

Bluebee Pal Use with All Students Supported by Evidence-Based Practice



Introduction to the “Four Cs” of education and their relation to all students

The goal of all educators should be to prepare all 21st Century students for a global society through the practice and mastery of the Four Cs- Communication, Creativity and innovation, Collaboration, Critical thinking and problem solving. Over the last ten years the National Education Association interviewed a diverse panel of leaders who agreed on the necessity to incorporate the “Four C’s” into K12 education for all learners.

Although many educators are challenged to bridge the gap between the Four C’s and the common core standards we know that focus on these 21st Century skills help all children. Research shows that students with higher needs struggle to exhibit the “Four Cs” effectively.

The “Four Cs” are indeed, however, for all of our students. Regular education students, students with special needs, and English language learners are of no exception. Critical thinking, creativity, effective communication and collaboration are all expected of our students to succeed in our 21st century civic and workforce lives. The National Education Association supports “Authentic Learning” for students to teach students to solve real world problems through critical thinking, creativity, communication and collaboration. (“A Guide to the Four Cs,” nea.org)

What does the research say about the “Four Cs” and their importance to “21st Century Learning”?

	What is it?	How important is it?
Communication	<p>Communicate Clearly by:</p> <ul style="list-style-type: none"> Articulating ideas and thoughts effectively Listening carefully to decipher meaning Using it for a myriad of purposes Communicating effectively to diverse groups of people <p><i>as defined by P21.org</i></p>	<p>“Expressing thoughts clearly, crisply articulating opinions, communicating coherent instructions, motivating others through powerful speech—these skills have always been valued in the workplace and in public life. But in the 21st century, these skills have been transformed and are even more important today.”</p>
Collaboration	<p>Working with diverse groups of people effectively and respectfully. Within these groups, one must appropriately share the workload and compromise accordingly.</p> <p><i>as defined by P21.org</i></p>	<p>“Collaboration is essential in our classrooms because it is inherent in the nature of how work is accomplished in our civic and workforce lives. Fifty years ago, much work was accomplished by individuals working alone, but not today. Much of all significant work is accomplished in teams, and in many cases, global teams.”</p>
Creativity & Innovation	<p>Creativity can be defined by the ability to:</p> <ul style="list-style-type: none"> Think Creatively Work Creatively with Others Implement Innovation <p><i>as defined by P21</i></p>	<p>“In the past, Americans perceived creativity and innovation as secondary in our national curriculum. Today, creativity and innovation are key drivers in the global economy. “</p>
Critical Thinking & Problem Solving	<p>Critical thinking and problem solving can be defined by the ability to:</p> <ul style="list-style-type: none"> Reason Effectively Use Systems Thinking Make Judgments and Decisions Solve Problems <p><i>*as defined by P21</i></p>	<p>“Critical thinking has long been a valued skill in society. Today, every student—not just the academically advanced— needs it. While critical thinking and problem solving used to be the domain of gifted students, now it’s a critical domain for every student.”</p>

*Adapted from nea.org “A Guide to Four Cs”

How can are the functions of the Bluebee Pal learning tool connect to developmentally appropriate student skills and objectives?

Bluebee Pal can support all students in regards to the "Four Cs"

Communication

- Students learn how to *interact and take turns* communicating with their pal as they engage in a phone conversation
- Students learn how to *start and end a conversation* with their pal
- Students *listen* to a story being read by their pal and then have to *tell their partner* what their pal's story was about
- Students *practice pronunciation* by listening to their pal dictate words and then repeating them back
- Students *sing along with* their bluebee pal increasing language skills
- Jessie Baker School has seen an increase in communication and engagement in their special needs classrooms*
- Students connect with the toy more than with an authority figure which in turn increases their participation and engagement in class*
- Students engage with their pal because it knows their name, asks them questions, sings songs that they are interested in and is connected to their classroom on a more personal level as opposed to a normal stuffed animal *
- One student at the Jessie Baker School, after using the bluebee pal, overcame her fear of stuffed animals and animals in general and learned to ride a horse*

Collaboration

- Students *listen and respond* to their pal's questions
- Students *restate a prompt* from their pal
- Students *play* a get to know you game (morning meeting sharing and games) with their classmates while passing their pal to each other.
- Jessie Baker School has seen an increase in communication with each other, teacher, and pal*

Creativity and Innovation

- Students *create* a visual story on a storyboard or digitally while listening to their Pal read them a story
- Students *learn to sing* as they sing along with their pal
- Students *gain confidence* and have support from their pal that are necessary for creative development and expression
- Students *connect* to their pal and in turn are being provided a unique system of support and means of expression which is critical in the *creative development* of all students, especially students with autism. (source: Snow, Creativity and the Autistic Child, pg 74)

Critical Thinking and Problem Solving

- A student (individually or with a partner) imagine and create an alternate ending to a story that their pal read to them
- Students *research* and learn about their bluebee pal animal. Students *gather and synthesize information* to prepare it for presentation. Students *write* about the animal and *present* their information to their classmates with a visual component and their pal speaking the information.
- Students *collaborate* in small groups to create and write a play (invented or rendition of a story they have read). They *write* the narration to be read by their pal. They act and present their play to the class. (Creativity and collaboration as well)