

SMARTLAB® EBOOKS

Developing Hopeful and Engaged Students

Implementing measures to engage and inspire life-long learners

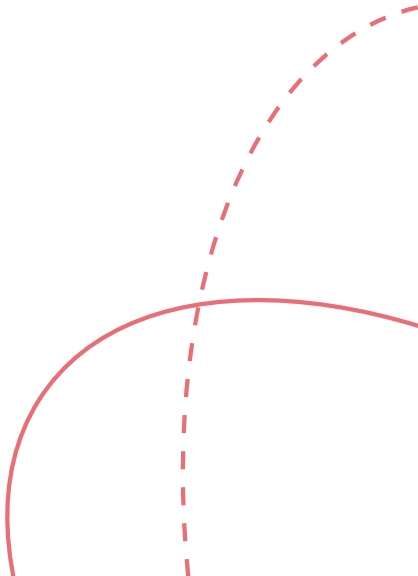


Reversing negative trends to develop hopeful and engaged life-long learners capable of approaching challenges with confidence

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Abstract

Student surveys have repeatedly shown that both hopefulness and engagement tend to decrease drastically from the early grades through high school graduation.^{1,2}

This decline often results in lower student confidence in approaching new experiences, which leads to even lower hopefulness and decreased engagement.

While this downward spiral can be attributed to a variety of factors, research indicates that environmental and social factors play a huge role in promoting hope, engagement, and confidence. At the school and classroom level, measures can be taken to reverse negative trends to develop hopeful and engaged life-long learners capable of approaching challenges with confidence.

This paper will explore how increasing student autonomy and ownership through authentic learning experiences can contribute to that essential development.

What we'll cover in this E-Book

- What are hopefulness and engagement?
- How are confidence, hopefulness, and engagement related?
- How can educators facilitate engaging learning experiences?
- What is the role of student agency in developing confidence?
- How do authentic learning experiences contribute to developing hopeful and engaged students?



Defining Hopefulness Engagement and Confidence

Since 2009, millions of young people have completed the Gallup Student Poll, providing a glimpse into a range of measures indicating the strength of school climates across the United States.

Among the indicators of positive school culture are hope and engagement, two attributes that have also been linked to increased well-being throughout life.³

Understanding what hopefulness and engagement are is an important first step in discovering the benefits to overall well-being that result from a positive school culture.

Hopefulness

The Gallup Student Poll defines hope as “the ideas and energy that students have for the future” and ranks students as “hopeful, stuck, or discouraged.”⁴

Hopefulness can also describe the interplay between the imagination and lived experience as young and old alike create versions of the future in their minds.

Douglas Heath described this interplay in terms of a “richer variety of mind’s skills, ...such as imagination, reflection, intuition, and induction,” which lead students to draw conclusions about how they address and adapt to “ongoing real-life issues, problems, and conflicts.”⁴

In short, hopefulness is an essential mindset that enables one to move past fears and uncertainty about the future.

In the past decade, the role of the school in developing hopefulness has gained greater importance with emphasis being placed on whole-student initiatives that move beyond academic performance to include qualities such as belongingness, motivational patterns, and overall psychological health.⁵

These qualities form a meaningful support system for developing hopefulness and can also lead to improvements in academic performance and overall wellbeing in students and school systems.

Newell and Van Ryzin further emphasize the role of schools in developing hopefulness by describing schools as an environment well-suited to trial and error—places where students can make mistakes as learning experiences leading to opportunities to grow, learn, and innovate.⁶

Seeing mistakes and failures as opportunities for growth is exactly what Carol Dweck refers to as a “growth mindset” and forms another key component of developing hopefulness.⁷

Engagement

While hopefulness relates to a student’s perspective on the future, engagement is much more concerned with the here and now of learning.

Schlechty’s Levels of Engagement Framework has long been the gold standard of describing engagement in a variety of settings.

Figure 1 shows the relationship between attention and commitment with respect to increasing levels of engagement.

When students devote high levels of attention and are deeply committed to classroom activities, they are truly engaged and feel a strong sense of ownership for their learning. These same levels of engagement apply beyond the classroom as students become adults and enter higher education and careers.

Another description of engagement is presented by Anderson Williams. In his “Continuum of Youth Involvement,” young people progress from three stages to arrive at full engagement, in which they “are the primary drivers of the work from conceptualization to implementation and reflection. Youth ‘own’ and understand the work deeply.”

This type of engagement requires a paradigm shift in decision-making and accountability, placing a greater responsibility on young people for their own learning and success.⁸

In 2009, the Canadian Education Association (CEA) published a report titled “What did you do in school today?” In that report, engagement is defined as “the extent to which students identify with and value schooling outcomes, have a sense of belonging at school, participate in academic and non-academic activities, strive to meet the formal requirements of schooling, and make a serious personal investment in learning.”

The three components of engagement identified in the study—social, academic, and intellectual—provide a broader perspective into the challenges faced by schools in developing hopeful and engaged students.

Confidence

The 2019 Harris Poll on student confidence adds another layer to the challenge that schools face in developing hopeful and engaged students. The survey indicated that, in addition to declining levels of hopefulness, confidence in school, and especially in STEAM subjects, is lacking in schools around the world.¹⁰

That lack of confidence can result in decreased engagement in STEAM classes as students feel overwhelmed by unfamiliar content and applications of concepts. Continued negative experiences in school can lead to lower levels of hopefulness and even lower confidence. Without effective intervention, this downward spiral can produce devastating results.

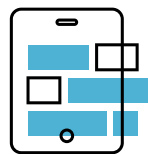
Levels of Engagement

According to Phillip Schlechty, there are five ways that students respond or adapt to school-related tasks and activities.



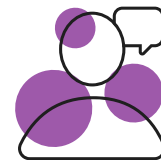
Engagement

The student associates the task with a result or product that has meaning and value for the student. The student will persist in the face of difficulty and will learn at high and profound levels.



Strategic Compliance

The task has little or direct value to the student, but the student associates it with outcomes or results that do have value to the student (such as grades). Student will abandon work if extrinsic goals are not realized and will not retain what is learned.



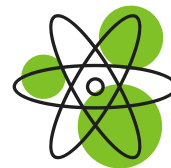
Ritual Compliance

The student is willing to expend whatever effort is needed to avoid negative consequences. The emphasis is on meeting the minimum requirements. The student will learn at low and superficial levels.



Retreatism

The student is disengaged from the task and does not attempt to comply with its demands, but does not try to disrupt the work or substitute other activities for it. The student does not participate and learns little or nothing from the task.



Rebellion

The student refuses to do the work, acts in ways to disrupt others, or substitutes tasks and activities to which he or she is committed. Student develops poor work habits and negative attitude towards formal education and intellectual tasks.

FIGURE 1. Attention and commitment are the two main determinants impacting student engagement. As students are given ownership of relevant learning activities, they are more likely to be focused on and committed to high levels of performance and mastery. Adapted from Phillip Schlechty's Levels of Engagement (schlechtycenter.org)

Facilitating Engaging Learning Experiences

Much of the research on hopefulness, engagement, and confidence in students centers on how schools and educators can address the deficits in learning experiences for at-risk youth.

While this approach can prove effective for reducing many of the outward measures of engagement (graduation rates, grades, standardized test scores, etc.), focusing primarily on those measures misses the mark with respect to developing hopeful and engaged students who can confidently face the future as hopeful and engaged citizens.¹¹

A more effective approach to increasing hopefulness, engagement, and confidence is needed to provide students with the greatest chance of success while in their youth and throughout their entire lives.

Student Agency In Learning

Recognizing students as humans with important physical and psychological needs is an important first step in facilitating engaging learning experiences that foster hopefulness and confidence. That recognition engenders greater trust between student and teacher and paves the way for students to fully own their learning, thereby becoming agents of their own growth and development. A continued focus on student needs can further increase student engagement.

Strong, Silver, and Robinson advocate that engaged individuals are driven by these essential goals:

- **Success** (the need for mastery)
- **Curiosity** (the need for understanding)
- **Originality** (the need for self-expression)
- **Relationships** (the need for involvement with others)

They round out the SCORE model of engagement with Energy, which allows students “to deal constructively with the complexity, confusion, repetition, and ambiguities of life.”¹²

By providing students with opportunities to succeed at increasingly difficult activities while expanding their knowledge, expressing their own uniqueness, and working with others, educators can effectively develop motivated and engaged learners in their schools.

Supporting students as they become agents of their own learning can take a lot of effort. A simple awareness of what motivates and engages students is an essential first step in the process, but thoughtful preparation and ongoing coaching makes the shift to learner-led, engaging environments effective and lasting.

Mike Anderson outlines how teachers can create cultures of choice and student agency through effective facilitation and reflection. He describes choice as “a powerful way in which teachers can help students develop the knowledge and skills they need to be successful in school and beyond—a way to help them work with purpose, joy, and passion—and a way to make schools a place worth coming to each and every day.”¹³

“**Hopefulness is an essential mindset that enables one to move past fears and uncertainty about the future.**”

Authentic Learning Experiences

Mitch Resnick's four Ps of creative learning provide an additional perspective on how educators can develop engaged students and promote hopefulness and confidence through authentic learning experiences. In his book, *Lifelong Kindergarten*, Resnick describes how schools have historically pushed academic rigor and content learning into younger and younger classes, while a more engaging and effective model would pull practices common in kindergarten up into older grade levels. In particular, he explores how projects, passion, peers, and play form a framework for developing powerful learning experiences for learners of all ages.¹⁴

When students are given the opportunity to work on projects relevant to their own interests and passions, while collaborating and sharing with their fellow learners, learning becomes an experience analogous to play. Zosh, et al. identified five characteristics of playful learning that result in high levels of engagement. Playful learning is joyful, meaningful, actively engaging, iterative, and socially interactive.¹⁵

Perhaps the most important factors in the context of developing hopeful and engaged students are that learning experiences must be meaningful and actively engaging. Students must find real meaning in the work they are expected to do and must be able to learn both hands-on and minds-on. In other words, they must be given authentic learning opportunities that are relevant to them and provide them with opportunities to produce some impact on their world.

In addition to finding relevance in their work, students need to know that what they are doing makes a difference in the world.

Dunleavy and Milton argued that students want work that is "relevant, interesting, and connects with [their] aspirations [and that] is rigorous and allows students to think as 'professionals' and create 'professional' quality outcomes."¹⁶ Thinking and creating as "professionals" empowers learners to find and solve problems to improve the world around them. That is true authentic learning driven by engaged and hopeful students.

Smartlab Learning

To help support educators in developing engaged, hopeful, and confident students, SmartLab Learning offers a comprehensive suite of project-based learning solutions that have an emphasis on STEAM subjects. These solutions consist of innovative learning spaces, access to extensive student-directed, project-based learning experiences that address a wide range of STEAM topics that spark learning at all ages.

Our solutions also include a project framework that guides students to explore different topics through impactful and relevant applications, while also providing professional development to support teachers in the work of developing engaged and hopeful learners. From successful SmartLab HQs to our SmartLab On-the-Go solutions, public, private, and charter schools across the United States engage students to learn alongside one another, while encouraging them to explore ways to extend their learning to impact the world around them, starting with their school and community.

Because SmartLab Learning encourages students to work in teams, they benefit from the experiences and perspectives of their peers as they develop their own project ideas for each topic they explore. With SmartLab Learning, students are free to choose the specific learning engagements that they complete for each topic as well, which allows them to find the most appropriate challenges to match their current levels of confidence. It is common for students to be so engaged in SmartLab projects that they find it hard to leave at the end of their time there.

SmartLab Learning has proven to be a powerful tool in developing hopeful and engaged students throughout the United States.

“ Students must be given authentic learning opportunities that are relevant and provide opportunities to impact their world.”





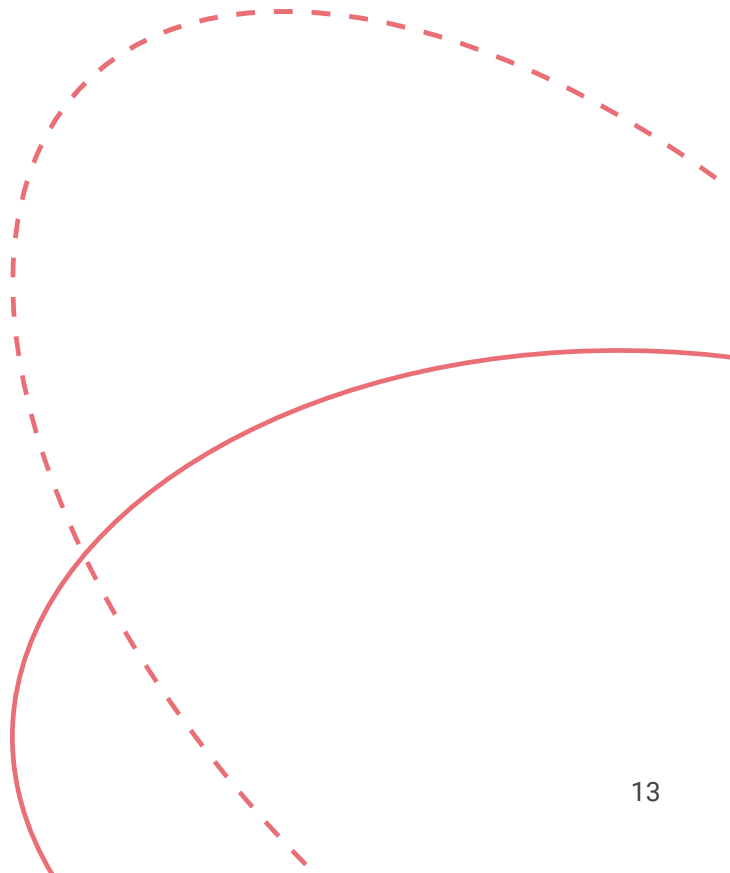
Conclusion

The need for schools to develop hopeful and engaged students has never been greater. Fostering environments and school cultures that increase the confidence of learners has never been more urgent for teachers.

While the challenge is great, developing those essential attributes in students is possible with the support of enthusiastic educators and organizations. Providing environments and resources for students to engage in curiosity-sparking and meaningful projects can improve the outcomes and cultures of schools facing challenging situations.

With support and resources in place, educators can shift the primary responsibility for learning to the learner. This does not imply that teachers can then sit back while students learn, but instead that they allow students to take the lead in their learning experiences to explore ideas in a variety of contexts and apply knowledge and skills to authentic problems.

Given autonomy and freedom to pursue passions, while being supported to equally experience failure and success in collaborative projects, students can develop the hopefulness and confidence they need to thrive now and in the future.





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About Creative Learning Systems

Creative Learning Systems (CLS) develops and installs engaging STEM and digital media programs for elementary, middle, and high schools, known as SmartLabs. These programs are designed for student-centered, personalized learning.

We pioneer STEM programs and a related digital curriculum in K-12 education. Together with partner schools across the country, CLS puts technology in the hands of students and engages them with personalized learning. While the technologies behind CLS's learning solutions will continue to evolve, the guiding principles remain constant:

We infuse each solution with our five guiding principles for learning:



Engaged

WHY: Engaged students are more focused in class, have fewer disciplinary issues, build stronger critical-thinking skills, and authentically connect to their learning.

HOW: We engage your students in hands-on, project-based learning experiences that support and reinforce academic content—specifically STEM topics.



Personalized

WHY: Learners are more intrinsically motivated when they have voice and choice to determine which projects they want to pursue

HOW: Open-ended engagements allow educators to collaborate with students on projects that support achievement while ensuring learners can pursue projects they're passionate about.



Empowered

WHY: Empowered learners become empowered adults who are equipped with the next-gen skills required for post-secondary success.

HOW: We empower your students to own their learning and approach challenges with creativity. This helps them develop the confidence needed to thrive in a rapidly evolving world.



Collaborative

WHY: Collaborative learning helps students develop higher-level thinking, verbal communication, self-management, and leadership skills, which prepares them for post-secondary success.

HOW: We purposely build collaboration into our learning spaces. Through collaborative work, learners collaborate and think critically to make meaning of facts, develop communication skills as they present their learning, and creatively solve problems.



Experiential

WHY: When learners use age-appropriate, pre- and professional tools in real-world settings, they're more prepared for college and careers.

HOW: Experiential learning connects your students to real-world problem solving and core academic content, which in turn helps them make more informed decisions in the future.



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