

NEW GAMES

For Health Science Education

Fall 2015

A LEARNING GAME IS FUN WITH AN INSTRUCTIONAL PURPOSE

Using Games Effectively

by Kim Smith





Engagement

A *Learning Game* (also called a serious game) has a specific goal that is tied to an instructional objective. *Learning Games* are NOT social games. Yes, *Learning Games* should be fun – but they must also engage students in active learning.

Remember that your ultimate goal is for students to RECALL the content on a test, and APPLY the content in a health care setting.

Games create engagement – the cornerstone of any positive learning experience."

- Karl M. Kapp, The Gamification of Learning and Instruction

Students learn best when they are actively engaged in learning. That doesn't mean you need to spend every minute of every day playing games, but you can use games to:

Refresh

After 10 - 15 minutes of instruction, play a game to repeat the content. Repetition will help move that content from short-term to long-term memory.

Clarify

Playing a game with the content provides an opportunity for feedback. You think they understood your lesson – but are you sure?

An excellent way to clarify learning is to use classroom content in a game format, and provide immediate feedback to confirm or correct.

Apply

"Use it or Lose It." Right? A *Learning Game* is an opportunity to use classroom content in a non-threatening environment and engage students in the learning process.



What's Inside?

This edition of New Games is provided as a service to Health Science Teachers. It includes games that are not currently included in Learning Games: Health Science or Anatomy & Physiology.

New Games

- 1. Back Words
- 2. Label Game
- 3. Relay Race
- 4. Healthcare Communication

This edition of New Games includes special pricing for Health Science bingo games.

Applied Learning

Learning Games give students a chance to APPLY what they have learned in your classroom.

Remember – you aren't teaching just because you want students to have the knowledge in their heads. You teach because you want them to USE what they have learned in their health professions.



You can play Learning Games:

- After 10 15 minutes of instruction.
- At the beginning of the class as a review of the prior day's learning.
- At the end of class to review the day's learning objectives.
- As a test review.

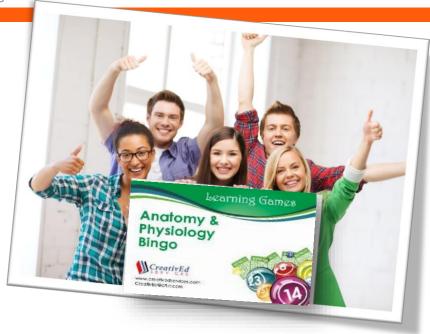
Did you know?

For most students, a game is a safe place because there is joy in winning and the consequences of failure are minimal.

Games have a beginning and an end. Game rules are typically easy to understand.

When presented at the right level of difficulty, students can apply what they have learned, earn immediate feedback on their progress, and know how it feels to successfully overcome a challenge.





Learning Games Bingo

We provide four bingo games for the Health Science classroom. Bingo is a fun way to apply classroom learning! The rules can be adjusted to meet the intended learning outcomes and classroom logistics.

Medical Terminology Bingo Medical Math Bingo Anatomy & Physiology Bingo Advanced Anatomy & Physiology Bingo

- Classroom set of 25 30 unique bingo cards
- 70 74 Clue cards
- 250 markers
- Instructions
- Students must know the answer in order to cover a square on their card.
- Medical Math Bingo is aligned to the HOSA Medical Math conversion chart.
- Students must know the conversion value in order to cover the correct number on their Bingo card
- The Medical Terminology word list is in *Learning Games: Health Science*
- Word lists for Anatomy & Physiology and Advanced Anatomy & Physiology are on amazon.com on each game's information page.

FALL BINGO SPECIAL!!

For all orders placed by December 31, 2015:

Purchase 3 bingo games and get the 4th game FREE!

Purchase online at www.creativedservices.com or www.amazon.com

Or with a purchase order:

Fax – 407 271-4272

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ORDER 3 - WE'LL SEND YOU ALL 4!

For special pricing on large orders of bingo games or books, call Kim at 919 244-5097.

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Short term memory capacity = 10-20 minutes

Students typically forget 90% of what they learn in a class within 30 days.



BACK WORDS

Description

Can be used with any unit of study. It requires analytical thinking and teamwork.

- The following explanation is for the Health Professions content on the next page. The activity can be adapted to any content that can be categorized.
- 2. This example includes a career and three related terms or job responsibilities.
- To make the game even more challenging, create four terms in common and have students figure out the categories (what the items have in common).
- 4. Explain to students:
 - I will be taping a sign on your back.
 - On my signal, you will need to organize yourselves into groups of four.
 - You may not talk, text, use sign language or write. This is a NON-VERBAL challenge.
 - You will sort yourselves into teams based on the similarity of information on the cards taped to your back. There can only be four people per group.
 - Once you are absolutely sure you have all four members of your team, sit in a circle and wait for the other teams to finish.



Materials

- ☐ Index cards with words (or stickers)
- ☐ Tape

Notes

- This activity is challenging and fun. Students must figure out what the words have in common, how to fit them into categories, and how to help each other out in finding their correct group.
- GREAT teambuilding! The teacher should observe student behaviors and make notes for the debrief.
 - Who demonstrated leadership?
 - Was it frustrating not knowing what was written on your back?
 - o How important was trust?
 - Did anyone feel like giving up? Did you? Why or why not?
 - Did you use touch to communicate? Is touch an important communication tool in health care?

Dental Laboratory Technician Crowns	Dentures Orthodontic appliances		
Dental Hygienist	Fluoride application		
Remove stains and deposits	Take radiographs		
EMT-P	ACLS		
Endotracheal intubation	ECG interpretation		
Podiatrist	DPM		
Can diagnose athlete's foot	Plantar faciitis treatment		
Genetic counselor	Advice on inherited conditions		
Prenatal counseling	Screens for genetic defects		
Nurse Midwife	Total care for a normal pregnancy		
CNM	Newborn delivery		
Nurse Assistant	Patient Care Technician		
CNA	Orderly		
Audiologist	Can you hear me?		
Prescribes hearing aids	Develops hearing protection programs		
Medical Laboratory Technologist	Clinical Laboratory Scientist		
Cytotechnologist	Performs complicated chemical and microscopic tests		

Health Information Administrator Stores and obtains information from records	Medical Records Ensures the confidentiality of patient information		
Veterinarian	Small animal care		
DVM	Livestock		
Dietician	Nutritionist		
Plans menus	Special diets		
Pharmacist	Dispenses physician's drug orders		
Ensures prescription compatibility	Recommends nonprescription items to customers		
Physical Therapist	Treatment to improve mobility		
Exercise and massage	Measures the functional ability of patients		
Respiratory Therapist	Administers oxygen		
Breathing exercises	Monitors patients on ventilators		
Surgical Technologist	Operating Room Technician		
Passes instruments to the surgeon	Sets up operating room supplies		
Optometrist	Visual acuity		
Prescribes contacts	Measures intraocular pressure		
Mortician	Survivor support		
Files death certificate	Burial or cremation arrangements		



LABEL GAME

Description

Review of nutritional values using food labels.

- 1. Divide the class into two teams.
- Give each student a Label Game answer sheet.
- 3. Obtain 10 food products with nutrition labels.
- 4. Hold up one product at a time. Tell them the name of the product and the serving size, and have them fill in those two columns on their answer sheet.
- 5. Next, share the value they are to guess for that specific product. For example:
 - Calories
 - Total fat in grams
 - Sodium in mg
 - Protein in grams
 - Dietary fiber in % of daily value
- 6. Once you present each item and all students have completed their game answer sheets, go back through the items and share the correct answers. Have students write the correct answer in the appropriate column and then calculate the "difference" score by subtracting the lower number from the higher number.
- Scoring Determine the five students who were closest to the correct answer (lowest difference score) and award a point to each of their teams.



Materials

☐ Ten food products with nutrition labels.

Notes

- This game can have a number of variations for team assignments and scoring.
- We like to use standing scoring because it creates some suspense.
 For example, we might say "everyone with a difference score of 10 or lower, please stand." Then we count down until there are only 5 students still standing. Their teams get the points.
- Having all students answer all the questions and then score their work before announcing the results assures a high level of student engagement.



Label Game - Nutrition Facts

- 1. Fill in the product, serving size, and nutrient you are to guess as given by your teacher. Then guess the value.
- 2. Your teacher will share the correct answer.
- 3. Subtract the lower number from the higher number ("My Guess" and "Actual Value") to determine your Difference score.

	Product	Serving Size	Nutrient	My Guess	Actual Value	Difference
	Skím Mílk	8 oz	Protein in g	10	8	2
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						



RELAY RACE

Description

This game works well as a unit review.

- This game provides a great deal of flexibility in how the game is played and scored.
- Divide the class into teams. Each team will need something (flip chart, white board) on which to record their answers.
- 3. Create a list of questions and possible answers that relate to the content being reviewed.
- 4. Read the first question and start timing.
- The first team member from each team walks up to the flip chart (white board) and writes his or response.
- 6. That team member then walks to another person on his/her team and hands over the marker. The next person then walks up to the flip chart (white board) and writes another answer.
- 7. The relay continues until time is called.
- 8. If the number of responses is finite, then the round ends when the first team records all the required answers.
- 9. The teacher is the judge of correct or incorrect answers.





Materials

- ☐ Flip charts or white boards
- □ Markers
- Questions
- ☐ Stopwatch

Notes

- Place flip charts out of the line of sight of other team members.
- We recommend counting off team numbers to determine the teams, and have students from each team equally distributed around the room.
- Team members can write their team number on a scratch piece of paper and hold it up when a member of their team is looking for a team member in order to pass the marker.
- Why?? To create a level playing field. Team members are less likely to give their teammates answers if they are not sitting close together.



Relay Race Medical Abbreviations and Terminology

- 1. List medical abbreviations that would be found on a medical laboratory slip.
- 2. List medical abbreviations that have an x as part of the abbreviation, for example, 2x means two times, and you can't use any other numbers.
- 3. List medical abbreviations that would be found on a name tag of a health professional.
- 4. List abbreviations for measures in the metric system.
- 5. List medical abbreviations that begin with the letter S.
- 6. List medical terms that contain the suffix "-uria."
- 7. List medical terms that contain the prefix "anti-."
- 8. List medical terms that contain the root word "cyst".



HEALTHCARE COMMUNICATION

Description

Role play game for client interaction.

- Start by dividing the class into six teams.
 Each team should have 3 or 4 team members.
- 2. Give each team a team number, one through six.
- 3. Select/write two scenarios.
- 4. Give each even numbered team the first scenario, and each odd numbered team the second scenario.

ANALYSIS AND WRITING

- 5. Give each team 10 minutes to analyze their scenario and write a role play that describes an effective response to the scenario
- 6. Place the written responses in two bowls, one for each scenario.

ROLE PLAY

- 7. Each odd team draws one of the role plays written by the one of the even numbered teams.
- 8. Give teams one minute to review their written role play and assign roles.
- 9. The teacher will read the scenario out loud to the class.
- 10. In turn, each of the odd numbered teams will act out the role play as written.



SCORING

11. The teacher will evaluate each role play and award points. The best role play earns 3 points each for the team who wrote the role play, and the team who acted it out. The next best role play earns 2 points for the writing and acting teams, and the third place teams each earn one point.

SWITCH UP

- 12. The process is reversed. When the game is complete, each team will have written one role play and acted out one role play.
- 13. The highest possible points is six. There may be a tie for first place.

The teacher is the final judge awarding points.

Materials

- ☐ Scenarios three copies each of at least two scenarios
- "Role play" is an ideal classroom activity for learning behaviors. They provide maximum freedom for the student(s) to take control of their learning.
- Three sample scenarios are provided.
- Be sure to debrief after each set of role plays and share connections between the student scripts and classroom learning.

Client Communication

ROLE PLAY #:

Brandy is a paralegal and single parent with two small children. She leaves work at 1:15 pm for a 2:00 pm appointment for a mammogram. At 2:45 pm, she still has not been called back to a treatment room for her x-ray. She tells the receptionist that she must pick up her children from school at 3:30 pm and believes that if she is called in now, she won't be out on time. The receptionist insists she not leave and walks her back to undress and put on an examination gown. At 3:10 pm, Brandy is sitting in the waiting room, undressed, and it takes her 20 minutes to get from the radiology office to her children's school.

Identify all roles to played, and write a role play about what happens next.

OLE PLAY #2

Kurt is a medical assistant and assists Dr. Nguyen who is examing Mr. Brown, a patient with prostate cancer. The doctor notes that according to the patient's history form, he quit smoking one year ago. After the doctor leaves the treatment room, Kurt helps Mr. Brown to dress while praising Mr. Brown on quitting smoking. However, when Mr. Brown finishes dressing, he confesses to Kurt that he hasn't actually totally quit smoking.

Write a role play for the role of Kurt, Mr. Brown, and any other roles that are needed. The role play should begin as soon as Dr. Nguyen leaves the treatment room.

OLE PLAY #3

Darla and Mario are dental assitants in a community dental health clinic. They have worked together for only three weeks, and Mario is becoming increasingly frustrated with Darla's messiness. According to Mario, Darla constantly leaves clutter everywhere around the clinic – in the operatory, break room, and supply room. Mario feels like he has to do some housekeeping every time he takes a patient back for treatment. On three different occasions, Mario pointed out Darla's messes to her. Today he took a patient back, only to find another mess.

Write a role play for Darla and Mario, and any other roles that are needed.