Kansas Effective Practices
Instructional Toolkit

Implementing Research and Resources Into Action
Research Lesson 1: Daily Challenges

SCAMPER

S *Substitute*	Think about substituting part of your product/process for something else. By looking for something to substitute you can often come up with new ideas.	Typical questions: What can I substitute to make an improvement? What if I swap this for that and see what happens? How can I substitute the place, time, materials, or people?
C *Combine*	Think about combining two or more parts of your problem to achieve a different product/process or to enhance synergy.	Typical questions: What materials, features, processes, people, products, or components can I combine? Where can I build synergy?
A *Adapt*	Think about which parts of the product/process could be adapted to remove the problem or think how you could change the nature of the product/process.	Typical questions: What part of the product could I change? In exchange for what? What if I were to change the characteristics of a component?
M *Modify/distort*	Think about changing part or all of the current situation, or to distort it in an unusual way. By forcing yourself to come up with new ways of working, you are often prompted into an alternative product/process.	Typical questions: What happens if I warp or exaggerate a feature or component? What will happen if I modify the process in some way?
P *Put to other purposes*	Think of how you might be able to put your current solution/product/process to other purposes, or think of what you could reuse from somewhere else in order to solve your own problem. You might think of another way of solving your own problem or finding another market for your product.	
E *Eliminate*	Think of what might happen if you eliminated various parts of the product/process/problem and consider what you might do in that situation. This often leads you to consider different ways of tackling the problem.	Typical questions: What would happen if I removed a component or part of it? How else would I achieve the solution without the normal way of doing it?
R *Rearrange/Reverse*	Think of what you would do if part of your problem/product/process worked in reverse was or done in a different order. What would you do if you had to do it in a different order? What would you do if you had to do it in reverse? You can use this to see your problem from different angles and come up with new ideas.	Typical questions: What if I did it the other way around? What if I reverse the order in which it is done or the way it is used? How would I achieve the opposite effect?

Adapted from Colorado: Gifted Education Guidelines and Resources Volume II: Programming