpret data.**

3.MD.4. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. (See Table 1). For example, draw a bar graph in which each square in the bar graph might represent 5 pets. (3.MD.3)

(Measurement and Data (data part) Progression K–5 Pg. 7)
3.MD.5. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. (3.MD.4) (Measurement and Data (data part) Progression K–5 Pg. 10)

**Geometric measurement: understand concepts of area and relate area to multiplication and to addition.**

3.MD.6. Recognize area as an attribute of plane figures and understand concepts of area measurement.

3.MD.6a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area (does not require standard square units). (3.MD.5a)

3.MD.6b. A plane figure which can be covered without gaps or overlaps by \( n \) unit squares is said to have an area of \( n \) square units (does not require standard square units). (3.MD.5b)

3.MD.7. Measure areas by counting unit squares (square cm, square m, square in, square ft, and non-standard square units). (3.MD.6)

3.MD.8. Relate area to the operations of multiplication and addition (Measurement and Data (measurement part) Progression K–5 Pg. 16).

3.MD.8a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. (3.MD.7a)

3.MD.8b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. (3.MD.7b)

3.MD.8c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths \( a \) and \( b + c \) is the sum of \( a \cdot b \) and \( a \cdot c \). Use area models to represent the distributive property in mathematical reasoning (Supports 3.OA.5). (3.MD.7c) (Measurement and Data (measurement part) Progression K–5 Pg. 18).

3.MD.8d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. (3.MD.7d)

**Example:**

Students can find the total area of the shape by finding the areas of \( a \), \( b \), and \( c \) and adding them together.
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

3.MD.9. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters. (3.MD.8)
(Measurement and Data (measurement part) Progression K–5 Pg. 16)

Geometry 3.G

Reason with shapes and their attributes.

(Geometry Progression K-6 Pg. 13)

3.G.1. Understand that shapes in different categories (e.g. rhombuses, rectangles, trapezoids, kites and others) may share attributes (e.g. having four sides), and that the shared attributes can define a larger category (e.g. quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. Refer to inclusive definitions noted in the glossary. (3.G.1)

3.G.2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as \( \frac{1}{4} \) of the area of the shape. (3.G.2)
Grade Four Content Standards Overview

Critical Areas for Grade Four

Operations and Algebraic Thinking (4.OA)
- Use the four operations with whole numbers to solve problems.
  - OA.1  OA.2  OA.3
- Gain familiarity with factors and multiples.
  - OA.4
- Generate and analyze patterns.
  - OA.5

Number and Operations in Base Ten (4.NBT)
- Generalize place value understanding for multi-digit whole numbers.
  - NBT.1  NBT.2  NBT.3
- Use place value understanding and properties of operations to perform multi-digit arithmetic.
  - NBT.4  NBT.5  NBT.6

Number and Operations—Fractions (4.NF)
- Extend understanding of fraction equivalence and ordering.
  - NF.1  NF.2
- Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.
  - NF.3  NF.4
- Understand decimal notation for fractions, and compare decimal fractions.
  - NF.5  NF.6  NF.7

Measurement and Data (4.MD)
- Solve problems involving measurement and conversions of measurements from larger units to smaller units.
  - MD.1  MD.2  MD.3
- Represent and interpret data.
  - MD.4

Geometry (4.G)
- Draw and identify lines and angles, and classify shapes by properties of their lines and angles.
  - G.1  G.2  G.3

 Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to Grade Four!
Operations and Algebraic Thinking 4.OA

Use the four operations with whole numbers to solve problems.

4.OA.1. Interpret a multiplication equation as a comparison, (e.g. interpret $35 = 5 \cdot 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5.) Represent verbal statements of multiplicative comparisons as multiplication equations. (4.OA.1)

4.OA.2. Multiply or divide to solve word problems involving multiplicative comparison, (e.g. by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.) (4.OA.2)

Additive Comparison

\[
\begin{array}{|c|}
\hline
\text{greater quantity} \\
\hline
\text{lesser quantity} \quad \text{difference} \\
\hline
\end{array}
\]

Multiplicative Comparison

\[
\begin{array}{|c|}
\hline
\text{unit} \\
\hline
\end{array}
\]

Copies of multiplicative unit

For Example:

A clown had 20 balloons. He sold some and has 12 left. Each balloon costs $2. How much money did he make?

Situation Equation: \[20 - n = 12\]
\[n \times $2 = \square\]

Solution Equation: \[20 - 12 = n\]
\[n \times $2 = \square\]

4.OA.3. Solve multi-step word problem posed with whole numbers and having whole number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using situation equations and/or solution equations with a letter or symbol standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (4.OA.3)
Gain familiarity with factors and multiples.

4.OA.4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite. (4.OA.4)

Generate and analyze patterns.

4.OA.5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. (4.OA.5)

Number and Operations in Base Ten 4.NBT

Generalize place value understanding for multi-digit whole numbers.
(Limited to whole numbers less than or equal to 1,000,000.)

4.NBT.1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division. (4.NBT.1)

4.NBT.2. Read and write multi-digit whole numbers using base-ten numerals, number names, expanded form, and unit form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, <, =, and ≠ symbols to record the results of comparisons. (Note: Students should demonstrate understanding and application of place value decomposition. For example, 127 can be 1 hundred, 2 tens, 7 ones or 12 tens, 7 ones) Refer to 2.NBT.1 (4.NBT.2)

4.NBT.3. Use place value understanding to round multi-digit whole numbers to any place. (4.NBT.3)

Use place value understanding and properties of operations to perform multi-digit arithmetic.

4.NBT.4. Fluently (efficiently, accurately, and flexibly) add and subtract multi-digit whole numbers using an efficient algorithm (including, but not limited to: traditional, partial-sums, etc.), based on place value understanding and the properties of operations. (4.NBT.4)

4.NBT.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. (4.NBT.5)

4.NBT.6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. (4.NBT.6)
Number and Operations—Fractions 4.NF

Extend understanding of fraction equivalence and ordering. (Limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, 100.)
(Number and Operations – Fractions Progression Pg. 3)

4.NF.1. Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{(n\cdot a)}{(n\cdot b)}$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. (4.NF.1)
(Number and Operations—Fractions Progression 3–5 Pg. 6)

4.NF.2. Compare two fractions with different numerators and different denominators, (e.g. by creating common numerators or denominators, or by comparing to a benchmark fraction such as $\frac{1}{2}$.) Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with relational symbols $>$, $<$, $=$, or $\neq$, and justify the conclusions, (e.g. by using visual fraction models.). (4.NF.2)

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. (Limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, 100.)

4.NF.3. Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.

4.NF.3a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. (4.NF.3a)

4.NF.3b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g. by using a visual fraction model. (4.NF.3b)

Examples: $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}; \frac{3}{8} = \frac{1}{8} + \frac{2}{8}; 2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$

4.NF.3c. Add and subtract mixed numbers with like denominators, e.g. by replacing each mixed number with an equivalent fraction (simplest form is not an expectation), and/or by using properties of operations and the relationship between addition and subtraction. (4.NF.3c)

4.NF.3d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g. by using visual fraction models and equations to represent the problem. (4.NF.3d)

4.NF.4. Apply and extend previous understandings of multiplication (refer to 2.OA.3, 2.OA.4, 3.OA.1, 3.NF.1, 3.NF.2) to multiply a fraction by a whole number.

4.NF.4a. Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$. For example, use a visual fraction model to represent $\frac{5}{4}$ as 5 copies of $\frac{1}{4}$, recording the conclusion by the equation $\frac{5}{4} = 5 \cdot \frac{1}{4}$. (4.NF.4a)
4.NF.4b. Understand a multiple of \( \frac{a}{b} \) as a multiple of \( \frac{1}{b} \), and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express \( 3 \cdot \frac{2}{5} \) as \( 6 \cdot \frac{1}{5} \); recognizing this product as \( \frac{6}{5} \). (In general, \( n \cdot \frac{a}{b} = \frac{n\cdot a}{b} \).) 

(4.NF.4b)

4.NF.4c. Solve word problems involving multiplication of a fraction by a whole number, (See Table 2) (e.g. by using visual fraction models and equations to represent the problem.) For example, if each person at a party will eat \( \frac{3}{8} \) of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie? (4.NF.4c)

Understand decimal notation for fractions, and compare decimal fractions. (Students are expected to learn to add decimals by converting them to fractions with the same denominator, in preparation for general fraction addition in grade 5.)

4.NF.5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express \( \frac{3}{10} \) as \( \frac{30}{100} \), and add \( \frac{3}{10} + \frac{4}{100} = \frac{34}{100} \). (4.NF.5)

4.NF.6. Use decimal notation for fractions with denominators 10 or 100. For example, rewrite \( 0.62 \) as \( \frac{62}{100} \); describe a length as 0.62 meters; locate 0.62 on a number line diagram. (4.NF.6)

4.NF.7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the relational symbols >, <, =, or ≠, and justify the conclusions, (e.g. by using a visual model.). (4.NF.7)

Measurement and Data 4.MD

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

4.MD.1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... (4.MD.1)

(Measurement and Data (measurement part) Progression K–5 Pg. 20)

4.MD.2. Use the four operations to solve word problems (See Table 1 and Table 2) involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. (4.MD.2)

4.MD.3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems explaining and justifying the appropriate unit of measure. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor. (4.MD.3)
Represent and interpret data.

4.MD.4. Make a data display (line plot, bar graph, pictograph) to show a set of measurements in fractions of a unit \( \frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16} \). Solve problems involving addition and subtraction of fractions by using information presented in the data display. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection. (4.MD.4)

Geometry 4.G

Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

4.G.1. Draw points, lines, line segments, rays, angles (right, acute, obtuse, straight, reflex), and perpendicular and parallel lines. Identify these in two-dimensional figures. (4.G.1)

4.G.2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles (right, acute, obtuse, straight, reflex). Recognize and categorize triangles based on angles (acute, obtuse, equiangular, and right) and/or sides (scalene, isosceles, and equilateral). (4.G.2)

4.G.3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry. (4.G.3)
Grade Five Content Standards Overview

Critical Areas for Grade Five

Operations and Algebraic Thinking (5.OA)
• Write and interpret numerical expressions.
  OA.1  OA.2

Number and Operations in Base Ten (5.NBT)
• Understand the place value system.
  NBT.1  NBT.2  NBT.3  NBT.4
• Perform operations with multi-digit whole numbers and with decimals to hundredths.
  NBT.5  NBT.6  NBT.7

Number and Operations—Fractions (5.NF)
• Use equivalent fractions as a strategy to add and subtract fractions.
  NF.1  NF.2
• Apply and extend previous understandings of multiplication and division to and divide fractions.
  NF.3  NF.4  NF.5  NF.6  NF.7

Measurement and Data (5.MD)
• Convert like measurement units within a given measurement system.
  MD.1
• Represent and interpret data.
  MD.2
• Geometric measurement: understand concepts of volume and related volume to multiplication and to addition.
  MD.3  MD.4  MD.5

Geometry (5.G)
• Graph points on the coordinate plane to solve real world and mathematical problems.
  G.1  G.2
• Classify two-dimensional figures into categories based on their properties.
  G.3  G.4

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to Grade Five!
Operations and Algebraic Thinking 5.OA

(Counting and Cardinality and Operations and Algebraic Thinking Progression K-5 Pg. 32)

Write and interpret numerical expressions.

5.OA.1. Use parentheses in numerical expressions and evaluate expressions with these symbols. (5.OA.1)

5.OA.2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “multiply the sum of 8 and 7 by 2” as $2 \times (8 + 7)$ because parenthetical information must be solved first. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product. (5.OA.2)

Number and Operations in Base Ten 5.NBT

Understand the place value system.

5.NBT.1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left. (5.NBT.1)

5.NBT.2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. (5.NBT.2)

5.NBT.3. Read, write, and compare decimals to thousandths.

5.NBT.3a. Read and write decimals to thousandths using base-ten numerals, number names, expanded form, and unit form (e.g.,

\[
\text{expanded form } 47.392 = 4 \cdot 10 + 7 \cdot 1 + 3 \cdot \frac{1}{10} + 9 \cdot \frac{1}{100} + 2 \cdot \frac{1}{1000}
\]

\[
\text{unit form } 47.392 = 4 \text{ tens} + 7 \text{ ones} + 3 \text{ tenths} + 9 \text{ hundredths} + 2 \text{ thousandths}.
\]

(5.NBT.3a)

5.NBT.3b. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $<$, $=$, and $\neq$ relational symbols to record the results of comparisons. (5.NBT.3b)

5.NBT.4. Use place value understanding to round decimals to any place (Note: In fifth grade, decimals include whole numbers and decimal fractions to the hundredths place.) (5.NBT.4)

Perform operations with multi-digit whole numbers and with decimals to hundredths.

5.NBT.5. Fluently (efficiently, accurately, and flexibly) multiply multi-digit whole numbers using an efficient algorithm (ex., traditional, partial products, etc.) based on place value understanding and the properties of operations. (5.NBT.5)

5.NBT.6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. (5.NBT.6)

(Number and Operations Base 10 Progression K-5 Pg. 16-17)
5.NBT.7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. (5.NBT.7) *(Number and Operations Base 10 Progression K-5 Pg. 18-20)*

**Number and Operations—Fractions 5.NF**

(Number and Operations – Fractions Progression Pg. 3)

**Use equivalent fractions as a strategy to add and subtract fractions.**

(Number and Operations – Fractions Progression Pg. 3-5)

5.NF.1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example,

\[
\frac{2}{3} + \frac{5}{4} - \frac{8}{12} + \frac{15}{12} = \frac{23}{12}
\]

In general:

\[
\frac{a}{b} + \frac{c}{d} = \frac{ad+bc}{bd}
\]

(5.NF.1)

5.NF.2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, (e.g. by using visual fraction models or equations to represent the problem.) Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. (See Table 1 to view situation types). For example, recognize an incorrect result

\[
\frac{2}{5} + \frac{1}{2} = \frac{3}{7}
\]

by observing that \(\frac{3}{7} < \frac{1}{2}\). (5.NF.2)

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

(Number and Operations – Fractions Progression Pg. 12-14)

5.NF.3. Interpret a fraction as division of the numerator by the denominator \(\left(\frac{a}{b} = a \div b\right)\). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g. by using visual fraction models or equations to represent the problem. For example, interpret \(\frac{3}{4}\) as the result of dividing 3 by 4, noting that \(\frac{3}{4}\) multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size \(\frac{3}{4}\). If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie? (5.NF.3)

5.NF.4. Apply and extend previous understandings of multiplication (refer to 2.OA.3, 2.OA.4, 3.OA.1, 3.NF.1, 3.NF.2, 4.NF.4) to multiply a fraction or whole number by a fraction.

(Number and Operations—Fractions Progression 3–5 Pg. 12 - 13)

5.NF.4a. Interpret the product \(\frac{a}{b} \cdot q\) as a parts of a partition of \(q\) into \(b\) equal parts; equivalently, as the result of a **sequence** of operations \(a \cdot q \div b\). For example, use a visual fraction model to show \(\frac{2}{3} \cdot 4 = \frac{8}{3}\) and create a story context for this equation. Do the same with \(\frac{2}{3} \cdot \frac{4}{5} = \frac{8}{15}\). (In general, \(\frac{a}{b} \cdot \frac{c}{d} = \frac{ac}{bd}\). (5.NF.4a)
5.NF.4b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. (5.NF.4b)

5.NF.5. Interpret multiplication as scaling (resizing), by:
5.NF.5a. Comparing the size of a product to the size of one factor based on the size of the other factor, without performing the indicated multiplication (e.g. They see \( \frac{1}{2} \cdot 3 \) as half the size of 3.). (5.NF.5a)

5.NF.5b. Explain why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence \( \frac{a}{b} = \frac{na}{nb} \) to the effect of multiplying \( \frac{a}{b} \) by 1. (e.g. Students may have the misconception that multiplication always produces a larger result. They need to have the conceptual understanding with examples like; \( \frac{3}{4} \times \) one dozen eggs will have a product that is less than 12.) (5.NF.5b)

5.NF.6. Solve real world problems involving multiplication of fractions and mixed numbers, (e.g. by using visual fraction models or equations to represent the problem) (See Table 2 to view situation types). (5.NF.6)

5.NF.7. Apply and extend previous understandings of division (3.OA.2, 3.OA.5), to divide unit fractions by whole numbers and whole numbers by unit fractions. Division of a fraction by a fraction is not a requirement at this grade.

5.NF.7a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for \( \frac{1}{3} \div 4 \), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that \( \frac{1}{3} \div 4 = \frac{1}{12} \) because \( \frac{1}{12} \cdot 4 = \frac{1}{3} \). (5.NF.7a)

5.NF.7b. Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for \( 4 \div \frac{1}{5} \), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that \( 4 \div \frac{1}{5} = 20 \) because \( 20 \cdot \frac{1}{5} = 4 \). (5.NF.7b)

5.NF.7c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g. by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share \( \frac{1}{2} \) lb of chocolate equally? How many \( \frac{1}{3} \)-cup servings are in 2 cups of raisins? (5.NF.7c)
Measurement and Data 5.MD

Convert like measurement units within a given measurement system.

5.MD.1. Convert among different-sized standard measurement units within a given measurement system (e.g. convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. (5.MD.1)

Represent and interpret data.

5.MD.2. Make a data display (line plot, bar graph, pictograph) to show a data set of measurements in fractions of a unit (\(\frac{1}{2}, \frac{1}{4}, \frac{1}{8}\)). Use operations (add, subtract, multiply) on fractions for this grade to solve problems involving information presented in the data display. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally. After lunch everyone measured how much milk they had left in their containers. Make a line plot showing data to the nearest \(\frac{1}{4}\) cup. Which value has the greatest amount? What is the total? (5.MD.2)

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

5.MD.3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement.

5.MD.3a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. (5.MD.3a)

5.MD.3b. A solid figure which can be packed without gaps or overlaps using \(n\) unit cubes is said to have a volume of \(n\) cubic units. (5.MD.3b)

5.MD.4. Measure volumes by counting unit cubes such as cubic cm, cubic in, cubic ft. or non-standard cubic units. (5.MD.4)

5.MD.5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

5.MD.5a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent three-dimensional whole-number products as volumes, (e.g. to represent the associative property of multiplication.) (5.MD.5a)

5.MD.5b. Apply the formulas \(V = l \cdot w \cdot h\) and \(V = B \cdot h\) (\(B\) represents the area of the base) for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems. (5.MD.5b)

5.MD.5c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. (5.MD.5c)
**Geometry 5.G**

**Graph points on the coordinate plane to solve real-world and mathematical problems.**

5.G.1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g. x-axis and x-coordinate, y-axis and y-coordinate). (5.G.1)

5.G.2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. (e.g. plotting the relationship between two positive quantities such as maps, coordinate grid games (such as Battleship), time/temperature, time/distance, cost/quantity, etc.). (5.G.2)

**Classify two-dimensional figures into categories based on their properties** (Geometry Progression K-6 Pg. 17 and graphic from Pg. 18)

5.G.3. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles. (5.G.3)

Grade Six Content Standards Overview

Critical Areas for Grade Six

Ratios and Proportional Relationships (6.RP)
- Understand ratio concepts and use ratio reasoning to solve problems.
  - 6.RP.1  6.RP.2  6.RP.3

The Number System (6.NS)
- Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
  - 6.NS.1
- Compute fluently (efficiently, accurately, and flexibly) with multi-digit numbers and find common factors and multiples.
  - 6.NS.2  6.NS.3  6.NS.4
- Apply and extend previous understandings of numbers to the system of rational numbers
  - 6.NS.5  6.NS.6  6.NS.7  6.NS.8

Expressions and Equations (6.EE)
- Apply and extend previous understandings of arithmetic to algebraic expressions.
  - 6.EE.1  6.EE.2  6.EE.3
- Reason about and solve one-variable equations and inequalities.
  - 6.EE.4  6.EE.5  6.EE.6  6.EE.7
- Represent and analyze quantitative relationships between dependent and independent variables.
  - 6.EE.8

Geometry (6.G)
- Solve real-world and mathematical problems involving area, surface area, and volume.

Statistics and Probability (6.SP)
Develop concepts of statistical measures of center and variability and an informal understanding of outlier.
- 6.SP.1  6.SP.2  6.SP.3
- Summarize and describe distributions.
  - 6.SP.4  6.SP.5

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to Grade Six!
Ratios and Proportional Relationships 6.RP
(Ratios and Proportional Relationships Progression 6–7 Pg. 1)

Understand ratio concepts and use ratio reasoning to solve problems.
(Ratios and Proportional Relationships Progression 6–7 Pg. 3)

6.RP.1. Use ratio language to describe a relationship between two quantities. Distinguish between part-to-part and part-to-whole relationships. For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.” (6.RP.1)

6.RP.2. Use unit rate language (“for each one”, “for every one” and “per”) and unit rate notation to demonstrate understanding the concept of a unit rate \( \frac{a}{b} \) associated with a ratio \( a:b \) with \( b \neq 0 \). For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is \( \frac{3}{4} \) cup of flour for each cup of sugar.” “We paid $75 for 15 hamburgers, which is a rate of $5 per hamburger.” (Expectations for unit rates in this grade are limited to non-complex fractions.) (6.RP.2)

6.RP.3. Use ratio and rate reasoning to solve real-world and mathematical problems, (e.g. by reasoning about tables of equivalent ratios, tape diagrams, double number line diagram, or using calculations.)

6.RP.3a. Make tables of equivalent ratios relating quantities with whole-number measurements, find the missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed? (6.RP.3a) (6.RP.3b)

6.RP.3b. Find a percent of a quantity as a rate per 100 (e.g. 30% of a quantity means \( \frac{30}{100} \) times the quantity); solve problems involving finding the whole, given a part and the percent. (6.RP.3c)

6.RP.3c. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities. (6.RP.3d)

The Number System 6.NS
(Number System 6–8 and High School Number Progression Pg. 1)

Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

6.NS.1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, requiring multiple exposures connecting various concrete and abstract models. (6.NS.1)
(Number System 6–8 and High School Number Progression Pg. 5 - 6.)

Compute fluently (efficiently, accurately, and flexibly) with multi-digit numbers and find common factors and multiples.

6.NS.2. Fluently (efficiently, accurately, and flexibly) divide multi-digit numbers using an efficient algorithm. (6.NS.2)
6.NS.3. Fluently (efficiently, accurately, and flexibly) add, subtract, multiply, and divide multidigit decimals using an efficient algorithm for each operation. (6.NS.3)

6.NS.4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express 18 + 48 as 6(3 + 8). (6.NS.4)

Apply and extend previous understandings of numbers to the system of rational numbers.

6.NS.5. Understand positive and negative numbers to describe quantities having opposite directions or values (e.g. temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); (6.NS.5)

6.NS.5a. Use positive and negative numbers to represent quantities in real-world contexts, (6.NS.5)

6.NS.5b. Explaining the meaning of 0 in each situation. (6.NS.5)

6.NS.6. Understand a rational number as a point on the number line and a coordinate pair as a location on a coordinate plane.

6.NS.6a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, (e.g. \(-(-3) = 3\)) and that 0 is its own opposite. (6.NS.6a)

6.NS.6b. Recognize signs of numbers in ordered pairs indicate locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. (6.NS.6b)

6.NS.6c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. (6.NS.6c)


6.NS.7a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret \(-3 > -7\) as a statement that \(-3\) is located to the right of \(-7\) on a number line oriented from left to right. (6.NS.7a)

6.NS.7b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write \(-3^\circ C > -7^\circ C\) to express the fact that \(-3^\circ C\) is warmer than \(-7^\circ C\). (6.NS.7b)

6.NS.7c. Explain the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of \(-30\) dollars, write \(|-30| = 30\) to describe the size of the debt in dollars. (6.NS.7c)

6.NS.7d. Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than \(-30\) dollars represents a debt greater than 30 dollars. (6.NS.7d)

6.NS.8. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. (6.NS.8)
Expressions and Equations 6.EE
(Expressions and Equations Progression 6–8 Pg. 4)

Apply and extend previous understandings of arithmetic to algebraic expressions.

6.EE.1. Write and evaluate numerical expressions involving whole-number exponents. (6.EE.1)
6.EE.2. Write, read, and evaluate expressions in which letters stand for numbers.
6.EE.2a. Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract y from 5” as $5 - y$. (6.EE.2a)
6.EE.2b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms. (6.EE.2b)
6.EE.2c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = e^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $e = \frac{1}{2}$. (6.EE.2c)
6.EE.3. Apply the properties of operations and combine like terms, with the conventions of algebraic notation, to identify and generate equivalent expressions. For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$. (6.EE.3) (6.EE.4)

Reason about and solve one-variable equations and inequalities.

6.EE.4. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. (6.EE.5)
6.EE.5. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. (6.EE.6)
6.EE.6. Solve one-step equations involving non-negative rational numbers using addition, subtraction, multiplication and division. (6.EE.7)
6.EE.7. Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams. (6.EE.8)

Represent and analyze quantitative relationships between dependent and independent variables.

6.EE.8. Use variables to represent two quantities in a real-world problem that change in relationship to one another.
6.EE.8a. Identify the independent and dependent variable. (6.EE.9)
6.EE.8b. Write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation \( d = 65t \) to represent the relationship between distance and time. (6.EE.9)

6.EE.8c. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. (6.EE.9)

**Geometry 6.G**

(Geometry Progression K-6 Pg. 19)

**Solve real-world and mathematical problems involving area, surface area, and volume.**

(Geometry Progression K-6 Pg. 19 - 20)

6.G.1. Find the area of all triangles, special quadrilaterals (including parallelograms, kites and trapezoids), and polygons whose edges meet at right angles (rectilinear figure (See Geometry Progression K-6 Pg. 19 Paragraph 4) polygons) by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. (6.G.1)

6.G.2. Find the volume of a right rectangular prism with fractional edge lengths by applying the formulas \( V = lwh \) and \( V = Bh \) (\( B \) is the area of the base and \( h \) is the height) to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems. (Builds on the 5th grade concept of packing unit cubes to find the volume of a rectangular prism with whole number edge lengths.) (6.G.2)

6.G.3. Draw polygons whose edges meet at right angles (rectilinear figure polygons) in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems. (6.G.3)

6.G.4. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems. (6.G.4)

**Statistics and Probability 6.SP**

(Statistics and Probability Progression 6–8 Pg. 4)

**Develop concepts of statistical measures of center and variability and an informal understanding of outlier.**

(Statistics and Probability Progression 6–8 Pg. 4)

6.SP.1. Recognize and generate a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages. (6.SP.1)

6.SP.2. Analyze a set of data collected to answer a statistical question with a distribution which can be described by its center (mean, median and/or mode), spread (range and/or interquartile range), and overall shape (cluster, peak, gap, symmetry, skew (data) and/or outlier). (6.SP.2)
6.SP.3. Recognize that a measure of center (mean, median and/or mode) for a numerical data set summarizes all of its values with a single number, while a measure of variation (range and/or interquartile range) describes how its values vary with a single number. (6.SP.3)

Summarize and describe distributions.

6.SP.4. Display numerical data on dot plots, histograms, stem-and-leaf plots, and box plots. (6.SP.4)

6.SP.5. Summarize numerical data sets in relation to their context, such as by:

- 6.SP.5a. Reporting the number of observations. (6.SP.5a)
- 6.SP.5b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. (6.SP.5b)
- 6.SP.5c. Giving quantitative measures of center (mean, median and/or mode) and variability (range and/or interquartile range), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. (6.SP.5c)
- 6.SP.5d. Relating the choice of measures of center and variability to the distribution of the data. (6.SP.5d)
Grade Seven Content Standards Overview

Critical Areas for Grade Seven

Ratios and Proportional Relationships (7.RP)
- Analyze proportional relationships and use them to solve real-world and mathematical problems.
    7.RP.1  7.RP.2  7.RP.3

The Number System (7.NS)
- Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
    7.NS.1  7.NS.2  7.NS.3

Expressions and Equations (7.EE)
- Use properties of operations to generate equivalent expressions.
    7.EE.1  7.EE.2
- Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
    7.EE.3  7.EE.4

Geometry (7.G)
- Draw, construct, and describe geometrical figures and describe the relationships between them.
- Solve real-life and mathematical problems involving area, surface area, and volume.

Statistics and Probability (7.SP)
- Use random sampling to draw inferences about a population.
    7.SP.1  7.SP.2
- Draw informal comparative inferences about two populations.
    7.SP.3  7.SP.4
- Investigate chance processes and develop, use, and evaluate probability models.
    7.SP.5  7.SP.6  7.SP.7  7.SP.8

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to Grade Seven!
**Ratios and Proportional Relationships 7.RP**

Analyze proportional relationships and use them to solve real-world and mathematical problems.  
(Ratios and Proportional Relationships Progression 6–7 Pg. 8)

7.RP.1. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks \( \frac{1}{2} \) mile in each \( \frac{1}{4} \) hour, compute the unit rate as the complex fraction \( \frac{\frac{1}{2}}{\frac{1}{4}} \) miles per hour (interpreting a complex fraction as division of fractions), equivalently 2 miles per hour. (7.RP.1)  
(Ratios and Proportional Relationships Progression 6–7 Pg. 9 Graphic)

7.RP.2. Recognize and represent proportional relationships between quantities:

7.RP.2a. Determine whether two quantities are in a proportional relationship, e.g. by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. (7.RP.2a)

7.RP.2b. Analyze a table or graph and recognize that, in a proportional relationship, every pair of numbers has the same unit rate (referred to as the “m”). (7.RP.2b)

7.RP.2c. Represent proportional relationships by equations. For example, if total cost \( t \) is proportional to the number \( n \) of items purchased at a constant price \( p \), the relationship between the total cost and the number of items can be expressed as \( t = pn \). (7.RP.2c)

7.RP.2d. Explain what a point \((x, y)\) on the graph of a proportional relationship means in terms of the situation, with special attention to the points \((0, 0)\) and \((1, r)\) where \(r\) is the unit rate. (7.RP.2d)

7.RP.3. Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error. (7.RP.3)

**The Number System 7.NS**
(Number System 6–8 and High School Number Progression Pg. 9)

Apply and extend previous understandings of operations with positive rational numbers to add, subtract, multiply, and divide all rational numbers.

7.NS.1. Represent addition and subtraction on a horizontal or vertical number line diagram.

7.NS.1a. Describe situations in which opposite quantities combine to make 0. Show that a number and its opposite have a sum of 0 (are additive inverses). For example, show zero-pairs with two-color counters. (7.NS.1a)

7.NS.1b. Show \( p + q \) as the number located a distance \(|q|\) from \( p \), in the positive or negative direction depending on whether \( q \) is positive or negative. (7.NS.1b)

7.NS.1c. Model subtraction of rational numbers as adding the additive inverse, \( p - q = p + (-q) \). (7.NS.1c)
7.NS.1d. Model subtraction as the distance between two rational numbers on the number line where the distance is the absolute value of their difference. (7.NS.1c)

7.NS.1e. Apply properties of operations as strategies to add and subtract rational numbers. (7.NS.1d)

7.NS.2. Apply and extend previous understandings of multiplication and division of positive rational numbers to multiply and divide all rational numbers.

7.NS.2a. Describe how multiplication is extended from positive rational numbers to all rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as \((-1)(-1) = 1\) and the rules for multiplying signed numbers. (7.NS.2a)

7.NS.2b. Explain that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. Leading to situations such that if \(p\) and \(q\) are integers, then \(-\frac{p}{q} = \frac{-p}{q} = \frac{p}{-q}\). (7.NS.2b)

7.NS.2c. Apply properties of operations as strategies to multiply and divide rational numbers. (7.NS.2c)

7.NS.2d. Convert a rational number in the form of a fraction to its decimal equivalent using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats. (7.NS.2d)

7.NS.3. Solve and interpret real-world and mathematical problems involving the four operations with rational numbers. (Computations with rational numbers extend the rules for manipulating fractions to complex fractions.) (7.NS.3)

Expressions and Equations 7.EE

(Expressions and Equations Progression 6–8 Pg. 8)

Use properties of operations to generate equivalent expressions.

7.EE.1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with integer coefficients. For example: apply the distributive property to the expression \(24x + 18y\) to produce the equivalent expression \(6(4x + 3y)\). (7.EE.1)

7.EE.2. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. For example, \(a + 0.05a = 1.05a\) means that “increase by 5%” is the same as “multiply by 1.05.” (7.EE.2)

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

7.EE.3. Solve multi-step real-life and mathematical problems with rational numbers. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making $25 an hour gets a 10% raise, she will make an additional \(\frac{1}{10}\) of her salary an hour, or $2.50, for a new salary of $27.50. (7.EE.3)

7.EE.4. Use variables to represent quantities in a real-world or mathematical problem, and construct two-step equations and inequalities to solve problems by reasoning about the quantities.
7.EE.4a. Solve word problems leading to equations of the form \( px + q = r \), and \( p(x + q) = r \) where \( p \), \( q \), and \( r \) are specific rational numbers. Solve equations of these forms fluently (efficiently, accurately, and flexibly). Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width? (7.EE.4a)

7.EE.4b. Solve word problems leading to inequalities of the form \( px + q > r \) or \( px + q < r \) where \( p \), \( q \), and \( r \) are specific rational numbers and \( p > 0 \). Graph the solution set of the inequality and interpret it in the context of the problem. For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions. (7.EE.4b)

**Geometry 7.G**

*(Geometry High School Progression Pg. 6)*

**Draw, construct, and describe geometrical figures and describe the relationships between them.**

7.G.1. Solve problems involving scale drawings of geometric figures, such as computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale. (7.G.1)

7.G.2. Identify three-dimensional objects generated by rotating a two-dimensional (rectangular or triangular) object around one edge. (G.GMD.4)

7.G.3. Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right cylinder. (7.G.3)

**Solve real-life and mathematical problems involving area, surface area, and volume.**

7.G.4. Use the formulas for the area and circumference of a circle and solve problems; give an informal derivation of the relationship between the circumference and area of a circle. (7.G.4)

7.G.5. Investigate the relationship between three-dimensional geometric shapes;

7.G.5a. Generalize the volume formula for prisms and cylinders (\( V = Bh \) where \( B \) is the base and \( h \) is the height). (2017)

7.G.5b. Generalize the surface area formula for prisms and cylinders (\( SA = 2B + Ph \) where \( B \) is the area of the base, \( P \) is the perimeter of the base, and \( h \) is the height (in the case of a cylinder, perimeter is replaced by circumference)). (2017)

7.G.6. Solve real-world and mathematical problems involving area of two-dimensional objects and volume and surface area of three-dimensional objects including cylinders and right prisms. (Solutions should not require students to take square roots or cube roots. For example, given the volume of a cylinder and the area of the base, students would identify the height.) (7.G.6)
Statistics and Probability 7.SP

(Statistics and Probability Progression 6–8 Pg. 7)

Use random sampling to draw inferences about a population.

7.SP.1. Use statistics to gain information about a population by examining a sample of the population;

7.SP.1a. Know that generalizations about a population from a sample are valid only if the sample is representative of that population and generate a valid representative sample of a population. (7.SP.1)

7.SP.1b. Identify if a particular random sample would be representative of a population and justify your reasoning. (7.SP.1)

7.SP.2. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to informally gauge the variation in estimates or predictions. For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be. (7.SP.2)

Draw informal comparative inferences about two populations.

(Statistics and Probability Progression 6–8 Pg. 5 Paragraph 3)

7.SP.3. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability (requires introduction of mean absolute deviation). For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable. (7.SP.3)

7.SP.4. Use measures of center (mean, median and/or mode) and measures of variability (range, interquartile range and/or mean absolute deviation) for numerical data from random samples to draw informal comparative inferences about two populations. For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book. (NOTE: Students should not have to calculate mean absolute deviation but use it to interpret data). (7.SP.4)

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.5. Express the probability of a chance event as a number between 0 and 1 that represents the likelihood of the event occurring. (Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.) (7.SP.5)

7.SP.6. Collect data from a chance process (probability experiment). Approximate the probability by observing its long-run relative frequency. Recognize that as the number of trials increase, the experimental probability approaches the theoretical probability. Conversely, predict the approximate relative frequency given the probability. For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times. (7.SP.6)
7.SP.7. Develop a **probability model** and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.

7.SP.7a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.* (7.SP.7a)

7.SP.7b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?* (7.SP.7b)

7.SP.8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.

7.SP.8a. Know that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. (7.SP.8a)

7.SP.8b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g. “rolling double sixes”), identify the outcomes in the sample space which compose the event. (7.SP.8b)

7.SP.8c. Design and use a simulation to generate frequencies for compound events. *For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?* (7.SP.8c)
Grade Eight Content Standards Overview

Critical Areas for Grade Eight

The Number System (8.NS)
- Know that there are numbers that are not rational, and approximate them by rational numbers.
  NS.1 NS.2

Expressions and Equations (8.EE)
- Work with radicals and integer exponents.
  EE.1 EE.2 EE.3
- Understand the connections between proportional relationships, lines, and linear equations.
  EE.4 EE.5 EE.6
- Analyze and solve linear equations and inequalities.
  EE.7

Functions (8.F)
- Define, evaluate, and compare functions.
  F.1 F.2 F.3
- Use functions to model relationships between quantities.
  F.4 F.5

Geometry (8.G)
- Geometric measurement: understand concepts of angle and measure angles.
  G.1 G.2 G.3 G.4 G.5 G.6
- Understand and apply the Pythagorean Theorem.
  G.7 G.8 G.9
- Solve real-world and mathematical problems involving measurement.
  G.10 G.11 G.12

Statistics and Probability (8.SP)
- Investigate patterns of association in bivariate data.
  SP.1 SP.2 SP.3

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to Grade Eight!
The Number System 8.NS
(Number System 6–8 and High School Number Progression Pg. 14)

Know that there are numbers that are not rational, and approximate them by rational numbers.

8.NS.1. Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number. (8.NS.1)

8.NS.2. Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g. \(\pi^2\)). For example, for the approximation of 68, show that \(\sqrt{68}\) is between 8 and 9 and closer to 8. (8.NS.2)

Expressions and Equations 8.EE
(Expression and Equations Progression 6–8 Pg. 11)

Work with radicals and integer exponents.

8.EE.1. Use square root and cube root symbols to represent solutions to equations of the form \(x^2 = p\) and \(x^3 = p\), where \(p\) is a positive rational number. Evaluate square roots of whole number perfect squares with solutions between 0 and 15 and cube roots of whole number perfect cubes with solutions between 0 and 5. Know that \(\sqrt{2}\) is irrational. (8.EE.2)

8.EE.2. Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. For example, estimate the population of the United States as \(3 \times 10^8\) and the population of the world as \(7 \times 10^9\), and determine that the world population is more than 20 times larger. (8.EE.3)

8.EE.3. Read and write numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g. use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology. (8.EE.4)

Understand the connections between proportional relationships, lines, and linear equations.

8.EE.4. Graph proportional relationships, interpreting its unit rate as the slope (m) of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed. (8.EE.5)

8.EE.5. Use similar triangles to explain why the slope (m) is the same between any two distinct points on a non-vertical line in the coordinate plane and extend to include the use of the slope formula \(m = \frac{y_2 - y_1}{x_2 - x_1}\) when given two coordinate points \((x_1, y_1)\) and \((x_2, y_2)\). Generate the equation \(y = mx\) for a line through the origin (proportional) and the equation \(y = mx + b\) for a line with slope \(m\) intercepting the vertical axis at \(y\)-intercept \(b\) (not proportional when \(b \neq 0\)). (8.EE.6)
8.EE.6. Describe the relationship between the proportional relationship expressed in $y = mx$ and the non-proportional linear relationship $y = mx + b$ as a result of a vertical translation. Note: be clear with students that all linear relationships have a constant rate of change (slope), but only the special case of proportional relationships (line that goes through the origin) continue to have a constant of proportionality. (2017)

Analyze and solve linear equations and inequalities.

8.EE.7. Fluently (efficiently, accurately, and flexibly) solve one-step, two-step, and multi-step linear equations and inequalities in one variable, including situations with the same variable appearing on both sides of the equal sign.

8.EE.7a. Give examples of linear equations in one variable with one solution ($x = a$), infinitely many solutions ($a = a$), or no solutions ($a = b$). Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a, a = a$, or $a = b$ results (where $a$ and $b$ are different numbers). (8.EE.7a)

8.EE.7b. Solve linear equations and inequalities with rational number coefficients, including equations/inequalities whose solutions require expanding and/or factoring expressions using the distributive property and collecting like terms. (8.EE.7b)

Functions 8.F

Define, evaluate, and compare functions.

8.F.1. Explain that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. (Function notation is not required in Grade 8.) (8.F.1)

8.F.2. Compare properties of two linear functions represented in a variety of ways (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change, the greater $y$-intercept, or the point of intersection. (8.F.2)

8.F.3. Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points $(1,1)$, $(2,4)$ and $(3,9)$, which are not on a straight line. (8.F.3)

Use functions to model relationships between quantities.

8.F.4. Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two $(x, y)$ values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. (8.F.4)

8.F.5. Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g. where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. (8.F.5)
Geometry 8.G

(Geometry High School Progression Pg. 9)

Geometric measurement: understand concepts of angle and measure angles.

8.G.1. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

8.G.1a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through \( \frac{1}{360} \) of a circle is called a “one-degree angle,” and can be used to measure angles. (4.MD.5a)

8.G.1b. An angle that turns through \( n \) one-degree angles is said to have an angle measure of \( n \) degrees. (4.MD.5a)


(Measurement and Data (measurement part) Progression K-5 Pg. 22-25)

8.G.3. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g. by using an equation with a symbol for the unknown angle measure. (4.MD.7)

8.G.4. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and use them to solve simple equations for an unknown angle in a figure. (7.G.5)

8.G.5. Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so. (8.G.5)

8.G.6. Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on drawing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. (7.G.2)

Understand and apply the Pythagorean Theorem.


8.G.8. Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions. For example: Finding the slant height of pyramids and cones. (8.G.7)

8.G.9. Apply the Pythagorean Theorem to find the distance between two points in a coordinate system. (8.G.8)
Solve real-world and mathematical problems involving measurement.

8.G.10. Use the formulas or informal reasoning to find the arc length, areas of sectors, surface areas and volumes of pyramids, cones, and spheres. *For example, given a circle with a 60° central angle, students identify the arc length as \( \frac{1}{6} \) of the total circumference \( \frac{60}{360} \). (2017)

8.G.11. Investigate the relationship between the formulas of three dimensional geometric shapes;

8.G.11a. Generalize the volume formula for pyramids and cones \( V = \frac{1}{3} Bh \). (G.GMD.3)

8.G.11b. Generalize surface area formula of pyramids and cones \( SA = B + \frac{1}{2} Pl \). (G.GMD.3)

8.G.12. Solve real-world and mathematical problems involving arc length, area of two-dimensional shapes including sectors, volume and surface area of three-dimensional objects including pyramids, cones and spheres. (2017)

Statistics and Probability 8.SP
(Statistics and Probability Progression 6–8 Pg. 11)

Investigate patterns of association in bivariate data.

8.SP.1. Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association. (8.SP.1)

8.SP.2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line. (8.SP.2)

8.SP.3. Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height. (8.SP.3)
One of the insights provided by mathematical modeling is that essentially the same mathematical or statistical structure can sometimes model seemingly different situations. Models can also shed light on the mathematical structures themselves.

Some examples of such situations might include:

- Estimating how much water and food is needed for emergency relief in a devastated city of 3 million people, and how it might be distributed.
- Planning a table tennis tournament for 7 players at a club with 4 tables, where each player plays against each other player.
- Designing the layout of the stalls in a school fair so as to raise as much money as possible.
- Analyzing stopping distance for a car.
- Modeling savings account balance, bacterial colony growth, or investment growth.
- Engaging in critical path analysis, e.g. applied to turnaround of an aircraft at an airport.
- Analyzing risk in situations such as extreme sports, pandemics, and terrorism.
- Relating population statistics to individual predictions.

In situations like these, the models devised depend on a number of factors: How precise an answer do we want or need? What aspects of the situation do we most need to understand, control, or optimize? What resources of time and tools do we have? The range of models that we can create and analyze is also constrained by the limitations of our mathematical, statistical, and technical skills, and our ability to recognize significant variables and relationships among them. Diagrams of various kinds, spreadsheets and other technology, and algebra are powerful tools for understanding and solving problems drawn from different types of real-world situations.

The basic modeling cycle is summarized in the diagram. It involves (1) identifying variables in the situation and selecting those that represent essential features, (2) formulating a model by creating and selecting geometric, graphical, tabular, algebraic, or statistical representations that describe relationships between the variables, (3) analyzing and performing operations on these relationships to draw conclusions, (4) interpreting the results of the mathematics in terms of the original situation, (5) validating the conclusions by comparing them with the situation, and then either improving the model or, if it is acceptable, (6) reporting on the conclusions and the reasoning behind them. Choices, assumptions, and approximations are present throughout this cycle.

There are different types of modeling. In descriptive modeling, a model simply describes the phenomena or summarizes them in a compact form. Graphs of observations are a familiar descriptive model—for example, graphs of global temperature and atmospheric CO₂ over time.
Analytic modeling seeks to explain data based on deeper theoretical ideas, albeit with parameters that are empirically based; for example, exponential growth of bacterial colonies (until cut-off mechanisms such as pollution or starvation intervene) follows from a constant reproduction rate. Functions are an important tool for analyzing such problems.

Graphing utilities, spreadsheets, computer algebra systems, and dynamic geometry software are powerful tools that can be used to model purely mathematical phenomena (e.g. the behavior of polynomials) as well as physical phenomena.

**Modeling Standards:** Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol (★). The star symbol sometimes appears on the heading for a group of standards; in that case, it should be understood to apply to all standards in that group.
The Real Number System (H.N.RN)
- Use properties of rational and irrational numbers.
  N.RN.1  N.RN.2  N.RN.3

Quantities ( ★ ) (H.N.Q)
- Reason quantitatively and use units to solve problems.
  N.Q.1 ( ★ )  N.Q.2 ( ★ )  N.Q.3 ( ★ )

The Complex Number System (H.N.CN)
- Perform arithmetic operations with complex numbers.
  N.CN.1  N.CN.2  N.CN.3 (+)
- Represent complex numbers and their operations on the complex plane.
  N.CN.4 (+)  N.CN.5 (+)  N.CN.6 (+)
- Use complex numbers in polynomial identities and equations.
  N.CN.7  N.CN.8 (+)  N.CN.9 (+)  N.CN.10 (+)

Vector and Matrix Quantities (H.N.VM)
- Represent and model with vector quantities.
  N.VM.1 (+)  N.VM.2 (+)  N.VM.3 (+)
- Perform operations on vectors.
  N.VM.4 (+)  N.VM.5 (+)
- Perform operations on matrices and use matrices in applications.
  N.VM.6  N.VM.7  N.VM.8  N.VM.9 (+)  N.VM.10 (+)  N.VM.11 (+)  N.VM.12 (+)

Mathematical Practices
1. Make sense of problems and persevere in solving them.
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3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to High School - Number and Quantity!
The grade level classifications for the high school standards are as follows:

<table>
<thead>
<tr>
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<tbody>
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The Real Number System N.RN
(Number System 6–8 and High School Number Progression Pg. 16)

Use properties of rational numbers and irrational numbers.

N.RN.1. **(9/10)** Know and apply the properties of integer exponents to generate equivalent numerical and algebraic expressions. (8.EE.1)

N.RN.2. **(11)** Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. For example, we define $\sqrt[3]{5}$ to be the cube root of 5 because we want $(5^{\frac{1}{3}})^3 = 5^{\frac{1}{3} \cdot 3}$ to hold, so $\left(\sqrt[3]{5}\right)^3$ must equal 5. (N.RN.1)

N.RN.3. **(11)** Rewrite expressions involving radicals and rational exponents using the properties of exponents. (N.RN.2)

Quantities* N.Q

Reason quantitatively and use units to solve problems.

N.Q.1. **(all)** Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. (N.Q.1)

N.Q.2. **(all)** Define appropriate quantities for the purpose of descriptive modeling. (N.Q.2)

N.Q.3. **(all)** Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. (N.Q.3)
Perform arithmetic operations with complex numbers.

N.CN.1. \((11)\) Know there is a complex number \(i\) such that \(i^2 = -1\), and every complex number has the form \(a + bi\) with \(a\) and \(b\) real. \((\text{N.CN.1})\)

N.CN.2. \((11)\) Use the relation \(i^2 = -1\) and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers. \((\text{N.CN.2})\)

N.CN.3. \((11)\) Find the conjugate of a complex number and use it to find the quotient of complex numbers. \((\text{N.CN.3})\)

N.CN.4. \((+)\) Use conjugates to find moduli. \((\text{N.CN.3})\)

Represent complex numbers and their operations on the complex plane.

N.CN.5. \((+)\) Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers), and explain why the rectangular and polar forms of a given complex number represent the same number. \((\text{N.CN.4})\)

N.CN.6. \((+)\) Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation. \(\text{For example, } (-1 + \sqrt{3} \cdot i)^3 = 8\text{ because } (-1 + \sqrt{3} \cdot i)\text{ has modulus 2 and argument } 120^\circ.\) \((\text{N.CN.5})\)

N.CN.7. \((+)\) Calculate the distance between numbers in the complex plane as the modulus of the difference, and the midpoint of a segment as the average of the numbers at its endpoints. \((\text{N.CN.6})\)

Use complex numbers in polynomial identities and equations.

N.CN.8. \((11)\) Solve quadratic equations with real coefficients that have complex solutions. \((\text{N.CN.7})\)

N.CN.9. \((+)\) Extend polynomial identities to the complex numbers. \(\text{For example, rewrite } x^2 + 4 \text{ as } (x + 2i)(x - 2i).\) \((\text{N.CN.8})\)

N.CN.10. \((+)\) Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials. \((\text{N.CN.9})\)

Vector and Matrix Quantities N-VM

Represent and model with vector quantities.

N.VM.1. \((+)\) Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes \((e., g., \vec{v}, |v|, ||v||, v)\). \((\text{N.VM.1})\)

N.VM.2. \((+)\) Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point. \((\text{N.VM.2})\)

N.VM.3. \((+)\) Solve problems involving velocity and other quantities that can be represented by vectors. \((\text{N.VM.3})\)

Perform operations on vectors.

N.VM.4. \((+)\) Add and subtract vectors.

N.VM.4a. \text{Add vectors end-to-end}, component-wise, and by the parallelogram rule. Understand that the magnitude of a sum of two vectors is typically not the sum of the magnitudes. \((\text{N.VM.4a})\)
N.VM.4b. Given two vectors in magnitude and direction form, determine the magnitude and direction of their sum. (N.VM.4b)

N.VM.4c. Understand vector subtraction $v - w$ as $v + (-w)$, where $-w$ is the additive inverse of $w$, with the same magnitude as $w$ and pointing in the opposite direction. Represent vector subtraction graphically by connecting the tips in the appropriate order, and perform vector subtraction component-wise. (N.VM.4c)

N.VM.5. (+) Multiply a vector by a scalar.

N.VM.5a. Represent scalar multiplication graphically by scaling vectors and possibly reversing their direction; perform scalar multiplication component-wise, (e.g. as $c(v_x, v_y) = (cv_x, cv_y)$). (N.VM.5a)

N.VM.5b. Compute the magnitude of a scalar multiple $cv$ using $||cv|| = |c|v$. Compute the direction of $cv$ knowing that when $|c|v \neq 0$, the direction of $cv$ is either along $v$ (for $c > 0$) or against $v$ (for $c < 0$). (N.VM.5b)

Perform operations on matrices and use matrices in applications.

N.VM.6. (11) Use matrices to represent and manipulate data, (e.g. to represent payoffs or incidence relationships in a network.) (N.VM.6)

N.VM.7. (11) Multiply matrices by scalars to produce new matrices, (e.g. as when all of the payoffs in a game are doubled.) (N.VM.7)

N.VM.8. (11) Add, subtract, and multiply matrices of appropriate dimensions; find determinants of $2 \times 2$ matrices. (N.VM.8)

N.VM.9. (+) Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties. (N.VM.9)

N.VM.10. (+) Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse. (N.VM.10)

N.VM.11. (+) Multiply a vector (regarded as a matrix with one column) by a matrix of suitable dimensions to produce another vector. Work with matrices as transformations of vectors. (N.VM.11)

N.VM.12. (+) Work with $2 \times 2$ matrices as transformations of the plane, and interpret the absolute value of the determinant in terms of area. (N.VM.12)
High School – Algebra Content Standards Overview

Seeing Structure in Expressions (H.A.SSE)

- Interpret the structure of expressions.
  - A.SSE.1 (*)
  - A.SSE.2
- Write expressions in equivalent forms to solve problems.
  - A.SSE.3 (*)

Arithmetic with Polynomials and Rational Expressions (H.A.APR)

- Perform arithmetic operations on polynomials.
  - A.APR.1
  - A.APR.2
  - A.APR.3
- Use polynomial identities to solve problems.
  - A.APR.4
  - A.APR.5 (+)
- Rewrite rational expressions.
  - A.APR.6
  - A.APR.7 (+)

Creating Equations (*) (H.A.CED)

- Create equations that describe numbers or relationships.
  - A.CED.1 (*)
  - A.CED.2 (*)
  - A.CED.3 (*)
  - A.CED.4 (*)

Reasoning with Equations and Inequalities (H.A.REI)

- Understand solving equations as a process of reasoning and explain the reasoning.
  - A.REI.1
- Solve equations and inequalities in one variable.
  - A.REI.2
  - A.REI.3
  - A.REI.4
  - A.REI.5
- Solve systems of equations.
  - A.REI.6
  - A.REI.7 (+)
- Represent and solve equations and inequalities graphically.
  - A.REI.8
  - A.REI.9 (*)
  - A.REI.10

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**Seeing Structure in Expressions A.SSE**

(See [High School Algebra Progression Pg. 4](#))

**Interpret the structure of expressions.**

A.SSE.1. **(all)** Interpret expressions that represent a quantity in terms of its context. * 
   A.SSE.1a. **(all)** Interpret parts of an expression, such as terms, factors, and coefficients. *(A.SSE.1a)* 
   A.SSE.1b. **(all)** Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret \( P(1 + r)^n \) as the product of \( P \) and \( (1 + r)^n \). *(A.SSE.1b)* 

A.SSE.2. **(all)** Use the structure of an expression to identify ways to rewrite it. *(A.SSE.2)*

**Write expressions in equivalent forms to solve problems.**

A.SSE.3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. * 
   A.SSE.3a. **(9/10)** Factor a quadratic expression to reveal the zeros of the function it defines. *(A.SSE.3a)* 
   A.SSE.3b. **(11)** Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. *(A.SSE.3b)*
A.SSE.3c.  (11) Use the properties of exponents to transform expressions for exponential functions. For example, the expression $1.15^t$ can be rewritten as $\left(\frac{1.15^{12}}{12}\right)^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%. (A.SSE.3c)

**Arithmetic with Polynomials and Rational Expressions A.APR**

(High School Algebra Progression Pg. 7)

Perform arithmetic operations on polynomials.

A.APR.1.  (9/10) Add, subtract, and multiply polynomials. (A.APR.1)
A.APR.2.  (11) Factor polynomials; identifying that some polynomials are prime. (2017)
A.APR.3.  (11) Know and apply the **Remainder Theorem**: For a polynomial $p(x)$ and a number $c$, the remainder on division by $(x - c)$ is $p(c)$, so $p(c) = 0$ if and only if $(x - c)$ is a factor of $p(x)$. (A.APR.2)

Use polynomial identities to solve problems.

A.APR.4.  (9/10/11) Generate polynomial identities from a pattern. For example, difference of squares, perfect square trinomials, (emphasize sum and difference of cubes in grade 11). (A.APR.4)
A.APR.5.  (+) Know and apply the **Binomial Theorem** for the expansion of $(x + y)^n$ in powers of $x$ and $y$ for a positive integer $n$, where $x$ and $y$ are any numbers, with coefficients determined for example by Pascal’s Triangle. The Binomial Theorem can be proven by mathematical induction or by a combinatorial argument. (A.APR.5)

Rewrite rational expressions.

A.APR.6.  (+) Rewrite simple rational expressions in different forms; write $\frac{a(x)}{b(x)}$ in the form $q(x) + \frac{r(x)}{b(x)}$, where $a(x)$, $b(x)$, $q(x)$, and $r(x)$ are polynomials with the degree of $r(x)$ less than the degree of $b(x)$, using inspection, long division, or, for the more complicated examples, a computer algebra system. (A.APR.6)
A.APR.7.  (+) Add, subtract, multiply, and divide rational expressions. (2017)

**Creating Equations** A.CED

(High School Algebra Progression Pg. 10)

Create equations that describe numbers or relationships.

A.CED.1.  (all) Apply and extend previous understanding to create equations and inequalities in one variable and use them to solve problems. (A.CED.1)
A.CED.2.  (all) Apply and extend previous understanding to create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. (A.CED.2)
A.CED.3.  (all) Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods. (A.CED.3)
A.CED.4.  (all) Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm’s law $V = IR$ to highlight resistance $R$. (A.CED.4)
**Reasoning with Equations and Inequalities A.REI**

*(High School Algebra Progression Pg. 13)*

Understand solving equations as a process of reasoning and explain the reasoning.

A.REI.1. **(all)** Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. *(A.REI.1)*

Solve equations and inequalities in one variable.

A.REI.2. **(all)** Apply and extend previous understanding to solve compound inequalities in one variable, including literal equations and inequalities. *(A.REI.3)*

A.REI.3. Solve equations in one variable and give examples showing how extraneous solutions may arise.

A.REI.3a. **(9/10/11)** Solve rational, absolute value and square root equations. *(A.REI.2)*

**(9/10)** Limited to simple equations such as, $2\sqrt{x - 3} + 8 = 16$, $\frac{x + 3}{2x - 1} = 5$, $x \neq \frac{1}{2}$.

A.REI.3b. **(+)** Solve exponential and logarithmic equations. *(2017)*

A.REI.4. **(11)** Solve radical and rational exponent equations and inequalities in one variable, and give examples showing how extraneous solutions may arise. *(A.REI.2)*

A.REI.5. Solve quadratic equations and inequalities

A.REI.5a. **(9/10)** Solve quadratic equations by inspection *(e.g. for $x^2 = 49$)*, taking square roots, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives no real solutions. *(A.REI.4b)*

A.REI.5b. **(11)** Solve quadratic equations with complex solutions written in the form $a + bi$ for real numbers $a$ and $b$. *(A.REI.4b)*

A.REI.5c. **(11)** Use the method of completing the square to transform and solve any quadratic equation in $x$ into an equation of the form $(x - p)^2 = q$ that has the same solutions. *(A.REI.4a)*

A.REI.5d. **(+)** Solve quadratic inequalities and identify the domain. *(2017)*

Solve systems of equations.


A.REI.6a. **(9/10)** Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. *(8.EE.8a)*

A.REI.6b. **(9/10)** Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6. *(8.EE.8b)*

A.REI.6c. **(9/10)** Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair. *(8.EE.8c)*
A.REI.7. (+) Represent a system of linear equations as a single matrix equation and solve (incorporating technology) for matrices of dimension $3 \times 3$ or greater. (A.REI.8) (A.REI.9)

Represent and solve equations and inequalities graphically.

A.REI.8. (all) Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). (A.REI.10)

A.REI.9. (9/10/11) Solve an equation $f(x) = g(x)$ by graphing $y = f(x)$ and $y = g(x)$ and finding the $x$-value of the intersection point. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.* For (9/10) focus on linear, quadratic, and absolute value. (A.REI.11)

A.REI.10. (9/10) Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. (A.REI.12)
Interpreting Functions (H.F.IF)

- Understand the concept of a function and use function notation.
  F.IF.1 F.IF.2 F.IF.3
- Interpret functions that arise in applications in terms of the context. (★)
  F.IF.4 (★) F.IF.5 (★) F.IF.6 (★)
- Analyze functions using different representations.
  F.IF.7 (★) F.IF.8 F.IF.9

Building Functions (H.F.BF)

- Build a function that models a relationship between two quantities.
  F.BF.1 F.BF.2 (★)
- Build new functions from existing functions.
  F.BF.3 F.BF.4 F.BF.5

Linear, Quadratic, and Exponential Models (★) (H.F.LQE)

- Construct and compare linear, quadratic, and exponential models and solve problems.
  F.LQE.1 (★) F.LQE.2 (★)

Trigonometric Functions (H.F.TF)

- Extend the domain of trigonometric functions using the unit circle.
  F.TF.1 (+) F.TF.2 (+) F.TF.3 (+) F.TF.4 (+)
- Model periodic phenomena with trigonometric functions.
  F.TF.5 (+) (★) F.TF.6 (+) F.TF.7 (+) (★)
- Prove and apply trigonometric identities.
  F.TF.8 (+) F.TF.9 (+)

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to High School - Functions!
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<tr>
<td>(+)</td>
<td>These standards should be taught as extensions to grade level standards when possible, or in a 4th year math course. These standards prepare students to take advanced courses such as college algebra, calculus, advanced statistics, or discrete mathematics.</td>
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**Modeling Standards:** Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol. The star symbol sometimes appears on the heading for a group of standards; in that case, it should be understood to apply to all standards in that group.

**Interpreting Functions F.IF**

*(High School Functions Progression Pg. 7)*

**Understand the concept of a function and use function notation.**

**F.IF.1.** *(all)* Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If \(f\) is a function and \(x\) is an element of its domain, then \(f(x)\) denotes the output of \(f\) corresponding to the input \(x\). The graph of \(f\) is the graph of the equation \(y = f(x)\). *(F.IF.1)*

**F.IF.2.** *(all)* Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. *(F.IF.2)*

**F.IF.3.** *(9/10/11)* Recognize patterns in order to write functions whose domain is a subset of the integers. *(9/10)* Limited to linear and quadratic. For example, find the function given \([(-1,4), (0,7), (1,10), (2,13)]\). *(F.IF.3)*
Interpret functions that arise in applications in terms of the context.

F.IF.4. (all) For a function that models a relationship between two quantities, interpret key features of expressions, graphs and tables in terms of the quantities, and sketch graphs showing key features given a description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. *(F.IF.4)*

F.IF.5. (all) Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function. *(F.IF.5)*

F.IF.6. (9/10/11) Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. (9/10) limited to linear functions. *(F.IF.6)*

Analyze functions using different representations.

F.IF.7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. *

F.IF.7a. (9/10) Graph linear, quadratic and absolute value functions and show intercepts, maxima, minima and end behavior. *(F.IF.7a)*

F.IF.7b. (11) Graph square root, cube root, and exponential functions. *(F.IF.7b)*

F.IF.7c. (11) Graph logarithmic functions, emphasizing the inverse relationship with exponentials and showing intercepts and end behavior. *(F.IF.7e)*

F.IF.7d. (+) Graph piecewise-defined functions, including step functions. *(F.IF.7b)*

F.IF.7e. (11) Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. *(F.IF.7c)*

F.IF.7f. (+) Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior. *(F.IF.7d)*

F.IF.7g. (+) Graph trigonometric functions, showing period, midline, and amplitude. *(F.IF.7e)*

F.IF.8. Write a function in different but equivalent forms to reveal and explain different properties of the function.

F.IF.8a. (9/10) Use different forms of linear functions, such as slope-intercept, standard, and point-slope form to show rate of change and intercepts. *(2017)*

F.IF.8b. (11) Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. *(F.IF.8a)*

F.IF.8c. (11) Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as
y = (1.02)^t, y = (0.97)^t, y = (1.01)^{12t}, y = (1.2)^{\frac{t}{10}}, and classify them as representing exponential growth or decay. *(F.IF.8b)*

F.IF.9. (all) Compare properties of two functions using a variety of representations (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, a quantity increasing exponentially eventually exceeds a quantity increasing linearly. *(F.IF.9)*
Building Functions F.BF

Build a function that models a relationship between two quantities.

F.BF.1. Use functions to model real-world relationships.
   F.BF.1a. (9/10) Combine multiple functions to model complex relationships. For example, \( p(x) = r(x) - c(x); \) (profit = revenue - cost). (2017)
   F.BF.1b. (11) Determine an explicit expression, a recursive function, or steps for calculation from a context. (F.BF.1a)
   F.BF.1c. (11) Compose functions. For example, if \( T(y) \) is the temperature in the atmosphere as a function of height, and \( h(t) \) is the height of a weather balloon as a function of time, then \( T(h(t)) \) is the temperature at the location of the weather balloon as a function of time. (F.BF.1c)

F.BF.2. (+) Write arithmetic and geometric sequences and series both recursively and with an explicit formula, use them to model situations, and translate between the two forms. *(F.BF.2)

Build new functions from existing functions.

F.BF.3. (9/10/11) Transform parent functions \((f(x))\) by replacing \( f(x) \) with \( f(x) + k, kf(x), f(kx), \) and \( f(x + k) \) for specific values of \( k \) (both positive and negative); find the value of \( k \) given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. For (9/10) focus on linear, quadratic, and absolute value functions. (F.BF.3)

F.BF.4. Find inverse functions.
   F.BF.4a. (11) Write an expression for the inverse of a function. (F.BF.4a)
   F.BF.4b. (11) Read values of an inverse function from a graph or a table, given that the function has an inverse. (F.BF.4c)
   F.BF.4c. (+) Verify by composition that one function is the inverse of another. (F.BF.4b)
   F.BF.4d. (+) Produce an invertible function from a non-invertible function by restricting the domain. (F.BF.4d)

F.BF.5. (11) Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents. (F.BF.5)

Linear, Quadratic, and Exponential Models* F.LQE

Construct and compare linear, quadratic, and exponential models and solve problems.

F.LQE.1. Distinguish between situations that can be modeled with linear functions and with exponential functions.
   F.LQE.1a. (11) Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. (F.LQE.1a)
   F.LQE.1b. (11) Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. (F.LQE.1b)
F.LQE.1c.  (11) Recognize situations in which a quantity grows or decays by a constant
percent rate per unit interval relative to another. (F.LQE.1c)
F.LQE.2.  (11) Construct exponential functions, given a graph, a description of a relationship, or
two input-output pairs (include reading these from a table). (F.LQE.2)

Trigonometric Functions F-TF
(High School Functions Progression Pg. 18)

Extend the domain of trigonometric functions using the unit circle.
F.TF.1.  (+) Understand radian measure of an angle as the length of the arc on the unit circle
subtended by the angle. (F.TF.1)
F.TF.2.  (+) Explain how the unit circle in the coordinate plane enables the extension of
trigonometric functions to all real numbers, interpreted as radian measures of angles
traversed counterclockwise around the unit circle. (F.TF.2)
F.TF.3.  (+) Use special triangles to determine geometrically the values of sine, cosine, tangent
for \(\frac{\pi}{3}, \frac{\pi}{4}, \text{and } \frac{\pi}{6}\), and use the unit circle to express the values of sine, cosine, and tangent
for \(\pi - x, \pi + x, \text{and } 2\pi - x\) in terms of their values for \(x\), where \(x\) is any real number.
(F.TF.3)
F.TF.4.  (+) Use the unit circle to explain symmetry (odd and even) and periodicity of
trigonometric functions. (F.TF.4)

Model periodic phenomena with trigonometric functions.
F.TF.5.  (+) Choose trigonometric functions to model periodic phenomena with specified
amplitude, frequency, and midline. * (F.TF.5)
F.TF.6.  (+) Understand that restricting a trigonometric function to a domain on which it is
always increasing or always decreasing allows its inverse to be constructed. (F.TF.6)
F.TF.7.  (+) Use inverse functions to solve trigonometric equations that arise in modeling
contexts; evaluate the solutions using technology, and interpret them in terms of the
context. * (F.TF.7)

Prove and apply trigonometric identities.
F.TF.8.  (+) Prove the Pythagorean identity \(\sin^2(\theta) + \cos^2(\theta) = 1\) and use it to find
\(\sin(\theta), \cos(\theta), \text{or } \tan(\theta)\) given \(\sin(\theta), \cos(\theta), \text{or } \tan(\theta)\) and the quadrant. (F.TF.8)
F.TF.9.  (+) Prove the addition and subtraction formulas for sine, cosine, and tangent and use
them to solve problems. (F.TF.9)
High School – Geometry Content Standards Overview

Congruence (H.G.CO)
- Experiment with transformations in the plane.
  - G.CO.1
  - G.CO.2
- Understand congruence in terms of rigid motions.
  - G.CO.3
  - G.CO.4
  - G.CO.5 (+)
  - G.CO.6 (+)
- Construct arguments about geometric theorems using rigid transformations and/or logic.
  - G.CO.8
  - G.CO.9
  - G.CO.10
  - G.CO.11 (+)
- Make geometric constructions.
  - G.CO.12

Similarity, Right Triangles, and Trigonometry (H.G.SRT)
- Understand similarity in terms of similarity transformations.
  - G.SRT.1
  - G.SRT.2
  - G.SRT.3
- Construct arguments about theorems involving similarity.
  - G.SRT.4
  - G.SRT.5
- Define trigonometric ratios and solve problems involving right triangles.
  - G.SRT.6
  - G.SRT.7
  - G.SRT.8 (★)
- Apply trigonometry to general triangles.
  - G.SRT.9 (+)
  - G.SRT.10 (+)
  - G.SRT.11 (+)

Circles (H.G.C)
- Understand and apply theorems about circles.
  - G.C.1
  - G.C.2
  - G.C.3
  - G.C.4
  - G.C.5
- Find arc lengths and areas of sectors of circles.
  - G.C.6 (+)

Expressing Geometric Properties with Equations (H.G.GPE)
- Translate between the geometric description and the equation for a conic section.
  - G.GPE.1
  - G.GPE.2 (+)
  - G.GPE.3 (+)
  - G.GPE.4 (+)
  - G.GPE.5 (+)
- Use coordinates to prove simple geometric theorems algebraically.
  - G.GPE.6
  - G.GPE.7
  - G.GPE.8 (★)

Geometric Measurement and Dimensions (H.G.GMD)
- Explain volume formulas and use them to solve problems.
  - G.GMD.1 (+)
  - G.GMD.2 (+)

Modeling with Geometry (H.G.MG) (★)
- Apply geometric concepts in modeling situations.
  - G.MG.1 (★)
  - G.MG.2 (★)
  - G.MG.3 (★)

Mathematical Practices
1. Make sense of problems and persevere in solving them.
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**Congruence G.CO**  
*(Geometry High School Progression Pg. 13)*

**Experiment with transformations in the plane.**

G.CO.1. **(9/10)** Verify experimentally (for example, using patty paper or geometry software) the properties of rotations, reflections, and translations:

- G.CO.1a. Lines are taken to lines, and line segments to line segments of the same length. *(8.G.1a)*
- G.CO.1b. Angles are taken to angles of the same measure. *(8.G.1b)*
- G.CO.1c. Parallel lines are taken to parallel lines. *(8.G.1c)*

G.CO.2. **(9/10)** Recognize transformations as functions that take points in the plane as inputs and give other points as outputs and describe the effect of translations, rotations, and reflections on two-dimensional figures. For example, *(x, y)* maps to *(x + 3, y − 5)*; reflecting triangle ABC*(input)* across the line of reflection maps the triangle to exactly one location, A′B′C′*(output)*. *(G.CO.2)*

**Understand congruence in terms of rigid motions.**

G.CO.3. **(9/10)** Given two congruent figures, describe a sequence of rigid motions that exhibits the congruence *(isometry)* between them using coordinates and the non-coordinate plane. *(8.G.3)*
G.CO.4.  (9/10) Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. (G.CO.7)

G.CO.5.  (+) Given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. (G.CO.6)

G.CO.6.  (+) Demonstrate triangle congruence using rigid motion (ASA, SAS, and SSS). (G.CO.8)

Construct arguments about geometric theorems using rigid transformations and/or logic.

G.CO.7.  (9/10) Construct arguments about lines and angles using theorems. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment’s endpoints. (Building upon standard in 8th grade Geometry.) (G.CO.9)

G.CO.8.  (9/10) Construct arguments about the relationships within one triangle using theorems. Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point; angle sum and exterior angle of triangles. (G.CO.10)

G.CO.9.  (9/10) Construct arguments about the relationships between two triangles using theorems. Theorems include: SSS, SAS, ASA, AAS, and HL. (2017)

G.CO.10.  (9/10) Construct arguments about parallelograms using theorems. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals. (Building upon prior knowledge in elementary and middle school.) (G.CO.11)

Make geometric constructions.

G.CO.11.  (9/10) Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line. (G.CO.12)

G.CO.12.  (+) Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle. (G.CO.13)

Similarity, Right Triangles, and Trigonometry G.SRT

Understand similarity in terms of similarity transformations.

G.SRT.1.  (9/10) Use geometric constructions to verify the properties of dilations given by a center and a scale factor:

G.SRT.1a.  A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. (G.SRT.1a)

G.SRT.1b.  The dilation of a line segment is longer or shorter in the ratio given by the scale factor. (G.SRT.1b)
G.SRT.2. (9/10) Recognize transformations as functions that take points in the plane as inputs and give other points as outputs and describe the effect of dilations on two-dimensional figures. (2017)

G.SRT.3. (9/10) Understand the meaning of similarity for two-dimensional figures as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides. (2017)

Construct arguments about theorems involving similarity.

G.SRT.4. (9/10) Construct arguments about triangles using theorems. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity, and AA. (G.SRT.4)

G.SRT.5. (9/10) Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures. (G.SRT.5)

Define trigonometric ratios and solve problems involving right triangles.

G.SRT.6. (9/10) Show that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles. (G.SRT.6)

G.SRT.7. (9/10) Explain and use the relationship between the sine and cosine of complementary angles. (G.SRT.7)

G.SRT.8. (9/10) Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. *(G.SRT.8)

Apply trigonometry to general triangles

G.SRT.9. (+) Derive the formula $A = \frac{1}{2}ab \sin C$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side. (G.SRT.9)

G.SRT.10. (+) Prove the Laws of Sines and Cosines and use them to solve problems. (G.SRT.10)

G.SRT.11. (+) Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g. surveying problems, resultant forces). (G.SRT.11)

Circles G.C

Understand and apply theorems about circles.

G.C.1. (9/10) Construct arguments that all circles are similar. (G.C.1)

G.C.2. (9/10) Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle. (G.C.2)

G.C.3. (9/10) Construct arguments using properties of polygons inscribed and circumscribed about circles. (G.C.3)

G.C.4. (+) Construct inscribed and circumscribed circles for triangles. (G.C.3)

G.C.5. (+) Construct inscribed and circumscribed circles for polygons and tangent lines from a point outside a given circle to the circle. (G.C.4)

Find arc lengths and areas of sectors of circles.

G.C.6. (+) Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector. (G.C.5)
Expressing Geometric Properties with Equations G.GPE

Translate between the geometric description and the equation for a conic section.

G.GPE.1. (9/10) Write the equation of a circle given the center and radius or a graph of the circle; use the center and radius to graph the circle in the coordinate plane. (G.GPE.1)

G.GPE.2. (+) Derive the equation of a circle of given center and radius using the Pythagorean Theorem; graph the circle in the coordinate plane. (G.GPE.1)

G.GPE.3. (+) Complete the square to find the center and radius of a circle given by an equation. (G.GPE.1)

G.GPE.4. (+) Derive the equation of a parabola given a focus and directrix; graph the parabola in the coordinate plane. (G.GPE.2)

G.GPE.5. (+) Derive the equations of ellipses and hyperbolas given the foci, using the fact that the sum or difference of distances from the foci is constant; graph the ellipse or hyperbola in the coordinate plane. (G.GPE.3)

Use coordinates to prove simple geometric theorems algebraically.

G.GPE.6. (9/10) Use coordinates to prove simple geometric theorems algebraically, including the use of slope, distance, and midpoint formulas. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle. (G.GPE.4)

G.GPE.7. (9/10) Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g. find the equation of a line parallel or perpendicular to a given line that passes through a given point). (G.GPE.5)

G.GPE.8. (9/10) Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, including the use of the distance and midpoint formulas. * (G.GPE.7)

Geometric Measurement and Dimension G.GMD

(Geometry High School Progression Pg. 19)

Explain volume formulas and use them to solve problems.

G.GMD.1. (+) Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments and informal limit arguments. (G.GMD.1)

G.GMD.2. (+) Give an informal argument using Cavalieri’s principle for the formulas for the volume of a solid figure. (G.GMD.2)

Modeling with Geometry G-MG

(Geometry High School Progression Pg. 19)

Apply geometric concepts in modeling situations.

G.MG.1. (9/10) Use geometric shapes, their measures, and their properties to describe objects (e.g. modeling a tree trunk or a human torso as a cylinder). * (G.MG.1)

G.MG.2. (9/10) Apply concepts of density and displacement based on area and volume in modeling situations (e.g. persons per square mile, BTUs per cubic foot). * (G.MG.2)

G.MG.3. (9/10) Apply geometric methods to solve design problems (e.g. designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios). * (G.MG.3)
High School – Statistics & Probability* Content Standards Overview

Interpreting Categorical and Quantitative Data (H.S.ID)

- Summarize, represent, and interpret data on a single count or measurement variable.
  - S.ID.1  S.ID.2  S.ID.3 (+)
- Summarize, represent, and interpret data on two categorical and quantitative variables.
  - S.ID.4  S.ID.5
- Interpret linear models.
  - S.ID.6  S.ID.7  S.ID.8

Making Inferences and Justifying Conclusions (+) (H.S.IC)

- Understand and evaluate random processes underlying statistical experiments.
  - S.IC.1 (+)  S.IC.2 (+)
- Make inferences and justify conclusions from sample surveys, experiments, and observational studies.
  - S.IC.3 (+)  S.IC.4 (+)  S.IC.5 (+)  S.IC.6 (+)

Conditional Probability and the Rules of Probability (H.S.CP)

- Understand independence and conditional probability and use them to interpret data.
  - S.CP.1 (+)  S.CP.2 (+)  S.CP.3 (+)  S.CP.4 (+)  S.CP.5 (+)
- Use the rules of probability to compute probabilities of compound events in a uniform probability model.
  - S.CP.6 (+)  S.CP.7 (+)  S.CP.8 (+)  S.CP.9 (+)

Using Probability to Make Decisions (+) (★★) (H.S.MD)

- Calculate expected values and use them to solve problems.
  - S.MD.1 (+)  S.MD.2 (+)  S.MD.3 (+)  S.MD.4 (+)
- Use probability to evaluate outcomes of decisions.
  - S.MD.5 (+)  S.MD.6 (+)  S.MD.7 (+)

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the box to open specific details related to High School – Statistics & Probability!
The grade level classifications for the high school standards are as follows:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(9/10)</td>
<td>These standards are required for all students by the end of their first two years of high school math courses.</td>
</tr>
<tr>
<td>(11)</td>
<td>These standards are required for all students by the end of their third year math course.</td>
</tr>
<tr>
<td>(9/10/11)</td>
<td>These standards are required for all students in their first three years of high school math courses. These standards are often further divided to (9/10) and (11) to identify specific concepts and their appropriate grade level. (9/10) should primarily accomplish the standards described as linear, quadratic and absolute value while (11) should primarily accomplish the standards described as logarithmic, square root, cube root, and exponential.</td>
</tr>
<tr>
<td>(all)</td>
<td>These standards should be taught throughout every high school math course, and often represent over-arching themes or key features of the mathematical concept. These standards should be taught in conjunction with the appropriate grade level standards.</td>
</tr>
<tr>
<td>(+)</td>
<td>These standards should be taught as extensions to grade level standards when possible, or in a 4th year math course. These standards prepare students to take advanced courses such as college algebra, calculus, advanced statistics, or discrete mathematics.</td>
</tr>
</tbody>
</table>

**Modeling Standards**: Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol. The star symbol sometimes appears on the heading for a group of standards; in that case, it should be understood to apply to all standards in that group.

**Interpreting Categorical and Quantitative Data S.ID**

*High School Statistics and Probability Progression Pg. 3*

Summarize, represent, and interpret data on a single count or measurement variable.

S.ID.1. *(9/10)* Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.

S.ID.2. *(9/10)* Interpret differences in shape, center, and spread in the context of the data sets using dot plots, histograms, and box plots, accounting for possible effects of extreme data points (outliers). *(S.ID.2)*

S.ID.3. *(+)* Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve. *(S.ID.3)*

Summarize, represent, and interpret data on two categorical and quantitative variables.

S.ID.4. *(9/10)* Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data. *(S.ID.4)*

S.ID.5. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.
Interpret linear models.

S.ID.6. (9/10) Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. (S.ID.6)

S.ID.7. (11) Compute (using technology) and interpret the correlation coefficient of a linear fit. (S.ID.7)

S.ID.8. (11) Distinguish between correlation and causation. (S.ID.8)

Making Inferences and Justifying Conclusions S.IC

Understand and evaluate random processes underlying statistical experiments.

S.IC.1. (+) Understand statistics as a process for making inferences to be made about population parameters based on a random sample from that population. (S.IC.1)

S.IC.2. (+) Decide if a specified model is consistent with results from a given data-generating process, e.g. using simulation. For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model? (S.IC.2)

Make inferences and justify conclusions from sample surveys, experiments, and observational studies.

S.IC.3. (+) Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each. (S.IC.3)

S.IC.4. (+) Use data from a sample survey to estimate a population mean or proportion; develop a margin of error, e.g. through the use of simulation models for random sampling. (S.IC.4)

S.IC.5. (+) Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. (S.IC.5)

S.IC.6. (+) Evaluate reports based on data. (S.IC.6)

Conditional Probability and the Rules of Probability S.CP

Understand independent and conditional probability and use them to interpret data.

S.CP.1. (+) Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”). (S.CP.1)

S.CP.2. (+) Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. (S.CP.2)
S.CP.3. (+) Understand the conditional probability of $A$ given $B$ as $P(A \text{ and } B)/P(B)$, and interpret independence of $A$ and $B$ as saying that the conditional probability of $A$ given $B$ is the same as the probability of $A$, and the conditional probability of $B$ given $A$ is the same as the probability of $B$. (S.CP.3)

S.CP.4. (+) Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results. (S.CP.4)

S.CP.5. (+) Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer. (S.CP.5)

Use the rules of probability to compute probabilities of compound events in a uniform probability model.

S.CP.6. (+) Find the conditional probability of $A$ given $B$ as the fraction of $B$'s outcomes that also belong to $A$, and interpret the answer in terms of the model. (S.CP.6)

S.CP.7. (+) Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model. (S.CP.7)

S.CP.8. (+) Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B) = P(A)P(B|A) = P(B)P(A|B)$, and interpret the answer in terms of the model. (S.CP.8)

S.CP.9. (+) Use permutations and combinations to compute probabilities of compound events and solve problems. (S.CP.9)

Using Probability to Make Decisions S.MD

(High School Statistics and Probability Progression Pg. 18)

Calculate expected values and use them to solve problems.

S.MD.1. (+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions. (S.MD.1)

S.MD.2. (+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution. (S.MD.2)

S.MD.3. (+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. For example, find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of a multiple-choice test where each question has four choices, and find the expected grade under various grading schemes. (S.MD.3)

S.MD.4. (+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. For example, find a current data distribution on the number of TV sets per household in the United States, and calculate the expected number of sets per household. How many TV sets would you expect to find in 100 randomly selected households? (S.MD.4)
Use probability to evaluate outcomes of decisions.

S.MD.5. (+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.

S.MD.5a. Find the expected payoff for a game of chance. For example, find the expected winnings from a state lottery ticket or a game at a fast-food restaurant. (S.MD.5a)

S.MD.5b. Evaluate and compare strategies on the basis of expected values. For example, compare a high-deductible versus a low-deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident. (S.MD.5b)

S.MD.6. (+) Use probabilities to make fair decisions (e.g. drawing by lots, using a random number generator). (S.MD.6)

S.MD.7. (+) Analyze decisions and strategies using probability concepts (e.g. product testing, medical testing, pulling a hockey goalie at the end of a game). (S.MD.7)
**Teacher Glossary**

**Acute angle.** An angle with a measure less than 90°

**Acute triangle.** A triangle with each of the interior angles measuring less than 90°

**Addition.** An operation that combines two or more numbers or groups of objects (component parts: addend + addend = sum)

**Addition and subtraction within 5, 10, 20, 100, or 1000.** Addition or subtraction of two whole numbers with whole number answers, and with sum or minuend in the range 0-5, 0-10, 0-20, 0-100, or 0-1,000 respectively. For example, 8 + 2 = 10 is an addition within 10, 14 − 5 = 9 is a subtraction within 20, and 55 − 18 = 37 is a subtraction within 100

**Additive identity (property of zero).** Adding 0 to any number with the result of that number

**Additive inverses.** Two numbers whose sum is 0 are additive inverses of one another. Example: \(\frac{3}{4}\) and \(\frac{-3}{4}\) are additive inverses of one another because \(\frac{3}{4} + \frac{-3}{4} = \left(-\frac{3}{4}\right) + \frac{3}{4} = 0\)

**Algorithm.** A step-by-step method for computing or solving a problem

**Angle.** Two rays or line segments that share an endpoint

**Area.** The number of square units needed to cover a given surface

**Array.** A rectangular arrangement of objects with equal amounts in each row

**Associative property.** The associative property states that numbers in an addition expression can be grouped in different ways without changing the sum OR the numbers in a multiplication expression can be grouped in different ways without changing the product. By “grouped” we mean where the parenthesis are placed in the expression

**Associative property of multiplication.** See Table 3

**Attribute.** A defining characteristic of a number, geometric figure, mathematical operation, equation, or inequality

**Auxiliary line.** An auxiliary line (or helping line) is an extra line needed to complete a proof in plane geometry

**Bar graph.** A display that uses horizontal or vertical bars to represent data (categorical data)

**Binomial theorem:** Formula for finding any power of a binomial without multiplying at length. \((a + b)^n = \sum_{k=0}^{n} \binom{n}{k} a^{n-k} b^k\)

**Bivariate data.** Pairs of linked numerical observations. Example: a list of heights and weights for each player on a football team

**Box plot.** A method of visually displaying a distribution of data values by using the median, quartiles, and extremes of the data set

**Cardinality.** Understands last number word said when counting, tells how many

**Cavalieri’s principle.** If two solids have the same height and the same cross-sectional area at every level, then they have the same volume
**Chance processes.** A probability experiment. For example, flipping a coin, drawing a card, tossing a number cube

**Chart (table).** Information organized in columns and rows

**Circle.** A closed curve with all its points the same distance from the center

**Circular arc.** The arc of a circle is a portion of the circumference. It can be measured by its central angle or the length of the arc

**Circumference.** The distance around the outside (perimeter) of a circle

**Cluster.** Numbers which tend to crowd around a particular point in a set of values

**Combinatorial argument.** In mathematics, the term combinatorial proof is often used to mean either of two types of mathematical proof

**Commutative property.** Numbers may be added or multiplied together in any order without changing the answer. See Table 3

**Compensation.** Understanding that decreasing from one part and increasing it to another leaves the quantity unchanged

**Complex fraction.** A fraction $\frac{A}{B}$ where $A$ and/or $B$ are fractions ($B$ cannot equal zero)

**Component-wise vector addition.** The component method of addition can be summarized this way:
- Using trigonometry, find the x-component and the y-component for each vector. Refer to a diagram of each vector to correctly reason the sign, (+ or -), for each component
- Add up both x-components, (one from each vector), to get the x-component of the total
- Add up both y-components, (one from each vector), to get the y-component of the total
- Add the x-component of the total to the y-component of the total, and then use the Pythagorean theorem and trigonometry to get the size and direction of the total

**Composite number.** A number that has more than two factors

**Computation algorithm.** A set of predefined steps applicable to a class of problems that gives the correct result in every case when the steps are carried out correctly. See also: computation strategy

**Computation strategy.** Purposeful manipulations that may be chosen for specific problems, may not have a fixed order, and may be aimed at converting one problem into another. See also: computation algorithm

**Cone.** A 3-dimensional figure with a curved surface, a flat circular base, and a vertex

**Congruent.** Having exactly the same size and shape

**Congruent figures.** Two plane or solid figures are congruent if one can be obtained from the other by rigid motion (a sequence of rotations, reflections, and translations)

**Conservation.** Understands quantity stays the same when physical space is changed

**Constant of proportionality:** A fixed value of the ratio of two proportional quantities

**Coordinate grid/plane.** The plane formed by two perpendicular number lines intersecting at their zero points used for displaying the location of coordinates
**Coordinates.** An ordered pair of numbers that gives the location of a point on a coordinate grid

**Counting on.** A strategy for finding the number of objects in a group without having to count every member of the group. *For example, if a stack of books is known to have 8 books and 3 more books are added to the top, it is not necessary to count the stack all over again; one can find the total by counting on—pointing to the top book and saying “eight,” following this with “nine, ten, eleven. There are eleven books now.”*

**Cube.** A 3-dimensional figure with six congruent square faces

**Cylinder.** A 3-dimensional figure with one curved surface and two parallel, congruent circular bases

**Data.** Information that is collected by counting, measuring, asking questions, or observing that is usually organized for analysis

**Data display.** A way to visually organize data

**Decagon.** A polygon with 10 sides

**Decimal.** A number in a number system based on 10 (also known as base-ten system or Hindu-Arabic system)

**Decimal fraction.** A number written in standard base-10 notation

**Decimal notation.** Representation of a fraction or other real number using the base ten and consisting of any of the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and a decimal point

**Decimal point.** A demarcation between whole numbers and numbers less than one

**Decompose.** The process of separating into smaller parts

**Denominator.** The number of equal parts making up a whole (the bottom number in a fraction)

**Diameter.** A line segment that passes through the center of a circle and has endpoints on the circle

**Difference.** The space between the value of two numbers on a number line (the result of subtracting one number from another)

**Digit.** Any one of the ten symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, 9

**Digital root.** The result of adding digits in a number until only one digit remains

**Dilation.** A transformation that moves each point along the ray through the point emanating from a fixed center, and multiplies distances from the center by a common scale factor

**Directrix.** A fixed line used in the description of a curve or surface

**Distributive property of multiplication.** A property indicating a special way in which multiplication is applied to addition or subtraction of two or more numbers in which each term inside a set of parentheses can be multiplied by a factor outside the parentheses. *For example*,

\[
4(2 + 3) = 4 \cdot 2 + 4 \cdot 3 \quad \quad 5(9 - 3) = 5 \cdot 9 - 5 \cdot 3
\]

**Division.** The operation of making equal groups to find out how many in each group or how many groups (component parts: dividend ÷ divisor = quotient)
**Double number line diagram.** Two number lines with different scales intended to organize and compare values

**Edge.** It is the line segment that joins two vertices where two faces of a solid shape intersect

**Ellipse.** A curved line forming a closed loop, where the sum of the distances from two points (foci) to every point on the line is constant

**End-to-end vector addition.** Added or subtracted graphically by laying them end to end on a set of axes

**Equal.** Having the same value

**Equation.** A mathematical sentence where the left side of the equal sign has the same value as the right side of the equal sign

**Equilateral.** A polygon with all sides congruent

**Equilateral triangle.** A triangle whose sides are all the same length

**Equivalence.** The condition of being equal or equivalent in value, worth, function, etc.

**Equivalent.** Having the same value

**Estimate.** To find a number close to an exact amount

**Even number.** Whole numbers that are divisible by 2; even numbers have 0, 2, 4, 6, or 8 in the ones place

**Expanded form.** A multi-digit number is expressed in expanded form when it is written as a sum of single-digit multiples of powers of ten. *For example, 643 = 600 + 40 + 3.*

**Expected value.** For a random variable, the weighted average of its possible values, with weights given by their respective probabilities

**Experimental probability.** The ratio of the number of times an event occurs to the total number of trials in a chance process

**Explicit function.** A function in which the dependent variable can be written explicitly in terms of the independent variable

**Exponent.** A numeral telling how many times a factor is to be multiplied

**Expression.** A mathematical phrase made up of numbers, variables, operational symbols, and/or parentheses

**Face.** The flat surface of a solid figure

**First quartile.** For a data set with median \( M \), the first (lower) quartile is the median of the data values less than \( M \). *See also: median, third quartile, interquartile range*

**Fluency.** Performing a skill flexibly, accurately, and efficiently

**Focus.** The locus of all points that are equidistant from a given point
**Fraction.** A number expressible in the form \( \frac{a}{b} \) where \( a \) is the number of equal parts being referenced and \( b \) is the number of equal parts in the whole. *Note: There is no need to introduce “proper fractions” and “improper fractions” (i.e. \( \frac{5}{3} \) is the quantity you get by combining 5 parts together when the whole is divided into 3 equal parts) rather student recognize that fractions can be between 0 and 1 or more than 1*

**Frequency table.** A table that shows how often that data point occurred (tally marks are commonly used)

**Fundamental Theorem of Algebra.** The theorem that establishes that, using complex numbers, all polynomials can be factored. A generalization of the theorem asserts that any polynomial of degree \( n \) has exactly \( n \) zeroes, counting multiplicity

**Growth pattern.** A type of pattern made by following a rule using operations

**Height.** The distance from the base to the top of an object or shape

**Heptagon (septagon).** A polygon with 7 sides

**Hexagon.** A polygon with 6 sides

**Hierarchical inclusion.** Numbers build by exactly one each time—smaller numbers are part of bigger numbers *(For example, 3 is “nested” in 4)*

**Identity property of 0.** See Table 3

**Improper fraction.** A fraction with a numerator that is greater than or equal to its denominator

**Incidence relationships in a network.** Shows the relationship between two classes of objects

**Independently combined probability models.** Two probability models are said to be combined independently if the probability of each ordered pair in the combined model equals the product of the original probabilities of the two individual outcomes in the ordered pair

**Induction.** A means of proving a theorem by showing that if it is true of any particular case, it is true of the next case in a series, and then showing that it is indeed true in one particular case

**Inequality.** A number sentence comparing the size, amount, or value using one of the following symbols: \(<, >, \leq, \geq, \neq\). Also used to define sets of numbers

**Informal derivation:** An informal development of a theorem

**Inscribe.** Draw (a figure) within another so that their boundaries touch but do not intersect

**Integers.** The set of whole numbers and their opposites: \( \ldots, -2, -1, 0, 1, 2, \ldots \)

**Interquartile Range.** A measure of variation in a set of numerical data, the interquartile range is the distance between the upper (third) quartile and the lower (first) quartile of the data set. Example: For the data set \( \{1, 3, 6, 7, 10, 12, 14, 15, 22, 120\} \), the interquartile range is \( 15 – 6 = 9 \). *See also: first quartile, third quartile*

**Intersecting lines.** Lines that meet or cross

**Interval (linear).** Space between numbers on a number line or the grid lines of a graph
Interval (time). A space of time between events

Inscribed. Draw (a figure) within another so that their boundaries do not intersect

Irrational number. A number that cannot be expressed as a ratio between two integers and is not an imaginary number. If written in decimal notation, an irrational number would have an infinite number of digits to the right of the decimal point, without repetition

Irregular polygon. A polygon whose sides are not all the same length

Isometry. A distance-preserving transformation

Isosceles triangle. A triangle with exactly two sides of equal length (exclusive); a triangle with at least two sides of equal length (inclusive)

Iteration. Repeating the same unit

Kite. A quadrilateral with two distinct pairs of equal adjacent sides (exclusive); a quadrilateral with two pairs of equal adjacent sides (inclusive)

Law of cosines. The law of cosines (also referred to as cosine law, cosine formula, cosine rule) is used to calculate one side of a triangle when the angle opposite and the other two sides are known $c^2 = a^2 + b^2 - 2ab \cos C$

Law of sines. The law of sines (also referred to as sine law, sine formula, sine rule) states that the ratio of the length of a side of a triangle to the sine of the angle opposite that side is the same for all sides and angles in a given triangle. $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

Length. The distance from one end of something to the other end

Line. An infinite set of points forming a straight path extending in opposite directions (Although mathematically undefined, we will use this description for line)

Line plot. A method of visually displaying a frequency of data values where each data value is shown as a dot or mark above a number line. Also known as a dot plot

Line segment. A part of a line defined by two endpoints

Line symmetry. See symmetry

Linear measure. A measure of a distance or length that is one-dimensional

Liquid volume (capacity). The amount that a container can hold (common units of measure: cup, pint, gallon, liter, etc.)

Literal equations. Equations with several variables often solved in terms of a single variable

Magnitude. Distance of a number from zero

Magnitude of a vector. Size of a mathematical object, a property by which the object can be compared as larger or smaller than other objects of the same kind

Mass. The amount of matter

Mean. A measure of center in a set of numerical data, computed by adding the values in a list and then dividing by the number of values in the list
Mean absolute deviation. A measure of variation in a set of numerical data, computed by adding the distances between each data value and the mean, then dividing by the number of data values. Also known as MAD. For example: For the data set \{2, 3, 6, 7, 10, 12, 14, 15, 22, 120\}, the mean absolute deviation is 19.96

Median. A measure of center in a set of numerical data. The median of a list of values is the value appearing at the center of a sorted version of the list—or the mean of the two central values, if the list contains an even number of values

Midline. In the graph of a trigonometric function, the horizontal line half-way between its maximum and minimum values

Mixed number. A quantity written with an integer and a fraction \(\frac{3}{2}\)

Moduli/modulus. The modulus of a complex number is the square root of the product of a complex number and its conjugate

Multiple. The product of any number and a counting number

Multiplication. The operation of repeated addition (component parts: factor x factor = product)

Multiplication and division within 100. Multiplication or division of two whole numbers with whole number answers, and with product or dividend in the range 0-100. For example, \((72|8) = 9\)

Multiplicative comparison. Comparing the difference between values using multiplication

Multiplicative identity property of one. When a number is multiplied by 1, the product is that number

Multiplicative inverses. Two numbers whose product is 1 are multiplicative inverses of one another. For example, \(\frac{3}{4}\) and \(\frac{4}{3}\) are multiplicative inverses of one another because \(\frac{3}{4} \cdot \frac{4}{3} = \frac{4}{3} \cdot \frac{3}{4} = 1\)

Negative numbers. Numbers less than zero

Nonagon. A polygon with 9 sides

Number line diagram. A diagram of the number line used to represent numbers and support reasoning about them. In a number line diagram for measurement quantities, the interval from 0 to 1 on the diagram represents the unit of measure for the quantity

Number model. A mathematical representation of a situation

Number sentence. An equation and/or algebraic expressions (=) or inequality (<, >, ...) with numbers

Number systems. The different subgroups of numbers For example, natural numbers, whole numbers, integers, rational numbers, etc.

Numeral. A symbol or group of symbols that stand for a number. For example, the numeral symbol for twenty-four is 24

Numerator. Tells how many equal parts of a whole are being described (the top number of a fraction)

Obtuse angle. An angle with a measure greater than 90° and less than 180°

Obtuse triangle. A triangle with a single angle measuring more than 90°
**Octagon.** A polygon with 8 sides

**Odd number.** Whole numbers that cannot be divided into 2 equal groups of whole numbers; odd numbers have 1, 3, 5, 7, or 9 in the ones place

**One-to-one correspondence.** Counting objects by saying one number for each object, when counting in sequential order

**Operational symbols.** Symbols used to indicate computation (+, -, x, , ÷, etc.)

**Ordered pair.** A pair of numbers that gives the coordinates of a point on a grid in this order: (horizontal coordinate, vertical coordinate)

**Ordinality.** A number indicating a series or specific order (1st, 2nd, etc.)

**Orientation.** Position and direction in space (usually around a fixed point)

**Outcome.** A possible result of a chance process

**Outlier.** A value in a data set that lies outside the overall pattern of a distribution or relationship

**Parallel lines.** Lines that are always the same distance apart

**Parallelogram.** A quadrilateral with two pairs of parallel sides

**Parallelogram rule vector addition.** When two vectors are represented by two adjacent sides of a parallelogram by direction and magnitude then the resultant of these vectors is represented in magnitude and direction by the diagonal of the parallelogram starting from the same point

**Pattern.** A logical sequence of numbers, pictures, shapes, or symbols

**Peak.** A data value that is greater than its neighboring values

**Pentagon.** A polygon with 5 sides

**Percent rate of change.** A rate of change expressed as a percent. *For example: if a population grows from 50 to 55 in a year, it grows by \( \frac{5}{50} = 10\% \) per year

**Perimeter.** The distance around a figure

**Perpendicular lines.** Two lines that form a right angle where they intersect

**Pictograph.** A display that uses pictures or symbols to represent data

**Place value.** The value of a digit depending on its place in a number

**Plane figures (2-D).** Any 2-dimensional shape that lays in a single plane

**Plot.** To place (points or other figures) on a graph by means of coordinates

**Point.** An exact location in space

**Polar form.** \( z = r(\cos \theta + i \sin \theta) \)

**Polygon.** A closed plane figure made from line segments that meet at endpoints and do not cross

**Positive numbers.** Numbers that are greater than zero
Prime number. A counting number greater than 1 that has exactly two factors, itself and 1

Prism. A 3-dimensional figure with two identical, parallel faces (bases) that are polygons; the remaining faces are parallelograms **A prism is named by its base

Probability. A number between 0 and 1 used to quantify likelihood for processes that have uncertain outcomes (such as tossing a coin, selecting a person at random from a group of people, tossing a ball at a target, testing for a medical condition)

Probability distribution. The set of possible values of a random variable with a probability assigned to each

Probability model. A mathematical representation (such as tree diagram or table) used to assign probabilities to all outcomes in the sample space in which the probabilities sum to 1. See also: uniform probability model

Properties of equality. See Table 4
Properties of inequality. See Table 5
Properties of operations. See Table 3

Pyramid. A 3-dimensional figure whose base is a polygon and whose other faces are triangles that share a common vertex (A pyramid is named by its base)

Quadrilateral. A polygon with four sides

Radius. The distance from the center of a circle to any point on a circle

Random variable. An assignment of a numerical value to each outcome in a sample space

Ratio. The quantitative relation between two amounts

Rational expression. A quotient of two polynomials with a non-zero denominator

Rational number. A number expressible in the form \( \frac{a}{b} \), where \( a \) and \( b \) are both integers and \( b \) cannot equal zero

Ray. A part of a line that has one endpoint and extends forever in one direction

Rectangle. A parallelogram with four right angles

Rectilinear figure. A polygon where all angles are right angles

Recursive function. Relating to or involving the repeated application of a rule, definition, or procedure to create successive results

Reflex angle. An angle that measures greater than 180°

Regular polygon. A polygon with all sides the same length and all angles the same measure

Related equations (used to be known as fact families). A set of equations that all communicate the same relationship between three values, but in different ways (there are eight ways to show a relationship between addition/subtraction and multiplication/division)
Relational symbols. Symbols used to show relationships between quantities, values, and figures (\(=, \neq, <, >, \leq, \geq, \sim, \approx, \cong\))

**Remainder.** When dividing, the part of a number or quantity that is left over

**Remainder Theorem.** The assertion that \(P(c)\) is the remainder when polynomial \(P(x)\) is divided by \((x - c)\)

**Repeating decimal.** The decimal form of a rational number. *See also: terminating decimal*

**Residuals.** Difference between the observed y-value (from scatter plot) and the predicted y-value (from regression equation line). It is the vertical distance from the actual plotted point to the point on the regression line

**Rhombus.** A parallelogram with equal sides and opposite angles equal

**Right angle.** An angle that measures 90°

**Right triangle.** A triangle that has one 90° angle

**Rigid motion.** A transformation of points in space consisting of a sequence of one or more translations, reflections, and/or rotations. Rigid motions are here assumed to preserve distances and angle measures

**Rounding.** Replacing a numerical value by another value that is approximately equal but has a shorter, simpler, or more explicit representation

**Sample space.** The set of all possible outcomes in the context of probability

**Scalar.** (of a quantity) having only magnitude, not direction

**Scale.** Ordered marks at fixed intervals (graphing or measurement)

**Scalene triangle.** A triangle having no equal sides

**Scaling (resizing).** Expressing the amount of the enlargement or reduction to the original

**Scatter plot.** A graph in the coordinate plane representing a set of bivariate data

**Septagon.** See heptagon

**Sequence.** A particular order in which relative events, movements, or things follow each other

**Similarity transformation.** A rigid transformation (reflection, rotation, translation) followed by a dilation

**Situation equation.** An equation that models the situation in a real-life and/or word problem (For example: A boy had some balloons and his dad gave him 2 more so he has 8. How many balloons did he start with? Situation equation \(-? + 2 = 8\). Solution equation \(-8 - 2 = ?\))

**Skew (data).** The asymmetry from the mean of a data distribution. A distribution is skewed if one tail is longer than another. When data has a long tail on the left side of the peak (in the negative direction on the number line), it is left-skewed. If it has a long tail on the right side of the peak (in the positive direction on the number line), it is right-skewed

**Solid figures (3-D).** A geometric figure with three dimensions (length, width, and height)
**Solution equation.** An equation that models how the situation in a real-life and/or word problem can be solved (the situation equation does not always allow for an easy solution path) [For example: A boy had some balloons and his dad gave him 2 more so he has 8. How many balloons did he start with? Situation equation \(-? +2 = 8\). Solution equation \(-8 - 2 = ?\)]

**Sphere.** A closed three-dimensional figure that is perfectly round with every point of its surface the same distance from the center

**Square.** A parallelogram with equal sides and four right angles

**Standard form.** A number written with one digit for each place value in a base ten numeric system

**Statistical question.** A question that can be answered by collecting data where there will be variability in the data

**Straight angle.** An angle with a measure of 180°

**Strategies.** System of finding and developing solutions when followed consistently

**Subitizing.** Instantly seeing how many

**Subset.** A set within a larger set. One unique subset of the whole set is the whole set itself

**Subtraction.** An operation that gives the difference or comparison between two numbers (component parts: minuend - subtrahend = difference)

**Symmetric property of equality.** The answer to an equation can be on either side of the equal sign

**Symmetry (line symmetry).** A line that divides a figure into two congruent halves that are mirror images of each other

**Table.** See chart

**Tape diagram.** A visual model using rectangles that looks like a segment of tape, used to illustrate number relationships. Also known as a strip diagram, bar model, fraction strip, or length model

**Terminating decimal.** A decimal is called terminating if its repeating digit is 0

**Theoretical probability.** The ratio of the number of ways the event can occur to the total number of possible outcomes based on a probability model

**Third quartile.** For a data set with median $M$, the third (upper) quartile is the median of the data values greater than $M$. See also: median, first quartile, interquartile range

**Time.** The way we measure years, days, minutes, etc.

**Transitivity principle.** Indirect comparison of two objects by the use of a third object

**Transitivity principle for indirect measurement.** If the length of object A is greater than the length of object B, and the length of object B is greater than the length of object C, then the length of object A is greater than the length of object C. This principle applies to measurement of other quantities as well

**Trapezoid.** A quadrilateral with exactly one pair of parallel sides (exclusive); a quadrilateral with at least one pair of parallel sides (inclusive)

**Triangle.** A polygon with three sides
Uniform probability model. A probability model which assigns equal probability to all outcomes. See also: probability model

Unit (unit size). A single object or any group of things or persons regarded as an entity that can be iterated

Unit form. A way to write numbers showing the place value of each digit by using the name of the place (Ex: 3045 = 3 thousands + 4 tens + 5 ones)

Unit fraction. When a whole is divided into equal parts, a unit fraction is one of those parts (a unit fraction has a numerator of one)

Variable. A letter or symbol that represents a number

Vector. A quantity with magnitude and direction in the plane or in space, defined by an ordered pair or triple of real numbers.

Vertex. The point at which two line segments, lines, or rays meet to form an angle

Visual fraction model. A tape diagram, number line diagram, or area model.

Volume. The number of cubic units it takes to fill a three-dimensional figure

Weight. The measure of how heavy something is; the force of gravity on an object

Whole numbers. The numbers 0, 1, 2, 3, ....

Width. The measure of one side of an object

Word form. Numbers written with only words (Ex: 3045 = three thousand forty-five)

Zero property (multiplication property of zero). When a number is multiplied by 0, the product is always 0

Student Glossary
**TABLE 1: Common Addition and Subtraction Situations**  
Shading taken from OA progression

<table>
<thead>
<tr>
<th>Add to</th>
<th>Change Unknown</th>
<th>Start Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two bunnies sat on the grass. Three more bunnies hopped there. How many bunnies are on the grass now?</td>
<td>Two bunnies were sitting on the grass. Some more bunnies hopped there. Then there were five bunnies. How many bunnies hopped over to the first two?</td>
<td>Some bunnies were sitting on the grass. Three more bunnies hopped there. Then there were five bunnies. How many bunnies were on the grass before?</td>
</tr>
<tr>
<td>2 + 3 = ?</td>
<td>2 + ? = 5</td>
<td>? + 3 = 5</td>
</tr>
<tr>
<td>Five apples were on the table. I ate two apples. How many apples are on the table now?</td>
<td>Five apples were on the table. I ate some apples. Then there were three apples. How many apples did I eat?</td>
<td>Some apples were on the table. I ate two apples. Then there were three apples. How many apples were on the table before?</td>
</tr>
<tr>
<td>5 − 2 = ?</td>
<td>5 − ? = 3</td>
<td>? − 2 = 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Put Together/Take Apart²</th>
<th>Total Unknown</th>
<th>Addend Unknown</th>
<th>Both Addends Unknown¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three red apples and two green apples are on the table. How many apples are on the table?</td>
<td>Five apples are on the table. Three are red and the rest are green. How many apples are green?</td>
<td>Grandma has five flowers. How many can she put in her red vase and how many in her blue vase?</td>
<td></td>
</tr>
<tr>
<td>3 + 2 = ?</td>
<td>3 + ? = 5, 5 − 3 = ?</td>
<td>5 = 0 + 5, 5 = 5 + 0, 5 = 1 + 4, 5 = 4 + 1, 5 = 2 + 3, 5 = 3 + 2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compare³</th>
<th>Difference Unknown</th>
<th>Bigger Unknown</th>
<th>Smaller Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>(&quot;How many more?&quot; version): Lucy has two apples. Julie has five apples. How many more apples does Julie have than Lucy?</td>
<td>(Version with &quot;more&quot;): Julie has three more apples than Lucy. Lucy has two apples. How many apples does Julie have?</td>
<td>(Version with &quot;more&quot;): Julie has three more apples than Lucy. Julie has five apples. How many apples does Lucy have?</td>
<td></td>
</tr>
<tr>
<td>(&quot;How many fewer?&quot; version): Lucy has two apples. Julie has five apples. How many fewer apples does Lucy have than Julie?</td>
<td>(Version with &quot;fewer&quot;): Lucy has 3 fewer apples than Julie. Lucy has two apples. How many apples does Julie have?</td>
<td>(Version with &quot;fewer&quot;): Lucy has 3 fewer apples than Julie. Julie has five apples. How many apples does Lucy have?</td>
<td></td>
</tr>
</tbody>
</table>

Blue shading indicates the four Kindergarten problem subtypes. Students in grades 1 and 2 work with all subtypes and variants (blue and green). Yellow indicates problems that are the difficult four problem subtypes or variants that students in Grade 1 work with but do not need to master until Grade 2.

¹These take apart situations can be used to show all the decompositions of a given number. The associated equations, which have the total on the left of the equal sign, help children understand that the = sign does not always mean makes or results in but always does mean is the same number as.

²Either addend can be unknown, so there are three variations of these problem situations. Both Addends Unknown is a productive extension of this basic situation, especially for small numbers less than or equal to 10.
For the Bigger Unknown or Smaller Unknown situations, one version directs the correct operation (the version using more for the bigger unknown and using less for the smaller unknown). The other versions are more difficult.
**TABLE 2: Common Multiplication and Division Situations**

Grade level identification of introduction of problems taken from OA progression

<table>
<thead>
<tr>
<th>Unknown Product</th>
<th>Group Size Unknown (&quot;How many in each group?&quot; Division)</th>
<th>Number of Groups Unknown (&quot;How many groups?&quot; Division)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3 \times 6 = ?$</td>
<td>$3 \times ? = 18$, $18 \div 3 = ?$</td>
<td>$? \times 6 = 18$, $18 \div 6 = ?$</td>
</tr>
</tbody>
</table>

**Equal Groups**

- **There are 3 bags with 6 plums in each bag. How many plums are there in all?**
  
  *Measurement example.* You need 3 lengths of string, each 6 inches long. How much string will you need altogether?

- **If 18 plums are shared equally into 3 bags, then how many plums will be in each bag?**

  *Measurement example.* You have 18 inches of string, which you will cut into 3 equal pieces. How long will each piece of string be?

- **If 18 plums are to be packed 6 to a bag, then how many bags are needed?**

  *Measurement example.* You have 18 inches of string, which you will cut into pieces that are 6 inches long. How many pieces of string will you have?

**Arrays\(^4\), Area\(^5\)**

- **There are 3 rows of apples with 6 apples in each row. How many apples are there?**

  *Area example.* What is the area of a 3 cm by 6 cm rectangle?

- **If 18 apples are arranged into 3 equal rows, how many apples will be in each row?**

  *Area example.* A rectangle has area 18 square centimeters. If one side is 3 cm long, how long is a side next to it?

- **If 18 apples are arranged into equal rows of 6 apples, how many rows will there be?**

  *Area example.* A rectangle has area 18 square centimeters. If one side is 6 cm long, how long is a side next to it?

**Compare**

- **A blue hat costs $6. A red hat costs 3 times as much as the blue hat. How much does the red hat cost?**

  *Measurement example.* A rubber band is 6 cm long. How long will the rubber band be when it is stretched to be 3 times as long?

- **A red hat costs $18 and that is 3 times as much as a blue hat costs. How much does a blue hat cost?**

  *Measurement example.* A rubber band is stretched to be 18 cm long and that is 3 times as long as it was at first. How long was the rubber band at first?

- **A red hat costs $18 and a blue hat costs $6. How many times as much does the red hat cost as the blue hat?**

  *Measurement example.* A rubber band was 6 cm long at first. Now it is stretched to be 18 cm long. How many times as long is the rubber band now as it was at first?

**General**

- $a \times b = ?$

- $a \times ? = p$ and $p \div a = ?$

- $? \times b = p$ and $p \div b = ?$

Multiplicative compare problems appear first in Grade 4 (green), with whole number values and with the “times as much” language from the table. In Grade 5, unit fractions language such as “one third as much” may be used. Multiplying and unit language change the subject of the comparing sentence (“A red hat costs n times as much as the blue hat” results in the same comparison as “A blue hat is $\frac{1}{n}$ times as much as the red hat” but has a different subject.)
TABLE 3: Fundamental Properties of Number and Operations

<table>
<thead>
<tr>
<th>Name of Property</th>
<th>Representation of Property</th>
<th>Example of Property, Using Real Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Properties of Addition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associative</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
\[(a + b) + c = a + (b + c)\] | \[(78 + 25) + 75 = 78 + (25 + 75)\] |
| Commutative               | \[a + b = b + a\]            | \[2 + 98 = 98 + 2\]                     |
| Additive Identity         | \[a + 0 = a \text{ and } 0 + a = a\] | \[9875 + 0 = 9875\]                     |
| Additive Inverse          | For every real number \(a\), there is a real number \(-a\) such that \[a + (-a) = -a + a = 0\] | \[-47 + 47 = 0\]                        |
| **Properties of Multiplication** |                             |                                         |
| Associative               | \[(a \times b) \times c = a \times (b \times c)\] | \[(32 \times 5) \times 2 = 32 \times (5 \times 2)\] |
| Commutative               | \[a \times b = b \times a\]  | \[10 \times 38 = 38 \times 10\]         |
| Multiplicative Identity   | \[a \times 1 = a \text{ and } 1 \times a = a\] | \[387 \times 1 = 387\]                   |
| Multiplicative Inverse    | For every real number \(a\), \(a \neq 0\), there is a real number \(\frac{1}{a}\) such that \[a \times \frac{1}{a} = \frac{1}{a} \times a = 1\] | \[\frac{8}{3} \times \frac{3}{8} = 1\]   |
| **Distributive Property of Multiplication over Addition** |                             |                                         |
| Distributive              | \[a \times (b + c) = a \times b + a \times c\] | \[7 \times (50 + 2) = 7 \times 50 + 7 \times 2\] |

(Variables \(a\), \(b\), and \(c\) represent real numbers.)

Excerpt from Developing Essential Understanding of Algebraic Thinking, grades 3-5 p. 16-17
### TABLE 4: Properties of Equality

<table>
<thead>
<tr>
<th>Name of Property</th>
<th>Representation of Property</th>
<th>Example of property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflexive Property of Equality</td>
<td>( a = a )</td>
<td>3,245 = 3,245</td>
</tr>
<tr>
<td>Symmetric Property of Equality</td>
<td>( If \ a + b, then \ b = a )</td>
<td>2 + 98 = 90 + 10, ( then ) 90 + 10 = 2 + 98</td>
</tr>
<tr>
<td>Transitive Property of Equality</td>
<td>( If \ a = b ) ( and ) ( b = c ), then ( a = c )</td>
<td>( If 2 + 98 = 90 + 10 ) ( and ) ( 90 + 10 = 52 + 48 ) ( then ) 2 + 98 = 52 + 48</td>
</tr>
<tr>
<td>Addition Property of Equality</td>
<td>( If \ a + b, then \ a + c = b + c )</td>
<td>( If \ \frac{1}{2} = \frac{2}{4}, then \frac{1}{2} + \frac{3}{5} = \frac{2}{4} + \frac{3}{5} )</td>
</tr>
<tr>
<td>Subtraction Property of Equality</td>
<td>( If \ a = b, then \ a - c = b - c )</td>
<td>( If \ \frac{1}{2} = \frac{2}{4}, then \frac{1}{2} - \frac{1}{5} = \frac{2}{4} - \frac{1}{5} )</td>
</tr>
<tr>
<td>Multiplication Property of Equality</td>
<td>( If \ a = b, then \ a \times c = b \times c )</td>
<td>( If \ \frac{1}{2} = \frac{2}{4}, then \frac{1}{2} \times \frac{1}{5} = \frac{2}{4} \times \frac{1}{5} )</td>
</tr>
<tr>
<td>Division Property of Equality</td>
<td>( If \ a = b ) ( and ) ( c \neq 0 ), then ( a \div c = b \div c )</td>
<td>( If \ \frac{1}{2} = \frac{2}{4}, then \frac{1}{2} \div \frac{1}{5} = \frac{2}{4} \div \frac{1}{5} )</td>
</tr>
<tr>
<td>Substitution Property of Equality</td>
<td>If ( a = b ), then ( b ) may be substituted for ( a ) in any expression containing ( a ).</td>
<td>( If 20 = 10 + 10 ) ( then ) 90 + 20 = 90 + (10 + 10)</td>
</tr>
</tbody>
</table>

(Variables \( a, b, \) and \( c \) can represent any number in the rational, real, or complex number systems.)

### TABLE 5: Properties of Inequality

Exactly one of the following is true: \( a < b, a = b, a > b \).

- \( If \ a > b \) and \( b > c \) then \( a > c \).  
- \( If \ a > b, \) then \( b < a \).  
- \( If \ a > b, \) then \( -a < -b \).  
- \( If \ a > b, \) then \( a \pm c > b \pm c \).  
- \( If \ a > b \) and \( c > 0, \) then \( a \times c > b \times c \).  
- \( If \ a > b \) and \( c < 0, \) then \( a \times c < b \times c \).  
- \( If \ a > b \) and \( c > 0, \) then \( a \div c > b \div c \).  
- \( If \ a > b \) and \( c < 0, \) then \( a \div c < b \div c \).  

Here \( a, b, \) and \( c \) stand for arbitrary numbers in the rational or real number systems.
To: Commissioner Randy Watson
From: Brad Neuenswander
Subject: Information on vision outcome: postsecondary completion/attendance

Board Goals: Provide a flexible and efficient delivery system to meet our students’ varied and changing needs

Staff will provide an update to the State Board on the postsecondary initiative including data to be reported on school districts.
To: Kansas State Board of Education  
From: Chairman Jim Porter and Vice Chair Kathy Busch  
Subject: Tentative continued work session discussion  

If there is sufficient time before adjournment, Board Chairman Jim Porter and Vice Chair Kathy Busch will lead continued discussions related to work session topics.