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Shark Tank and Project Based Learning

Heather Smith

Abstract

The aim of this article is to review the concept of project-based learning in broad terms while also providing an example from a United States History classroom. Through the review of research, the validity of project-based learning is addressed. The level of student engagement is also evaluated. The example project is based on the current television show. Due to its current popularity, students are drawn to imitating the sharks and are immediately drawn to the project. Student motivation is key to classroom success and the validity of project-based learning as a means of engagement is supported.

Data collection and comparison of data points currently drives modern education. Post-tests should show growth from pre-tests, and standardized assessments are used as the proof of learning. Teachers are challenged with meeting the standards of the state as well as providing engaging activities for the student. Unpacking the curriculum is the first major challenge. The primary job of teachers is to ensure the standards are covered and that the students comprehend them in depth. However, while important, that is not the reason most people chose to teach. Those called to the profession yearn to make the subject matter come alive as well as provide a relevant and engaging learning environment for the students in their classes.

As the End of Course Test results in Georgia were published to schools every spring, I found my students to be successful in regard to total average score. However, they were lacking complete success in one major course topic: The Gilded Age and Captains of Industry. I attempted multiple methods over several years to reach the children in my room: lecture, Socratic discussion, project-based learning, web quests, and other additional methods of pedagogy. The efforts were to no avail. My students seemed to be stuck in a rut.

Creating a New Shark Tank

While attempting another project as a means to teach this period of history, a burst of creativity came to me through interaction with my students. I planned to have my students complete a panel discussion involving the major industrialists and reformers of the Gilded Age. The original directions divided the class into two groups: the panel or the audience. The panel was comprised of notable Captains of Industry during the Gilded Age, including John D. Rockefeller, Cornelius Vanderbilt, Andrew Carnegie, J.P. Morgan, and Henry Frick among others. The audience members were other notable individuals or important segments of the population, such as W.E.B. DuBois, Booker T. Washington, Jane Addams, William Jennings Bryan, Jacob Riis, Helen Hunt Jackson, and immigrants from China, Italy, and Poland. Each student's assigned role was to research their character and prepare to ask and answer questions as that character.

The entire purpose of a panel discussion is to allow the audience members to more fully understand the views being presented in a very personal way. The characters become real instead of figures in a textbook. As I was introducing the project, I remarked that the industrialists reminded me of the investors from the television show *Shark Tank*. A hand shot up

Table 1

Instructions for AP U.S. History Gilded Age Shark Tank Simulation

Directions:

You will be divided into TWO groups: Sharks (captains of industry) and Members of the Audience (those looking for investment in their idea or concept). The sharks will have the opportunity one by one to speak to the audience to share their opinions/viewpoints and how they made their money. After they have finished, the sharks will then take questions and see presentations from those looking for investment in their concept. Using your text notes, documents, and web links and sites, you will need to ask questions (audience) to the panel of sharks regarding specific issues and views that you disagree with. The sharks can either choose to buy in to the concept or not.

PANEL TOPIC: Robber Barons or Captains of Industry: American Industrialists in the late-1800s

Sharks: You will need to know your beliefs and accomplishments and be ready to answer questions from those in the audience. Be prepared.

Andrew Carnegie
Cornelius Vanderbilt

John D. Rockefeller
Henry Frick

J.P. Morgan

Audience: You will need to pull from your notes and other sources to understand what life was like for you: struggles, conflicts with the sharks, the “issues” you have with them, and why. You will need to address these as questions to the panel.

W.E.B. Dubois
Russell Conwell
Eugene Victor Debs
Albert Parsons (anarchist)
Italian or Polish and/or Slovak immigrant
Thomas “Tom” Edward Watson
Geronimo
Ida Wells Barnett
Chief Sitting Bull of the Sioux Nation
Helen Hunt Jackson
Emma Goldman
Jacob Riis
George Pullman
Susan B. Anthony
Carrie Chapman Catt (NAWSA)
Captain Richard Henry Pratt

Jane Addams
William Jennings Bryan
Chinese Immigrant (create a name for yourself)
Member of the Knights of Labor -- Terence V. Powderly
Joseph Labadie and/or Benjamin Tucker (anarchists)
Anthony Comstock
“General” Jacob S. Coxey
Booker T. Washington
Indian from Carlisle Indian School
Mary Elizabeth Lease
Mary Harris Jones “Mother Jones”
Henry George
Denis Kearney
Carrie Nation
Victoria Woodhull

Questions to help research the person:

1. What were your central beliefs regarding the role of government in the U.S. economy and individual's lives? Should the government intervene? Laissez-faire? Provide laws and assistance to those less fortunate?
2. What were your accomplishments in your field/industry or your cause? What did you do to achieve your goals? (hint: any key letters or speeches that reflect your viewpoints – use these to help in research).
3. Do you view yourself (or others) who are successful in business in the United States as a *robber baron* or *captain of industry*? why or why not?
4. Do you believe there is corruption in our government and business in the United States? If so, how so? To what extent? What should we do or not do to reform and improve things in our country?
5. What is your view on workers, immigrants, and other minorities (women/African-Americans)? What role do they and should they play in the U.S.? Should there be restrictions on them? Should there be reforms to help them and improve their working conditions and lives?

from the back row. One of my students asked if we could do a Gilded Age version of *Shark Tank*, rather than the Panel Discussion I had planned. Teachable moments come in many forms. Sometimes there is a better means of getting the point across than what the teacher has planned. This was definitely the case for me in this instance.

A class discussion rapidly redefined the basic elements of the project. The essential topics and assigned roles would remain unchanged. The students would be required to adopt a character and know all historically relevant actions and events surrounding that person. As a means of proving their research, they would conduct research and submit their notes with a works cited page for the information they obtained. In addition to general research, they would also have to answer some more specific questions to guide their research given to them by me. They needed to know the central beliefs of their characters in regard to the US Government and its role in economics as well as in the lives of individuals. This is essential, as the dominant policy up to this point in American History was *laissez-faire*. Students were to know what the major accomplishments were, as well as how they were achieved, for each person.

The next two concepts dealt with interpretation of actions. The first dealt with government corruption, and the possible need to reform. How did each character feel about potential government corruption? Additionally, how did the characters feel about the Captains of Industry? For example, were they *Captains* or *Robber Barons*? In addition to the questions that were researched, answered, and handed in on the day of the presentation, the students would also be required to write questions from the perspective of their character. They were also prepared to answer them in a presentation format. Suddenly, just like that, I had their attention, enthusiasm, and an exciting way to cover somewhat tedious material.

Student Roles

The students helped me build the new version of the project. As such, Rockefeller, Carnegie, Morgan, Frick, and Vanderbilt became the *sharks* looking to invest or find philanthropic causes for their monies. Because the role of shark comes with more constant verbal involvement during class, these positions were filled by students who volunteered. In the event that there were more volunteers than roles, the students drew out of a hat. The numbered papers from the hat were sharks. Any student who volunteered for a role as a shark and did not get it was able to have first choice on the roles of reformers, authors, and other important members of the Gilded Age who would present to the sharks. This seemed to sustain the enthusiasm for the project for the students who did not get their first choice.

Students filled the roles of the sharks by researching their assigned historical figure and then investing consistently with the priorities of that individual. Each shark had to draw up questions to ask of the presenters, tailored to each scenario. It was not acceptable to ask the same question of each person. This ensured that each role was reviewed comprehensively by the sharks looking to invest. The requirement to prepare questions on both sides of the Shark Tank forced students to learn not just who their figure was as an Industrialist, but also who those presenting were and how they fit into the era.

The roles of the *presenters* were also pre-approved by me and previously part of the panel discussion as audience members. In the case of Jane Addams, the student asked the sharks for money to help build and maintain the Hull House. The exact time frame required for the pitch was fluid because of the nature of the presentations. While all of the people lived during the same era, they were not active at the same time. The assumption is that all participants live together, currently, in the Gilded Age.

Table 2
Class Rubric: Gilded Age “Shark Tank” Simulation

Category	4	3	2	1
Information	All information presented in the debate was clear, accurate, and thorough.	Most information presented in the debate was clear, accurate and thorough.	Most information presented in the debate was clear and accurate, but was not usually thorough.	Information had several inaccuracies OR was usually not clear.
Use of Facts/ Statistics	Every major point was well supported with several relevant facts, statistics and/or examples.	Every major point was adequately supported with relevant facts, statistics and/or examples.	Every major point was supported with facts, statistics and/or examples, but the relevance of some was questionable.	Every point was not supported.
Organization	All arguments were clearly tied to an idea (premise) and organized in a tight, logical fashion.	Most arguments were clearly tied to an idea (premise) and organized in a tight, logical fashion.	All arguments were clearly tied to an idea (premise) but the organization was sometimes not clear or logical.	Arguments were not clearly tied to an idea (premise).
Speaking	Spoke more than 3 times on relevant material	Spoke 3 times on relevant material	Spoke less than 3 times on relevant material	Did not speak

The students who filled the roles of presenters had a great deal of freedom in their pitches to the investors. This allowed for Jacob Riis’s student to ask for money to publish the book *How the Other Half Live* and Eugene V. Debs’s student to pitch selling a seal to any industrialist that would be willing to provide better working conditions. These are hard sells for the students, as the industrialists would not have limited their own ability to make money in that way. However, by persuasively arguing the point, the students learn the roles to a much greater depth than simple, rote memorization. To ensure student preparation, the presenters must answer the same general questions as the Sharks. They also have to conduct research on their assigned roles and submit printed proof of their research with proper citations. During the presentations, students also complete a chart for each character. The information on the chart is collected at the end of the class and evaluated on

completion and accuracy for a portion of the grade. (See Table 1 for instructions).

Rubric

As students are grade-driven, and rubrics make life easier, the grade is the product of the following components: information, facts, statistics, and organization (see Table 2). Students must present accurate, clear, and thorough information on each role. Each major point must be supported with relevant, research-based facts or statistical data in order to request or provide money. This facet provides the method to check and grade the students’ research. Finally, the argument or presentation must be clear and logical. These points are earned by the students during the verbal presentation portion of the project. This includes the use of any visual aid they choose as a means of pitching an idea to the sharks. The final category is also part of the verbal presentation. Each shark must ask at least one question of

each presenter. I found that students not presenting tend to mentally drift off during presentations. To keep this from happening, the students must complete a chart provided on *Gilded Age Notable Figures*.

For the first time, the students were engaged in *Gilded Age* material, and I saw marked improvement on the unit exam in class, as well as on the practice exam in May. At the end of the year, this trend in comprehension was demonstrated when the End of Course Milestone exam scores were released. I have continued to use this method since it was created four years ago. In addition to the *Gilded Age Shark Tank*, I have utilized this methodology for the Antebellum Reform Era as well. This activity is the favorite activity for both my students and me in my United States History class.

Project-Based Learning

The major problem with project-based learning of any kind is that the students only learn the element of the project they are assigned. This dilemma leaves other portions of the material largely uncovered by the student. It becomes imperative that the teacher address this issue and inspire students to want to know as much about the material as possible or, in other words, to be more motivated. The main idea behind project-based learning is that the students use real-world, problem-solving skills. In addition to capturing the students' interests, the use of authentic lessons enhances students' abilities to bridge into the workplace upon graduation from traditional education (David, 2008).

According to recent studies, if implemented correctly, project-based learning shows an increase in academic performance (David, 2008). The challenge is with the concept of proper implementation. Many schools of education do not teach this methodology, and as a result, many public school systems have not embraced the concept. Good teachers always look to advance their classes in any way possible

and continually look for new methods to reach their learners. The lack of formal training on comprehensive, project-based learning makes proper implementation difficult.

There are steps that can be used to support proper implementation. It is important that the students have a driving question, they be given a choice in the project, and they create a meaningful product (Larmer & Mergendoller, 2010). If students don't see the purpose in the assignment they are completing, the learning possibility is diminished. Just like their adult counterparts, students need to find value and importance in their work. Project-based learning functions best when learning can be tied to the world outside the classroom as well as when it reflects their knowledge inside the classroom (Bell, 2010).

Conclusion

Truly effective project-based learning can be difficult to create, and even more challenging to implement. While the statistics seem to prove that it enhances the learning environment, it varies from one classroom to another in effectiveness due to the intrinsically isolated setting of the current classroom model and the autonomy of each teacher in their classroom. In some cases, teachers do not collaborate and that leads to isolation. In the current, global educational environment, it is important for students to be able to apply thinking skills rather than simply regurgitate memorized classroom facts. Project-based learning provides that opportunity. It enhances the learning environment, reaching to incorporate the world outside the classroom. Student enthusiasm is instrumental to the effectiveness of project-based learning and true acquisition of knowledge. Students need to have a hand in the learning process and feel connected to the material. Project-based learning provides the best means for this. In the words of the current investors on *Shark Tank*, for that reason "I'm in."

References

- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House*, 83(2), 39-43.
- David, J. L. (2008). What research says about project-based learning. *Educational Leadership*, 65(5), 80-82.
- Larmer, J., & Mergendoller, J. R. (2010). Seven essentials for project-based learning. *Educational Leadership*, 68(1), 34-37.



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Project-Based Learning in Middle Level Mathematics

Emily Goins Abernethy

Abstract

Project-based learning (PBL) is “a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging and complex question, problem, or challenge” (Buck Institute for Education, 2018, para. 3). Many students struggle with learning mathematical concepts because they do not comprehend the purpose of learning these ideas. It is important for educators to teach math with real-world examples, so the students will become motivated to learn math. Many teachers throw a math concept at students and assess them to see if they have solved the problem correctly. At the end of the school year in South Carolina, students are given a summative assessment to analyze what they have learned. Is this a true assessment of their learning? Are we preparing our students to go to college or start a career? How will students remember the ideas taught if the information is just thrown at them? The following paper discusses how to use PBL in Middle School Mathematics classrooms.

What is Project-Based Learning?

Project-based learning (PBL) is the idea of teaching a concept while connecting it to real-world applications. South Carolina’s standards are called College and Career Ready Standards which implies the importance of concentrating on students’ lives after they graduate from high school. “By using real-world scenarios, challenges, and problems, students gain useful knowledge and skills that increase during their designated project periods” (Educators of America, 2018, para. 1). PBL encourages students to use real-life skills such as: critical thinking, problem solving, team work, time management, and self-reflection. In math, some students struggle with remembering concepts after they are assessed on the information. Students are more likely to remember information they are taught when it correlates with real-world scenarios. Inquiry-based learning plays a big role in PBL. In PBL, students are given a scenario and they have to figure out a solution to the problem.

Students’ Interests

Project-based learning can broaden the horizon for students’ interests. I have noticed

that students tend to learn better when they see the connection between what they are learning and the real world. At the beginning of the year when teachers are building a community in the classroom, it is important for them to learn who each student is and what they enjoy doing. Students will bring their own unique experiences and perspectives into the projects they are given. Students are more engaged in activities when it includes their interests. Therefore, this methodology encourages students to understand and perform better in the class.

Examples of Project-Based Learning in Sixth Grade Math

In my math class, I have incorporated PBL projects with my students. The outcomes have been great, and a majority of the students were engaged during each of these activities. Each project included interests of the students, and students had wiggle room to express who they were as an individual.

Students are introduced to operations with decimals in sixth grade. They are expected to fluently add, subtract, multiply, and divide decimals. Where does one see decimals in the real world? Most of my sixth-grade students

correlate decimals with money. I created a project where students plan a trip to Florida, and stay within a certain budget. Students plan the amount of money they would need for gas (round-trip), food, and lodging for the duration of the trip. The greatest part about the project is the students get to plan the attractions they would want to see in Florida. This involves calculating the ticket cost and food while there. The students are given a fixed budget, so they must figure out how much money is left over to spend on souvenirs. I also provide students the opportunity to work with a partner to complete the project.

The next two chapters covered in math class are ratios and percentages. At the end of the units, I assess students with a real-world project that involves food. The students have to scale up or down a recipe to make enough for their class size. This is an individual assignment, and the students work in and out of the classroom to complete the project. The students also calculate the percentage of each ingredient in their recipe. The students make their recipe at home, and bring it in for the class to try. This is a unique project that provides the opportunity to observe various cultures in the classroom because students often bring in family recipes.

Another example of a PBL project we complete in my sixth-grade math class explores geometric area. My students design and build a tiny house (not life size). They determine the area of the house they are going to make, and even design furniture to fit inside the house. Students gain an insight into the importance of area while simultaneously designing their own custom home.

At the end of the year, my class investigates statistics. Instead of having students graph data that I give to them, students go out and collect their own data. They come up with questions to collect data, and who to ask questions to. Often, students decide to collect data from the classroom and school, or we go outside to collect the data. Students collect data

on things such as how long it takes to run around the track, how far they can jump, and even how large a bubble they can blow using chewing gum.

I am continuously researching new and creative ways to incorporate PBL in the classroom. In the past, I could see a significant difference between simply giving students a computation assessment rather than giving them a project. The students enjoy coming to class when they get to complete these fun projects, and the results show they are engaged.

Technology with Project-Based Learning

Technology continues to grow each day, and students are growing with it. With technology, PBL is easier to use in the classroom. There are great teacher resources that educators can use to find new and engaging projects for use in their own classroom. Below are some examples:

- [Teachers Pay Teachers](#) is a great resource to find completed projects to purchase. More than likely if it was successful in one classroom then it will be successful in yours.
- [Pinterest](#) also has projects already completed by some teachers. It is great to find previously completed projects which allow teachers to spend more time focusing on their own students than researching the internet for projects.
- [Share My Lesson](#) is a website where teachers come together to create and share their resources.
- [Emergent Math](#) helps encourage interesting and dynamic math problems, as well as, projects in your own classroom.
- [The Buck Institute](#) is one of the international leaders in project-based learning. You can read through the website to gain a better understanding of what PBL is and how to use it in your own

classroom. You can search through their data to find the perfect project to use in your own classroom.

- [Less Helpful Math](#) is created by the wonderful Dan Meyer. This is a blog website, and Dan Meyer often talks about PBL in his blogs.

Students also use technology to complete their projects. Students can use the internet to research ideas for their projects. They can use programs to display their projects such as [Google Docs](#), [Microsoft Powerpoint](#), [Padlet](#), [Thinglink](#), [The Noun Project](#), [Infogr.am](#), [Poll Everywhere](#), [BigHugeLabs](#), and so much more. A little research on the web will give you a lot of options to use in your own classroom.

Integrating technology is a great way to engage students. As Fullan (2013) states, Technology is not a panacea. Not all technology is good for pedagogy. And great pedagogy can and will exist without technology. We have, however, greatly miscast and underutilized technology's power. When we enlist technology in the service of exploratory learning for all, watch out! On the other hand, if we plod along with standards and assessment using technology only as a prop, we will get what we deserve: a higher level of tedium. (p. 78).

When technology is integrated correctly, learning can go deeper.

There are several problems teachers and students will run into while using technology. Many schools work on a one-to-one student laptop program where all students have a laptop

or ChromeBook. Technology often fails us because students cannot get work done if their laptop is not functioning. Not all students have Wi-Fi at home, so we cannot expect for students to complete their projects without giving them the tools they need.

Conclusion

The goal of project-based learning is to develop a deeper understanding of the concepts that are taught in the classroom. As teachers, we want our students to retain the information we teach. Current research about the PBL implementation shows evidence of student achievement in the classroom. Bob Lenz (2010), executive director of Buck Institute for Education, discussed how students who participated in project-based learning outscored their fellow students in the control group. Furthermore, these students also scored higher on measures of problem-solving skills and their application to real-world economic challenges. Through PBL, can better prepare themselves for the future. They will be experts at the skills needed to be successful by having a surplus of practice with critical thinking, problem-solving, team work, time management, and self-reflection.

References

- Buck Institute for Education (2018). What is project-based learning? Retrieved from http://www.bie.org/about/what_pbl
- Lenz, B. (2010, September 30). Evidence that PBL works [Web log post]. Retrieved from <https://www.edutopia.org/blog/project-based-learning-findings-study-bob-lenz>
- Educators of America. (2018). What is project based learning? Retrieved from <https://www.educatorsusa.org/project-based-learning>
- Fullan, M. (2013). *Stratosphere: Integrating technology, pedagogy, and change knowledge*. Toronto, Ontario: Pearson Canada, Inc.



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Developing Our History Clips (OHCs) in Sixth Grade Social Studies

Nora McMillan

Abstract

In order to both engage sixth grade social studies students and incorporate disciplinary literacy learning, one teacher has implemented a strategy using *OHCs* (*Our History Clips*). A university researcher shared the instructional strategy through a professional development course and the strategy has improved student learning and achievement. The process for teaching students how to create an *OHC* is important and often takes several attempts. Observing students becoming excited about thinking like a historian is a social studies teacher's greatest pleasure.

Due to new educational demands to incorporate technology into the middle school classroom, teachers are often searching for new and exciting instructional strategies that will allow students to utilize different types of technology that are now at students' fingertips. Researchers have identified an increase in student achievement and engagement with the use of technology as a tool in the classroom (Gulek & Demirtas, 2005). An instructional strategy designed to engage students, as well as improve achievement, is currently being implemented in a sixth-grade social studies classroom and is based upon creating *Our History Clips* or *OHCs*. As part of an ITQ (Improving Teacher Quality) grant, one university researcher (Bailey, 2017) developed the *OHC* instructional strategy. As a middle school social studies teacher, I quickly recognized the academic benefits that students would receive through creating *OHCs*. In addition to using technology, students are applying disciplinary literacy skills when creating the history clip. Developing *OHCs* is designed to incorporate disciplinary literacies into the middle school social studies classroom and researchers explain how school districts are currently encouraging disciplinary literacy (Bailey, 2017). Sixth graders are learning how to

build arguments, think like historians, and analyze primary and secondary sources.

Using technology in the middle school classroom often excites students. Developing the *OHC* requires that students create a two to three-minute history clip with a small hand-held video device, such as a Flip camera or iPhone. The recording occurs after the teacher has reviewed key information for the unit and students begin to develop an argument about the unit topic. The teacher can provide historical documents to present facts relating to the argument or students can investigate historical documents on their own relating to the unit topic. This task involves both inquiry and critical thinking skills which are essential to thinking like a historian. By developing an *OHC*, students are constructing their own knowledge about a historical event. Brown and Knowles (2014) explain how a constructivist classroom engages students in the material so that they can develop conceptual knowledge of the information. Students are encouraged to create their own understanding of the historical facts through both their illustrations and discussions captured in the two to three-minute video presentation. Clearly developing the *OHC* is aligned with the constructivist learning theory which was based on the ideas of the educational reformer John Dewey (Moore, 2009).

In my sixth-grade middle school classroom, students keep an ISN (Interactive Student Notebook) for their notes (the teacher “input” page) and an “output” page that contains illustrations for the *OHC*. The “output” pages contain personal student reflections, which are usually both illustrations and written phrases about factual information that students learned in

class. The illustrations support an interpretation of the information, and thus are supporting evidence for the argument that is often used for the *OHC*. The instructor frequently allows students to develop the “output” page on a separate sheet of paper which provides students with more space for their illustrations. Students simply transfer the ideas for their illustrations

Table 1
OHC Scoring Rubric Draft

Score	Evidence of Historical Understanding	3 Right on Target	2 Almost There	1 Needs More Focus	0 No Evidence
3x	Develops a clear and carefully supported position about an historical concept, event, period or person using multiple sources (primary and/ or secondary sources) <i>Corroboration Literacy</i>	<ul style="list-style-type: none"> •Has clear thesis statement •Develops 3 supportive claims about position statement •Uses at least 2 sources to build support & alludes to them in meaningful ways • Explains significance or authority of the sources 	<ul style="list-style-type: none"> •Position statement is a bit unclear; Doesn't seem to make a definite stand •Develops only 2 claims •Uses only one source or both sources are not used in meaningful ways •One or more of the sources is not carefully analyzed 	<ul style="list-style-type: none"> •Lacks a clear position statement •Develops only 1 claim •Needs help with building historical position statement from multiple sources •Sources need to be more carefully analyzed 	
2x	Places subject of position within a meaningful historical time frame <i>Chronological Literacy</i>	<ul style="list-style-type: none"> •Clearly explains (visually, orally, and/or textually) the chronological time period for the position's subject (the person, concept, event. . .) 	<ul style="list-style-type: none"> •Is not clear enough about how position statement is related to a specific historical context although there is some effort in this direction 	<ul style="list-style-type: none"> •Lacks clear information about the time period 	
2x	Uses maps or geographical skills and knowledge to develop position <i>Geographic Literacy</i>	<ul style="list-style-type: none"> •Reveals (visually, orally, and/or textually) how maps have helped build historical understanding or change over time related to position statement 	<ul style="list-style-type: none"> •Uses insights from maps but historical understanding from them is still a bit unclear 	<ul style="list-style-type: none"> •Does not reveal that map/s were used to help build historical understanding related to the position statement 	
1x	Considers multiple perspectives within position <i>Perspective Literacy</i>	<ul style="list-style-type: none"> •Shows that at least 2 different perspectives have been considered that relate to position 	<ul style="list-style-type: none"> •Incorporates only 1 perspective related to the position 	<ul style="list-style-type: none"> •Needs help with stating multiple perspectives in a clearer way 	
1x	Contextualizes a primary source used to support position <i>Sourcing and Contextualizing Literacy</i>	<ul style="list-style-type: none"> •Gives source information for a primary source used to build the position (when, where & why source was created and its role in historical context) 	<ul style="list-style-type: none"> •Lacks sufficient information about when, where or why source was created or its role in the historical context 	<ul style="list-style-type: none"> •Has little or no information about the primary source 	
1x	Uses a multimedia source in a meaningful way to build position <i>Visual Discrimination Literacy</i>	<ul style="list-style-type: none"> •Uses a multimedia source to build position 	<ul style="list-style-type: none"> •Uses a multimedia source but doesn't use it well enough to show historical understanding 	<ul style="list-style-type: none"> •Does not use a multimedia source or does not show much historical understanding from its use 	
Opt	Applies insights about economic theories to position if relevant <i>Economic Literacy</i>	<ul style="list-style-type: none"> •Effectively applies an economic theory to suggest change or continuity if relevant to position 	<ul style="list-style-type: none"> •Applies an economic theory but not that successfully 	<ul style="list-style-type: none"> •Does not apply an economic theory when required 	

Note. Based on Greenville County School District's History/Social Studies Literacy Standards

from the ISN to the larger blank sheet of paper. In order to prepare students to have a greater understanding of what an *OHC* should look like, the teacher first develops a sample to post as a link in Google Classroom. The teacher created model serves as a template for students to follow.

In addition to presenting a teacher sample that is easily accessible in Google Classroom, the scoring rubric is also added as a link. The scoring rubric contains key information that students should include in the *OHC*. The teacher template is aligned with the scoring rubric so that sixth grade students will have a guide to refer to as needed. The *OHC* scoring rubric is

based on disciplinary literacy for social studies (see Table 1).

The second unit topic in sixth grade social studies is comparing the river valley civilizations of India, China, Mesopotamia, and Egypt. The students are able to gather facts from multiple sources about these civilizations to incorporate into the *OHC*. Several weeks of class activities are shared in the *OHC* “output” page (see Figure 1) which includes information about each river valley civilization. By creating the *OHC*, this student is able to compare each civilisation and explain specific, significant facts. Factual content becomes internalized as

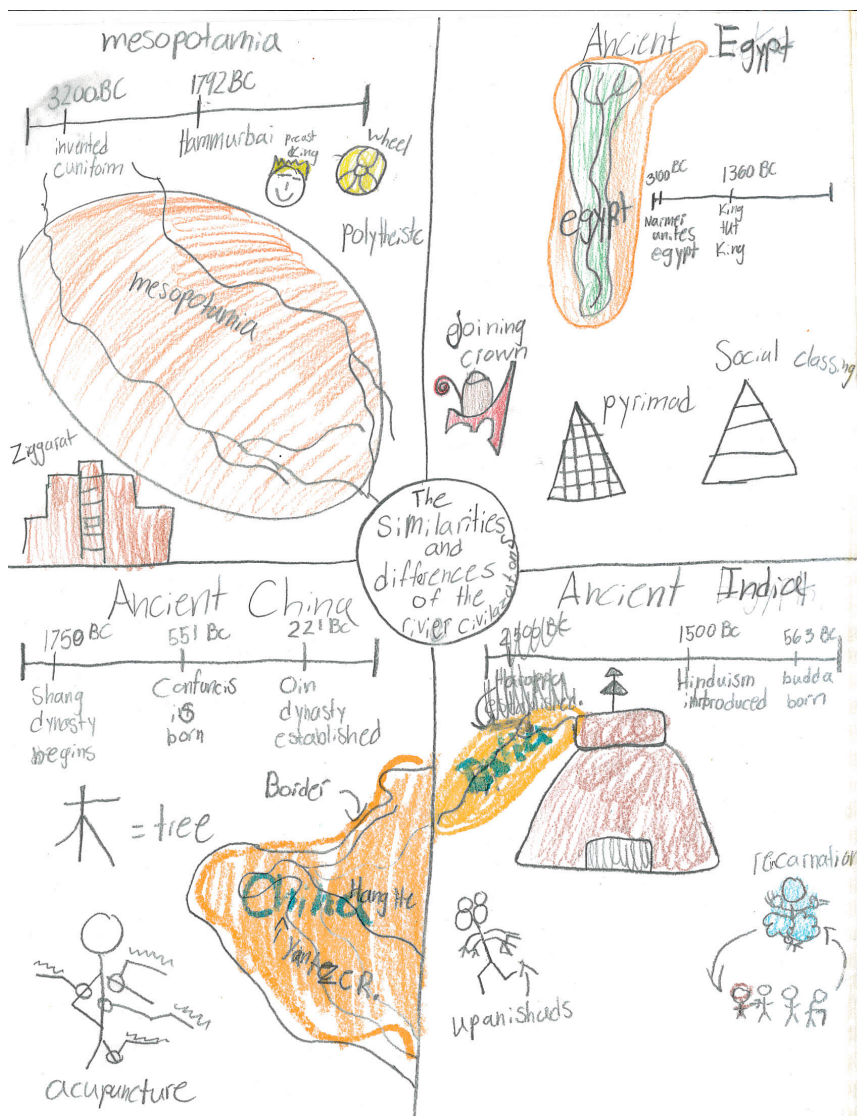


Figure 1. Sixth Grade Student’s ISN “Output” page

the student takes ownership of his/her own learning. *Figure 1* presents a comparison between the river valley civilizations. The student simply took the notes from the ISN and developed illustrations for the *OHC*. At the conclusion of the *OHC*, the student identifies the sources of where the information was found.

The benefits of implementing this instructional strategy into a sixth-grade social studies classroom include:

- higher levels of student engagement,
- individualized learning,
- critical thinking and
- inquiry.

Social studies teachers can meet the learning needs of all students by allowing them to select a variety of reference materials. Accommodations can be made for reading levels of heterogeneously grouped classrooms. Students are able to have more choices over which sources to include in the *OHC*. Some students select reference materials with more graphics or those with more textual information. Many

students have a combination of both. Class notes become more meaningful as students refer back to the notes to build the argument and think like historians.

Students are encouraged to work with partners to film the *OHC*. They often share ideas with one another and ask questions about the factual information selected for the *OHC*. Students have critical conversations with one another about historical events. Higher levels of learning and inquiry are observed in a sixth-grade social studies classroom when the teacher assigns the *OHC* instructional strategy.

References

- Bailey, B. N. (2017). Our history clips: Collaborating for the common good, *Middle Grades Review*, 3(2), Article 5. Retrieved from <https://scholarworks.uvm.edu/mgreview/vol3/iss2/5/>
- Brown, D. F., & Knowles, T. (2014). *What every middle school teacher should know* (3rd ed.). Portsmouth, NH: Heinemann.
- Gulek, J. C., & Demirtas, H. (2005). Learning with technology: The impact of laptop use on student achievement. *The Journal of Technology, Learning, and Assessment*, 3(2), 1-39.
- Moore, K. (2009). *Effective instructional strategies: From theory to practice* (2nd ed.). Thousand Oaks, CA: Sage.



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Success in Middle School Science: A Model for Professional Development

Cynthia C. Gardner

Abstract

Success in Middle School Science (SIMSS) forms a collaborative partnership between a school district and local university. The purpose of the SIMSS program is to provide sustained professional development in science content knowledge and pedagogy for middle school science teachers (grades 6-8). A key feature of the program is yearlong professional development coupled with an intensive weeklong summer camp. Preliminary results from the three-year program indicate the model supports the development of teachers' content knowledge and pedagogy specific to science.

Introduction

Science is a concerted human effort to understand how things are related. It is through observation and collecting data that scientists are able to answer questions, solve problems, understand how things work, or understand better how things are related. *A Framework for K-12 Science Education* (NRC, 2012) sets forth a precedent that all students will engage in science and engineering practices in order to learn science content. Science students will be our next generation's problem solvers, creators, thinkers, and engineers. As scientific reasoning skills improve in early adolescence, middle school students begin to question everything. By harnessing and directing this wonderful inquisitiveness, we can create greater science thinkers of tomorrow. In order to fully prepare our students, teachers need to be well prepared and versed in the science content at the middle school level.

The Next Generation Science Standards (NGSS Lead States, 2013) require a shift in thinking and teaching approaches. Today's middle level teachers need a deeper understanding of science content and the skills to communicate that understanding in a way that develops advanced thinking and problem-solving skills in their students (Garet, Porter, Desimone, Birman, & Yoon, 2001). While many teachers

support using a variety of approaches in science, they have limited understanding of science-specific pedagogical content knowledge. Middle level teachers must learn how to develop students' science proficiencies using student-generated models, argumentation from evidence, and other formative assessment approaches.

A Framework for K-12 Science Education (NRC, 2012) laid out the necessary components of professional development for science educators. In order for science educators to be fully prepared to develop science proficiency in students, professional development should be ongoing and provide opportunities for active engagement. In addition, it should focus on science content, engineering practices, cross-cutting concepts, and disciplinary core ideas within the context of the state standards and local curriculum (Framework). Professional development designed with these features is more likely to have a positive influence on changes in teaching practices (Garet et al, 2001).

Need

The district involved in this program serves approximately 9,200 students. Of the total student population, 53% are on free and reduced lunch, 47% are White, 40% are Black, 9% are Hispanic, 1% is Asian, and 2% are Other. The

district is home to three middle schools that serve students in grades 6-8. The data showed 35% of middle school students in the district scored *Not Met* on the South Carolina Palmetto Assessment of State Standards (SCPASS) science test in 2014. This was an increase from 32% in 2013. In addition, the number of students scoring *Met* decreased from 2013-2014. When aggregating data by subgroups for 2012-2014, significant gaps in the raw scores of minority students versus white students were noted with the highest being in 2014 with a 28-point difference for African-American students and a 58-point difference for Hispanic students.

A district analysis of teacher certification information revealed only 8.3% of the middle level science teachers had an undergraduate degree in a field of science. This presented concern that many teachers may not possess deep understanding of content, nor know how to move students along the developmental progression needed to teach the curriculum at the level of rigor required by the science standards.

Success in Middle School Science (SIMSS) established a three-year, grant-funded partnership between the district and the local university's College of Mathematics & Science and College of Education. The collaborative project provides extensive professional development for all middle level science teachers in both content and pedagogy.

Professional Development Design

SIMSS identified four goals:

1. Increase teacher knowledge of the science content relevant to the middle grades,
2. Increase teacher pedagogical knowledge to implement the standards as designed,
3. Increase teacher use of formative assessments while implementing the South Carolina Academic Standards for Science, and
4. Increase student academic achievement in science.

To meet these goals, professional development was purposefully planned to increase teachers' content knowledge and the pedagogy unique to teaching science.

All middle school science teachers participated in half-day professional development in-service training. Six sessions were provided in the 2015-2016 school year, four sessions in 2016-2017, and two sessions in 2017-2018. Providing professional development in half-day increments allowed each teacher to attend 27.5 hours of targeted professional development (over a 2-year period). Weaknesses within the science content knowledge were identified using test results from the previous school year. In addition to SCPASS, data was collected from MAP for Science and District Benchmark exams. Strategies found in Keeley's (2008) text, *75 Formative Assessments for Science Teachers* were introduced during the half-day sessions along with the Science and Engineering Practices (SEPs).

The half-day sessions in year one of the grant focused on science content that was new to the middle grades. In the example below (see Table 1), a university Biology professor provided content and shared investigations related to cell theory, cell types, and typical cell components. The pedagogy component concentrated on developing and using models, and was facilitated by a professor from the Department of Teacher Education and the district science coordinator.

Between half-day sessions, the district science coordinator and the Education professor co-taught science lessons in the middle school classrooms. This allowed the science teachers to observe the strategies being used with students and to reflect on best practices. A post-conference was held with the teachers following the model lessons. The post-conference specifically asked the teacher to reflect on the strategies used and on evidence of student learning. The district science coordinator was available at each middle school at least one full

Table 1
Half-day PD Schedule

Time	Sessions
1:15-2:30	Content development with Biology professor. Key activities <ul style="list-style-type: none"> • Observing cells using a microscope. Why plant cells are the better choice. • Coleus leaf: Compare starch pigmentation to original pigmentation of the leaf. • Elodea: Observe the plasma membrane as a 10% solution of NaCl is added.
2:30-2:40	Break
2:45-3:45	Pedagogical instruction with Teacher Education professor and district science coordinator. Key activities <ul style="list-style-type: none"> • Introduce Jigsaw strategy • Working in teams of four, each person becomes an expert on two cell organelles • Demonstrate Placemat strategy (formative assessment) • Create a 2-D model of the cell • Use the model to predict outcomes based on changes in the model
3:45-4:00	Wrap-up

day per week to plan, co-teach, and reflect with the science teachers.

In addition to the half-day professional development sessions, each science teacher participated in a one-week intensive summer B.O.O.T.S (Bring Out Our Teachers for Science) camp. The schedule for the camp was similar to the half-day professional development schedule. Science teachers were immersed in their content as they worked through a variety of science investigations and problems under the tutelage of university professors. Professors from the fields of Physics, Earth Science, and Biology were involved in the summer camp. Afternoon sessions focused on increasing pedagogical knowledge, and included topics such as measuring student learning through formative assessments, effective strategies for Limited English Proficient (LEP) students, increasing science literacy, and culturally relevant science teaching.

During the 2015 B.O.O.T.S Camp, science teachers worked in grade level teams to design a science unit for the start of the school year. The units were developed to meet the rigor of the science standards, including the SEPs. University professors and the district science coordinator provided support as the teachers created lessons and investigations for the units.

Science teachers implemented their units at the start of the 2016-2017 school year. The district science coordinator was available to observe, co-teach, and guide reflective sessions as needed. The half-day professional development days continued to emphasize both content and pedagogy, in addition to unit revisions. Science teachers were also able to discuss evidence of student learning across schools and grade levels.

Science content addressed in the 2016 B.O.O.T.S Camp was chosen by the science teachers. They were asked to indicate the areas

they felt most unprepared to teach. These included SC State Science Standards related to astronomy, weather and climate, and plants. University science professors designed investigations to specifically increase knowledge in those areas.

In the afternoon session, the district science coordinator and university Education professors dissected the SEPs, provided research-based strategies to implement with LEP students, and continued the conversation on culturally relevant pedagogy. Science teachers were tasked with revising their units to include purposeful integration of the SEPs and implementation of best practices for LEP and African-American students.

In addition to professional development provided by the university and the school district, science teachers involved in this project attended the South Carolina Science Council conferences in 2015 and 2016. Six participants presented science lessons that they developed during the project. Another group presented at the South Carolina Association of Middle Level Educators conference in 2017.

Preliminary Results

Teachers

Science teachers completed a pre- and post-test during each B.O.O.T.S Camp. Questions developed by university faculty and the district science coordinator assessed the science content areas addressed during the week-long camp. All 24 participants showed improvement from the pre- to post-test administrations with an average gain of 40 points (data from both 2015 and 2016 were combined). Teachers also completed a survey at the end of B.O.O.T.S Camp. Ninety percent of participants felt the content provided was relevant and that the SIMSS project improved their effectiveness as a science teacher.

Observations made by the district science coordinator reflect an increase in student engagement in science lessons. Most notably,

teachers increased their use of formative assessments during instruction to modify instructional strategies. Several participants felt they were more responsive to student needs and better able to identify and address misconceptions. Teacher lesson plans from the 2016-2017 academic year show a higher agreement between lesson content and the State Science Standards than those from 2015-2016. Finally, teachers reported higher confidence when planning and teaching science lessons.

Students

District middle level (grades 6-8) SCPASS scores from 2016 show a 3.1% decrease in *Not Met* and a 3.1% increase in *Exceeded*. Overall, 66% of all students scored *Met* or *Exceeded* compared to 63% in 2015. Hispanic/Latino students also showed an overall increase: 49.5% scored *Met* or *Exceeds* in 2015 and 54.4% scored *Met* or *Exceeds* in 2016. The percentage of African-American or Black students showed no change. In 2015 and 2016, 44% scored *Met* or *Exceeds*. District MAP results from 2016 indicate all grade levels (6-8) made at least a 2% increase from the previous year.

Overall student scores on the 2017 SCPASS were reported in four achievement categories (*Does Not Meet Expectations*, *Approaching Expectations*, *Meets Expectations*, and *Exceeds Expectations*) instead of the three previously used (*Not Met*, *Met*, and *Exceed*). Forty-seven percent of all students in grades 6-8 scored *Meets* or *Exceeds*.

Discussion

Middle level science teachers often lack content knowledge needed to develop students' science understanding. SIMSS was designed to engage middle level teachers in science content under the tutelage of experts, apply new learning to the classroom, and reflect with peers and the district science coordinator. This cycle of learning, teaching, and reflecting appears to be

an effective model for professional development. Data from the first two years is promising. Increases in teachers' content and pedagogical knowledge and use of formative assessments have been noted. However, there is still much to be done. Student achievement in science, especially LEP students and African-American students have not made significant gains on the SCPASS (Science). Professional development during the 2017-2018 school year included specific strategies for these student populations. In addition, teachers in the program that have demonstrated success with LEP and/or African-American students are sharing more directly with their peers.

Due to shuffling of teachers within the district and others leaving the district, outcomes from teachers that participated in SIMSS for three years will be compared to those that completed only one or two years. It is believed that teachers involved from the beginning will

show the most growth toward the four goals of the program.

Preliminary results provide support for ongoing professional development. The links between content and pedagogical experiences to teachers' efforts in the classroom, as well as continued support from university professors and the district science coordinator, will be imperative in creating opportunities for collaboration and reflection with colleagues. It is hoped that future data will yield more evidence for this model.

References

- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.
- Keeley, P. (2008). *Science formative assessment*. Thousand Oaks, CA: Corwin Press.
- NGSS Lead States. (2013). *Next generation science standards: For states, by states*. Washington, DC: The National Academies Press.
- National Research Council. (2012). *A framework for K-12 science education: Practices, crosscutting concepts, and core ideas*. Washington, DC: The National Academies Press.



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Positive Effects of Native Language Access in the School Library Media Center

Dwane Valera

Abstract

This paper intends to explore how the school library media center (SLMC) can aid in the understanding of the language learning experience by offering native language materials. The SLMC is in a unique position addressing English language learners (ELLs). The SLMC can make an effort to ensure that there is a consideration for the different cultures and languages that will be present in schools. English language learners are growing in number in the schools around the nation and SLMCs can be proactive in helping these students. The SLMC can be a beneficial ally to those children who cannot speak English in their classroom.

Creating an inclusive center that represents an entire population is a difficult task. The collaborative nature of the school library media center (SLMC) as an educational space is pushed further with its potential by the library media specialist (LMS) who can prioritize a positive experience for English language learners (ELL). Research has shown over and over again that students have an increased chance for success when they have access to their primary language to assist in second language acquisition (Cummings, 2007; Dailey, Giles, & Jansma, 2005; Fry, 2007; Green, 1997; Green, 2013; Moll, Amanti, Neff, & Gonzalez, 1992; Ruiz, 1984). The research has also shown that in education, when there is deficit providing the necessary assistance in educating ELLs a *demographic imperative* occurs (García, Jensen, & Scribner, 2009). Schools across the nation already are required to provide services for ELL students due to the federal regulation Title III, which does ensure equitable educational opportunities. In language learning, there is an understanding that knowledge of an existing language can be a building block for further language acquisition (Agosto, 2007; de Souza, 2009; Gallo, Link, Allard, Wortham, &

Mortimer, 2014; Jiménez, García, & Pearson, 1996; Lambson, 2002; Mestre, 2009; Vardell, Hadaway, & Young, 2006).

School library media centers are poised to be key collaborators in education, lending a helping hand to classroom teachers. As literacy professionals the LMS can bridge existing knowledge through materials available in primary languages for students to attain English language proficiency (Corona & Armour, 2007; Jeng, 1997; Riley, 2008). If there is access to literature and multimedia in native languages, this would be a tremendous benefit to students who are trying to simultaneously acquire English along with grade level standards. Language has an important role in our educational process, and the ELL population is unique due to an expectation of learning all their subjects in a language that they are not fluent in. The LMS is an important ally for both students and teachers (Michie & Chaney, 2009; Todd & Kuhlthau, 2005). The SLMC is a great source of literacy as well as an outreach for students and families looking to understand the materials available for them (Green, 2013; Neuman, 2001). Essentially, a LMS must understand and begin to advertise that if "the population [they] serve...is a

significant percentage of the school body, why [not] require a similar percentage of literature in the media center" (Jeng, 1997, p. 337).

The SLMC has a lasting impact on the research habits and information comprehension of the students that it serves (Michie, & Chaney, 2009; Neuman, 2001; Todd & Kuhlthau, 2005). A LMS is a graduate-level trained professional who can assist people with research, information gathering, and overall comprehension of what their patrons need to find or understand. The LMS essentially serves as the curriculum specialist; a person that can transcend many classrooms and give the best opportunity for children to succeed. If given the opportunity to execute the differentiated instruction and create collaborative learning environments, the LMS can be a huge benefit to the population they serve. That means students who need access to native language materials to help them succeed should have access to the native language materials. The ability to bridge the gaps of language use and language learning is essential for overall school success. Without this access to native languages these students will remain at a disadvantage (Adamich, 2009; Koskinen, et al., 2000; Vardell, Hadaway, & Young, 2006).

Danger of Excluding Native Languages

Jeng (1997), points out that the American Library Association are not in favor of English-only policies, especially when "bilingual and literacy education is affected" (p. 337). In this nation, there is a growing population of ELL students (Terrazas, 2011). A notable factor with this growing ELL population is that most of these students "are born in the United States.... [and] At the elementary school level, 59 percent of LEP [limited English proficiency] students were second-generation" (Capps et al., 2005, p. 17). This being the case, why are language learners treated as outsiders, or thought of as having a lack of mental ability? Jimenez, Siegel,

& Lopez (2003), said that the challenge for English language educators is to discredit the view that students are "academically and linguistically handicapped", but instead "be viewed as a necessary and welcome addition to the school curriculum" (p. 125). In the article by Green (2013), there is a great deal of importance placed on the job provided by librarians as stewards of information. He goes on to state that SLMCs should "engage in collaboration with ELL students" (p. 24) as well as their teachers to mend any issue regarding preparation or engagement with this student population. Being able to meet the varying needs of the whole student population in a school should be easy for the SLMC, because the SLMC has a positive reputation, and this is only furthered by the fact that the SLMC "is synonymous with thinking about school work" (Todd & Kuhlthau, 2005, p. 82).

Tapping into the First Language

There are a few studies that outline an expectation for native language use in the classroom such as Anton & DiCamilla (1998), who make the claim that "by means of the L1 [first language] the students enlist and maintain each other's interest in the task throughout its performance" (p. 272). This then fuels students' interest in learning, which is required for the educational practice. Anton & DiCamilla continue to demonstrate that "learners also use L1 as a tool to evaluate and understand the meaning of a text in L2 [second language]" (p. 238). Furthermore, their research has shown that native language use in language learning is "beneficial for language learning" (p. 245). One can also see that when a student's native language is excluded in the English language acquisition process these "non-native speakers... with no schooling in their first language take 7-10 years or more to reach age and grade-level norms of their native English-speaking peers" (Collier, 1995, p. 7).

Koskinen et al. (2000) point out that ELL students are now posing an “ever-increasing challenge...[and] are failing to keep pace with mainstream native English speaking students in educational achievement” (p. 23). If SLMCs have appropriate native language materials, the LMS will be able to accommodate a more complete version of their school. Koskinen, et al. (2000), demonstrated that access and reading practice “allows students at many different instructional levels to participate in the same activity and improve at their own pace” (p. 24). This manner of individualization for ELL students can be an important contribution provided by the LMS. The LMS has the freedom to make a center that is both inviting and educational for diverse populations (Everhart, 1994; Moreillon, 2013; Neuman, 2001; O’Neal, 2004). For all of this to progress in a positive way a change in the SLMC catalog to include first language materials in our school libraries are paramount.

The Next Steps

When beginning to understand language identity it can be very difficult to comprehend the complexities that are involved with a middle school student’s understanding of him/herself (Fry, 2007; Gallo, et al., 2014; Garcia, Jensen, & Scribner, 2009). Many different factors can help to shape the identity of an individual. The community that a student comes from as well as the school they attend will have an impact on their lives beyond their educational careers. The symbiotic nature of the communities and schools has an impact on the language identity of students. They should feel as comfortable in schools to speak, socialize, and learn as they do in their communities (Dailey, Giles, & Jansma, 2005). It is significant to explain that the perception of a language learner identity is one that schools can begin to shape while simultaneously the student begins to believe (Gallo, et al., 2014; Jimenez, Siegel, & Lopez, 2003). If negative assumptions and stereotypes

plague students there will be more harm done than good to encourage future generations to learn. These scenarios lend themselves to misconceptions of ability both inside of the classroom and outside in their community.

I contend through direct action there are three factors that the LMS can do to increase ELL student participation in the SLMC and their school.

1. Take on and correct the ideas of “English only” in schools. With introductions and personal buy in, one person can do more to challenge the “labels” that arise with foreign language use for academic success (Cummins, 2007; Palmer, & Martínez, 2013).
2. When the LMS can connect the foreign language materials to their classes (especially English language learning) and any interest the student may have, educators can expand on those topics that may have been overlooked (Agosto, 2007; Mestre, 2009; Riley, 2008).
3. Identify and endorse the importance of a student’s first language in language learning education, and show that when students begin to understand more clearly, there can be an increase in their motivation and individual ownership in the educational process (Corona, & Armour, 2007; Singer, & Smith, 2003).

The social aspect of all these questions is essential because it is, in many ways, that which is used to motivate and push for their success. Discounting their needs to understand all aspect of education, and not just to achieve English language proficiency can be a challenge. The LMS should try to ensure that students in this particular group do not fall behind academically due to not understanding the material (Fry, 2007; Garcia, Jensen, & Scribner, 2009; Jimenez, Siegel, & Lopez, 2003).

I make it a point to specify that the SLMC is an educational setting and not just a book depot. Some articles have examples of

interest driven education and learning that takes place outside of the traditional classroom setting (Jeng, 1997; Lambson, 2002; Michie, & Chaney, 2009; Morellion, 2013; Neuman, 2001; Teale, 2009; Todd & Kuhlthau, 2005). The LMSs must revise how they view the construct of the SLMC and how they can shape an inviting space that is all inclusive. Once the LMS can change the perception, and ultimately encourage the use, of native language materials it will have a different sense of legitimacy within the school and community (Fry, 2007; Morellion, 2013; Neuman, 2001; Paganelli, & Houston, 2013; Singer, & Smith, 2003). A large portion of success for students at the middle grade level is in the community buy in. The community/parents may construct its own ideas of how languages other than English are perceived. The SLMC must make sure that the argument keeps the best interest of children at the forefront and reject damaging labels that are attached to ELL students (Jiménez, García, & Pearson, 1996; Jimenez, Siegel, & Lopez, 2003).

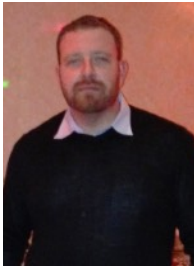
As middle school educators there is a prime opportunity to change the conversation about how we can engage new ELLs. There are problems that the LMS will face on several fronts. First, the LMS may have to justify the purchase of foreign language materials for the media center. Second, the LMS has to ensure the buy-in needed for the students to utilize and benefit from the native language materials. There is an ongoing debate over language use in schools as well as the legitimacy of certain languages over others (Anton & DiCamilla, 1998; Donato, 1994; Menken, Kleyn, & Chae, 2012; Swain & Lapkin, 2013), and how SLMCs choose to stock their shelves can make powerful statements about the understanding of the children they are serving. It is the access to information, especially in their native language, that aid in the educational success of children and in turn demonstrate the equality in the school (Adamich, 2009; Corona & Armour, 2007; Echevarria, Short, & Powers, 2006;

Paganelli & Houston, 2013; Thomas & Collier, 2002).

References

- Adamich, T. (2009). The purpose of the cataloging for matters of equitable access: Spanish-language cataloging and "everyday" approaches for non-native English speakers. *Knowledge Quest*, 37(5), 42-47.
- Agosto, D. E. (2007). Building a multicultural school library: Issues and challenges. *Teacher Librarian*, 34(3), 27-31.
- Anton, M., & DiCamilla, F. J. (1998). Socio-cognitive functions of L1 collaborative interaction in the L2 classroom. *The Canadian Modern Language Review* 54(3), 314-342.
- Capps, R., Fix, M., Murray, J., Ost, J., Passel, J. S., & Herwatoro, S. (2005). The new demography of America's schools: Immigration and the No Child Left Behind Act. *Urban Institute (NJI)*.
- Collier, V. P. (1995). Acquiring a second language for school. *Directions in Language and Education*, 1(4), 1-12.
- Corona, E., & Armour, L. (2007). Providing support for English language learner services. *Library Media Connection*, 25(6), 34-37.
- Cummins, J. (2007). Rethinking monolingual instructional strategies in multilingual classrooms. *Canadian Journal of Applied Linguistics/Revue canadienne de linguistique appliquée*, 10(2), 221-240.
- Dailey, R. M., Giles, H., & Jansma, L. L. (2005). Language attitudes in an Anglo-Hispanic context: The role of the linguistic landscape. *Language & Communication*, 25(1), 27-38.
- de Souza, M. (2009). Examining the role of the library in promoting the academic achievement of English learners. *CATESOL Journal*, 21(1), 29-44.
- Donato, R. (1994). Collective scaffolding in second language learning. In J. P. Lantolf, & G. Appel (Eds.), *Vygostkian approaches to second language research* (pp. 33-56). New Jersey: Ablex.
- Echevarria, J., Short, D., & Powers, K. (2006). School reform and standards-based education: A model for English-language learners. *The Journal of Educational Research*, 99(4), 195-211.
- Everhart, N. (1994). How high school library media specialists in automated and nonautomated media centers spend their time: Implications for library media educators. *Journal of Education for Library and Information Science*, 35(1), 3-19.
- Fry, R. (2007). How far behind in Math and Reading are English language learners? *Pew Hispanic Center*. Retrieved from <http://www.pewhispanic.org/2007/06/06/how-far-behind-in-math-and-reading-are-english-language-learners/>
- Gallo, S., Link, H., Allard, E., Wortham, S., & Mortimer, K. (2014). Conflicting ideologies of Mexican immigrant English across levels of schooling. *International Multilingual Research Journal*, 8(2), 124-140.
- García, E. E., Jensen, B. T., & Scribner, K. P. (2009). The demographic imperative. *Educational Leadership*, 66(7), 8-13.
- Green, E. J. (1997). Guidelines for serving linguistically and culturally diverse young children. *Early Childhood Education Journal*, 24(3), 147-154.
- Green, L. S. (2013). Language learning through a lens: The case for digital storytelling in the second language classroom. *School Libraries Worldwide*, 19(2), 23-36.
- Jeng, L. H. (1997). Facilitating classroom discussion on diversity. *Journal of Education for Library and Information Science*, 38(4), 334-338.
- Jiménez, R. T., García, G. E., & Pearson, P. D. (1996). The reading strategies of bilingual Latina/o students who are successful English readers: Opportunities and obstacles. *Reading research quarterly*, 31(1), 90-112.
- Jimenez, J. E., Siegel, L. S., & Lopez, R. M. (2003). The relationship between IQ and reading disabilities in English-speaking Canadian and Spanish children. *Journal of Learning Disabilities*, 36(1), 15-23.
- Koskinen, P. S., Blum, I. H., Bisson, S. A., Phillips, S. M., Creamer, T. S., & Baker, T. K. (2000). Book access, shared reading, and audio models: The effects of supporting the literacy learning of

- linguistically diverse students in school and at home. *Journal of educational psychology*, 92(1), 23-36.
- Lambson, D (2002) The availability of Spanish heritage language materials in public and school libraries. *International Journal of Bilingual Education and Bilingualism*, 5(4), 233-243
- Mestre, L. (2009). Culturally responsive instruction for teacher-librarians. *Teacher Librarian*, 36(3), 8-12.
- Michie, J. S., & Chaney, B. W. (2009). Second evaluation of the Improving Literacy through School Libraries program. *US Department of Education*. Retrieved from <https://www2.ed.gov/rschstat/eval/other/libraries/libraries09.pdf>
- Terrazas, A. (2011, Feb 8). Immigrants in New-Destination States. *Migration Information Source*. Retrieved from <http://www.migrationpolicy.org/article/immigrants-new-destination-states#top>
- Menken, K., Kleyn, T., Chae, N. (2012). Spotlight on “long-term English language learners”: Characteristics and prior schooling experiences of an invisible population. *International Multilingual Research Journal*, 6(2), 121-142.
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into practice*, 31(2), 132-141.
- Moreillon, J. (2013). Educating for school library leadership: Developing the instructional partnership role. *Journal of Education for Library and Information Science*, 54(1), 55-66.
- Neuman, D. (2001). Re-Visioning school library media programs for the future: Implications of the new AASL/AECT national guidelines for LIS education. *Journal of Education for Library and Information Science*, 42(2), 96-115.
- O'Neal, A. J. (2004). Administrators', teachers', and media specialists' perceptions of the roles of media specialists in the schools' instructional programs: Implications for instructional administration. *Journal of Education for Library and Information Science*, 45(4), 286-306.
- Paganelli, A., & Houston, C. (2013). School library ebook providers and Spanish language equity: An analysis of ebook collections available to school libraries. *School Libraries Worldwide*, 19(1), 100-113.
- Palmer, D., & Martínez, R. A. (2013). Teacher agency in bilingual spaces: A fresh look at preparing teachers to educate Latina/o bilingual children. *Review of Research in Education*, 37(1), 269-297.
- Riley, B. (2008). Immersing the library in English language learning. *Library Media Connection*, 27(2), 26-27.
- Ruiz, R. (1984). Orientations in language learning. *NABE*, 8(2), 15-34.
- Singer, J. Y., & Smith, S. A. (2003). The potential of multicultural literature: Changing understanding of self and others. *Multicultural Perspectives*, 5(2), 17-23.
- Swain, M., & Lapkin, S. (2013). A Vygotskian sociocultural perspective on immersion education: The L1/L2 debate. *Journal of Immersion and Content-based Language Education*, 1(1), 101-129.
- Teale, W. H. (2009). Students learning English and their literacy instruction in urban schools. *The Reading Teacher*, 62(8), 699-703.
- Todd, R. J., & Kuhlthau, C. C. (2005). Student learning through Ohio school libraries, part I: How effective school libraries help students. *School Libraries Worldwide*, 11(1), 63-88.
- Thomas, W. P., & Collier, V. P. (2002). A national study of school effectiveness for language minority students' long-term academic achievement. *Centre for Research on Education, Diversity & Excellence*. Retrieved from http://www.thomasandcollier.com/assets/2002_thomas-and-collier_2002-final-report.pdf
- Vardell, S. M., Hadaway, N. L., & Young, T. A. (2006). Matching books and readers: Selecting literature for English learners. *The Reading Teacher*, 59(8), 734-741.



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CALM in the Classroom: Celebrating and Activating Learning via Mindfulness

Debbie Hammond-Lancaster

Abstract

This paper explores three teachers' collaborative implementation of mindfulness practices in fifth and sixth grade classrooms at a rural, high poverty school in South Carolina. Through their own empirical evidence and a case study, they report success using mindfulness strategies which promote calm, focus, and a positive climate. Definitions of mindfulness, reasons for including it in schools, effective strategies for teaching it, teacher self-care, and a case study are included.

Since 2016, my colleagues and I have been exploring the science and impact of calm in the classroom using the powerful practice of mindfulness. We teach at a rural, high poverty, award-winning school district and have 32, 22, and 10 years of experience, respectively, in a combination of classroom teaching, coaching, and administration. We share a dual interest in methods which promote a positive climate in the classroom – the intangible feeling that creates a relaxed but alert environment – and strategies to help students focus. We have been exploring intentional steps we can take as teachers to create and promote these two foundational elements which make a classroom conducive to learning.

As a result of our self-initiated professional development, we committed to a personal practice in mindfulness and collaborated in formulating and testing a series of classroom lessons and activities we call CALM – Celebrating and Activating Learning via Mindfulness. Our findings are anecdotal and case-study based. There are no charts and graphs to illustrate quantitative research, and we are not doctoral candidates. We are boots on the ground, front-line teachers figuring out what is working and what is not in our classrooms. We have read much of the research and/or attended conferences and lectures which inform our practices; however, it is through empirical

research that we found a process which covers a plethora of areas in the classroom, even some beyond our expectations. Powerful to say the least and somewhat akin to finding the elusive silver bullet, the success we witnessed in the classroom compels us to share our findings.

What Precipitated our Exploration of Mindfulness?

It was September 2015. As I sat at my desk in my classroom catching up on professional reading, an article on the implementation of mindfulness in schools in California piqued my interest. In three decades of experience as an educator, it was not uncommon to witness how ideas spawned in the California education arena tended to sweep the country. I had heard the word mindfulness in various settings over the years and had been introduced to a form of it as a dual-sport athlete in college. It was called mental strength training at the time, a process designed to help athletes relax and summon the zone. Though mental training in sports fed my lifelong interest in human potential, I had never mastered the process even while occasionally applying it in other areas of my life. But as I read the claim that mindfulness is transforming classrooms and students' lives, I began to imagine what it could do for my own students. To my surprise, within a week, I received an email from Todd Scholl at The Center for

Educator Recruitment, Retention, and Advancement (CERRA) inviting teachers to enroll in the first South Carolina Mindfulness Retreat for Teachers in June 2016, co-sponsored by Newberry College's RETAIN Center for Excellence. I quickly emailed my principal requesting funds. Concerned that the term mindfulness would sound "fringy" or "woowoo," too far off the beaten path for traditional educators, I was again surprised to learn that he approved. Thus began my journey into mindfulness in education. I was completely unaware at the time of how awe-inspiring the journey would be as I shared it with students, colleagues, and others in the education field.

Besides the normal duties of teaching language arts and chairing the department, my school year was subsequently filled with testing and modifying strategies, meeting with fellow mindfulness enthusiasts, traveling, and later, presenting to anyone who was interested in the topic of the personal transformative power of a mindfulness practice and the potential impact on students.

What is Mindfulness?

It is likely you have heard the term mindfulness, either in light-hearted jest – there are many references arising in popular culture with the concomitant eye-rolls – or as an important concept being applied in many walks of life including the medical, business, military, and professional sports worlds. Jon Kabat-Zinn (1990), founding director at the Center for Mindfulness in Medicine, Health Care, and Society at the University of Massachusetts Medical School, and creator of Mindfulness Based Stress Reduction (MBSR), explains that mindfulness is "a particular way of paying attention and the awareness that arises through (it)...a way of looking deeply into oneself in the spirit of self-inquiry and self-understanding" (p. 12). According to Rechtschaffen (2014),

in (mindful) moments, our awareness is rooted in the present moment without our

minds getting involved with judgments and comparisons. These moments of awareness often arise spontaneously, but we practice mindfulness so that we can cultivate it not just in extreme cases but in our normal everyday moments. (p. 6)

Through mindfulness, we are able to become more self-aware, clear-minded, and calm, less mentally cluttered. When we develop mindful awareness, we live more fully in the now, unfettered by what happened yesterday or what we imagine is in the future.

Why Should Mindfulness be in Schools?

Mindfulness serves many purposes. Researchers have confirmed the benefits of mindful awareness for students of all ages, even students as young as kindergarten when they practice daily mindfulness. There are reports of increased attention, reduced anxiety, cognitive control, and greater ability to regulate emotion (Tang, Yang, Leve, & Harold, 2012).

Mindfulness helps infuse a classroom of learners with spontaneous celebration. Pam Allyn, literacy researcher, author, and founder of LitWorld, says that she and her researchers have seen many classrooms where there are lots of pieces in place, but one secret, fabulous ingredient is missing... celebration. We see teachers wait to celebrate until the end of the year, until a child does well on a test, until the child actually masters the art of reading. But why wait? Celebration is the ultimate management strategy... It is the core ingredient that infuses the entire life of the classroom with joy, with hope, with faith, and with optimism. (Allyn, Margolies, & McNalley, 2010, p. 107)

Due to my own practice in mindfulness, spontaneous moments of celebration occur easily, and because they originate in the present

moment, they are authentic, thus helping to build genuine relationships vital to learning.

Mindfulness activates learning by helping students to clear their mind and calm themselves. When students are engaged and making content connections, the permanence of learning is more likely. We have quite a repertoire as teachers for activating learning. We ask questions, challenge students to reflect and recall in writing, or turn and share with a partner. We use audio-visuals to stimulate learning. The list goes on. But sometimes, in spite of our best efforts, obstacles interfere. Students are distracted, uninterested, or at worst traumatized so that for them to focus on what they need to learn at the time is nearly impossible. One in five children have been hit, one in five have been sexually abused, and one in eight have witnessed parent violence (Van der Kolk, 2016). Mindfulness is a powerful practice that can help students calm the interference from trauma while focusing on learning.

Teachers frequently urge students to pay attention but rarely explicitly teach them how to do so. There is the assumption that students are readily equipped with the skill. However, most of us likely learn on our own what paying attention means. Simply hearing the words “pay attention” perhaps precipitates a slight physical response, one we use to signal our brain to zone in on that to which we should be attending. Perhaps a stress response occurs and our heartbeat or respiration increases slightly. “For many of us the act of paying attention is intertwined with a subtle (or gross) sense of strain, a physiological effort to pull it all together, and—in many cases—a low-grade fight-or-flight response” (McKenna, 2016, para 3). Before adopting a mindfulness practice, never did I explicitly teach my students how to monitor and focus their attention. When I began to incorporate mindfulness strategies with my students, improved attention was an undeniable positive byproduct.

Mindfulness affects the brain and human behavior positively. Cardiologist Herbert

Benson, Harvard medical school professor, Founder of the Mind/Body Institute, and pioneer in mind-body medicine, trained teachers to teach middle school students relaxation exercises. The results were higher GPAs, improved work habits, and greater cooperation (Benson et al., 2000). The role of mindfulness in schools is apparent for reasons ranging from emotional regulation to improved performance.

What is the Best Way to Approach Mindfulness in the Classroom?

There are numerous strategies for introducing mindfulness and making it a regular practice in the classroom. Packaged curricula such as MindUp, Learning to Breathe, and the .b curriculum in the UK each have redeeming qualities. I studied and/or heard lectures on each of these and considered them as options for my classroom. However, it is my goal to bring mindful awareness benefits to students not as a program or curriculum, but as an organic practice within existing subject areas, more like a procedure than content, even though there is the need to teach basic concepts initially. I call the instruction CALM – Celebrating and Activating Learning via Mindfulness. My content area is ELA, but I introduce it to classes at a fellow teacher’s request in other subjects as well. I have presented to the South Carolina Association of Middle Level Educators Conference, Palmetto Teaching Fellows, The Summer Institute of The Center of Excellence for Teachers of Children of Poverty at Francis Marion University, Teacher Cadets at our local high school, a high school Academic Support II class, and fifth and sixth grade students. In every case, mindfulness is met with a measure of skepticism coupled with intrigue because the process ultimately reveals the potential for positive outcomes. Once students understand the basics, teachers should feel comfortable incorporating it without interrupting instruction in the South Carolina curriculum standards. In

fact, the practice significantly enhances subject area instruction.

Before I introduce the practice, I prepare students with two statements:

1. You are not required to participate in mindfulness.
2. Please be respectful of those who choose to engage.

Andres Gonzalez of the Holistic Life Foundation in Baltimore tells the story of teaching a six-week program of mindfulness in one of the nearby public schools. He learned how important it is to respect students' space and not force them to engage in mindfulness. As he taught the class, there was a group of six girls who would not participate. They would hang out in the back corner of the room, use their cell phones, create step routines, anything to not engage; however, at the end of instruction when it was time for Andres to leave, the girls were upset. He was surprised when they showed him everything he had taught. At a conference presentation (Gonzalez, 2016), he encouraged fellow mindfulness teachers to "go with the flow – time, space, even noise restraints."

Mindfulness and the Brain

One of the first topics in teaching CALM is a very short neurobiology lesson. Students enjoy learning the basic structure of the brain and later use the language as it applies to their experiences and initial attempts to be more mindfully aware.

The concept of the two hemispheres of the brain has been well-established in science – the right side is the center for art, creativity, imagination, and emotion; the left hemisphere is where linear, analytical, and logical thinking occurs. Lower and upper regions greatly impact our actions as well, and in humans, the lower region develops first, specifically the amygdala.

The amygdala is likened to a filter for thoughts. For my young students, I compare the amygdala to a smoke detector. In stressful situations, it is on hyper-alert and sends out

signals which result in the impulse to fight, flee, or freeze. These signals flow to the hind brain in the back, our primitive brain. Primitive man especially needed the amygdala to do its work because physical safety was a daily threat, but in modern society, the amygdala is over-reactive. Of course, we experience stress, but our inner, amygdala-influenced dialogue keeps us on high alert even when intense stressors are not present.

The hippocampus is the part of the brain that is important to learning, memory, and emotional regulation. It is like a staircase or escalator which carries information from the amygdala to the prefrontal cortex and cannot do its job effectively if the amygdala is out of control. The prefrontal cortex, the voice of reason, is the key to clear, creative, and higher-level thinking and reasoning. It takes many years to fully develop executive functioning which takes place in the prefrontal cortex.

How do the amygdala, hippocampus, and prefrontal cortex relate to mindfulness? Mindfulness calms the amygdala's natural reactivity so that better decision making can occur. Studies have shown a decrease in amygdala activation after eight weeks of mindful meditation (Desbordes et al., 2012). When we calm our amygdala – the inner heated voice and critic, accuser and judge - we are much more reasonable decision makers and are more likely to respond appropriately and compassionately rather than react impulsively.

Which Mindfulness Strategies Work for Students?

What follows is a list and explanation of the lessons I teach as students increasingly respond to the positive effects of mindful awareness throughout the year. The lessons are a culmination of my own professional development through reading the research, perusing existing programs, attending conferences or retreats, and visiting classrooms in other locations where teachers were

implementing mindfulness. I wanted to learn from the experts and the practitioners. There are numerous resources listed in the reference section and available online to explore terminology and how-tos. Some strategies I employed numerous times, others were introduced to give students variety and to allow them to adapt their practice to what suits them. Once established, it takes very little time to employ a mindful awareness practice with students. As it becomes a habit of mind, there is a cumulative positive effect.

- **4-3-2-1.** This strategy is effective in helping students calm their mind before a test or performance. When we are hyper-stressed, our peripheral vision narrows. What we often focus on is the very thing causing the most stress. Having students find four blue things in the room, listen for three outside noises, then two inside noises, and take one deep cleansing breath helps them to clear their mind and calmly engage in the task causing stress.
- **Focused Breath.** This is the most accessible because it is free! I use a wide variety of strategies for focused, silent reflection on the breath: Breath exercises such as Spiderman, dolphin, tree branches, statue, and five-finger breath, some of which are described in Daniel Rechtschaffen's (2012) work. I also use an app/website for individualized mindful awareness, [StopBreatheThink](#).
- **Intrusive Thought Release.** I use concrete visual images such as the release of a red helium balloon, the release of a tennis ball from a C-clamp, or the release of fall leaves from a branch to help students visualize releasing incessant thoughts that nag and annoy but are not essential to attend to.
- **Mindful Eating.** Some teachers use raisins. I use M&Ms and have students slowly and deliberately pay close attention to how their one M&M looks, smells, and

feels before putting it in their mouth. They let it sit on the tongue allowing it to melt; then bite, chew, savor, and swallow. Students are amazed at how powerful the chocolate is in one M&M.

- **Mindful Listening.** Using a percussion chime, I have students sit up in their seat with their hands in their lap, their eyes closed or cast downward. I ring the chime and ask students to listen to the sound until it disappears. They may raise their hand when they no longer hear it. Having students listen for the absence of a sound proves to be a profound boost to attention in my classroom and an effective way to begin a lesson.
- **Mindful Movement.** Mindful walking is a movement strategy whereby students pay attention to every step they take, the feeling of the weight of their body heel to

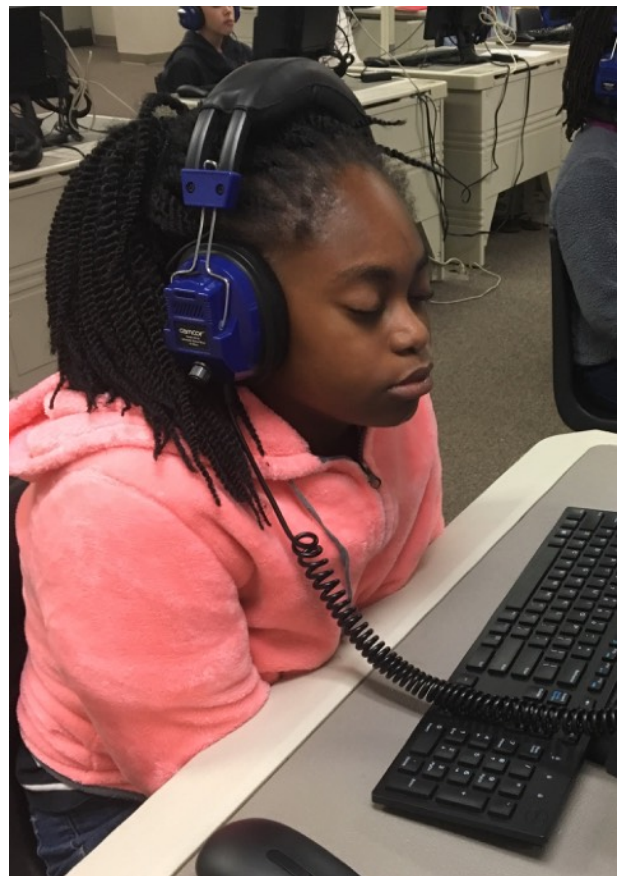


Figure 1. Student practicing a breathing exercise from StopBreatheThink.

toe, as they walk deliberately, first in a circle, then during transitions such as on the way to lunch. I also teach students a technique called tapping which I learned from Argos Gonzalez (2017), though it is modified from the original traditional Chinese practice. I use tapping to help sleepy students wake up or fidgety students “get the wiggles out.”

- **RAIN.** This is a technique for listening to thoughts that need attention by recognizing, accepting, investigating, and nurturing the thought(s) in order to gain insight, come up with solutions, become less stressed, or learn how to sit with troublesome thoughts and remain calm (Brach, 2016).
- **Reading and Writing.** Students have a Reader-Writer Notebook (RWN) in which they write responses to their reading in my ELA class. The RWN is also useful for reflective thought and for writing a gratitude statement each day: Marvelous Monday, Terrific Tuesday, Wonderful Wednesday, Thankful Thursday, Free Friday. Neuroscientist Rick Hanson (2016) refers to our brains as “Velcro for negative and Teflon for positive,” so anything we can do to encourage positivity will help students. I use picture books such as Jon J. Muth’s (2002) *The Three Questions* based on Tolstoy’s work to have students answer thought-provoking questions. Poetry is an effective tool to promote reflection while learning academic concepts. For example, I use Georgia Lyon’s “I Am From” poem as a template for students to explore their family origins and write narrative poetry.

Other positive practices:

- **Fill-a-Bag.** Students decorate a personal paper bag so that classmates and the teacher may write an encouraging or complimentary note to put in the bag.
- **Positive Picture.** My team colleague has each student sit in front of the smart board

and invites fellow classmates to write positive affirmations all around him/her. The teacher then takes a picture, has the team teachers add a note, and gives it to the student to keep.

At What Times Could Teachers Incorporate Mindfulness Into the School Day?

During a quarter or semester, teachers could set aside ten minutes two to three times per week to introduce mindfulness in small increments. I created a brief PowerPoint presentation with information about the brain, an explanation of mindfulness and its benefits, and a brief mindfulness practice of about two minutes to start. Thereafter, I added to instruction by introducing a wide variety of techniques students could explore. Once taught, a mindfulness practice could be applied as follows:

- first thing in the morning with the entire class;
- during a moment of silence, if one is observed school wide;
- during class changes while lined up or walking;
- after lunch and recess with a class;
- when a conflict occurs between two or more students;
- when an individual student is upset, uncooperative, or disruptive.

What if Parents and the Community Object to Mindfulness?

One legitimate concern teachers and administrators might share concerning mindfulness is its origin and execution as a religious practice. While it is true that meditation has roots in Buddhism and nearly every religion has some form of meditation as a regular practice, mindfulness in schools can be taught in an entirely secular way. I prefer to use terms like

“mindful focus on the breath” or “focused awareness,” avoiding the word meditation. In my nearly three years of exploring mindfulness with students, I have had only one parent object, but she was comforted when I assured her I was not camouflaging the teaching of a specific religion. There are, however, some practices that should be avoided to ensure disconnection from the potential to interpret mindfulness as religion. I avoid using terms like karma, chanting, mantras, chakras, etc., and I do not use Tibetan bowls to signal the start of a meditation. As always, parents should have access to any concepts being taught in the classroom, so a letter sent home before you start which explains your intentions is good practice.

Mindfulness for Teacher Self-Care

No matter how much we know about mindfulness or the brain, before we engage our students in a mindful practice, it is essential that we practice it ourselves. Students cannot calm themselves if they do not feel connected to someone who understands them. We need to work to be deeply attuned to each of them. Mindfulness proves to be an effective way to do so. But when teachers are in high stress situations daily, it can be quite challenging for them to take care of themselves. The most recent survey by MetLife (Markow, Macia, & Lee, 2013), with a demographically representative sample of 1,000 U.S. K–12 public school teachers, found that 59% of teachers reported being under great stress, a dramatic increase from 35% in 1985. Studies have shown that teachers make as many as 3000 non-trivial decisions per day in dealing with students, parents, and administrative expectations (Danielson, 1996). Self-care is not selfish. In fact, it might just be the most selfless thing we do. The better we treat ourselves, the better we are for others. After you have practiced mindfulness and are experiencing the benefits for yourself, you may feel compelled to teach it to your students.

Tips for Teachers Practicing Mindfulness

The benefits of simply slowing down, becoming still, and breathing are immense. Calm is free and uncomplicated. It begins with the breath.

- Practice mindfulness yourself.
- Choose a positive attitude. It is a choice – not always easy, but a choice nonetheless.
- Observe and counter negativity and obsessions in your mind. We tend to ruminate about the past and create fiction about the future. Try to be present in the moment.
- As you sit in the moment, be kind and tell yourself it is okay to experience frustration, emptiness, pain, or discomfort. We do not have to push it away.
- Drink plenty of water before and after mindful meditation. Dehydration happens easily and affects our ability to think clearly.
- Do meditations in short bursts. You may not take it in easily. You may feel sleepy or restless. It is all part of the process. Be kind to yourself as you engage in mindfulness. Do not try to suddenly do thirty minutes of silent meditation.
- Be creative. Mindful meditation is not limited to sitting. You can walk, move, eat, and interact mindfully.
- Use one of several apps to help guide you if needed ([StopBreatheThink](#), [HeadSpace](#), [Calm](#)). StopBreatheThink is my preferred app. It has won the Webby and People’s Voice Awards. The feature I like most is the meditation prescription similar to when a medical doctor prescribes medication or treatment after you report your symptoms. The StopBreatheThink prescriptive tool invites you to check in mentally, physically, and emotionally, then uses the information to prescribe a meditation tailored for you. There are choices on the

emotion scale ranging from grateful, joyful, or compassionate to nervous, afraid, sad, lonely, angry, and jealous.

CARE for Teachers

One professional development program designed to promote teachers' social and emotional competence and increase the quality of classroom interactions is CARE for Teachers. The one-year program model is designed to introduce concepts in sequence through didactic, experiential, and interactive learning processes. Through structured sets of mindful awareness practices such as breath awareness, mindful walking or stretching, and listening and compassion practices, teaching efficacy, regulation of emotion, and classroom organization are enhanced (Jennings et al., 2017).

The Effects of Mindfulness: A Case Study

The most rewarding aspect of implementing mindfulness is witnessing student progress. Jamon, a sixth grader who came to my team of four core teachers after a tough fifth grade year, close to being referred to the alternative school, responded well to a one-year mindfulness practice. We had seen Jamon's name quite frequently on the list for the time-out room before he came to us. Fortunately, when he started with us in August, he had great resolve to have a successful year. He confidently told all four of us on the team individually that he wanted to put the past year behind him. But, we soon found out it would be quite a struggle for him to do so. Resolve without strategies was just a wish for Jamon, but none of us gave up, including Jamon himself. We worked hard to connect with this determined twelve-year-old, to love him, and to be mindful ourselves. He worked hard to reciprocate.

I will never forget the first day I talked with him about mindfulness. It was spontaneous,

in the hall early in the morning before he entered math class. I stopped him because I could see he was struggling to control his emotions. We discussed what was bothering him, and I told him briefly about inner dialogue and how we can change the story we tell ourselves. I shared a little about focusing on what it feels like to breathe. It was very early introductory stuff. He came to my class an hour later and could not wait to tell me, "Mrs. L. Mrs. L., you know that breathing stuff you taught me? It works!!!"

He was on board from the start, and though it was not an easy road and took many people nurturing relationships with him, he came a long way. He taught his teachers many lessons about mindfulness, love, and compassion as well. If you would like to hear Jamon's take on mindfulness, you will find him on YouTube as "Mindful Jamon," with the full approval of his mother who supports Jamon's journey in mindfulness.

Maria Montessori once said, "Free the child's potential, and you will transform him (or her) into the world" (https://www.brainyquote.com/authors/maria_montessori). Mindfulness in schools is one powerful way to catalyze transformation. It transforms classrooms one student at a time and equips them with a process for inviting calm in their lives, paying attention with a clear mind, and regulating emotion. Mindfulness, an easily accessible process, can accompany us throughout our lives and impact us in positive ways which science supports and which the education profession is beginning to realize.

References

- Allyn, P., Margolies, J., & McNalley, K. (2010). *The great eight: Management strategies for the reading and writing classroom*. New York: Scholastic.
- Benson, H., Wilcher, M., Greenberg, B., Huggins, E., Ennis, M., Zuttermeister, P. C., Myers, P., Friedman, R. (2000). Academic performance among middle-school students after exposure to a relaxation response curriculum. *Journal of Research and Development in Education*, 33(3), 156-165.
- Brach, T. (2016, December). *Radical acceptance*. Retrieved from a lecture and mindfulness exercise at the Insight Meditation Community of Washington, D.C., Bethesda, MD.
- Danielson, C. (1996). *Enhancing professional practice: A framework for teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.

- Desbordes, G., Negi, L. T., Pace, T. W., Wallace, B. A., Raison, C. L., & Schwartz, E. L. (2012). Effects of mindful-attention and compassion meditation training on amygdala response to emotional stimuli in an ordinary, non-meditative state. *Frontiers in Human Neuroscience*, 6(292), 1-15.
- Gonzalez, A. (2016, July). *The reciprocal teaching model*. Retrieved from notes during a panel discussion at the Mindfulness in Education Conference at The Omega Institute in Rhinebeck, NY.
- Gonzalez, A. (2017, February). *A mindful approach to education: Promoting inquiry and social justice*. Retrieved from a lecture during Bridging the Hearts and Minds of Youth Conference in San Diego, CA.
- Hanson, R. (2016). *Hardwiring happiness: The new brain science of contentment, calm, and confidence*. New York: Harmony.
- Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S., Oh, Y., Davis, R.,... Greenberg, M. T. (2017). Impacts of the CARE for teachers program on teachers' social and emotional competence and classroom interactions. *Journal of Educational Psychology*, 109(7), 1010-1028.
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Delacorte Press.
- Markow, D., Macia, L., & Lee, H. (2013). *The MetLife survey of the American teacher: Challenges for school leadership*. New York, NY: Metropolitan Life Insurance Company.
- McKenna, C. (2016). Taking tension out of attention. *Mindful*. Retrieved from <https://www.mindful.org/taking-tension-out-of-attention/>
- McKenna, C. (2016, June). Retrieved from notes on Skype lecture during CERRA-sponsored South Carolina Mindfulness Conference at Newberry College.
- Muth, J. J. (2002). *The three questions*. New York: Scholastic Press.
- Rechtschaffen, D. (2014). *The way of mindful education: Cultivating well-being in teachers and students*. New York, NY: W.W. Norton & Company, Inc.
- Siegel, D. (2011). *The whole brain child: 12 revolutionary strategies to nurture your child's developing mind*. New York: Random House
- Tang, Y. Y., Yang, L., Leve, L. D., & Harold, G. T. (2012). Improving executive function and its neurobiological mechanisms through a mindfulness-based intervention: Advances within the field of developmental neuroscience. *Child Development Perspectives*, 6(4), 361-366.
- Van der Kolk, B. (2016, July). *The developing brain*. Retrieved from lecture during Mindfulness in Education Conference at The Omega Institute in Rhinebeck, NY.

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Strategies to Integrate the Arts in Geometry for Middle Grades

Nancy Ruppert, Bridget Coleman & Erin D. Besser

Abstract

Integrating the arts can enhance meaning and add context to middle grades mathematics. Advocating for incorporating art into instruction, this article highlights strategies to integrate the arts in geometry including transformations and symmetry, tessellations, and scale factor. When mathematics and art teachers collaborate, students gain a deeper understanding of both mathematics and art. Literature and technology resources are included along with descriptions of activities for each topic.

Strategies to Integrate the Arts in Geometry for Middle Grades

Bring mathematics teaching and learning to life by integrating the Arts! Integrating the arts can enhance meaning and add context to middle grades mathematics. As higher-level geometry moves into the middle grades, educators seek activities to increase conceptual understanding for young adolescents. The strategies offered in this article present examples of ways educators can use the creative arts - musical, visual, and kinesthetic, as well as storytelling as an art form - to reach and engage students while teaching the South Carolina College- and Career-Ready Standards (SCCCRS) for Mathematics (2015). The examples incorporate the arts as an avenue to apply and model select mathematical concepts. Overviews of activities aligned with mathematics objectives include resources related to children's literature and technology connections.

Benefits of Integrating the Arts in Mathematics

As priorities in the K-12 environment have shifted towards a science and math focus, educators are rethinking the art curriculum. Walling (2001) identifies five influences or trends that are impacting arts-based instruction, as well as offers ways in which educators can

use these trends to influence their instruction.

These influences include

- national standards and goals;
- discipline-based art;
- postmodernism education (creative self-expression);
- constructivist teaching; and
- emerging technologies.

Within higher education, opportunities to generate monies (e.g. grants, artistic endeavors, employment) are met with steep risks and consequences when it comes to pursuing the arts (Taylor, 2013). Many believe these efforts do not provide valued outcomes, and thus creative arts education has consistently low enrollment.

However, incorporating the arts is an avenue for inspiring, engaging, and motivating students to interact with multiple disciplines. Arts-based strategies may include visual arts, music, drama, interpretive movement, as well as other creative avenues. Ellen and Stéphan (2013) state that arts-based strategies have the potential to promote and develop students' creativity and critical thinking skills. Students who study the visual arts are stronger in geometrical reasoning, and innovation. Also, art educators typically incorporate opportunities for reflection that includes metacognition (Ellen & Stéphan, 2013), all of which are essential in the mathematics classroom.

In *This We Believe* (2010), The

Association for Middle Level Education (AMLE), advocates for young adolescents to engage in active, purposeful learning and for the curriculum to be challenging, exploratory, integrative, and relevant. Art integration provides middle school students with the opportunity to express themselves through art while communicating mathematical concepts. The National Council of Teachers of Mathematics (SCDE, 2014) promotes contextual teaching and learning with an emphasis on conceptual understanding and problem solving. The SCCCRS-M (2015) include mathematical process standards which provides a commitment to students creating their own conceptual understanding based on experiences. All of these organizations and resources provide expectations for students who are becoming mathematically literate and ready to engage in career exploration. Common practices are making sense of problems, reasoning abstractly, and modeling with mathematics. Effective educators strive to help students understand the information they are learning in a real context, reflect on the experience, and communicate their knowledge in multiple ways.

In an article about the evolution of public arts education, Heilig, Cole and Aguilar (2010) quote Steve Jobs by saying, “Economic success in the future will likely depend on the interaction of creative, entrepreneurial thinking with mathematics and scientific intellect and literary prowess” (p. 143). We believe it is essential for policymakers and stakeholders to understand the value of arts education, and for educators to look for ways to offer new perspectives and alternative means of expression within their content-related courses. The strategies shared here are examples of the possibilities for the mathematics teacher to focus on visual, creative arts integration. These are starting points to inspire creativity, engage students, and begin to shift the priority of art education.

Where Math and Art Intersect: Strategies to Integrate the Arts in Geometry

The following activities provide students with opportunities to actively engage in hands-on, creative experiences while exploring geometry concepts. The activities represent simple, small-scale approaches to integration that classroom teachers can apply in conjunction with existing lessons. Each activity may take as little as 20 minutes and as long as an entire class period. So much of mathematics can be examined in the real world through art. Ultimately, educators want to empower students to think critically and creatively. Incorporating the arts in mathematics adds meaning to learning. Doing so, can also engage students in utilizing the SCCCR Mathematical Process Standards.

Topic: Transformations and Symmetry

Mathematical concepts: Rotations, reflections, translations, symmetry

Art concepts: Dance, radial symmetry

Student Task

Transformations will come alive as students manipulate their drawings to “dance” along with music.

1. Ask students to draw an image on a sticky note (square). Play a dance song such as Livingston’s *Electric Boogie* (Livingston, 1982) which has become widely popular as the *Electric Slide line dance* (Silver, 1976).
2. Have students analyze the mathematics in the dance motions. Students will move their drawings to dance along with the music. As students move to the beat of the music, have them verbalize the mathematical vocabulary. For example, as the dance moves four steps to the right, have students call out “translate, translate, translate, translate.” During the pivot, students call out, “rotate 90

3. After using the *Electric Slide*, encourage students to create their own dance song for transformations. You may even have a few students who will model the actual dance for your class. Use the floor in the classroom and/or in the hallway as a Cartesian Plane. The integration of dance, music, and visual art will make this a lesson to remember.

The basic *Electric Slide* dance moves:

- 4 Side Steps to the Right
- 4 Side Steps to the Left
- 2 Steps to the Back
- 3 Step-touch
- Pivot and Brush

To challenge more advanced learners, our art teacher had students rotate the drawing overlaid on a coordinate grid. For example, given instructions to “Translate (2,3)” on the coordinate grid, students will move their drawings up two units and right three units.



Figure 1. Transformation and

To expand the topic of radial symmetry, follow this exercise.

1. Students can trace an original drawing three times on a large square that has been divided into four quadrants (See Figure 1).

2. Increase the level of difficulty by using the four sticky notes to rotate the image around a center point. This provides students with a deeper understanding of how symmetry emerges based on rotating the image 90 degrees for each turn.
3. In the Figure 1 example students integrated cool or warm colors utilizing various geometric shapes in their designs. By tracing and coloring different patterns, students can explore the elements of design taught in art classes.
4. Once the project is complete, students discuss properties of symmetry in students' designs. Complexity will increase along with the nature of the students' drawings as students expand their own conceptual understanding of symmetry in art.

Resources for Student Exploration

Children's Literature: *Seeing Symmetry* by Loreen Leedy (2012)

This informational picture book can be used to supplement explanations of different types of symmetry. It includes instructions on making symmetrical art.

Web Resources

DESMOS - an interactive mathematical tool created to help students explore mathematical concepts. There are several topics associated with transformations and symmetry.

- Transformations - <https://teacher.desmos.com/transformations>
- Symmetry - The following allows students to deepen their understanding of symmetry as it relates to functions. <https://teacher.desmos.com/activitybuilder/custom/592acf754ad948050543f6f1>

Topic: Tessellations

Mathematical concepts: Tessellations, translations

Art concepts: Escher, tiling



Figure 2. Fish Tessellation Template.

Student Task

Encourage your students to become M. C. Escher fans! Ask students to examine Escher's artwork for transformations and tessellations. Guide students in creating their own "Escher" style art.

To create a simple translation tessellation, do the following steps:

1. Start with a square. Cardstock or heavy weight paper works well.
2. Trace a design on one side of the square.
3. Cut the design out and slide it to the opposite side of the square.
4. Tape your cutout piece to the opposite side of the square and use the finished tile as a pattern (See Figure 2).
5. On a larger piece of paper, trace the template and repeat in a pattern. Add color and design details inside the shapes for creativity.

Resources for Student Exploration

Children's Literature: *A Cloak for the Dreamer* by Aileen Friedman (1994)

This story provides a context for students to think about how geometric shapes fit together. As the characters are each challenged to tailor a unique cloak, their ideas highlight geometric properties. The book's mathematical language along with the illustrations provide valuable opportunities for discussion. Once students have read the book, they may create their own patchwork design. Teachers may use the book as a springboard for discussion on which shapes fit

together and why. Questions and explanations are conveniently provided at the end of the book.

Web Resources

- The M. C. Escher website - View artwork. <http://www.mcescher.com/>
- Bee Engineering - Examine structural geometric patterns in honeycombs while building 2D and 3D Honeycomb Models.
- http://www.sylvanlearning.com/blog/index.php/bee_engineering_with_polygon_tessellations/
- NCTM Illuminations Tessellation Creator- Click and drag polygons to form tessellations. <https://illuminations.nctm.org/Activity.aspx?id=3533>
- GeoGebra Dynamic Geometry Software - Use the software to move points to create a tile for creating your own tessellations. <https://www.geogebra.org/m/mMc2JpJD>
- Tessellation Creations and Artistic Patterns - View a variety of artwork. <http://www.tessellations.org>

Topic: Scale Factor

Mathematical concepts: Scale Factor, dilations, problem solving

Art concepts: Scale drawings, perspective drawings

Student Task

1. Ask students to sketch an original drawing on a 3x3 one-inch grid paper. On the back

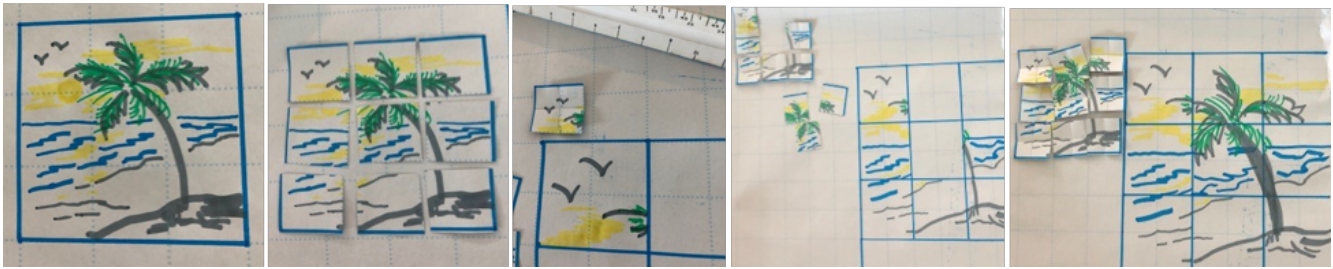


Figure 3. Scale drawing.

- of the design, number the squares 1-25.
Cut the squares apart.
2. Each square must then be transferred to a 6x6 inch square. Discuss how they can use mathematics to determine how to draw their sketches.
3. Calculate the scale factor for each square (See Figure 3).
4. In the art world, artists often create scale drawings of masterpieces and murals.

To expand the scaling process, ask students to select an object to measure. Measure the main parts of the object in preparation for creating a smaller version drawing of it. Decide the scale. Divide or multiply to reduce the parts equally. Use the new measurements to sketch the new drawing. Scale drawings relate well to modeling. A conversation can include how engineers and scientists use models in their careers. For example, we had students measure different parts of a toy PT Cruiser and compared the parts to an actual PT Cruiser to further develop their knowledge of scale factor.

Scale factor can also be viewed in perspective drawings. For example, we created a perspective drawing of a train then measured the ratio between car windows. (We actually googled perspective drawings of trains to find a train.)

1. Fold a sheet of paper in half.
2. Measure two inches above the fold and two inches below the fold. Then draw a line, using a ruler (Students don't always like using a ruler) to the point at the opposite end of the paper. This will allow

- students to measure and record the scale factor.
3. Place lines down the perspective lines. Make them parallel to one another.
4. Fill in the car windows and wheels.
5. Once students finish the drawing have them compare their drawings to one another. They will find similarities.
6. The drawing in Figure 4 was completed by one of our Exceptional Education children. He and the class were very proud of their work.

Resources for Student Exploration

Children's Literature: *Cut Down to Size at High Noon* by Scott Sundby (2000)

This fun story highlights the artistic and mathematical masterpieces of an artistic barber. Two barbers have a scale drawing showdown in an old frontier town in this math adventure. The illustrations in the book can be used to offer examples for teaching scale drawings, as well as artistic sketches. The book is a strong introduction to scale drawings.

Web Resources

- SketchUp - Create perspective drawings using this free 3D software. <https://www.sketchup.com/>
- In this DESMOS activity, students are examining transformations including scale factor by using polygraphs. <https://teacher.desmos.com/polygraph/custom/560c53f5441172070b26220a>
- The following is an interactive activity designed by the Florida Department of

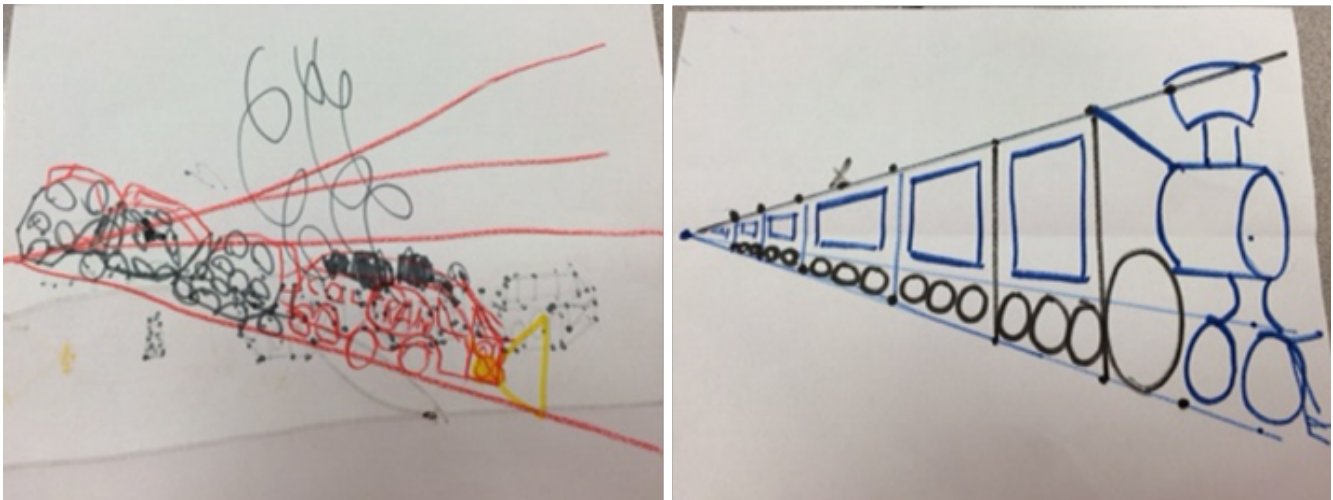


Figure 4. Perspective drawings.

Education on Scale Factor: <http://www.cpalms.org/Public/PreviewResourceLesson/Preview/28885>

- ScaleElla is part of MathSnacks, a cartoon/animated mathematical review or introduction to materials. There are teacher resources available and the cartoons are in English or Spanish. The following is related to Scale Factor: <http://mathsnacks.com/scale-ella.html>

Conclusion

Middle grade educators must find ways to motivate and capture the imagination of their students. Connecting content areas like mathematics and art is one way to do that. Providing opportunities for students to explore and create models of mathematical concepts, to share stories and images, and to reason and communicate their thinking about where math is in their world strengthens students' efforts with mathematical processes. It also allows students to use the language of mathematics to explain their thinking. Integrating art gives visual and tactile learners challenging experiences and opportunities to apply concepts in real-life applications. Arts integration can help students better conceptualize mathematics content and have a more positive impact on mathematics

learning. Math teachers are not alone in this quest. Collaboration with art specialists can support efforts to brainstorm ideas and align curriculum.

References

- Association for Middle Level Education. Formerly the National Middle School Association. (2010). *This we believe: Keys to educating young adolescents*. Westerville, Ohio: AMLE.
- Ellen, W., & Stéphan, V. L. (2013). *Educational research and innovation art for art's sake? The impact of arts education: The Impact of Arts Education*. OECD publishing.
- Friedman, A. (1994). *A cloak for the dreamer*. New York: Scholastic.
- Livingston, N. (1982). Electric Boogie [Recorded by M. Griffiths]. On Carousel [ALBUM].
- Heilig, J. V., Cole, H., & Aguilar, A. (2010). From Dewey to No Child Left Behind: The evolution and devolution of public arts education. *Arts Education Policy Review*, 111(4), 136-145.
- Leedy, L. (2012). *Seeing symmetry*. New York: Holiday House.
- National Council of Teachers of Mathematics (NCTM). (2014). *Principles to Actions: Ensuring Mathematical Success for All*. Reston, VA: NCTM.
- Silver, Ric. *This is 'The Electric' - The Complete Choreography*. Retrieved from <http://the-electricslidedance.com/>
- South Carolina Department of Education Office of Standards and Learning. (2015). *College and Career Ready Standards for Mathematics*. Retrieved from <https://ed.sc.gov/instruction/standards-learning/mathematics/standards/scccr-standards-for-mathematics-final-print-on-one-side/>
- Sundby, S. (2000). *Cut down to size at high noon*. Watertown, MA: Charlesbridge.
- Taylor, S. (2013). Failure: what's it good for in arts and higher education? *The Guardian*. Retrieved from <https://www.theguardian.com/culture-professionals-network/culture-professionals-blog/2013/oct/21/failure-in-arts-higher-education>
- Walling, D. R. (2001). Rethinking visual arts education: A convergence of influences. *Phi Delta Kappan*, 82(8), 626-631.



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Virtual Reality: The New Classroom Reality

Sarah Evanson-Atkinson

Abstract

Virtual Reality, once the stuff of science fiction, is blazing into our public school classrooms with fervor, and it's amazing to behold. The employment of Virtual Reality technology coupled with thoughtfully presented literacy and thinking scaffolds facilitates a deep level of student learning for all stakeholders. For the first time, all students can visit the far-off destinations regardless of where they've come from or where they've been economically, socially, or genetically. This technology evens the learning field for all students in a meaningful and memorable way.

I would love to gather my middle-level students, the entire motley crew, load them onto an airplane and take them to explore the pyramids of Ancient Egypt. Perhaps we could spend a weekend traveling from South Carolina to Australia and swim amongst the amazing sea life in the Great Barrier Reef. In the future, I'd enjoy taking my students on a day trip to the International Space Station so that they might witness firsthand what kinds of measurements scientists and astronomers are gathering in their data hunt during their expeditions just inside the edges of our Earth's orbit.

Unfortunately, these kinds of trips could never materialize for South Carolina public school students who are struggling to pay full price for a school lunch or even for students of working families who could never undertake a travel cost that is greater than braces. Considering those factors, how can we, as public educators, bring learning alive for our students via an unforgettable experience that reaches well beyond the school building walls without breaking the bank?

Virtual Reality is the new classroom reality in our middle school. I'm honored to be deeply involved with the implementation and widespread success of our newly acquired technology that, for the first time, levels the

playing field for all learners in the arena of educational experience and access.

Merriam-Webster (n.d.) defines virtual reality as "an artificial environment which is experienced through sensory stimuli (such as sights and sounds) provided by a computer and in which one's actions partially determine what happens in the environment."

This past summer, my principal gave the final approval for a significant expenditure into the world of virtual reality and education. He purchased a class set of Android devices and headsets specially equipped for virtual reality in the classroom. I would be remiss in saying the journey into virtual reality has been one free of challenges; the collaboration required to get a vision like this not only up and running efficiently but embedded in classroom experience is nothing short of mammoth. However the efforts produces extensive yield in the area of professional collaboration and student learning. We faced issues with network compatibility, network security, user interface challenges, and myriad of other struggles. These puzzles allowed me to collaborate with departments and individuals that I had never had the opportunity to work with. For that, I am thankful for the opportunity. What I couldn't have fully grasped upon the start of this journey,

however, is how immense the impact would be for the teachers and students I serve.

I introduced the new technology on our campus in September as a resource for the teaching faculty. As adults, we toured an Ebola hospital in Sierra Leone together and discussed how we might use such a technology in our classrooms to ignite student curiosity, critical thinking, and sharpen questioning techniques for both teachers and students. I could see skepticism in the eyes of the adults. “How would I manage such a lab?” “Would my students enjoy such an adventure?” “How would I ‘fit’ it into an already chocked full pacing sequence limited by so many requirements for my students?”

All I requested of teachers was this: give me a chance to come into your classroom with the lab and allow me to take the reins – I would handle set up, management, create literacy and thought-scaffolding documents and activities to guide student learning and exposure, and handle all of the details that proved cause for anxiety.

The first expedition that students at my school participated in was a trip into the Stratosphere hitching a ride on a weather balloon. We explored what there was to see at each layer of our planet’s atmosphere during our exploration and even got to witness the Aurora Borealis. Hearing students “ooh” and “aah” was alarmingly rewarding and better than any “a-ha” moment I’ve experienced in my career so far; however, even more exhilarating was the way in which students walked away from the lab activity with a willingness and eagerness to demonstrate their learning to the edu-adults in the classroom. This demonstration of learning was from more than one, three or seven students. It was an enthusiastic sharing of knowledge from all students in the classroom. We had taken every single student up into the stratosphere on a weather balloon and gazed at the Aurora Borealis together - as a learning community. We had truly leveled the playing field. There were no “haves” and no “have-nots.” It didn’t matter if we couldn’t perform on standardized state tests

or qualified for free lunch. We had traveled, learned, and seen together.

According to Richard Culatta (Davis, 2017), CEO of the International Society for Technology in Education, the biggest impact that technology is having in education is “the access to high quality resources. We’ve moved from 100 percent of learning materials coming from an out-of-date textbook, to interactive materials, and students in remote locations having access to high-quality resources” (para. 3). While the school I serve is far from remote, access for all students to high quality, timely resources is a struggle faced by all students in American public schools. It is impossible for print resources to maintain steady with the rapidly changing, research-based theories that are emerging in academia today. What we teach our students about thinking, inquiry, learning, and content basics is not what it was when you or I were in school. Things that we were taught to memorize have largely become negotiable or individually discoverable via technology.

Implementation containing literacy and critical thinking supports with fidelity is essential to student success in the longer term and in the scope of the educational program as a whole. All of our Virtual Reality labs are guided with carefully designed, academic vocabulary filled scripts which have been previewed by both the teacher as well as the instructional coach. Students are then given access to a series of questions of different types via [Socrative](#) or [Google Forms](#) to help guide their learning and focus their thinking during the experience. Data from student responses are sent directly to the teacher for immediate, formative feedback that can be used in subsequent daily lessons and future learning activities. One of the main goals of the structure of this delivery is that students will be able to recognize the interconnected nature of their learning over time.

Some naysayers and technology gurus dismiss this technology as a distraction for our learners. For instance, Jones (2017) stated,

“although these technologies have provided boundless opportunities over previous generations of students, they also produce myriad distractions and much higher costs” (para 9). As with most material things in life, it’s all about the delivery. If I sold this lab to students as a collection of play toys – albeit expensive ones – to delight and entertain them, I would expect students to view both me and the technology as a distraction from the learning. On the contrary, however, the faculty and I have been careful, thoughtful, and reflective in our implementation and use of this technology. Students stop me in the hallway and ask when I’ll be back so that they can check out Westminster Abbey, the great pyramids at Giza, and the battlefields of Vietnam again. They employ specific, content vocabulary when speaking with me and display an undercurrent of curiosity that motivates me to return each morning to the school I serve. If this is a distraction in my learning community, I’m proud to lead the distracting charge forward.



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While it isn’t necessarily a simple or inexpensive response to redefined educational access, Virtual Reality and all of its accoutrements, including scaffolded literacy and thinking support, is a reasonable starting point. It is these moments of learning when students are no longer defined as anything beyond individual learner that pushes us forward, and that’s the reality we should be envisioning for the students we serve in our technologically-limitless classrooms of our new reality.

References

- Jones, G. (2017). Classroom technology: What's new For 2017? *Edudemic*. Retrieved from <http://www.edudemic.com/classroom-technology-in-2017/>
- Davis, M. R. (2017). The future of classroom technology: 5 experts weigh in. *Education Week*. Retrieved from <http://www.edweek.org/ew/articles/2017/06/14/the-future-of-classroom-technology-5-experts.html?cmp=SOC-SHR-FB>
- Virtual reality. (n.d.). Merriam-Webster online. Retrieved from <https://www.merriam-webster.com/dictionary/virtualreality>

The Missing Mandate in Read to Succeed: Interpreting the Reflection Tool to Explicitly Support the Implementation of Culturally Relevant Pedagogy and the Reading Workshop Model

Lillian Reeves

Abstract

In this paper, I address the persistently low test scores of South Carolina middle school students, labeled as "Historically Underperforming Readers" in the Read to Succeed Legislation (2014). While Read to Succeed set an ambitious goal to see 95% of all South Carolina students reading at grade level at the end of its five-year implementation cycle, few if any gains have been made in the reading scores of middle school students since the Read to Succeed enactment in 2014. Consequently, I explicitly interpret the Read to Succeed language in an effort to articulate what must be done to support teens as they develop their identities as readers and to improve the reading scores of middle school students who the data identify as struggling the most on state reading assessments. I also speculate that while it is not explicit and indeed could be seen as the missing mandate, the language of the Reflection Tool can be interpreted to support the simultaneous implementation of culturally relevant pedagogy (Ladson-Billings, 1995) and a genuine reading workshop model (Atwell, 2014), in which students gain access to current and relevant authentic texts. Ultimately, this article was not written to tell teachers what to do as much as it was written in defense of teachers who already hold these beliefs but who are being railroaded by pacing guides and prescribed curriculum in their efforts to do this type of transformative teaching.

Introduction

South Carolina's Read to Succeed Legislation (2014), Act 284, provides lengthy and exhaustive guidelines for districts, schools, administrators, literacy coaches, teachers, and families engaged in the effort of raising our state's persistently low student reading scores. According to the Department of Education's mandated annual South Carolina State Reading Plan and Annual Proficiency Update (SCDE, 2017a), reading scores in K-12 continue to indicate that many of South Carolina's students are not getting ahead, despite the mandate's mission to have 95% of South Carolina's students reading on grade level at the end of its five-year cycle. Though there have been reported small gains on the ACT Aspire Reading and SC Ready ELA, large numbers of 6-8th graders

continue to score below "meets expectations." Concerningly, the percentage of students who "exceed expectations" on the SC READY ELA across grades 6 to 8 is below 15% (see Table 1) (SCDE, 2017a).

The state scores are compounded by NAEP's (National Assessment of Educational Progress) National Report Card (2015) data, which indicated only 28 percent of South Carolina 8th graders met or exceeded proficient in the national reading assessment. Citing longitudinal reading scores on South Carolina assessments, Read to Succeed Legislation seems to recognize the discrepancy between white students and their counterparts and specifically identifies subgroups within the student population in need of additional and intensive support in reading. These subgroups are designated as "historically underperforming

Table 1

State Scores by Grade Level on SC READY ELA Test, 2017

SC Ready ELA Level	Grade 6	Grade 7	Grade 8
Number of Students Tested	56,413	55,849	55,049
Percentage of Students Scoring "Does Not Meet Expectations"	23.7	28.4	28.0
Percentage of Students Scoring "Approaches Expectations"	36.6	35.2	31.9
Percentage of Students Scoring "Meets Expectations"	26.0	23.3	26.9
Percentage of Students Scoring "Exceeds Expectations"	13.6	13.0	13.2

Note. Adapted from South Carolina Department of Education. (2017b). State scores by grade level. Retrieved from <https://ed.sc.gov/data/test-scores/state-assessments/sc-ready/2017/State-Scores-By-Grade-Level/?ID=9999999>.

readers" (SCDE, 2017a, p. 4). Student readers in these groups include: "African American students, Hispanic students, Native American students, students eligible for free or reduced lunch under federal guidelines, Limited English Proficient (LEP) students, migrant students and students with non-speech disabilities" (p. 4). Though the students categorized into these subgroups are multidimensional and deserving of careful and detailed attention in their own right, an analysis of the needs for each group is beyond the scope of this paper. Rather, this paper aims to highlight the disparities in the reading scores of students of color, and to make suggestions about how South Carolina has a unique opportunity to interpret the demands of the Read to Succeed law in favor of the identified student populations. Consequently,

while I recognize that Read to Succeed legislation acknowledges the disparities in students' reading achievement, the South Carolina ELA middle school curriculum does not yet reflect a commitment to genuine reading workshop, to using authentic texts, or to implementing culturally relevant pedagogy that could positively impact student reading achievement.

The Problem

Evidenced in the racial subgrouping statistics reported by Read to Succeed and the 2015 NAEP Report Card, (which reported South Carolina's African American 8th graders' average score was 27 points lower than white students and Latino 8th graders' average score was 22

Table 2

State Scores by Grade Level and Demographic Category on SC Ready ELA Test, 2017

Demographic Category	Percentage of Students Scores "Does Not Meet Expectations"		
	6th	7th	8th
African American Students	37.8	44.9	44.4
Latino Students	28.7	32.4	32.4

Note. Adapted from South Carolina Department of Education. (2017c). State scores by grade level and demographic category. Retrieved from <https://ed.sc.gov/data/test-scores/state-assessments/sc-ready/2017/State-Scores-by-Grade-Level-and-Demographic-Category/?ID=9999999>.

Table 3

State Scores by Grade Level and Demographic Category on SC Ready ELA Test, 2017

Demographic Category	Percentage of Students Scores “Approaches Expectations”		
	6th	7th	8th
African American Students	41.9	37.4	35.1
Latino Students	41.2	39.4	34.4

Note. Adapted from South Carolina Department of Education. (2017c). State scores by grade level and demographic category. Retrieved from <https://ed.sc.gov/data/test-scores/state-assessments/sc-ready/2017/State-Scores-by-Grade-Level-and-Demographic-Category/?ID=999999>.

points lower than white students), African American and Latino student populations are identified as struggling significantly to score at or above proficient on South Carolina reading assessments (See Tables 2 and 3) (SCDE, 2017c), but there is little indication that South Carolina’s ELA curriculum uniformly adheres to long-established research, which vehemently argues children of color and children of diverse cultural and linguistic backgrounds are more likely to become readers and to continue reading when they have access to texts that positively and accurately reflect their experiences, languages, families, and lives (Davis, 2017; Freeman & Freeman, 2017; González, Moll, & Amanti, 2009; Robertson, 2016; Worthy, Moorman, & Turner, 1999). Based on the reported reading scores of South Carolina students of color and students of diverse cultural and linguistic backgrounds, it is apparent that students have not yet gained access to a curriculum that recognizes the triadic impact of genuine reading workshop, authentic texts, and culturally relevant pedagogical practices.

Information Gathering

Recently, I conducted an informal survey of parents and middle school ELA teachers, and discovered that South Carolina middle schoolers are likely to be assigned *The Giver* (Lowry, 1993), *Hatchet* (Paulsen, 1987), *The Outsiders* (Hinton, 1967), *The Bridge to Terabithia* (Paterson, 1977), and selections from Edgar Allan Poe (1946) to name a few. However, these

classics in American literature are outdated (Boyd, Causey, & Galda, 2015; Crowder, 2016; Dredger, Horst, Martin, & Williams, 2014; Jeffrey 2009) and out of touch with 21st century preteens and teens’ interests, experiences, and cultures.

Specifically, as teenagers’ interests evolve and the demographics of the country become even more diverse, static middle school classics may no longer be the *best* tools for helping struggling students gain access to academic success in reading. Therefore, for middle schoolers still learning to read, still building stamina as readers, and still deciding if books can be cool (Beers, 2003), more access to contemporary texts, to include images, poetry, songs, short stories, mixed media prose, and more may be a stronger method by which to invite young learners to engage in reading and may improve middle school students’ reading scores.

The reading required of middle schoolers is complex and multidimensional (Galda & Graves, 2007; Guthrie & Davis, 2003; Tovani, 2000, 2011). In addition to supporting students in reading instruction’s cognitive dimensions -- fluency, comprehension, word knowledge, decoding, phonics, and phonemic awareness -- curriculum developers must also consider the cultural and sociopolitical contexts and intersectionalities in which students learn and live and from which books are written (Compton-Lilly, 2007; DeVries, 2011; Henderson & May, 2005; Vacca, et al., 2011).

Explicit and Critical Interpretation of the Read to Succeed Evaluation Criteria

Beginning in section E of the Read to Succeed Middle and High School Exemplary Literacy Reflection Tool (SCDE, 2017), it is evident that middle and high schools are being evaluated based on whether a wide range of levels, texts, and genres are available to students and if they are used instructionally for sustained periods of time. A number of categories in the reflection rubric relate specifically to student engagement with reading materials (see Table 4).

After reviewing the evaluation criteria, I looked specifically at the italicized words (my emphasis; see Table 4). These words provided an entry point for explicitly interpreting the mandated tenants of Read to Succeed in support of “Historically Underperforming Readers.” Though it is not explicitly stated, the specific terms italicized in the reflection criteria do provide the language of practices with the

greatest opportunity to improve student reading achievement. These words and phrases are:

- choice;
- monitor reading and increase reading;
- eliminate activities that interfere with text reading;
- ample [access to] text;
- authentic texts;
- authentic experiences;
- provide large blocks of time; and
- are appropriate for the readers ...in their classrooms.

To gain a better understanding of the implications of each italicized word, I suggest that an authentic combination of Atwell’s (1998) reader’s workshop using authentic texts and culturally relevant pedagogical practices may invite students to engage further in reading practice. Consequently, an explicit articulation of reading workshop using authentic texts and culturally relevant pedagogical practices may be the missing mandate in the Read to Succeed Legislation.

Table 4

Read to Succeed Middle and Secondary Reflection Tool Criteria, 2017

E1. Teachers provide students <i>choice</i> in what they read, write, and research.
E2. The teachers <i>monitor reading</i> and writing engagement and use that data to conference with students as needed to <i>increase reading</i> and writing volume.
E3. Teachers reflect on and <i>eliminate activities that interfere with text reading</i> and writing.
E5. Teachers ensure there are <i>ample texts</i> (both informational and literary) and other materials available in their classrooms.
H1. Teachers use predictable structures (Immersion, Investigation, Coalescing, and Going Public) so that students construct knowledge by reading and writing <i>authentic texts</i> for most of the instructional time.
H2. Teachers integrate content-specific reading, writing, & researching into ELA to provide the a <i>authentic experiences</i> necessary to become more proficient researchers and readers and writers.
H3. Teachers <i>provide large blocks of time</i> for instruction & practice for students to <i>sustain</i> work in reading, writing, and researching.
H5. Teachers ensure texts and other materials are appropriate for the readers and writers in their classrooms.

Note. Adapted from South Carolina Department of Education. (2017). *Read to Succeed middle and secondary exemplary literacy reflection tool*. Retrieved from [https://ed.sc.gov/scdoe/assets/File/instruction/read-to-succeed/Reading%20Plans/R2S%20Middle%20and%20Secondary%20Reflection%20Tool%20revised\(1\).docx](https://ed.sc.gov/scdoe/assets/File/instruction/read-to-succeed/Reading%20Plans/R2S%20Middle%20and%20Secondary%20Reflection%20Tool%20revised(1).docx).

Reading Workshop

Providing choice and ample access to text, monitoring reading, increasing reading, and providing large blocks of time for reading in school are defining features of Atwell's (1998) reader's workshop. Atwell has adamantly emphasized that students need spaces in school where there are interesting and exciting books to choose from, where students can practice reading, where books are talked about, and where students are provided significant time to engage in the act of reading. Atwell uses the term "voluminous practice" to describe the "only route to proficiency" in reading. Voluminous practice "builds stamina, fluency, vocabulary, and comprehension. It sharpens tastes and preferences. It gives children knowledge of genres, authors, and literary features, and it encourages the development of critical and analytical skills" (Atwell, 2014, para 8).

There must also be a plan in place that puts books in students' hands. In their independent reading guidelines, Lamping and Blase (2012) suggested schools not only need to provide time to read, but to secure the copies of the books for students to read. In many rural and urban schools in South Carolina, funding is a chronic barrier to book access. Some schools do not have the ability to maintain or update library selections to meet the evolving interests of preteens and teens. This falls back on the South Carolina Department of Education; if they mandate student reading instruction should follow the Read to Succeed guidelines, they will have to allocate funds to improve and expand access to relevant books in the state's schools.

While not all books are appropriate for students, many more books than those on the typical required reading list are appropriate and may be just the book that is needed to hook a reluctant reader. Beach, Appleman, Hynds, and Wilhelm (2006) have suggested teachers collaboratively develop booklist criteria with students. Citing the survey results of the 2011 American Library Association's "Teens' Top Ten

Books," the authors reported the teen-generated book selection criteria, which included:

1. Appeal and Involvement – Books should have a "lasting and universal" appeal, an attractive cover, and high degree of personal, emotional involvement.
2. Literary Quality – Books should be substantive and not "fluffy." They should offer unique perspectives and ways of thinking.
3. Characters – Characters should be old enough to understand the problems and concerns of teenagers. They should be realistic, compelling, and distinctive.
4. Content and Style – The subject matter should be relevant to teenagers, with good descriptions, vivid imagery, and an appropriate (not condescending) tone.
5. Plot – The plot should have a good blend of action and description with a satisfying (not necessarily happy) ending.
6. Genres – The final list should contain many different genres on topics that appeal to a variety of teen readers. (Beach, Appleman, Hynds, & Wilhelm, 2006, pp. 32-33).

Criteria developed with students can make our classroom libraries more inviting and more reflective of student interests, resulting in more books being read, shared, and discussed. While standardized test data offers a particular type of information for teachers, schools, districts, and the state, scores cannot be the only information used to interpret student reading ability; test scores tell us virtually nothing about students' interests in or strengths across a wide variety of texts. For instance, it may be discovered that students who score below proficient on a standardized reading test, which relies primarily on asking students to comprehend and analyze non-contextualized passages, have an incredible precociousness for deciphering images, movies and film, poetry, music, or short stories, all of which are complex and dynamic text structures

but the analysis or creation of which are not typically measured on the state assessments.

Like Beach and colleagues, Tovani (2011) also argued student choice in reading material is the cornerstone of her reader's workshop. While all students cannot read different books, all students should have ample opportunity to choose what they read from collaboratively developed book lists. To help students maintain a sense of autonomy, Tovani arranged her readers' workshop by three purposeful criteria. Tovani used whole class anchor texts, supported by nonfiction choices (six to eight weeks); an ongoing, concurrent, choice-based reading structure; and shorter (three-week) units in which students read self-selected texts in class or book clubs to read with peers. During the three-week units, which happen at least once a quarter, students get to choose whatever book they want to read. Throughout the short units, students study author's craft, language conventions, or work to increase fluency, vocabulary, stamina, and comprehension. Further, Tovani provided "free reading" or additional, built-in time during class when students can read their self-selected books throughout the year.

Galda and Graves (2007) further advocated for student choice in selecting reading material for reading workshop. They supported students having access to a wide range of texts and genres, including fiction, informational texts, magazines, comic books, and newspapers. Galda and Graves also suggested that students be allowed to choose not just what they read, but how they respond to what they read. In addition to offering students a choice of reading materials and how to respond to the reading, Galda and Graves also advocated for supportive classroom environments that provide extended periods of reading, respect for students' home languages and home cultures, and validation of home languages by making books available in that language.

Comparably, Beers (2003) fleshed out the confidences needed by dependent readers, or readers "dependent on an outside-of-themselves source not only to tell them what to do but in many cases, to do it for them" (p. 16). The confidences identified by Beers were broken into three categories: cognitive confidences, social and emotional confidences, and text confidences:

When students experience cognitive confidence, they are able to comprehend texts, monitor their understanding, determine meaning of words, and read with fluency. When students experience social and emotional confidence, students are willing and active participants in a community of readers, read for enjoyment and information, and have a positive attitude toward reading and other readers. And when students experience text confidence, they develop the stamina to continue reading difficult texts and they find authors and genres that interest them. (p. 18)

To maximize student practice (which may include applying the mini lesson skill or engaging in reading), Tovani (2011) arranged her 90 minute ELA block into a reading workshop schedule that included some variation of this schedule:

- 10 minute opening to set a purpose for instruction;
- 15 minute mini lesson on a skill (The mini lesson is usually informed by student questions, comments, or submitted work from the previous day's class);
- 50 minutes of work time (The teacher and students work during this time. Students work to apply the skill from the mini lesson to their reading or their responses to reading. Meanwhile, the teacher holds mini conferences with students that target or assess individual needs and abilities); and
- 15 minutes of debrief and close the lesson.

The reading workshop model, as illustrated in these snapshots, is highly individualized, relies

on teachers' astute formative assessment documentation, and targets students' needs, strengths, and interests.

Reading workshop, however, as Atwell (2014) cautioned, is not a scripted reading program, despite heavy national reliance on packaged learning. If districts suggest they are using a reading workshop model, but students do not have access to a wide range of texts, do not have extended periods of time in school devoted expressly to reading, talking about reading, and practicing reading, then students are not engaged in a genuine reading workshop that provides opportunities for growth and change. Any reading program, in fact, that removes teacher autonomy, student autonomy, and teacher ability to respond to individual students' interests, needs, and strengths is not using effective or genuine reading workshop.

Authentic Texts

Once we have an idea of how a reading workshop should work, as genuine, non-scripted reading workshop models, only part of the important and necessary work of addressing the instructional reading needs of all students has occurred. The language in the Read to Succeed Reflection Tool uses the term "authentic" to describe the texts and experiences students should have while engaged in reading. The reading workshop model, then, needs an explicit culturally relevant overlay. Think, for example, of a piece of cardstock with a flow chart on it representing the reading workshop. Now think of a piece of tracing paper or a transparency going on top of the cardstock to enhance particular features of the reading workshop model. The difficulty arises, however, when we realize the word "authentic" is often thrown around as a buzzword and the complexity of the term is ignored.

The idea of defining an authentic text is so highly debated, complex, and dependent on changing and evolving contexts, stories, cultures, languages, locations, and readers (Henderson,

2005), that some leading scholars on cultural authenticity in children's literature like Fox and Short (2003) chose not to adopt any one definition of authenticity. Similarly, Bishop (1991, 2007, 2012) the leading scholar in African American children's literature, also argued that black culture is "not monolithic." While there are features of black authors' work that more authentically represent black life, history, language, and culture, no one set of characteristics could possibly encapsulate the style, achievement, or context from which these works are produced.

In an exhaustive and historic review of African American children's literature, Bishop (2012) arranged books about black characters, culture, and experience into categories. One of the categories, "culturally conscious books," included works by authors who set out "to reflect both the distinctiveness of African American cultural experiences and the universality of human experience" (p. 7). The children's books Bishop assigned to this category are "set in Black cultural environments, have Black major characters, are told from the perspective of those characters, and include some textual means of identifying the characters as Black, such as physical descriptions or distinctive cultural markers" (p. 7). In her review of Walter Dean Myers' significant contributions to children's and young adult literature, Bishop (1991) discussed Myers' determination to address two persistent issues still relevant today: there were not many children's or young adult books representing black families, black life, or black experience, and many of the books that were available portray problematic and inaccurate representations of black reality. Of Myers' work, Bishop said, "He writes of good literature for Black children as literature that 'celebrates their life and their person. It upholds and gives special place to their humanity'" (pp. 15-16).

Freeman and Freeman (2017), ESL (English as a Second Language) and bilingual education specialists, developed a culturally

relevant checklist for students and teachers to use to assess whether or not books are authentic. The checklist includes these questions with scaled answers, 4 indicating “just like us” and 1 indicating “not at all”:

1. Are the characters in the story like you and your family?
2. Have you ever had an experience like one described in this story?
3. Have you lived in or visited places like those in the story?
4. Could this story take place this year?
5. How close do you think the main characters are to you in age?
6. Are there main characters in the story who are boys (for boys) or girls (for girls)?
7. Do the characters talk like you and your family do?
8. How often do you read stories like these? (pp. 106-115)

Schools and curriculum developers may fall into a trap of thinking they know how to choose authentic texts when in fact they do not. Beach et al. (2006) cautioned that choosing two books that “represent” each culture, race, or ethnicity does not mean schools have achieved an authentic reading list. Like Bishop and Freeman and Freeman, Beach and colleagues believed no single book or story could represent an entire culture:

There is a common tradition in secondary schools, however, where one or two texts are expected to bear the burden of cultural representation. When *Roll of Thunder Hear my Cry* (Taylor, 1976) or *To Kill a Mockingbird* (Lee, 1988) are chosen as ‘the’ texts by and about African Americans in a curriculum, or when Langston Hughes becomes the sole spokesperson for the Harlem Renaissance, the result is not a broader representation, but a kind of misrepresentation of the diversity, nuance, and variety of cultural, racial,

ethnic, and other influences represented in our literature choices (pp. 34-35). Freeman and Freeman (2017) raised similar concerns:

Not all books about Spanish speakers, for example, are relevant to all Hispanic students. Some books merely perpetuate stereotypes. Others, especially those published in Spain, contain settings and events that are unfamiliar to most Latino students in the United States. Still other books contain fairy tales or legends, and students have trouble connecting personally to such books. (para 1)

These issues of gaining access to authentic young adult books are compounded by the fact that books for late elementary and early middle school readers have been “frequently neglected in favor of picture books for younger children and young adult novels for older ones.” (Bishop, 2007, p. 221). Yet, the evidence is clear that gaining access to authentic texts benefits all readers. Specifically, not only do culturally authentic reading choices positively impact students of color; white students also benefit from reading texts that accurately reflect the lives and experiences of non-white protagonists: “For children both in ethnically homogenous and ethnically diverse classrooms, literature can offer self-affirmation and a sense of connection to others like and unlike themselves” (Bishop, 2007, p. xiv).

In describing the universal appeal of Walter Dean Myers’ characters, Bishop (1991) further argued, “what connects with young adult readers, regardless of their cultural or ethnic affiliation, is Myers’ portrayal of the youth group as a human support system. Group members tease each other, but they also share laughter and tears and rescue each other from the perils of the city and the snares of adults” (pp. 18-19). Increasingly, middle school readers want to read about kids who are their age, who sound and look like they do, and who are caught up in believable and complex stories. With more and

Table 5**Authors Writing Authentic Text for Middle Grade Readers**

Brendan Kiely and Jason Reynolds; Rita Williams-Garcia; Kwame Alexander; Jordan Sonnenblick; Mike Lupica; Sharon Draper; K.A. Holt; Lynda Mullaly Hunt; Gary D. Schmidt; Jo Knowles; Leila Sales; Jacqueline Woodson; Walter Dean Myers; Victor Cruz; Tim Tingle; Julia Alvarez; Pam Muñoz Ryan; Sharon Flake; Pat Mora; Adi Alsaid; Pablo Cartaya; Lulu Delacre; Alexandra Diaz; Celia C. Pérez

Note. Always read texts before assigning to students.

more 21st century authors creating authentic texts for middle grade readers, we have a unique opportunity to find just right books that enthrill and engage readers who are struggling and reluctant (see Table 5 for suggested authors).

Culturally Relevant Pedagogy

Reading workshop that uses culturally authentic texts must also be supported by culturally relevant pedagogy. Ladson-Billings' (1995) term referred to "a theoretical model that not only addresses student achievement but also helps students to accept and affirm their cultural identity while developing critical perspectives that challenge inequities that schools (and other institutions) perpetuate" (p. 469). Ladson-Billings' seminal scholarship identified a gap in the research, indicating significant amounts of research available on African American students failing in school, but few studies on African American students succeeding in school. During the course of her research, Ladson-Billings discovered a number of unique and troubling features characterizing the school experience of African American students. First, Ladson-Billings realized that fewer than fifty percent of the African American students identified as gifted and talented in elementary schools were still high academic achievers by the time they got to high school. Of those students who were excelling, Ladson-Billings documented that they stayed away from their African American peers who were not academic high achievers so the teachers would not think poorly of them or stereotype them based on their non-high achieving peers. This self-imposed separation

from black peers and rejection from white peers left many of the gifted African American students socially ostracized in school settings.

Ladson-Billings (1995) argued that the purpose of culturally relevant pedagogy then, was to "provide a way for students to maintain their cultural integrity while succeeding academically" (pp. 476); making students "feel good" was not enough to meet students' complex and varied academic needs (Ladson-Billings, 1995b). To enact culturally relevant pedagogy, teachers must also work to make visible and to disrupt social and institutional inequalities while preparing students to critique and challenge inequalities, too (Ladson-Billings, 1995). Culturally relevant pedagogy aims to empower the individual student and the collective, emphasizing the impact social change can have on the school environment, student and teacher engagement, and the community beyond the school. This occurs when real talk happens in the classroom, when students discuss race, language, culture, gender identity, and class among others (Aronson & Laughter, 2016), and when students' sense of self-worth and value is nurtured.

Conclusion

From what I have seen in South Carolina's schools of education, I know this content is being taught and I know teacher candidates are receptive to the practices described here. Once teachers are working in districts across the state, these practices are often abandoned in favor of standardization. Standardization, however, conflicts with practices that require us to know our individual students and their communities, to document

their interests, strengths, and abilities, and to navigate the important and necessary work of cultivating confidence in young readers. To that end, we teachers have to make the choice to look critically and to challenge, if necessary, school practices that may impede some students' abilities to succeed. Our training tells us and there is strong evidence documenting that young people can act in ways and can use literacies in ways that indicate definitively that they are stakeholders in our social project. We can further legitimize students' literacies, interests, abilities, and strengths through the books we share with our students at school and in our own actions and behaviors as facilitators of reading workshop and as users of culturally relevant pedagogical practices that affirm students' identities and abilities.

To make reading achievement possible for some African American and Latino students involves risks we may not yet be willing to take in our assumed identity as teachers. Yet being brave means many things in education, not the least of which is standing up for those we have traditionally seen silenced. We have to acknowledge our own ideologies, practice critical self-reflection, and maybe even become political in public spaces – like school – where we have been told politics have no place. To practice a culturally relevant pedagogy, we may have to stand up to some parents and politicians who occupy positions of power in the school and in the community, who will challenge our choices to use multicultural, authentic, and anti-bias content in our teaching, even if the language of the Read to Succeed Act supports, and indeed, mandates these practices.

References

- Aronson, B. & Laughter, J. (2016). The theory and practice of culturally relevant education: A synthesis of research across content areas. *Review of Educational Research*, 86(1), pp. 163-206. DOI: 10.3102/0034654315582066
- Atwell, N. (1998). *In the middle: New understandings about writing, reading, and learning*. Portsmouth, NH: Boynton/Cook.
- Atwell, N. (2014, September 2). *Nancie Atwell's elements for a successful reading workshop* [Blog post]. Retrieved from <https://blog.heinemann.com/nancie-atwells-elements-for-a-successful-reading-workshop/>
- Beach, R. W., Appleman, D., Hynds, S., & Wilhelm, J. (2006). *Teaching literature to adolescents*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Beers, K. (2003). *When kids can't read: What teachers can do*. Portsmouth, NH: Heinemann.
- Bishop, R. S. (1991). *Presenting Walter Dean Myers*. Boston, MA: Twayne.
- Bishop, R. S. (2007). *Free within ourselves: The development of African American children's literature*. Portsmouth, NH: Heinemann.
- Bishop, R. S. (2012). Reflections on the development of African American children's literature. *Journal of Children's Literature*, 38(2), 5-13.
- Boyd, F. B., Causey, L. L., & Galda, L. (2015). Culturally diverse literature. *Reading Teacher*, 68(5), 378-387.
- Compton-Lilly, C. (2007). *Re-reading families: The literate lives of urban children, four years later*. New York: Teachers College Press.
- Crowder, L. (2016). *Questioning the canon: Exploring the place of young adult literature in the high school curriculum* (Doctoral dissertation). Mercer University.
- Davis, M. (2017, September 27). *Students have a right and a need to read diverse books* [Blog post]. Retrieved from <http://www2.ncte.org/blog/2017/09/students-right-need-read-diverse-books/>
- DeVries, B. A. (2011). *Literacy assessment & intervention for classroom teachers* (3rd Ed.). Scottsdale, AZ: Holcomb Hathaway.
- Dredger, K. S., Horst, P. H., Martin, J., & Williams, M. S. (2014). Harnessing the participatory nature of adolescents today: New literacies and young adult literature. *Educational Practice and Reform*, 1(1), 1-17.
- Fox, D. L., & Short, K. G. (Eds.). (2003). *Stories matter: The complexity of cultural authenticity in children's literature*. Urbana, IL: National Council of Teachers of English.
- Freeman, Y., & Freeman, D. (2017). *Culturally relevant books in the ELL classroom*. Retrieved from <http://www.colorincolorado.org/article/culturally-relevant-books-ell-classroom>
- Galda, L., & Graves, M. F. (2007). *Reading and responding in the middle grades: Approaches for all classrooms*. Boston: Pearson/Allyn and Bacon.
- González, N., Moll, L. C., & Amanti, C. (Eds.). (2009). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. New York, NY: Routledge.
- Guthrie, J. T., & Davis, M. H. (2003). Motivating struggling readers in middle school through an engagement model of classroom practice. *Reading & Writing Quarterly*, 19(1), 59-85.
- Henderson, D. L. (2005). Authenticity and accuracy: The continuing debate. In D. L. Henderson & J. P. May (Eds.), *Exploring Culturally Diverse Literature for Children and Adolescents* (pp. 266-276). Boston, MA: Pearson Allyn and Bacon.
- Henderson, D. L., & May, J. P. (2005). *Exploring culturally diverse literature for children and adolescents learning to listen in new ways*. Boston, Mass.: Pearson Allyn and Bacon.
- Hinton, S. E. (1967). *The Outsiders*. New York: Viking Press.
- Jeffery, D. (2009). Reaching reluctant readers (aka books for boys). *The ALAN Review*, 36(2). Retrieved from <https://scholar.lib.vt.edu/ejournals/ALAN/v36n2/jeffery.html>
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465-491.
- Ladson-Billings, G. (1995b). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice*, 34(3), 159-165.
- Lamping, S., & Blase, D. W. (2012). *Trust me! I can read: Building from strengths in the high school English classroom*. New York: Teachers College Press.
- Lee, H. (1988). *To kill a mockingbird*. New York: Grand Central Publishing.
- Lowry, L. (1993). *The giver*. New York: Random House.
- U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress, various years, 1990–2015 Reading Assessments. (2015). *2015 reading state snapshot report: South Carolina, grade 8, public schools*. Retrieved from

- <https://nces.ed.gov/nationsreportcard/subject/publications/stt2015/pdf/2016008SC8.pdf>
- Paterson, K. (1977). *Bridge to Terabithia*. New York: Crowell.
- Paulsen, G. (1987). *Hatchet*. New York, NY: Bradbury Press.
- Poe, E. A. (1946). *The complete poems and stories of Edgar Allen Poe with selections from his critical writings*. New York: A. A. Knopf.
- Read to Succeed Act. SC Act 284, Chapter 155 S 516 (2014). Retrieved from https://www.scstatehouse.gov/sess120_2013-2014/bills/516.htm
- Robertson, K. (2016). *Connect students' background knowledge to content in the ELL classroom*. Retrieved from <http://www.colorincolorado.org/article/connect-students-background-knowledge-content-ell-classroom>
- South Carolina Department of Education. (2017). *Read to Succeed middle and secondary exemplary literacy reflection tool*. Retrieved from [https://ed.sc.gov/scdoe/assets/File/instruction/read-to-succeed/Reading%20Plans/R2S%20Middle%20and%20Secondary%20Reflection%20Tool%20revised\(1\).docx](https://ed.sc.gov/scdoe/assets/File/instruction/read-to-succeed/Reading%20Plans/R2S%20Middle%20and%20Secondary%20Reflection%20Tool%20revised(1).docx)
- South Carolina Department of Education. (2017a). *South Carolina state reading plan and annual proficiency update*. Retrieved from https://www.scstatehouse.gov/reports/DeptofEducation/16649_State%20Reading%20Plan%20FINAL.pdf
- South Carolina Department of Education. (2017b). *State scores by grade level*. Retrieved December 18, 2017, from <https://ed.sc.gov/data/test-scores/state-assessments/sc-ready/2017/State-Scores-By-Grade-Level/?ID=9999999>
- South Carolina Department of Education. (2017c). *State scores by grade level and demographic category*. Retrieved December 18, 2017, from <https://ed.sc.gov/data/test-scores/state-assessments/sc-ready/2017/State-Scores-by-Grade-Level-and-Demographic-Category/?ID=9999999>
- Taylor, M. D. (1976). *Roll of thunder, hear my cry*. New York: Dial Press.
- Tovani, C. (2000). *I read it, but I don't get it: Comprehension strategies for adolescent readers*. Portland, ME: Stenhouse.
- Tovani, C. (2011). *So what do they really know? Assessment that informs teaching and learning*. Portland, ME: Stenhouse.
- Vacca, J. A., Vacca, R. T., Gove, M. K., Burkey, L. C., Lenhart, L. A., & McKeon, C. A. (2011). *Reading and learning to read* (8th ed.). Boston: Pearson.
- Worthy, J., Moorman, M., & Turner, M. (1999). What Johnny likes to read is hard to find in school. *Reading Research Quarterly*, 34(1), 12-27.



Dr. Lillian Reeves is the site coordinator for the Next Generation Leadership Network (Bread Loaf Teacher Network, Ford Foundation) in Allendale and Aiken, SC. In that capacity, she has been able to learn from two NGLN youth leaders who are enrolled at the Allendale Fairfax High School. The youth leaders drew Lillian's attention to aspects of the Read to Succeed Law by conducting and presenting research on how the R2S Law impacts 3rd graders in Allendale. The youth leaders' attention to this issue inspired Lillian to look at other aspects of the R2S Law and to better understand what implications the law has for the state's K-12 students and teachers. Lillian holds a PhD in language and literacy from USC and an MA in English from Bread Loaf School of English. Currently, she is an assistant professor in the USC-Aiken School of Education.

Professional Book Reviews

The 21st Century Classroom: Creating Space for Student Engagement

Victoria A. Oglan & Janie Riddle Goodman

I was recently at a middle school working with an ELA teacher on her writing curriculum. As I wandered down the hallway to her classroom, I heard the familiar sounds of a school at work. I am always curious as to how teachers organize their classrooms for learning, so as I walked passed classrooms, I noticed a variety of classroom arrangements. Some of the rooms had tables, others had desks in small groups, while still others had desks in rows. I flashed back to my K-12 experiences remembering the seating arrangements that were predominately in rows with students placed alphabetically. When I first started teaching, many years ago, I remembered also seating my students in rows, more for my benefit than theirs. As a teacher and natural kid-watcher, I soon realized that the row arrangement did more to limit my students' learning than expand it. During my teaching career, I experimented with various desk arrangements until I found one that worked for my students and for me, and my time as a row teacher was over. And yet, here I was in a middle school all these years later, and some teachers still preferred the row design. When I thought about all the changes that have occurred in education over the years, as well as all the changes that have occurred since the beginning of the 21st century, I wondered why this one strategy continued to permeate K-12 classrooms.

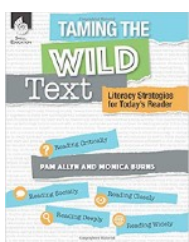
We have witnessed a multitude of changes in the world in the last two decades. As a result, technology in the 21st century is placing greater demands on both teachers and students,

which has educators reevaluating the nature of teaching and learning. The quiet classroom with students seated in rows where students work independently will no longer prepare students for the 21st century workplace where they will be required to collaborate, innovate, and use critical and creative thinking. Teachers are looking for ways to design their classrooms to offer a deeper learning environment, one that maximizes student engagement.

Fredricks, Blumenfeld, and Paris (2004) reported that student engagement is viewed as one of the factors that needs be considered when addressing issues of students' low achievement, boredom, alienation, and dropout rates. In addition, Marks (2000) indicated that student engagement declines as students progress from upper elementary grades to middle school, reaching its lowest levels in high school. Some studies estimate that, by high school, 40 to 60 percent of youth are disengaged. Considering the importance of student engagement, teachers are eager to learn how to construct classrooms that are inclusive and accommodate collaboration. They want to create classrooms that will provide multiple opportunities for students to learn how to be problem solvers and critical thinkers who come together to entertain multiple perspectives. As well, teachers are looking for resources that will help them rethink how to plan relevant instruction that is inclusive of print and digital formats, that will utilize strategies for flexible grouping of students, and that will sustain a learning environment that helps students thrive.

It is clear, teachers know they must prepare students to be ready for the demands of the 21st century workplace.

In this collection of resources, teachers of all disciplines will find support for creating deeper learning environments that nurture in students the necessary 21st century skills. In their book, *Taming the Wild Text: Literacy Strategies for Today's Reader*, Pam Allyn & Monica Burns (2018), offer a broad view of reading across multiple formats, both print and digital, along with strategies for supporting students as they struggle with complex texts and become proficient at taming 21st century reading. To help teachers minimize lecturing for a more student-centered instructional approach, Chris Tovani and Elizabeth Birr Moje (2017) in their book *No More Telling as Teaching: Less Lecture, More Engaged Learning* provide a collection of ideas that support teachers in creating classrooms that provide students with time and opportunity to “engage every day in relevant, problem-based work” (p. vii). In her book *Enticing Hard-to-Reach Writers*, author Ruth Ayres (2017), offers strategies for helping students go to the page with their own stories of struggle and survival as a way to both acknowledge their courage and to heal. To offer teachers strategies that help students be collaborative thinkers and learners, Patricia Vitale-Reilly (2017) in her book, *Supporting Struggling Learners: 50 Instructional Moves for the Classroom Teacher*, offers up some of her best time-tested ideas that meet the needs of all learners. Teachers will want to include these helpful resources in their professional libraries. (VAO)



**Taming the Wild Text:
Literacy Strategies for
Today's Reader** by Pam Allyn
& Monica Burns, 2018, Shell
Education, 200 pp., ISBN:
978-1-4258-1696-4

In education circles around the globe, the conversation about the literacy demands of the 21st century continues to be a much debated topic. In our current age of information, being literate means an individual is advanced at reading, writing, listening, speaking, thinking and using technology. In addition, an individual must also be an effective collaborator, communicator, and problem solver, as well as have a capacity for both critical and creative thinking. Teachers are aware that many of their students have challenges when it comes to the literacy demands of the 21st century. As a result, teachers are eager to access resources that will support their efforts to help all learners be successful not only in the classroom but also in their lives and the 21st century workplace.

In their book, Allyn & Burns (2018) report it is a “new era for reading” (p. 7), an era where the nature of reading is changing. As a result, teachers need to be apprised of these changes and adapt their teaching. For these authors, they see today’s readers as athletic because readers are “reading across many platforms, many types of text, from visual to print, from moving images to primary source photographs” (p. 7). Reading has become a blended affair encompassing text from both print and technology where students have countless options. The new era of reading for these authors has become wild and their goal is to provide teachers with structure and strategies to support the “fearless reader who tames the wild text” (p. 9).

Teachers will enjoy the structure and content of this book. The authors introduce the Five Habits for Reading and provide a chapter detailing each of the habits which include:

- Reading Widely,
- Reading Critically,
- Reading Deeply,
- Reading Closely, and
- Reading Socially.

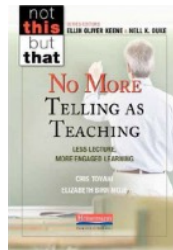
In addition, throughout the chapters, there are callout boxes, which offer lesson ideas with

detailed steps for each lesson. The authors encourage teachers to adapt the lessons to best fit their teaching style and the needs of their learners. There is also a wide selection of reproducible graphic organizers, as well as recommendations for websites, mobile applications, books, and text sets for each of the habits for reading. One feature that will be helpful is a shareable letter at the end of each chapter written in both English and Spanish, for parents and caregivers to help them better understand how they can help their children tackle the many forms of text in the home. These letters offer easy to follow, practical suggestions for families to implement. There is also a chapter on assessment that highlights some useful strategies for both formative and performance-based assessments that will inform instruction and promote student learning. Teachers will find the many resources in this book very helpful and adaptable for all students at any grade level. There is also a robust collection of resources and tech tools offered in an appendix that will be invaluable to teachers as they work to blend the literacy world of print and technology in their classrooms.

Teachers are aware that formative assessment is done during the learning process to determine a student's level of understanding and to recognize next steps in teaching. The chapter on assessment will be valuable for teachers. It offers teachers access to helpful rubrics, one for each of the Five Habits for Reading. These rubrics allow teachers to collect data on students that will help plan instruction to move students forward as learners. Students can also use the rubrics so they can self-assess to see both progress and next steps. Throughout the chapter, there is a collection of digital tools that can be used to formatively assess students in the learning process. The authors encourage teachers to align both digital and print formative assessments to procure a comprehensive picture of each student and to familiarize students with

these tools so they can use the tools for self-assessment.

This book provides teachers with an expanded view of reading and assessment. Understanding the Five Habits for Reading, multiple formats for reading, blended assessment, and the many ways students are athletic readers will open up new instructional possibilities for teachers that will benefit all readers. This new knowledge will help teachers better prepare their learners to address the literacy demands of the 21st century both in their learning and their lives. (VAO)



No More Telling as Teaching: Less Lecture, More Engaged Learning by Chris Tovani & Elizabeth Birr Moje, 2017, Heinemann, 104 pp., ISBN: 978-0-325-09244-7

Engaging students in 21st century literacy practices requires teachers to provide a deeper learning classroom environment. The literacy demands of the 21st century require students to be effective critical thinkers, collaborators, communicators, and creative learners. As a result, teachers need to create classrooms that physically provide opportunities for students to become proficient in the 4 Cs. Unfortunately, many classrooms in grades 6-12 in the United States continue to have students physically arranged in rows where teachers use lecture to cover content as the preferred instructional methodology. This is a throwback to the traditional model of education that continues to permeate far too many classrooms. Students need deeper learning environments to become literacy proficient and teachers need to reconsider how they can accomplish this.

The student-centered classroom has been a hot topic in adolescent literacy for the past two decades and teachers who understand best practices know that student-centered learning is integral to meeting the literacy demands of the 21st century. A deeper learning environment

requires students to be the leaders in the classroom, functioning as sources of knowledge with and for their peers. This is a departure from the traditional classroom where the teacher is the main source of knowledge. In the student-centered classroom, learning is no longer about being empty vessels that get filled up by listening to the teacher talk. Instead, learning is about working collaboratively, constructing meaning, problem solving, and thinking critically and creatively. However, the student-centered classroom does not mean the teacher does not lecture, but rather, lecturing takes on a new profile.

Tovani & Moje (2017) provide new understanding to what it means to engage students in authentic research-based learning in the 21st century classroom. Their book is part of a series fashioned after the diet book format *Eat This, Not That*; one of the goals of the series is to replace outdated practices or practices that are not research supported with approaches that are supported and provide opportunities for students to be active learners. The book is divided into three sections:

- Section I focuses on the lecture approach and how and why this methodology has existed for many decades;
- Section II focuses on what research says about how people learn and what works in classrooms with students; and
- Section III focuses on how to implement the suggestions offered in Section II.

Teachers will understand how to address practices that are engaging and expand students' potential for learning to develop the necessary 21st century literacy practices.

Teachers are aware that the person who is doing the talking, reading, writing, and thinking in the classroom is the person who is getting smarter. In too many classrooms that person is the teacher. Teachers also know that the more students are engaged in learning, the more opportunities they have for developing as proficient learners. Tovani and Moje (2017)

provide evidence that teachers can use a practical model for instruction that puts student engagement and learning at the core of their teaching. The authors present a model of student engagement that will help teachers understand how to plan and structure a lesson. The model includes:

- opening,
- mini-lesson/microlecture,
- working/thinking session,
- catch and release, and
- debriefing.

These elements can be adapted for a one- or two-day time frame. As well, the authors make it clear this is not a lock step approach, but rather a guideline for teachers to rethink how they plan. The goal of the model is to have students engaged for extended periods of time in each of the elements and to ensure students understand how to monitor their progress and have some control in their learning. In Section III, Tovani addresses how to conduct ongoing assessment of students in an effort to provide next steps for them and to also inform the teacher of how to adjust instruction to meet the needs of students.

This book is a must-have. It is an easy to read, practical resource that will help teachers of all content areas in grades 6-12 rethink how they plan for maximum student engagement. (VAO)



Enticing Hard-to-Reach Writers

by Ruth Ayres, 2017, Stenhouse Publishers, 168 pp. ISBN 978-1-62531-090-3

Ruth Ayres (2017) has written a book that begins with her own family's quest to find effective ways to heal trauma. What she ends with is a book for *all* educators to use with *all* students of *all* ages in *all* places, as they work together in classrooms to try and make sense of a world that often seems senseless. Ayres clearly shares her guiding principle for writing this book by stating, "The core of my professional life is encouraging others to use their voices to change

the world” (p. 8). She expands her idea by writing, “It’s our job as teachers to help students see the positive impact they can have on the world...For many kids, teachers are the last hope for healing” (p. 9).

Educators will be interested in the brain research Ayres (2017) shares in “Part I: Holding on in the Hard: Understanding Kids Who Need to Be Enticed to Write.” By connecting brain research on children who have experienced trauma and stress with Maslow’s hierarchy of needs (pp. 13-16), Ayres concludes, “Environment and circumstances do influence a child...If we are going to help children rewrite their histories of hard into stories of hope, then we need to develop new thinking paths in the brain” (p. 17). The overarching question becomes how teachers can create classroom environments filled with instructional practices that support students when those students are forced to confront the intersections of their lives with the stress and trauma of the world. Ayres’ book is a testimony to the power of providing a writing workshop as a safe place where intentional adults can nourish children’s brains so they can heal. In chapter 5, Ayres explains how “behaviors often mask the stories of children who come from hard places” (p. 33) and shares her belief that “their behaviors cover their stories” (p. 33). She goes on to write,

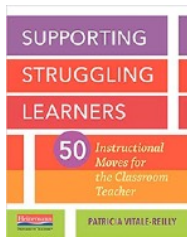
It matters that students learn to use their voices to tell their stories, share their passions, and advocate for their beliefs... Our classrooms may be the last place where healing is possible for some students. Writing workshop may be the only opportunity for their voices to be heard. (p. 34)

In “Part II: Setting the Stage to Entice Students to Write,” Ayres (2017) shares what she believes all teachers must do to establish a writing workshop for students. This begins with self-reflection about what writing has to do with teaching writers—what it means to unlock the writing process in order to guide students as they

do the same. She states, “when we become teachers who write, our teaching is forever changed” (p. 49). Readers will continue to discover in part II what Ayres values about the writing workshop and its power to help students realize that there “is power in knowing how to write well and in being able to communicate through narrative, informative, and argumentative writing” (p. 67). She offers the promise that “writing workshop is the best vehicle for students to become the kind of people who are positive world changers” (p. 67).

The final section of the book, “Part III: Moves to Entice Students to Write,” offers ideas to use in the writing workshop to help students uncover their stories and find their voices. Especially helpful for readers is the table Ayres (2017) provides in Chapter 13: “Leaps of Faith.” In this table, she lists thirty-seven instructional moves to make with student-writers and the specific students each move will help. For example, one move, building curiosity, will help students who either do not want to keep a writer’s notebook or who claim not to have anything to write about. Ayres provides readers with a QR code that takes them to a video showing the minilesson she created for this move to spark students’ curiosity.

Ruth Ayres (2017) has written a timely book that can help teachers better understand what they can do to help students uncover their writers’ voices and grow as agents of change, both in their own stories and the stories of the world. As she concludes, “All children deserve to know that they can write a different version of their stories” (p. 154). As educators, we all should follow Ayres’ idea of developing “faithful and fearless writers” by becoming “faithful and fearless instructors” (pp. 70-73). Who knows what amazing changes could happen, both in students’ lives and in the world that we all call home! (JRG)



Supporting Struggling Learners: 50 Instructional Moves for the Classroom Teacher by Patricia Vitale-Reilly, 2018, Heinemann, 208 pp. ISBN 978-0-325-08878-5

As teachers, we have all had the students in our classes that pull at the heartstrings of Patricia Vitale-Reilly (2018). These are the students who find the path to learning to be a bumpy one. The author tells readers to abandon the deficit model when thinking about these struggling learners and instead to remember that every student has strengths, whether those strengths are resources, talents, skills, or motivations. She continues by identifying three cohorts of struggling learners that can be found in all classrooms: special education students, students designated to receive mandated or non-mandated supplemental instruction, and intermittent strugglers. Of the last cohort, she notes how these learners are not easy to define because they can potentially be any student who struggles with anything at any time in her or his school career.

The author challenges all teachers to consider how the classroom environments they create can either support or impede learners. She then proposes small instructional moves that all K-8 teachers can make that will enable learners to access ideas and learning (p. xvii).

Vitale-Reilly (2018) divides the book into ten chapters with a number of instructional moves included in each chapter. In Chapter 1: “Create an Inclusive Culture through Structures and Environment,” she suggests that teachers:

1. make the room and walls clutter free;
2. offer multiple, flexible seating arrangements;
3. present information in multiple media;
4. allow students to show understanding in multiple forms; and
5. embrace the power of yet.

She writes, “when we have a mindset that trusts that all students can grow, we can move our

students to a place of great joy and success” (p. 13).

Chapters 2 to 5 focus on resources and structures that teachers can incorporate into their teaching that will benefit struggling learners and help facilitate their success. These include incorporating collaborative learning practices into student engagements, using visuals in teaching and learning, scaffolding instruction through pre-teaching, and incorporating small-group instruction. Vitale-Reilly (2018) notes how “collaborations can be positive experiences for all students, including struggling readers” (p. 33), if teachers are willing to allow the work to unfold organically and go to plan B when necessary. She also reminds teachers that even though scaffolding and pre-teaching take time, the benefits for students are profound.

In Chapters 6 and 7, Vitale-Reilly (2018) shares strategies to teach students that will help them develop learning and study skills, as well as communication skills. She notes, in chapter 6, how the executive functioning system of the brain can be compared to an air traffic control tower. Just as the air traffic controllers manage all of the movements of incoming and outgoing airplanes, students need good facility with the habits and processes of focusing, planning, prioritizing, and managing tasks. She believes it is critical for teachers to make the time to teach learning and study skills if struggling students are to become happy and successful in classrooms. Additionally, she recognizes in chapter 7 how “now more than ever, our students need effective communication skills to be successful, happy, and productive citizens of our classrooms and our world” (p. 109). This makes it essential for teachers to help struggling learners develop their language, listening, processing, presentation, and articulation skills.

The focus of chapter 8 is teaching writing instructional moves. Vitale-Reilly (2018) writes “writing is an interesting academic discipline because it travels with our students across the day” (p. 121). She notes, “the instructional

moves that have the most positive impact are moves that are direct, explicit, and differentiated to scaffold student learning” (p. 122). She suggests that teachers should incorporate moves such as modeling, offering choices, freewriting, and creating opportunities for feedback into their instructional practices.

Vitale-Reilly (2018) ends the book by including a chapter on the importance of establishing and maintaining positive relationships with the parents of struggling learners. She notes how teachers should communicate regularly and often with parents in order to help those parents and caregivers of struggling students better understand their children as learners. Additionally, she offers suggestions for teachers on what to do and where to go when what they are trying in the classroom does not seem to be working. She concludes the book by sharing her list of six core beliefs that all teachers should have on the role of teaching children.

While this book has struggling learners as its focus, it is a book that will help teachers learn new instructional moves that work for all learners. After all, being a struggling learner is something that everyone frequently experiences. Patricia Vitale-Reilly has written a book that is a valuable addition to all K-8 teachers’ professional libraries. (JRG)

References

- Allyn, P., & Burns, M. (2018). *Taming the wild text: Literacy strategies for today's reader*. Huntington Beach, CA: Shell Education.
- Ayres, R. (2017). *Enticing hard-to-reach writers*. Portland, ME: Stenhouse Publishers.
- Fredericks, J., Blumenfeld, P., & Paris, A. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59-109.
- Marks, H. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal, 37*(1), 153-184.
- Tovani, C., & Moje, E. B. (2017). *No more telling as teaching: Less lecture, more engaged learning*. Portsmouth, NH: Heinemann.
- Vitale-Reilly, P. (2017). *Supporting struggling learners: 50 instructional moves for the classroom teacher*. Portsmouth, NH: Heinemann.



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