Creating Authentic Literacy Tasks Influences Children's Engagement and Motivation

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Abstract

The academic task assigned to students often dictates what the student will learn, and it plays a vital role of student's motivation and engagement of learning (Turner & Paris, 1995). Thus, the creation and usage of authentic literacy tasks is critical for students' learning (Parsons, Malloy, Parsons, & Burrowbridge, 2015). There are three types of motivation to consider: intrinsic motivation, extrinsic motivation, and autonomous motivation. The use of authenticity, student choice, collaboration, and challenge are all components within a task that can promote student engagement and motivation. Project-Based Learning (PBL) is another way to bring in authenticity. Project-based instruction allows students participate in assignments that are challenging, provide voice and choice, and produce a product that has a purpose beyond school (Parsons, Metzger, Askew, & Carswell, 2010). Several examples and lessons are given to provide insight on how to incorporate different components of authentic tasks.

Keywords: authentic tasks, Project-Based Learning, motivation and engagement

Importance of Authenticity

Academic tasks that students are given determine what the student will learn and play a

vital role in dictating their motivation and engagement of learning (Turner & Paris, 1995).

Therefore, creating and implementing authentic literacy tasks is crucial for students'

learning (Parsons, Malloy, Parsons, & Burrowbridge, 2015). Pearson, Raphael, Benson, and

Madda (2007) stated the importance of authentic tasks:

> The argument underlying the promotion of authenticity is that too many school tasks are
> unauthentic, unrealistic, and, by implication, not useful for engaging in real-world
> literacy activities; that is, instead of teaching kids how to "do school," we should be
> teaching them how to "do life". (p. 36)

There is no consistent agreement around terminology. The word authenticity has become a

"buzzword" in education and can be connected to many other ideas already found in teaching

(Quigley, 2014). Other terms such as, "real-world application", "problem-based learning",

"relevant practices", "open-inquiry", and "project-based learning" can all be associated to the

ideas of authentic learning (Schumacher & Reiner, 2013). The clarity and conceptualization of

the term are still inconsistent. The research based around authenticity is dependent on how that

study defines the word (Duke, Purcell-Gates, Hall, & Tower, 2006). For the purpose of this

review, authentic tasks will be defined as, "those that replicate or reflect reading and writing

activities that occur in the lives of people outside of a learning-to-read-and-write context and

purpose" (Duke, Purcell-Gates, Hall, & Tower, 2006, p.3).

Due to a variety of obstacles, teachers often struggle to create authentic tasks within their

classrooms (Parsons, Malloy, Parsons, & Burrowbridge, 2015). Due to time constraint, teachers

are trying to use every minute they have productively, but often fail to engage students (Parsons,

Malloy, Parsons, & Burrowbridge, 2015). Also, teachers must be able to craft curriculum in a

way that ensures students participate with interest and thoughtfulness (Parsons, Malloy, Parsons,

& Burrowbridge, 2015). This dilemma is exacerbated when creating instruction that accounts for

students' differences of ability level, cultural background, and interests (Parsons, Malloy,

Parsons, & Burrowbridge, 2015). One cause of this could be the lack of professional

development provided for educators (Teale & Gambrell, 2007). Making sure teachers receive

adequate and multiple opportunities of teacher development is crucial to the success of

understanding, creating, and implementing authentic literacy tasks into the classroom (Teale &

Gambrell, 2007).

Theories of Motivation and Engagement

Currently, there are several theories around student motivation and engagement that all

come to a similar understanding: a student's perception of their ability and the worth they deem

an academic task determines that student's motivation and task engagement (e.g. Duke, Purcell-

Gates, Hall, & Tower, 2006, Parsons & Ward, 2011). One theory, the expectancy-value theory

(EVT), propounded by Eccles et al. (1983) and Wigfield (1994) stated that "motivation is

strongly influenced by one's expectation of success or failure at a task as well as the value or

relative attractiveness the individual places on the task" (Gambrell, Hughes, Calvert, Malloy, &

Igo, 2011, p.236). There are also theories of constructivism that put great value on classroom

tasks, suggesting that students will learn what the task leads them to learn (Doyle, 1983). Finally,

theories of situated learning contend that learning happens in certain conditions and these

different situations can play a big part in a student's learning as it is hard to transfer learning to

new contexts (Duke, Purcell-Gates, Hall, & Tower, 2006). Building off the ideas within the

situated learning theory, Duke, Purcell-Gates, Hall, & Tower find authenticity critical because

students learn language best when the learning connects with the "real functional context"

(2006). Therefore, implementing tasks that provide students with opportunities to use their

academic knowledge for authentic purposes and that allow students to be an active participant in constructing meanings and metacognitions were found to be successful in motivating students in literacy (Turner & Paris, 1995).

Types of Motivation

Understanding the different types of motivation can help educators promote student achievement. There are three types of motivation to consider: intrinsic motivation, extrinsic motivation, and autonomous motivation. "Intrinsic motivation refers to behavior motivated by its inherent satisfactions" (Erickson & Wharton McDonald, 2019, p.475). While intrinsic motivation is what educators strive for students to obtain, they also need to also consider the other types of motivation for high student achievement and well-being (Ryan & Deci, 2002). Helping students understand long and/or short-term goals with an extrinsic motivator (e.g., performing in a play, becoming a teacher) is also important (Ryan & Deci, 2002). Lastly, the combination of both intrinsic and extrinsic motivation is referred to as autonomous motivation. This type of motivation is what teachers should pay most attention to when planning instruction and academic tasks (Erickson & Wharton McDonald, 2019). Autonomous motivation presents desired school and psychological outcomes such as persistence and cognitive involvement within a task, and positive emotional experiences (Erickson & Wharton McDonald, 2019; Guay, Chanal, Ratelle, Marsh, Larose, & Boivin, 2010).

Authentic Tasks

The statistics on student's motivation and engagement suggest that engagement in reading drops drastically as students continue their way through our educational system (Erikson & Wharton-McDonald, 2019). Authentic literacy tasks can help foster autonomous motivation in students which will increase their achievement in literacy (Erikson & Wharton-McDonald,

2019).The curriculum a teacher utilizes does not impact a student's motivation or engagement, but instead it is found to be affected by the types of task a teacher creates (Turner & Paris, 1995). The types of tasks a teacher can create are abundant, but research has found that authentic, open tasks brought about a higher success rate than closed tasks (Turney & Paris, 1995). Turner and Paris (1995) defined an open task:

> In open tasks, students were in control of both the products they created and the processes they employed. There was no one correct answer, nor was there a specified procedure to use. Open tasks required students to set goals, select and organize information, choose strategies, and assess the final result. Closed tasks were those in which either the product (e.g., there is one correct answer), the process (e.g., sound out the word), or both were specified. (p.664)

The successes of open tasks are due to the challenge, choice and control, and collaborate nature that students can access through these assignments (Turner & Paris, 1995).

In the past, it was thought that the best method of learning was the teacher delivering information to the students, but recently new ideas have risen about the importance of social interaction within learning (Turner & Paris, 1995). In order to hold students accountable for their learning, tasks need to offer an opportunity for collaboration with their peers along with appropriate supports from the teacher (Parsons, Malloy, Parsons, & Burrowbridge, 2015). Not only do collaborative communities within the classroom provide academic benefits, but teamwork also plays a critical piece in student motivation (Turner & Paris, 1995). Students can gain an understanding, confidence, and regulation of learning through supportive context with their peers (Parsons, Malloy, Parsons, & Burrowbridge, 2015).

Another important aspect of an open task is student choice (Erickson & Wharton McDonald, 2019). By incorporating choice, students are given different avenues to be successful and are provided with a feeling of autonomy (Erickson & Wharton McDonald, 2019). Students who gain a sense of autonomy are more likely to exert autonomous motivation (Erickson &

Wharton McDonald, 2019). They are also more likely to use deeper level strategies like summarizing or backtracking, instead of shortcuts like memorizing, copying, or guessing on the chosen tasks (Turner & Paris, 1995). Lastly, students with the highest levels of motivation and engagement were those who were participating in challenging tasks (Turner & Paris, 1995). Not only will challenging tasks engage students cognitively, but also behaviorally (Miller 2003).

Environment

Successes have been found with authentic tasks, but the greatest success with these tasks was found in a learner centered classroom (Daniels, Kalkman, & McCombs, 2001). To develop a learner centered classroom, there must be an understanding of each learner (a student's heritage, experiences, backgrounds, talents, interests, needs) and the learning process (teaching practices that are the most effective in motivating and obtaining high achievement in all students) (McCombs & Whisler, 1997). The practices of the teacher influence the classroom environment, which in return can affect the teacher-child interaction. By incorporating researched based practices into the classroom that are proposed by psychologists and motivational researchers, teachers can implement opportunities for students to engage with tasks that are meaningful, challenging, and socially supportive (Daniels, Kalkman, & McCombs, 2001).

Culturally Relevant Teaching

Children come to school with a diverse range of home, community, and daily-life experiences. With this comes a wealth of diversified knowledge of the world around them, but it is often ignored and gone unnoticed within educational settings. (Clark & Fleming, 2019). Based on previously mentioned theories of engagement and motivation, students who can see themselves within the curriculum and literature, will become personally invested and engaged with their learning. In contrast, those students with diverse backgrounds are unable to see themselves within the school's curriculum, which creates barriers for meaningful connections and schema. One

solution to this issue is engaging students with culturally relevant teachings (CRTs). Clark and Fleming define culturally relevant teachings as:

> "CRTs are theoretically and historically grounded in culturally responsive and relevant pedagogy and teaching (Ladson-Billings, 1992; 1995; Gay, 2000), multicultural education (e.g., Nieto, 1995; Banks, 1993), and multicultural literature (e.g., Yokota, 1993; Bishop, 1990)" (2019).

Studies have shown that there is a correlation between using CRT's in elementary and middle school literacy programs and increased levels of engagement in EL and African American students (Clark & Fleming, 2019). Teachers that use CRT in their classroom will be incorporating a student's home, school, and community life to bring meaningful interconnections between them (Bennett, Gunn, Gayle-Evans, Barrera IV, & Leung, 2018). From there, teachers will be able to consider how to bring in authentic conversations and experiences into the classroom. **Creating Authentic Assignments**

When creating authentic tasks research studies have found that bringing in authenticity, choice, collaboration, and challenge are critical components (Erickson & Wharton-McDonald, 2019; Parsons, Malloy, Parsons, & Burrowbridge, 2015; Turner & Paris, 1995). The following sections suggest ways to bring these different components into a project or assignment.

Authenticity

One of the first components in creating authentic tasks is to consider integrating literacy content in an authentic and meaningful way. Doing so may be challenging but start by considering events that are happening in school and then consider whether or not these events could allow for students to create a product with a greater purpose. For example, students might create an advertisement for an upcoming school event, a speech about an issue they wish to see fixed at school, an announcement for the principal to make during morning announcements, or a

brochure providing information about what's happening in their school. Students may also look to their community, state, or country to examine the current events that are happening. Also, using students' interests is another way to create an authentic purpose for learning. Lastly, contact outside sources to engage with the students and set a purpose for their project. The following list provides examples where authenticity can be tied into a literacy task: Information on prevention and/or relief support from natural hazards, websites or commercials of how one can make a difference in the community, written proposals about what new books to add into the library, informational posters about healthy school lunches, brochures about the transition into middle school.

Another way to bring in authenticity is by tying in different content areas, such as social studies and literacy. For example, an educator might integrate U.S. History into Biography/Informational Writing. By addressing issues that are happening around the community, country, and world, students will be able to use their literacy skills to go beyond the classroom. How a task is addressed can also show the value of literacy. Instead of referring to an assignment as a task that must completed—like a worksheet to practice a specific skill—bring authentic reasoning into the situation. For example, several literacy tasks could be incorporated into a project that plans a dinner party for 12 historical figures. Students would create a guest list with a brief description of who the guests are, draw and explain a seating chart, design a menu with the foods served for each course, and create conversation cards for each table.

Finally, authenticity can be brought into a task by giving students a real audience to guide the creation of their end product. There is a general agreement that giving the students an audience that exists outside of the classroom is a critical aspect of authenticity (Duke, Purcell-Gates, Hall, & Tower, 2006). Audiences can be established in many different ways. A teacher

may establish a task to be read by others outside the school setting, such as a brochure for visitors at the nature center (Duke, Purcell-Gates, Hall, & Tower, 2006). A teacher might even ask personal and professional friends to come in and become readers of the students work. Another audience may stay within the school setting, but be outside of the classroom such as administration, other teachers, or even classmates.

Choice

A second component within authentic tasks is student choice. Educators should identify places within the project that will allow students to take ownership of their learning by making choices for themselves. One way of incorporating choice is allowing students to demonstrate their knowledge through various means. Students can create hands on products such as a poster, brochure, written report, diorama, skit or play, poem, or a model. Students can also use technology to help them create a final project. Websites such as Google Docs, Google Slides, WeVideo, Powtoons, Prezi, and many more provide a plethora of options for students to best show their learning in a way that is successful for them.

Another way to incorporate choice is giving students the option of a topic within a curriculum unit. For example, in a curriculum unit of opinion writing, students have the choice of what opinion they would like to voice. They should also be given a choice of resources and text used to gather information. Books, magazines, reference materials, and online resources can all be utilized. This will give students ownership of their learning and also provide a natural way to differentiate levels of text.

Mini choices are also a way to still have general control of what students are doing, while also providing a sense of ownership in the decision-making for the students. Mini choices allow students to decide from a prescribed set of two or three options. An example of this being used in

literacy is allowing students to choose the order of tasks they need to complete, whether to work

alone or with a peer, or what tool to use to complete these tasks.

Collaboration

Another part to bring into authentic tasks is student collaboration. Throughout the project,

there should be ample time for students to discuss, inquire, and collaborate with each other.

Placing students into pairs or small groups allows for conversations to take place in a safe

setting. During this time, students can share their progress, struggles, and questions thus far.

Through conversation, peers will be able to make suggestions, critique, or encourage their

classmates. In order for these conversations to be successful, modeling and coaching must first

take place.

Groups can be made for all different purposes. One must consider the main goal for the

groups in order to appropriately create them. Students could be grouped heterogeneously. This

could be done by giving students a choice in creating their own group, using apps or websites

such as Team Shake, Who's Next, and Wheel Decide, or giving students a specific criterion for

choosing groups (e.g. interests, similar research, common project being created). Students may

also be placed in homogenous groups where the level of reading or writing are similar.

Collaboration might also take place outside of the classroom. Consider collaboration

between different classrooms, adults, or community leaders. This might be done by having pen

pals, using programs such as Skype or Facetime, or bringing adults into the classroom. One unit

of study that could easily incorporate outside collaboration would be with book clubs. The

teacher would have to coordinate with adult volunteers to have consistent discussions with a

student(s). The student and adult would exchange their thoughts and wonderings about the book

they are both reading. The student would then be able to collaborate with his/her peers and talk about what their adult partner wrote to them.

Challenge

Finally, educators should make sure that each task moderately challenges students. This will lead to student engagement, the discovery of new understandings, and the recreation of their previous understandings (Turner & Paris, 1995). To create challenging tasks, the task must lend itself to reflection and planning, while memorization and automaticity are skills that students should not be depending on (Turner & Paris, 1995). This way, students will be using resources and previous learned knowledge in order to create new understandings and "pull learning in a variety of ways" (Turner & Paris, 1995). One way to do this is to design a task with multiple entry points. By allowing students to enter the problem with what they know, they are able to count on previous knowledge to be checking their work along the way and adjusting if needed. Another way to make tasks challenging, is by incorporating real-life skills that go beyond the content standards. By adding in skills such as flexible thinking, problem solving, strategic use of technology, informing or persuading others (orally or in writing), students will be pushed to use their skills in a multifaceted way (Duke, Halvorsen, & Strachan, 2016). An example of a high-challenge writing task would be paragraph level writing for several days. Collaboration can occur when students study together on a topic or provide feedback for one another on their academic task. Some examples of paragraph writing with a high challenge are writing an essay on a student's choice of topic for a science unit, a character analysis for a class novel, and letters to the next year's class explaining what they need to know in their new grade.

Authentic Tasks Through Project Based Learning (PBL)

Another way that teachers can bring in authentic literacy tasks into their classrooms is by implementing project-based learning (PBL). Through project-based instruction, students participate in assignments that are challenging, provide voice and choice, and produce a product that has a purpose beyond school (Parsons, Metzger, Askew, & Carswell, 2010). PBL assignments allow for opportunity in actively constructing knowledge with text (Gambrell, Malloy, & Mazzoni, 2007), and empowering students to read and write for their own purpose (Parsons, Metzger, Askew, & Carswell, 2010).

Project Ideas

Below are project ideas that encompass authentic learning and application by incorporating literacy standards within other content areas. To access more project ideas visit www.pblworks.org.

The Story Time Channel. This lesson, which was adapted from www.pblworks.org, has students create a readers-theater script for a fable, folktale, or fairytale that will be presented to a greater audience by video. This project lends to building their reading fluency and comprehension skills. Start by bringing a diverse selection of fables, folktales, and fairytales from a mixture of different cultures. Students will have a choice in the story they wish to read and complete the project on. Students working on the same story will work in collaborative groups engaging in close readings, creating storyboards, writing a Readers Theater style script, and planning and producing a dramatic reading as a video for a "Storytime Channel." The "host" of the story will end the show by explaining the story's central message, theme, or moral. Students will also participate in groups reading different stories in order to critique and provide feedback on each other's work. By hosting a viewing party, the outside audience will be able to

view the students' video and will be able to have continued access to the videos through an online platform.

Mysteries, solved!.

This literacy project is also adapted from www.pblworks.org. During this project, students will be working in collaborative groups based on selected novels. First, each student will choose a mystery story/novel to read and analyze within a literature circle group. Then, each group will hold discussions to establish a set list of criteria that they think a highly effective mystery contains based off of the novel they just read. Next, students will write their own mystery story that incorporates the set criteria established earlier by the group. Each group has a choice in how they wish to publish their final work. Some examples that students may choose from are written text, graphic novels, videos, or podcasts. Finally, a classroom event is held where students share their story to their peers and/or members of the community. This project is easily adaptable to fit other genres, such as adventure stories.

The how-to-make-money book.

This last project is adapted from the article, Project-based learning not just for the disciplines of science, technology, engineering, and mathematics (STEM) anymore. The authors Duke, Halvorsen, and Strachan (2016) came up with a project that incorporates social studies and literacy standards. "Students are connected with a local organization serving youth, such as the Young Men's Christian Association (YMCA) or Boys & Girls Club. Students write a book for this group on how to make money for personal or philanthropic use (Duke, 2015). The project begins with reading about real-life child entrepreneurs. Students then begin researching and analyzing the pros and cons of a range of possible businesses. In the process, they learn

important economic concepts, such as unmet economic wants, business plans, profit and loss, as well as reading skills such as understanding words that have multiple meanings.

Each student chooses a business he or she would like to lead, such as making and selling bracelets or offering car washing services. Once students have developed strong knowledge of the business they have chosen to write about, they study common features and language of procedural or how-to texts. They imitate the features and language as they write about their chosen business, drafting both prose and graphics for their procedural texts while deepening their knowledge. They get feedback from peers, their teacher, and some members of the target audience and then revise and edit to create a product as effective as possible for students in the organization they hope to support. Once all students' texts are compiled into a book, they are delivered to the partner organization for their use" (Duke, Halvorsen, & Strachan, 2016, p.17).

Discussion

The academic task assigned to students often dictates what the student will learn, and it plays a vital role of student's motivation and engagement of learning (Turner & Paris, 1995). Thus, the creation and usage of authentic literacy tasks is critical for students' learning (Parsons, Malloy, Parsons, & Burrowbridge, 2015).

Teachers must first consider what motivates and engages a student to complete an academic task. There are three types of motivation that teachers need to consider: intrinsic motivation, extrinsic motivation, and autonomous motivation (Erikson & Wharton-McDonald, 2019). When teachers provide students with challenging tasks and choice, they will use intrinsic motivation as they move through the task with scaffolding and appropriate feedback. The student will put a greater value on the task as it will have an attractiveness to them. Although educators strive for students to be intrinsically motivated in literacy, using an extrinsic motivator such as

performing in a play or the completion of an end-product, can be beneficial (Erikson & Wharton-McDonald, 2019).

Teachers that create authentic tasks, will be able to autonomously motivate their students. These tasks should incorporate student choice, academic challenge, collaboration, and authenticity. One way to create authentic tasks is by creating cross-curricular tasks combining literacy with math, social studies, and/or science. Another way to incorporate authenticity is using project-based learning.

Implementing authentic tasks or PBL requires scaffolding and an abundance of feedback (Daniels, Kalkman, & McCombs, 2001; English & Kitsantas, 2013). Teachers play a critical role in the success students have with these academic tasks. Teachers will be able to guide students through needed skills and understandings by making sure the content core standards are at the front. Students will also play an important role in their learning. Students will be able to provide constructive criticism and feedback to their peers through collaborative groups. Also, students will need to monitor and adjust their own personal goals and learning along the way.

With bringing in authentic literacy tasks into the classroom, challenges are to be present along the way. Making sure teachers receive adequate and multiple opportunities for teacher development is crucial to the success of understanding, creating, and implementing authentic literacy tasks into the classroom (Teale & Gambrell, 2007). Therefore, I would recommend further studies to be carried out on the professional development of authentic tasks and PBL. Also, I would suggest a study that investigates the attitude and willingness to implement authentic literacy tasks into the classroom. The suggested audience would look at the administrative staff as well as teachers grouped into years of experience. The conclusions that would hopefully be gained are the targeted audience of whom needs the most professional

development, and an understanding of where there might be roadblocks in getting authentic tasks within the classrooms.

References

Bennett, S., Gunn, A., Gayle-Evans, G., Barrera IV, E., & Leung, C. (2018). Culturally responsive literacy practices in an early childhood community. *Early Childhood Education Journal*, *46*(2), 241–248. https://doi.org/10.1007/s10643-017-0839-9

Amy Clark, & Jane Fleming. (2019). "They almost become the teacher": pre-k to third-grade teachers' experiences reading and discussing culturally relevant texts with their students. *Reading Horizons (Online)*, *58*(3), 23–51.

Daniels, D., Kalkman, D., & Mccombs, B. (2001). Young children's perspectives on learning and teacher practices in different classroom contexts: implications for motivation. *Early Education & Development*, 12(2), 253–273. https://doi.org/10.1207/s15566935eed1202_6

Doyle, W. (1983). Academic work. *Review of Educational Research,* 53(2), 159–199

Duke, N.K. (2015). *Information in action: Reading, writing, and researching with informational text, grade 5.* New York. NY: Scholastic.

Duke, N., Halvorsen, A., & Strachan, S. (2016). Project-based learning not just for STEM anymore. *Phi Delta Kappan*, 98(1), 14–19. https://doi.org/10.1177/0031721716666047

Duke, N., Purcell-Gates, V., Hall, L., & Tower, C. (2006). Authentic literacy activities for developing comprehension and writing. *Reading Teache*r, 60(4), 344–355. https://doi.org/10.1598/RT.60.4.4

Eccles, J. S., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J., & Midgley, C. (1983). Expectancies, values and academic behaviors. *In J. T. Spence (Ed), Achievement and achievement motives* (pp. 75–114). San Francisco: W. H. Freeman.

English, M., & Kitsantas, A. (2013). Supporting student self-regulated learning in problem- and

project-based learning. *Interdisciplinary Journal of Problem-Based Learning*, 7(2). https://doi.org/10.7771/1541-5015.1339

Erickson, J., & Wharton-McDonald, R. (2019). Fostering autonomous motivation and early literacy skills. *Reading Teacher*, 72(4), 475–483. https://doi.org/10.1002/trtr.1750

Gambrell, L., Hughes, E., Calvert, L., Malloy, J., & Igo, B. (2011). Authentic reading, writing, and discussion. *The Elementary School Journal*, 112(2), 234–258. https://doi.org/10.1086/661523

Gambrell, L. B., Malloy, J. A., & Mazzoni, S. A. (2007). *Evidence-based best practices for comprehensive literacy instruction.* In L. B. Gambrell, L. M. Morrow, & M. Pressley (Eds.), Best practices in literacy instruction (3rd ed.). New York: Guilford Press

Guay, F., Chanal, J., Ratelle, C.F., Marsh, H.W., Larose, S., & Boivin, M. (2010). Intrinsic, identified, and controlled types of motivation for school subjects in young elementary school children. *British Journal of Educational Psychology, 80(4), 711-735.* https://doi.org/10.1348/000709910X499084

McCombs, B., & Whisler, J. (1997). *The learner-centered classroom and school : strategies for increasing student motivation and achievement* (1st ed.). San Francisco: Jossey-Bass.

Miller, S. (2003). How high and low-challenge tasks affect motivation and learning: implications for struggling learners. *Reading & Writing Quarterly*, 19(1), 39–57. https://doi.org/10.1080/10573560308209

MyPBLWorks. (n.d.). Retrieved from https://my.pblworks.org/

Parsons, S., & Ward, A. (2011). The case for authentic tasks in content literacy. *Reading Teacher,* 64(6), 462–465. https://doi.org/10.1598/RT.64.6.12

Parsons, S., Malloy, J., Parsons, A., & Burrowbridge, S. (2015). Students' engagement

    in literacy tasks. *Reading Teacher*, 69(2), 223–231.

    https://doi.org/10.1002/trtr.1378

Parsons, S., Metzger, S., Askew, J., & Carswell, A. (2010). Teaching against the grain:

    one Title I school's journey toward project-based literacy instruction. *Literacy*

    Research and Instruction, 50(1), 1–14.

    https://doi.org/10.1080/19388070903318413

Pearson, P.D., Raphael, T., Benson, B., & Madda, C. (2007). Balance in comprehensive literacy

    instruction: Then and now. *In L.B. Gambrell, L.M. Morrow, & M. Pressley (Eds.),*

    Best practices in literacy instruction (2nd ed., pp. 30–54). New York, NY: Guilford

Quigley, C. (2014). Expanding our view of authentic learning: bridging in and

    out-of-school experiences. *Cultural Studies of Science Education*, *9*(1), 115–122.

    https://doi.org/10.1007/s11422-013-9535-2

Ryan, R.M., & Deci, E.L. (2002). Overview of self-determination theory: An organismic

    dialectical perspective. In E.L. Deci & R.M. Ryan (Eds.), Handbook of self-

    determination theory research (pp. 3–33). Rochester, NY: University of Rochester

    Press.

Schumacher, A., & Reiners, C. (2013). Designing Authentic Learning Environments in

    Chemistry Lessons: Paving the Way in Pre-Service Teacher Education. *Science &*

    Education, *22*(9), 2173–2191. https://doi.org/10.1007/s11191-012-9552-7

Teale, W., & Gambrell, L. (2007). Raising urban students' literacy achievement by

    engaging in authentic, challenging work. *Reading Teacher*, 60(8), 728–739.

    https://doi.org/10.1598/RT.60.8.3

Turner, J., & Paris, S. (1995). How literacy tasks influence children's motivation for

     literacy. *Reading Teacher*, 48(8), 662–673.

Wigfield, A. (1994). Expectancy-value theory of achievement motivation: A developmental

     perspective. Educational Psychology Review, 5, 49–78.