Real-World LEARNING FRAMEWORK

FOR ELEMENTARY SCHOOLS

Digital Tools and Practical Strategies for Successful Implementation

Marge Maxwell

Rebecca Stobaugh

Janet Lynne Tassell

Hawker Brownlow
EDUCATION

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Reproducible pages are in italics.

Do you want to inspire student inquiry to boost student engagement and authentic learning? If the answer is yes, then ask yourself the following questions.

- Have I given my students the opportunity to show me what interests them? Have I incorporated their interests into my instruction and lesson planning?
- Do I incorporate standards in real-world activities?
- Do I challenge students with provocative questions?
- Are my students working on teacher-directed tasks and projects in isolation?
- Do my students work on technology that does not enrich their learning nor expand on the content?

This book helps you answer these questions and address the concerns they may reveal.

In a real-world environment, creation is not a formulaic set of steps but a messy process. Often, creation of important work involves starting and stopping—revising all the while. If we consider an artist designing a masterpiece, we can envision the artist beginning with personal inspiration, addressing personal questions, working from a blank canvas, and then problem solving to come up with a pathway to brilliance. The masterpiece is the result of the artist's many failures and revisions. The term *create* means bringing something unique into being that did not previously exist and would not evolve on its own. Based on this concept, the instructional framework this book introduces is termed the Create Excellence Framework. With this framework, teachers and students have the opportunity to plan project-based instruction that is comprehensive, pulling from the real world by utilizing cognitive complexity, student engagement, and technology integration.

Teachers must be open to meaningful learning, remembering that the learning will be a messy process, as it is in the complex and often chaotic real-world environment. Students' projects will be personalized and unique. This requires teachers to have flexibility and focus as they plan, keeping in mind the ultimate goal is to support learning that leads to brilliance! As we consider the real world's meaningful impact on education, teachers and students need a tool to help them achieve the best-designed project.

The Create Excellence Framework for Real-World Learning

Researcher Christopher Moersch (2002) developed the H.E.A.T. Framework (higher-order thinking, engaged learning, authentic learning, and technology integration), and we have adapted it to define each component, emphasizing the teacher's need to *create* an experience for the students (Maxwell, Constant, Stobaugh, & Tassell, 2011). The resulting Create Excellence Framework is a research-based, lesson-plan framework that can guide students, parents, and teachers in thinking about learning in a different, yet comprehensive, way (Tassell, Maxwell, & Stobaugh, 2013).

The foundation of the Create Excellence Framework and chapter structure of this book provide readers with a deep understanding of how real-world learning, supported by cognitive complexity, student engagement, and technology integration, can support student learning (see figure I.1). The purpose of this book is to help teachers improve instruction for students by designing instructional tasks that include these four key components. This framework gives us a new lens through which to look at how to plan instruction and balance the demands of rigorous standards. It incorporates the key components necessary to create engaging and meaningful lessons for student learning. The Create Excellence Framework is intended to be a tool to help with enhancing the current curriculum. Throughout the school year, teachers can utilize the framework to design tasks and projects at various levels. In this book, we provide sample tasks and projects to guide the use of the framework.

Real-World Learning Students learn from, interact with, and have an impact on the real world.		
Cognitive Complexity Level of critical thinking required by students for an instructional task or project	**Student Engagement** Level at which students take responsibility for their own learning, instruction is differentiated, and students partner or collaborate with the teacher, other students, or outside experts to guide their own learning	**Technology Integration** Level at which students use technology as a research tool, collaborative tool, design tool, and presentation tool; student-directed technology use is seamlessly integrated into real-world content; students' critical thinking with technology use is at Bloom's Analyze, Evaluate, or Create levels

Figure I.1: Structure of Create Excellence Framework and book.

All the components important for adding depth to learning and planning comprehensive lessons are addressed through this framework. Each component covers the same five levels of increasing complexity to help the teacher target growth in his or her instructional development of tasks and projects: (1) Knowing, (2) Practicing, (3) Investigating, (4) Integrating, and (5) Specializing. The cognitive-complexity component also incorporates the revised Bloom's taxonomy thinking skills: Remember, Understand, Apply, Analyze, Evaluate, and Create. Table I.1 (pages 4–5) highlights this structure, clarifies each component's role, and illustrates how all the framework's pieces fit together. Levels 1–3 involve tasks, while levels 4–5 involve projects. *Tasks* are small classroom activities, while *projects* are more complex and use several instructional strategies, have open-ended solutions, involve more student choice and decision making, and take longer to complete. The lower levels of the framework are teacher directed (levels 1–3), whereas higher levels are more student directed (levels 4–5) with the teacher partnering with students to design projects and assignments (Tassell et al., 2013). The target levels for consistent student learning are levels 3 and 4, which are shaded in tables depicting the framework levels throughout the book. While level 3 is still teacher directed, students are engaging in higher cognitively complex tasks and projects. Students are beginning to take more responsibility for their learning in level 4. Level 5 is attained after consistent learning at levels 3 and 4 and could be accomplished a few times a year.

Real-World Learning

Real-world learning is where the student learns from, interacts with, and has an impact on the real world. The goal is for students to experience real-world, authentic learning by interacting with the real world to complete tasks and solve problems. The real-world learning component is the foundation for the other three components (cognitive complexity, student engagement, and technology integration), as it establishes an authentic context for learning.

Cognitive Complexity

The student's level of thinking with real-world content is vital to creating a quality task. The cognitive-complexity component within the Create Excellence Framework is based on the revised Bloom's taxonomy (Anderson & Krathwohl, 2001). At the teacher-directed level of the framework, students are engaged in learning experiences that the revised Bloom's taxonomy would classify as Remember, Understand, and Apply. Student-directed levels of the Create Excellence Framework embrace Bloom's top three cognitive processes

transition. See table I.3 (page 10) for examples highlighting how the Create Excellence Framework connects to the various student content standards.

Table I.3: Highlights of How the Create Excellence Framework Connects to Student Content Standards

CONTENT-AREA STANDARDS	SAMPLE STANDARD	CREATE EXCELLENCE FRAMEWORK COMPONENT
Common Core English language arts standards	SL.3.1: "Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly" (National Governors Association Center for Best Practices & Council of Chief State School Officers [NGA & CCSSO], 2010a).	Student engagement
Common Core mathematics standards	Mathematical Practice 4: "Model With Mathematics—Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. . . . They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose" (NGA & CCSSO, 2010b).	Real-world learning Student engagement Technology integration Cognitive complexity
Next Generation Science Standards	K–2-ETS1–1: "Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool" (Achieve, 2013).	Real-world learning
College, Career, and Civic Life (C3) Framework	D4.3.3–5: "Present a summary of arguments and explanations to others outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, and reports) and digital technologies (e.g., Internet, social media, and digital documentary)" (National Council for the Social Studies [NCSS], 2013).	Technology integration

In addition to these connections to standards that professional organizations propose, there are many more notable leaders in the field of education whose works and ideas align to the major components of the Create Excellence Framework.

Structure of This Book

Real-World Learning Framework for Elementary Schools is presented in two parts. In part I, the chapters provide an in-depth look at each component of the Create Excellence Framework, highlighting how to classify levels within the framework and how they align with the standards. We describe each component of the framework in chapters 1–4. Chapter 5 gives guidance for how to use the Create Excellence Framework in your classroom, school, and district. Examples of lessons covering a variety of subjects and framework levels for the

elementary grades are interwoven throughout the chapters. Each chapter also includes discussion questions for readers to consider and a Take Action section that provides readers with more in-depth activities and tasks, often including reproducibles.

Part II includes several sample lesson plans from different content areas and spotlights real-world learning, cognitive complexity, student engagement, and technology integration. The projects specify grade levels, but they can be modified for higher or lower grades. Each project description includes the following.

- An assignment overview, including learning objectives, the standards they address, project options, and resources, including technology, needed for the project
- A task or project description and scoring rubric, which teachers can copy and distribute to students to guide their creation of the project
- Sample student work to show how a typical student might complete the project, which the teacher may or may not decide to share with students
- The Create Excellence Framework rating that explains how closely the lesson fulfills the framework's levels, with justification provided for the rating

You may also visit Create Excellence (http://create-excellence.com) to access many additional resources featuring web 2.0 tools and applications highlighted in the projects in this book as well as other resources that we have found to be outstanding in our work with teachers.

Conclusion

At a time when educators are seeking a deeper connection with the content and their students, this book is needed! The Create Excellence Framework is a tool to design instruction with a research base. With the challenging environment of rigorous standards in many content areas requiring engaging and higher-level inquiry, the Create Excellence Framework can help you fill this need. The Danielson Framework for Teaching (Danielson, 2014) also reveals the importance of students driving instruction and making decisions involving their own learning. These manifestations drive and support the timely nature of and need for the Create Excellence Framework—it can provide a guide and a target for student learning, encouraging students such as Gracie, the eager student who is hoping to experience deeper learning. Teachers can use the concepts from the Create Excellence Framework to inspire and reinforce their students' self-directed learning. While advocating for this type of real-world learning in the classroom, teachers can promote a vision for higher levels of cognitive complexity, technology integration, and student engagement. In this type of learning environment, Gracie can realize her dreams and potential.

Discussion Questions

Answer the following five questions to summarize the chapter's concepts.

1. How can the Create Excellence Framework help you plan lessons that tap into real-world and relevant learning?
2. Are there any components of the Create Excellence Framework in your current instruction?
3. How do you see the framework components embedded in the teaching standards at your school?
4. What has been missing from your instructional-planning tools? What struggles have you been having? How would the Create Excellence Framework help you with these struggles?
5. Are the tasks and projects you design more teacher driven or student driven? How does the design difference impact student motivation in your elementary classroom?

Take Action

Consider the following four tasks and activities to help you toward implementing the Create Excellence Framework.

1. Consider a student in your class or school who wants to engage in higher levels of real-world learning than he or she currently has the opportunity to. Have a discussion with the student about aspects of the current curriculum's cognitive complexity, student engagement, and technology integration as related to real-world learning in the Create Excellence Framework. Ask the student to share specific topics or issues that affect him or her that can be explored in class projects.
2. Have your students complete the survey provided in the "Personal Learning Survey" reproducible (page 13 or 14). What did you learn about your class that you did not know before? How can you use this information to design better learning experiences for your students?
3. Examine the content standards for your discipline. Find the elements within the Create Excellence Framework components that you want to develop in your classroom instruction. Discuss this with a colleague who can give you feedback—someone you connect with, someone in a similar position as you, someone on your team, or someone teaching the same content.
4. Meet with a teacher at a level different than yours. How might the Create Excellence Framework impact different levels of elementary classrooms—primary (K–2) versus intermediate (3–5)? What might be some differences? Together, examine an idea one or both of you have, and determine goals for how you can use the framework to enhance your lessons.