LEARNING WITH A PURPOSE:
Student Agency and the Joy of Teaching and Learning

By Evo Popoff

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EXECUTIVE SUMMARY

• Educators will reflect on the era of COVID-19 as a time of great trauma and chaos. But an important lesson emerged: Agency is an important tool for helping students with uncertainty and ambiguity. Teachers report that kids who were encouraged to engage in meaningful activities and pursue their interests long before the pandemic better managed the tumult during it.

• In addition, student agency plays a vital role in increasing equity in schools. As Dr. Lazaro Lopez, interim superintendent of Township High School District 214, Arlington Heights, Illinois, states, “We can’t address the challenges presented by poverty — especially multi-generational poverty — through traditional approaches to teaching and learning that have often ignored the importance of bridging the gap between what happens in the classroom and the real world. That is why our district has invested in work-based learning programs, like entrepreneurship and internships, that provide authentic experiences to our students while they work with mentors and build their social capital.”

• Youth enterprise and entrepreneurship programs are an important pathway for fostering agency, because they provide students with opportunities to identify and address problems in their communities.

• INCubatoredu, Uncharted Learning’s entrepreneurship program, exposes students to the joys and challenges of building a business from the ground up. According to INCubatoredu classroom instructors, the experience not only equips students with the tools they need to thrive in the real world, it helps them become more resilient in the face of adversity — or even failure.

• When COVID-19 required INCubatoredu student groups to navigate the entrepreneurship process remotely, they rose to the challenge. They connected through videoconferencing tools, demonstrated flexibility with product testing and even sought to solve problems that the pandemic created, displaying the very agency the program seeks to create.

• Watching students take charge of their learning and develop transferable skills during the pandemic provided a much-needed breath of fresh air for exhausted educators. They say watching as students creatively addressed one challenge after another was not only inspiring but proof that learning with a purpose does indeed promote student agency.

• This report considers the role youth enterprise and entrepreneurship programs play in creating student agency through interviews with teachers who bring purposeful learning to classrooms across America. It also highlights how these programs have helped educators rediscover their love of teaching and learning amid great upheaval.

• A previous version of this report was released in June 2021.
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ABOUT THE AUTHOR

Named State Policy Maker of the Year by the State Education Technology Directors Association, Evo Popoff ranks among the small handful of education policymakers who have worked as an education entrepreneur and executive within the private sector.

Evo previously served as chief innovation and intervention officer and assistant commissioner for the New Jersey Department of Education, where he oversaw the state’s education technology and school and district improvement efforts. Prior to joining the department, Evo led the development of education technology products and school improvement solutions in collaboration with district and state leaders and educators.

Before beginning his career in education, Evo practiced law at McDermott, Will & Emery where he worked on labor and employment, antitrust, and general corporate issues.

He holds a Bachelor of Arts in political science from the University of Chicago and a Juris Doctor from the George Washington University Law School.

Uncharted Learning is a not-for-profit organization with a mission to kick-start students for life by equipping them with real-world skills. We help inspire students to discover their passions, strengthen their capabilities, and create their futures. Our programs offer authentic, rigorous entrepreneurship experiences to students in over 405 schools across the United States, Europe, and Australia.

Whiteboard Advisors brings an unmatched understanding of policy and market trends to work on behalf of the organizations, employers, and entrepreneurs working to promote social and economic mobility in a knowledge economy. Our team of researchers, policy wonks, and storytellers is reimagining the way we learn, work, and live.
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Entrepreneurship teacher, Collier County Public Schools, Florida

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Director of education research, Christensen Institute

**Dana Jones**  
Entrepreneurship teacher, Leander Independent School District, Texas

**Falia Justima**  
Entrepreneurship teacher, Collier County Public Schools, Florida

**Dr. Tom Leonard**  
Former superintendent of Eanes Independent School District, Austin, Texas

**Phyllis Lockett**  
CEO, LEAP Innovations, Chicago, Illinois

**Dr. Lazaro Lopez**  
Interim superintendent of Township High School District 214, Arlington Heights, Illinois

**Dr. Kimberley Harrington Markus**  
Founding board member, National Virtual Teacher Association and Former State Commissioner of Education, New Jersey Department of Education

**Anthony Miller**  
Entrepreneurship teacher, Township High School District 211, Palatine, Illinois

**Brad Neubauer**  
Entrepreneurship teacher, Naperville District 203, Naperville, Illinois

**Kurt Wismer**  
Entrepreneurship teacher, North Fond du Lac District, Wisconsin
It’s amazing what adults can learn when they listen to students.

Transcend’s 2022 report, "Conversations With Kids: Insights From a Year of Listening," could serve as a how-to guide for engaging students and accelerating their learning. Take its main conclusion: “Most young people say their experiences in school feel irrelevant and offer few opportunities for agency and choice,” which “paint(s) a picture of learning experiences that are often disconnected from students' interests, passions, and real-life needs.” With only one-third of students saying they have a voice in their learning and that it’s connected to their passions and interests, it’s no surprise districts are concerned with student disengagement and declining enrollments.

But addressing this lack of relevance not only improves engagement, it may also be the “secret sauce” for accelerating student learning — perhaps the top priority for most educators and administrators during this rebuilding year. Student responses to the Transcend survey reinforced what teachers and parents (and a significant body of research) have already shown: Students learn best when they care about what they’re learning.

This report explores the pivotal role of student agency in creating relevant, purposeful learning experiences that lead to positive academic and life outcomes. It shows, through interviews with teachers in youth entrepreneurship programs that are deeply rooted in student agency, that the benefits of student agency extend to educators as well. The experience often rejuvenates weary educators — even keeping some teachers in the profession — and returns joy to teaching and learning.

Former New Jersey State Commissioner of Education Dr. Kimberley Harrington Markus says this connection between student agency and educator happiness shouldn’t be a surprise: “As educators, nothing brings us more satisfaction than seeing our students succeed, and the satisfaction of seeing them figure out a solution to a question or problem doesn’t come close to the joy that comes from seeing them come up with the problem or question themselves in the first place. Student agency — and programs that foster student agency — are critical to putting students on a path to success both in school and beyond.”

Ultimately, this report makes the case that student agency could be the key to unlocking not only student engagement but teacher engagement.
WHAT IS STUDENT AGENCY?

There’s a large body of research, dating many years, on the benefits of student agency. Indeed, “research has demonstrated overwhelmingly that students who have agency in their learning are more motivated, experience greater satisfaction in their learning, and, consequently, are more likely to achieve academic success.”

Former Superintendent Dr. Tom Leonard of Eanes Independent School District in Texas points to another potential benefit of student agency: addressing growing issues of student anxiety. In explaining the role that entrepreneurship education programs play in supporting student social emotional well-being, he writes that the programs “empower [students] to become agents of change and equip them to solve problems, empathize with people who might not look like them, and pick themselves up after adversity.”

Studies also suggest ways to define student agency. In her overview of the research, Jennifer Davis Poon of the Center for Innovation in Education identifies four:

- Setting advantageous goals.
- Initiating action toward those goals.
- Reflecting on and regulating progress toward those goals.
- A belief in self-efficacy.

The stories in this report point to another recurring theme of student agency: When done right, it can foster greater student empowerment. This happens organically because, as author John Spencer writes, “engaging environments often promote empowerment because they focus on student agency and ownership.”

While teachers play a critical role in advancing student agency, instructional models are also important because some models are inherently engaging and naturally promote agency. Tom Vander Ark, CEO of Getting Smart, cites examples of these models:

- Competency-based learning environments.
- Project-based, interest-based and purpose-based learning models.
- Work and service learning experiences, including youth entrepreneurship education programs.

Consequently, one path to fostering student agency is adopting new instructional models.
STUDENT AGENCY AND EQUITY

Given the role student agency plays in fostering empowerment, it’s also a critical factor for addressing equity. Former Envision CEO Gia Truong calls it “the equity challenge of our day: to develop and strengthen agency in students, so that armed with skills and competencies, they can head into college, careers, and their lives equipped to make the changes most relevant to them.”

In Township High School District 214 in Illinois, strengthening student agency through entrepreneurship education is tied to addressing social and economic mobility. According to Dr. Lazaro Lopez, interim superintendent of Township High School District 214, “motivating students to lead their own learning — understanding their purpose, navigating challenges and solving problems on their own and becoming stewards of their own future — is the critical first step on the path to a successful life.”

It’s an opinion that Phyllis Lockett, CEO of LEAP Innovations, shares: “We must shorten the distance between ‘school’ and economic opportunity for Black, brown and high-poverty students. We have to reimagine learning if we are serious about addressing equity. A critical starting point is empowering our students to lead their own learning along these pathways so they can become masters of their own success in and beyond school.”

Developing student agency through work-based learning, including youth entrepreneurship programs, also has the potential to address the systemic opportunity gaps that impact life outcomes alongside better-reported academic gaps. These programs often connect students with mentors and industry experts in real-world contexts, providing relevance and meaning to academic subjects while helping students develop social capital and networks vital to success later in life.

“We can’t expect to address systemic opportunity gaps through traditional, academic pedagogical approaches and classroom models alone,” says Julia Freeland Fisher, director of education research at the Christensen Institute. Instead, she writes “schools must adopt and embrace approaches — like work based learning and service learning — that deliberately connect students with real-world opportunities to develop their social capital that can extend beyond their networks forged in school.”

To achieve these outcomes, Fisher says schools can’t leave connections to chance: “Measurement and equity go hand in hand. If schools truly hope that work-based learning will address opportunity gaps, they will need to begin measuring connections brokered, not just experiences accessed.”

Lopez agrees. “We can’t address the challenges presented by poverty — especially multi-generational poverty — through traditional approaches to teaching and learning that have often ignored the importance of bridging the gap between what happens in the classroom and the real world. That is why our district has invested in work-based learning programs, like entrepreneurship and internships, that provide authentic experiences to our students while they work with mentors and build their social capital.”
STUDENT AGENCY AND UNCERTAINTY: WHAT WE LEARNED DURING THE PANDEMIC

The first iteration of this report — "Learning With a Purpose: Preparing Today’s Students to Navigate an Increasingly Ambiguous Future" — explored the connection between students’ experience in entrepreneurship programs and their ability to adapt and deal with uncertainty. The epitome of real-world uncertainty, COVID-19 provided a crash course in the benefits of student entrepreneurship in general and student agency in particular.

Experiential learning environments, such as entrepreneurship courses, emphasize student agency and creative problem-solving; the very skills needed to deal with moments of uncertainty and ambiguity. Time and again during the pandemic, teachers noted that students in these programs were better equipped for the frequent disruptions and transitions between in-person and at-home learning. They logged in each morning; completed their assignments on time; and most importantly, remained engaged. In the face of adversity, they displayed flexibility and resilience.

Despite the circumstances, my students were engaged, they were clear about what they needed to accomplish, and they were motivated to do so and make it happen. They were comfortable taking initiative.

Brad Neubauer, INCubatoredu teacher, Naperville Central High School, IL

And some students thrived, finding purpose and inspiration in the challenges the pandemic presented.

Take the team from Ted Coiné’s INCubatoredu class in Collier County Public Schools in Naples, Florida. During COVID-19, students couldn’t buy unwrapped food in the cafeteria because of health restrictions, so the team created the All-In Box, fancy boxed lunches served in plastic containers for $5. Students could go to a website and select meals — like crepes, mushrooms in Thai sauce, onigirazu (seaweed and rice) — then pick up their meals the following school day.

“They built the website before I even told them to,” Coiné says.

At a time when many educators during the pandemic were experiencing fatigue and stress, youth entrepreneurship teachers said they fed off the energy from their students, many of whom were engaged in an authentic learning experience for the first time. Seeing their students succeed, particularly during trying times, was a source of joy and renewed excitement for teachers who were themselves dealing with the unfamiliar world of remote and hybrid learning. And the joy spread to colleagues searching for ways to rekindle their love of the profession.

“You end up being a cheerleader for sure,” says Anthony Miller, INCubatoredu teacher from Township High School District 211’s Conant High School in Hoffman Estates, Illinois. “There’s an intrinsic feeling you get as an educator when you see the kids go the extra mile — 15-, 16-, 17-year-olds who were able to do this.”
A PHILOSOPHICAL SHIFT

About a decade ago, educators and workforce development experts proposed a radical new approach to K-12 learning.

What if ensuring that students leave school with a sense of purpose was just as important as their GPAs and class rankings? What if exploring their passions and interests were as much a priority as preparing them for college or the workforce?

Authentic youth entrepreneurship programs like INCubatoredu are part of this philosophical shift from “sage on the stage” to “guide on the side.” It’s a growing movement that believes that giving students the opportunity to build a business from the ground up and solve authentic problems for people provides them with the meaningful, real-life experiences that they not only crave but absolutely must have for life-long success.

The yearlong INCubatoredu courses begin with something real. Teams of students brainstorm a problem in their communities — anything from minor annoyances like keeping their cellphones charged to more consequential global issues like climate change. Their assignment? Create a product or service that addresses that problem, then try to convince actual investors to provide real financial backing to take that product to the marketplace.

Teams might build their products using 3-D printers or materials from local hardware stores. Others develop digital solutions, such as apps for smart devices. No matter what the form, the products undergo rigorous testing. The teams decide what they got right — and the assumptions they got wrong — and then use the results to improve the outcomes. They develop experiments to test their assumptions and hypotheses, then study the opportunities and limitations of the marketplace, tinkering with their products more and more with every discovery. Once they have the kinks worked out, they pitch their viable product to investors with the hope of creating a startup.

Student agency may be the goal, but they’re not alone. In addition to the INCubatoredu teacher, each team checks in regularly with a mentor, usually a local business expert or entrepreneur who has real-world experience in product development, marketing, angel investing or some other facet of the entrepreneurial process.

And, yes, “failure” is not only a possibility but a probability. Teachers and mentors offer the teams advice but stop short of stepping in to rescue them. If a team fails to find a workable solution to a problem or is unable to secure funding at a pitch competition, then that becomes a teachable moment.

“I’ll ask them questions to lead them in the direction they need to go, but sometimes just falling into the hole is the best thing that could ever happen,” says former INCubatoredu teacher Laura Boyd Smidt of the Academies of Loudoun in Leesburg, Virginia.

But an amazing thing happens: Students want to make these decisions for themselves, for
better or for worse. Like a toddler suddenly demanding to dress himself, the students begin to take ownership of their burgeoning entrepreneurial enterprise. They personalize the project, referring to it as “my business” rather than “my project,” says Coiné, the INCubatoredu teacher from Collier County Public Schools in Naples, Florida. They stop asking for his permission, he says, and take the initiative to do it themselves, because they know it’s the best thing for the product and for the team.

In short, they develop agency. And agency becomes advocacy for themselves.

“The thing that motivates them is that it is their business and company. [The] direction they take the company is theirs.”

Dana Jones, INCubatoredu course teacher in Leander Independent School District in Texas
This much is clear: Students want a purpose for learning that goes beyond the four walls at school, says Kristin De Vivo, executive director of the George Lucas Educational Foundation, which advocates for project-based learning.27

“They want something that’s authentic to themselves and to their lives,” she says, “something that’s relevant to their futures.”28

But researchers are finding empirical evidence that experiential learning promotes deeper insights and increased student engagement. Students in these programs perform better not only on traditional assessments but also on problem-solving and critical-thinking measures as well. In addition to increased engagement, students also display greater collaboration, empathy and reflection, and agency, De Vivo says.29

Most importantly, it gives them a purpose.

“We want students to grapple with figuring out what they need to know before they’re just delivered the information,” she says. “We want them to collaborate with one another to figure out how to get the information they’ll need. This will result in a deeper understanding and one that’s generalized to newer opportunities to learn.”30

Each step in a young entrepreneur’s journey in INCubatoredu builds skills that provide new learning opportunities:

• Identifying the problem and inventing a solution promotes curiosity and creative problem-solving.
• Building the prototypes involves anything from engineering and code-writing to math and physics.
• Testing their product requires using the scientific method to identify weaknesses and improve the user experience.
• Pitching to investors means presenting to and connecting with adults, which promotes social-emotional skills.
• Managing a successful startup — if the groups make it that far — demands soft skills (collaboration, time-management and perseverance) along with more concrete skills like accounting, database management and inventory control.

The most successful groups are the ones that become so independent, so confident in their decision-making that teachers must keep up with their progress.31

Take GreenDirt, the product developed by the team that won INCubatoredu’s 2017 national pitch competition and a $5,000 investment in the product to go with the $20,000 they received from a districtwide event. A group of five students from Conant High School in Hoffman Estates, Illinois, wanted to solve the problem of food waste in landfills. The students interviewed restaurant owners
to find out how much of the food they actually discard can be easily composted. According to their teacher, Anthony Miller from Township High School District 211, the students mulled several solutions before settling on composting.

Their project developed rapidly, outpacing the curriculum and moving beyond the school’s four walls. During Thanksgiving break, the team bought a composting tumbler on Craigslist and in the middle of winter in suburban Chicago built an elevated tumbling machine to test turning food scraps into compost. From there, it was a blur of one development after another, all initiated by the students. After building a prototype of a vermicomposting system (one that operates on worm-power), a team member — on his own — convinced the school’s maintenance department to store the equipment in one of the heated garages.

GreenDirt eventually packaged the compost and sold it in four or five local garden centers. The startup operated for about 1.5 years until the students moved on, Miller says.

Miller’s proudest moments were when students asked for help after hours or on weekends, the very definition of student agency. “You’ll take time out of your personal life to have conversations with them on Slack, to look at what they’ve created, to spend time on a Saturday or Sunday working on their business model,” he says.32
REIGNITING A LOVE OF TEACHING

Anyone who reads education media knows that schools are struggling with teacher shortages. While there are many reasons for these shortages, it’s clear that dissatisfaction is contributing to more teachers leaving the profession. A 2022 survey found that teacher satisfaction is at its lowest point in 40 years. Only 12% reported that they are very satisfied, down from 39% in a comparable survey from 2011. Low teacher satisfaction has a direct impact on students, with some research suggesting that low teacher morale and long-term stress can impact student performance.

But INCubatoredu teachers often say the program is a source of inspiration. The entrepreneurship students remain engaged in their businesses, and their teachers follow suit.

Falia Justima, an INCubatoredu teacher at Immokalee High School in Collier County, Florida, credits entrepreneurship education for her joy in the classroom and believes it also plays a role in supporting teacher satisfaction. Justima says she finds joy because she “get[s] to see students become agents of their learning while finding their purpose. My satisfaction comes from watching students develop a sense of purpose while solving problems they themselves have identified. As their teacher, it’s amazing to see them achieve so much as they develop an understanding of the impact they can have in the world.”

Kurt Wismer, an INCubatoredu teacher at Horace Mann High School in North Fond du Lac, Wisconsin, often mentions a former student who, after taking his course, studied entrepreneurship at the University of Milwaukee-Wisconsin. The business she created won money through pitch events, which enabled her to cover tuition. “Her story and others like it remind me why I do what I do,” he says. “The best part is seeing the students be successful in their work. It’s had a dramatically positive impact on me as a teacher (and) the students I serve.”

Once INCubatoredu is introduced to a school, the joy of teaching and learning can be infectious, spreading to teachers and students in other classrooms. Coiné says teachers of other subjects at his Collier County school have taken a greater-than-usual interest in the entrepreneurship program and are even finding ways to partner on projects. When one INCubatoredu group in his class needed welding for its project and another needed someone with expertise in auto repair, teachers in both of those programs picked their best students to work with the INCubatoredu teams on their projects.

The best part is seeing the students be successful in their work. It’s had a dramatically positive impact on me as a teacher (and) the students I serve.”

Kurt Wismer, INCubatoredu teacher in North Fond du Lac, Wisconsin
CONCLUSION: PURPOSE AND THE FUTURE OF EDUCATION

The stories in this report provide hope of what students can accomplish, even in the face of adversity, when they’re empowered to pursue their purpose and lead their own learning. The stories also demonstrate additional benefits, such as improving teacher satisfaction, that can result from an investment in student agency through experiential learning.

Teachers and mentors in entrepreneurship programs have been aware of these benefits for years, witnessing the power of student agency when coupled with a sense of purpose. It’s the reason these programs are gaining popularity around the country. And it’s all the more reason that as districts continue to reimagine education to accelerate learning and address teacher shortages, they consider giving students and teachers the same opportunities to discover the power and joy of purposeful, project-based learning.
ENDNOTES

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8 Ibid.
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