

Skills for the Twenty-First Century

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Education, necessary job skills, and occupations are currently changing as technology and our world continue to change at a rapid pace. Educators strive to prepare their students for their futures, but educators are currently trying to help prepare their students for jobs that have not even been created yet. Therefore, educators have been trying to teach their students how to apply their knowledge to meet the needs of the new skills that will be necessary for innovative future careers (Lapek, 2017).

Beers (2011) explained that creativity, critical thinking, cultural awareness, communication, collaboration, effective use of technology, information management, innovation, problem solving, career skills and life skills are all skills that help learners deepen their understanding about their content. Beers went on to explain that connections, application, and participation are the key factors that educators need to think about when integrating these skills. Integrating a variety of learning opportunities, using cross-curricular connections, giving students the opportunity to lead investigations to focus on their inquiries, using appropriate technology tools, providing opportunities for students to collaborate with others, using visualization and visuals, and purposefully integrating assessments will help educators facilitate learning to help prepare their students for their futures.

Twenty-First Century Skills

21st century skills increase students' engagement and are essential to students' success because they help prepare our students for the ever-changing globally and digitally interconnected world (Battelle for Kids, 2019). I try to integrate all of the 21st century learning

skills into my classroom. I believe they are all very important, but in first grade I do focus a lot on collaboration because I believe that collaboration is a foundational skill that impacts many of the other 21st century skills. People need to learn how to work together to interact effectively with others, to be a good listener as well as a good speaker, to solve problems, to manage projects, and to learn from each other.

Core Subjects

Global awareness, finance, and economics are key subjects that I integrate into our social skills, reading, math, writing, and STEAM lessons and learning activities. Global awareness allows students to explore diverse lifestyles, religions, and cultures. It helps students learn about issues that other people are facing, develop respect for others, teaches kids to use open dialogue, and it helps them understand different cultures and nations. Finance and economics helps educate students about their role in our economy and it helps them understand the importance of making appropriate personal choices (Battelle for Kids, 2019).

CORE Subject	Explain Content	Global Awareness	Finance or Economics
1. Social Skills	My students learn skills to help them learn, strategies to help them manage their emotions, how to identify others' emotions, how to develop a growth mindset, and how to problem solve.	The Second Step curriculum pictures and my students peers' connections allow them to realize that all kids encounter issues. We also make connections to characters from stories we read in our classroom and this too helps my students identify that kids and adults across the word encounter different problems that they need to problem-solve through. As a class we are also able to discuss tools that students can add to their "toolbox" that help them solve problems they may encounter today and far into their futures.	In first grade we often talk about strong emotions. We discuss that they are normal to feel, but the most important factor is how we choose to handle them. When we discuss anger, every year students bring up at least one story about someone breaking something when they are angry. We then discuss if that was a helpful decision. Did it solve their problem? Now what happens to the broken item? How are they going to replace it? What if they don't have money to replace it?

			What is a better way they could have handled the situation?
2. Math	One of our first grade math standards focuses on addition and subtraction within 20 and word problems.	I often try to integrate themes or topics from our reading mini lessons into our word problems to help facilitate a cross-curricular experience for my students. Therefore, I integrate themes from our social studies standard 1.6.1 (identify the similarities and differences among families around the world) into our reading and word problem activities.	I integrate money into some of our word problems that we practice so that my students understand that money can be earned and spent. They practice identifying key words and phrases that tell them if they need to add or subtract.
3. Reading	I facilitate learning to help students practice and deepen their understanding about the importance of comprehension, accuracy, fluency, and expanded vocabulary.	I integrate a wide variety of cultural books into our reading lessons to help educate students about different cultures.	When we learn about money in math, I use money books in our mini reading lessons to help create cross-curricular learning experiences and to help them deepen their understanding about what money is used for.
4. Writing	In first grade we focus on writing personal narratives, writing about our opinions, and informational writing.	Throughout our personal narrative practice I provide my students with many opportunities to share their writing. Students are then given the opportunity to make connections to realize that others have done, felt, and experienced similar things that they have; while also realizing that everyone is unique and has different family structures and experiences.	Around Christmas I integrate opinion writing and gratitude activities when our class learns about needs and wants. We focus on being grateful for all that we have, but we also discuss the differences amongst things we “need” compared to things we “want”.
5. STEAM	One of our science standards is 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	Another one of our social studies standards is 1.2.1 which invites students to compare past and present family life (e.g., housing, transportation, technology) over time. We study how explorers and the first inhabitants traveled across water long ago. Then we discuss current water craft that people can use to travel across water. We explore the similarities and	In March I lead my students through an activity where they are challenged to build “leprechaun traps”. During this activity they use their engineering skills to create a solution to help catch a leprechaun who has been causing trouble. I give them fake dollars and they are able to choose what “tools” they would like to purchase to construct their trap.

	development of a new or improved object or tool).	differences across the world and when comparing past and present. Then I facilitate a problem-based activity where students are encouraged to build and test their own transportation device that will float and hold a certain amount of weight.	
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21st century literacies, learning and innovation skills, information media and technology skills, and life and career skills are additional key subjects that I also integrate into our social skills, reading, math, writing, and STEAM activities. These additional subjects also help widen students' vocabulary, expand their knowledge and critical thinking skills, while also preparing students for their futures (Battelle for Kids, 2019).

CORE Subject	21st Century Literacies	Learning and Innovation Skills	Information Media and Technology Skills	Life and Career Skills
1. Social Skills	I facilitate learning to educate my students about the importance of problem solving and I provide them with strategies and steps that they can use to help themselves problem-solve.	I challenge my students to think creatively and innovatively when brainstorming how to solve their problems (the problem examples we talk about in class and also the real problems they encounter in their day to day lives).	My students use Canvas's discussion to make connections to the social skills we are learning about.	Throughout our social skill lessons we discuss the importance of being responsible and portraying leadership roles. I use positive verbal encouragement and praise, postcards, and I send Remind messages to their families to celebrate students' responsible choices and leadership choices.
2. Math	I facilitate activities where my students collaborate with others and apply their math skills to solve problems.	One of our project-based activities that includes math involves students creating their own pet stores. They have to creatively design the layout (perimeter and	One of my students favorite technology math games is Prodigy and I love the assessment information I can gather from it.	I give students many choices during our math time and they have the opportunity to practice and develop their initiative and self-direction. As a class, we have had many

		area practice), choose how they would like to spend their money to purchase merchandise for their store, and they have to creatively advertise for their pet shop.		conversations about using our time wisely to help our brains grow stronger and smarter.
3. Reading	I facilitate a reading, research, writing, and science cross-curricular activity where my students practice their career and life skills to read, learn, take notes, and then write about an animal of their choice. Throughout this project students practice learning about their animal independently, gathering information, keeping their information and ideas organized, being responsible and using their time wisely. At the end of the project my students then practice their communication skills while they share and listen to their peers share their information.	Many of our reading skills (cause and effect, making inferences, literary elements, etc.) provide students with the opportunity to think critically.	My students love Epic and in our classroom we use it for a “listen to reading” activity and as a source to gather information when they are working on gathering facts for their research activities.	During our reading mini lessons I incorporate many social skills, cross-cultural, and cross-curricular books and themes to help students identify that they can use our reading time to pursue their interests and passions to encourage and help my students develop foundational skills that will help them become life-long learners.

4. Writing	My students write books using Pages to communicate and share information they have learned.	I often incorporate writing activities with our STEAM activities so that students have the opportunity to use their writing skills to help them plan, critically think, and problem solve.	We use Pages in our classroom to create books to share their writing with each other and with their families.	Everyday students are able to practice initiative and self-direction with their writing during our “work on writing” time. They are able to use their creativity to choose what they would like to write about.
5. STEAM	My students practice applying their creative and innovative skills to collaborate with their peers to solve problem-based scenarios.	Collaboration, communication, critical thinking, creativity, innovation, and problem-solving are all integrated into our STEAM activities.	I integrate Ozobots, Minecraft Education Edition, and Spheros into some of our STEAM activities to provide my students with the opportunity to explore new technology tools.	Leadership and responsibility are skills that students practice throughout every STEAM activity. They work together to split the tasks and responsibilities to utilize their time wisely.

Skills for the Twenty-First Century

I believe that perseverance, digital citizenship, and emotional intelligence are additional skills, to the 21st century skills, that will be essential for students to be successful in the decades ahead. Emotional intelligence helps people solve problems, maintain relationships, overcome obstacles, and develop empathy (Giedre, 2019). Digital citizenship helps people understand the importance of using technology in a respectful and responsible manner. As technology continues to change and evolve, I predict we will continue to see an increase in digital communication; therefore, I believe it is important that we help students understand how to respectfully and responsibly communicate and collaborate in digital settings. Perseverance is also a necessary skill because it helps students understand the importance of working hard and taking personal responsibility for their choices. Educating students about perseverance, modeling perseverance, and celebrating students when they persevere will help students identify it, they will have the

opportunity to observe the benefits of it, and then they will be more likely to apply it to other areas of their lives.

Conclusion

It is difficult to prepare students for jobs that have not even been created yet, but providing students with universal skills helps provide them with strategies that they can apply to a wide variety of tasks, activities, situations, and jobs. Students can apply these skills today and in their futures. Therefore, they are key skills that are critical to students' success.

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