Knox County Schools: Student Success Learning Network (SSLN)

Date:	December 2017	**Cycle #**	1

Driver: Students Lack Persistence in their work	Curriculum, Instruction, & Assessment: Rigorous Curriculum
What CHANGE IDEA is being tested?	Does teaching students to persist increase their willingness to engage in grade level tasks?
What is the overall GOAL of the test?	Use the Learning Challenge Model to increase students' completion rate on a standards-aligned task

1) PLAN
Describe the "who/what/where/when" for the test. Include your data collection plan.

Who: Each teacher selects 3 students that show an inability to persist in a classroom task.
What: Teach the concept of the Learning Pit to help them to go through a productive struggle.
Where: Algebra I classrooms at Fulton, Central, and Austin-East
When: Two weeks beginning in January

Questions: Questions you have about what will happen. What do you want to learn?	**Predictions:** Make a prediction for each question. Not optional.	**Data:** Data you'll collect to test predictions.
Will students apply the strategies to persist through the task?	Students who have a strong relationship with the teacher will engage with the strategies. Students will be afraid of taking academic risks. Students will not be completely familiar with the learning pit and may revert back to old habits	Teacher observation for selected students.
Does this strategy work differently in certain situations? (group, individual, etc.)	Low will students will wait to apply strategies until placed in a group. High will, low skill students will try to apply the learning pit strategy individually	teacher observation before/during/after group work.

Knox County Schools: Student Success Learning Network (SSLN)

Date:	December 2017	**Cycle #**	1

2) DO Briefly describe what happened during the test, surprises, difficulty getting data, obstacles, successes, etc.			
Shaun (Fulton)	Student #1: Brown Began drawing a diagram on paper during independent work. When we switched to group work, he did not interact much with his group, and disengaged. After the "lesson" about strategies, he went back to his paper, and asked for cups and coins once they were discovered.	Student #2: Jose Immediately began drawing on paper, but did not really interact with his group. He asked a question about a possible solution right before the strategy lesson, and went back to his paper afterward. Asked for cups and coins after they were revealed.	Student #3: Marsh After a moment of thought, asked about a possible solution. When told that his solution was incorrect, he shut down and did not further participate until cups were offered.
Kim (Fulton)	Student #1: Sivells During independent thinking, he did not look like he was working. He didn't write down anything. During group work, student was very talkative and tried multiple ideas before asking if cups could be stacked. He was the first student to come up with a correct way of solving the problem. When challenged to create another problem he worked with his group. Low students in this group performed very well. They were able to think outside of the box.	Student #2: Slade During independent thinking, she did not look like she was working. She didn't write down anything. During group work, student was shy and quiet and did not contribute. She watched her higher level classmates work and problem solve. Her group was the last to come up with a solution. She was not able to reiterate the solution or explain it. High students in her group struggled to think outside of the box with this activity. They did persevere through after speaking with other groups.	Student #3 Carroll During independent thinking, student tried to ask several questions about the task. I had to remind to not say anything out-loud. Don't talk about ideas yet with their group. During group work, the student was vocal in ideas. It was his group that came up with a solution first. He did not think the cups could be stacked. He was the first to walk around the room and see what other groups were doing. He was able to bring back solutions from one group about stacking cups. Student was able to reiterate how the solution works even though he wasn't the first student in his group to come up with it. He was also able to help other groups when he finished with his.
Angela (AE)	Student #1: DeMarion During independent thinking, he did not write anything down. Once cups were	Student #2: Elizabeth During independent thinking, she did not write anything down. She was the first to find	Student #3: Cheyenne During independent thinking, Cheyenne immediately started writing and drawing on paper. She did not get

Date:	December 2017	**Cycle #**	1

	found, he was involved with trying to create a solution. DeMarion is part of the "higher" achieving students, and this group did no think out of the box. He was actively involved, but once convinced there was no solution, he did not try after a few fails.	the cups in the room, but once she found cups, she stood back and let other members of the group take control. Elizabeth is in the "lower" achieving group. They were trying to think outside the box, but they never achieved a solution. Elizabeth observed others, and I could see she was contemplating something. However, she did not share anything.	up and use the manipulative cups with the group. She continued trying and did not give up, but she did not have a solution by the time the timer went off.
Meagan (Central)			

3) RESULTS Comment on your predictions in the box below. Were they correct? Record any data summaries as well.			
Shaun (School #1)	Student #1: B.N. (strong relationship, high skill, low will) Used independent strategies as he understood them, but not any requiring interdependence. He seemed to be willing to try new things, but didn't seem to get what they would be.	Student #2: J.S. (moderate relationship, low skill, high will) Seemed open to the strategies, but not very good at implementing them, and with the exception of asking me, stuck with mostly independent strategies.	Student #3: M.S. (poor relationship, low skill, low will) Student showed no interest in pursuing further solutions or trying strategies after his initial guess didn't pan out.
Kim (School #1)	Student 1 (not a great relationship with) was very engaged in the activity. He was the first student to ask if they could stack ups etc. I was shocked that he was talking about math and wanted to figure out the answer. He did say several times how stupid the task was when he was confused. My prediction was not correct about this student. However, the student did wait to be in a group setting to	Student 2 (okay relationship) didn't contribute much in the group; she is very quiet and timid and doesn't like to talk or ask for help. she was with a talkative group and let them to much of the work. When student had to explain the problem himself she could not. My prediction was correct about this student. The student did wait to	Student 3 (okay relationship with) wanted to contribute a lot at the beginning of think time and wanted to bounce ideas off with the entire class. I wasn't surprised that this student wanted to talk with a lot of people. The student did say, "I give up" a few times and he did go to other groups to see what they had tried. He went to the higher students group to see what they did but they

Date:	December 2017	Cycle #	1

	contribute.He wasn't afraid to take academic risks.	be in a group setting to contribute.She was afraid to take academic risks.	were the group that struggled the most. I was incorrect about my prediction that he wouldn't try it on his own. He wasn't afraid to take academic risks.
Angela (School #2)	Student #1: D.M. D.M. is a Middle (higher for the class) achieving student and Motivation can vary from Little to Middle Motivation. D.M. has a pretty good relationship with the teacher. I predicted that D.M. would be talkative and engaged in the activity but would shut down if he was challenged too much. D.M.stopped once he was convinced there was no solution to the "cup" problem. Since presented with the Learning Pit, D.M. is getting better and using some tools to help him when struggled. He was proficient on his last factoring assessment. While learning how to factor, D.M. would use his Guiding Questions, Self-Made Multiplication Chart, Peers, and Teacher's help.	Student #2: E.B. E.B. is a Lower Achieving and Lower Motivated student who has a great relationship with the teacher. I predicted that E.B.would check out completely and not be involved in the activity. E.B. was the first person to see the cups. She did not check out completely, but she stayed to herself more. Since presented with the Learning Pit, E.B. is still not pushing through when challenged. With factoring, which had at least 5 steps, E.B. only mastered the first 2 steps. She does not like asking for help and has not been relying on her "tools."	Student #3 C.H.: C.H. is a Middle (higher for the class) achieving student with Higher Motivation (on most days) who has a pretty good relationship with the teacher. I predicted that C.H. would try in the activity and that she may actually arrive at the solution. C.H. did not think out of the box, and she did not use the manipulatives. She did draw pictures and tried on her own but never arrived at the solution. Since presented with the Learning Pit, C.H. gets frustrated when she doesn't have immediate success. She only wants to use the "ask the teacher" tool. When I make her aware of other strategy options, she was been shutting down.
Meagan (Central)			

3) STUDY

What did you learn?

Intervention was interrupted by the snowcation and flucation.

Angela: When we did factoring quadratics, they didn't shut down even though it was a bunch of steps. For the most part. Students made a safety net by creating their own tool with a multiplication chart. They also worked in groups to make their tool.

Kim: Students who did not engage previously are engaging even with content that is not necessarily familiar to them. They are asking questions to each other and not just relying on their teacher. Students are paired based on where they are in the content and they help each other out more than they used to. When I ask, "what have you tried?" they can answer with some strategies. Module tests - they are persevering to get through the challenge.

Knox County Schools: Student Success Learning Network (SSLN)

Date:	December 2017	**Cycle #**	1

Shaun: Students need to be reminded, but they do not remember to use the strategies before being reminded.

Pattern: Students need to be reminded of the strategies. How do we embed them within the classroom culture? What else might need to be added to the work?

4) ACT

Describe modifications and/or decisions for the next cycle; what will you do next?

Week- reference specific strategies aligned with the process
Visual cues with specific strategies

Maybe some lessons about the strategies
Model the struggle

Reflection may come in a later cycle.