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Exponential Pathways: Four Perspectives

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Recognizing that adult learners are the backbone of the U.S. economy, CAEL helps forge a clear, viable connection between education and career success, providing solutions that promote sustainable and equitable economic growth. CAEL opens doors to opportunity in collaboration with workforce and economic developers; postsecondary educators; employers and industry groups; and foundations and other mission-aligned organizations. By engaging with these stakeholders, CAEL fosters a culture of innovative, lifelong learning that helps individuals and their communities thrive. A national membership organization established in 1974, CAEL is Diversity, Equity, and Inclusion Workplace™ certified and is a part of Strada Collaborative, a mission-driven nonprofit. Learn more at cael.org and stradacollaborative.org.

XP and the Exponential Power of Channeling Diverse Experiences to Clarify Complex Career Pathways

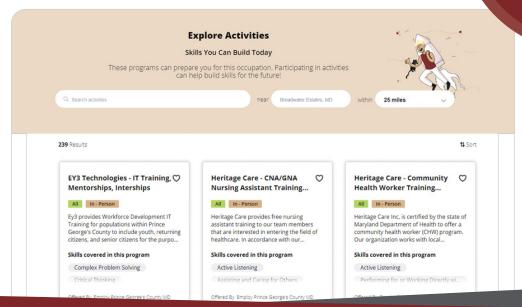
Parallel perspectives make Terry Bazemore Jr. an ideal evangelist for Exponential Pathways (XP), a six-region pilot program of CAEL's interactive career navigation platform. Bazemore is the COO of Ey3 Technologies, a systems engineering and cybersecurity company based in Prince George's County, Maryland. From his own education and employment experience, he knows just how arduous the career-exploration journey can be, especially for underrepresented workers. On the other hand, as a business owner in the tech space, he is keenly aware of the ethical and economic imperatives of a diverse and thriving talent pipeline.

XP is the result of a CAEL-led partnership among the U.S. Department of Education, which is funding the initiative, Lightcast, Vantage Point, Junior Achievement, The Mentor Method, and the American Council for Education. Prince George's County is one of six regional XP pilot sites, which also include Central Indiana; Rhode Island; Racine, Wisconsin; Maricopa County, Arizona, and southwestern Ohio.

XP incorporates skills and interest assessments and localized features that include virtual mentors, job market data, and skill-building experiences like internships, apprenticeships, bootcamps, volunteer opportunities, and other training programs. These fine-tuned assets help to connect students and jobseekers to rewarding careers in high-demand industries in their communities. It uses diverse, individually customized education and employment pathways to help traditionally underserved learners navigate their way to credential completion and employment.

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THE WORKFORCE AND THE WHY BEHIND EY3

Bazemore and his wife, who is the CEO of Ey3, founded the company in 2020. He calls his community the "Why" of Ey3. "My wife and I are both a product of Prince George's County, and we love everything about it. We want to focus on bringing out not only the good things, but also helping to develop the better."

For Bazemore, a big part of that is taking an active role in connecting the next generation to educational and career opportunities they might otherwise have missed. That's why, in addition to tending to its customer base of organizations within the U.S. Department of Defense and intelligence spheres, Ey3 Technologies partners with Employ Prince George's, the workforce board (and CAEL institutional member) leading the region's XP pilot. Through this partnership, the company provides IT training that upskills and reskills students and workers, including youth, returning citizens, and senior citizens, who are seeking new career pathways.

True to the company's community focus, it provides professional development to help workers succeed anywhere, not just at Ey3. The company offers Scrum Master training as a framework for developing essential skills with diverse applications. Although the Scrum methodology is rooted in agile software development, it also develops problem-solving, conflict resolution, and time management skills, helpful along any career path. "We have a lot of people who are transitioning into cybersecurity or other aspects of IT," said Bazemore. "Scrum is really a really great way for people to get into it. We joke around that everybody actually is a scrum master, they just don't know it yet."

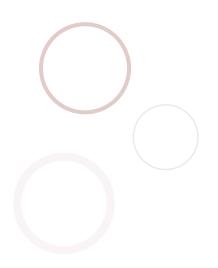
CAREER PATHS AND ALIEN LANDSCAPES

Unshadowing opportunities and helping learners visualize and act on their own potential is at the heart of XP, a capacity that resonates with Bazemore's own experience trying to divine the best career path forward. For Bazemore, the journey began with an interest in what he thought was graphic design.

He recalled seeing a documentary on the computerized effects used in the alien invasion film Independence Day. He was moved by the power of the technology behind it. When he shared his interest, he was encouraged to take up graphic design. "I soon found out that wasn't the pathway," recalled Bazemore. "I was a terrible graphic designer, I couldn't draw at all, but an adult had told me graphic design is where you want to go, because that's all they knew."

Bazemore would next pursue a career in finance, which also wasn't the right fit. When he finally discovered IT, he knew he had found a place where he belonged — although he didn't feel much of a sense of belonging. "Once I got into IT, one thing that I saw was that there were not a lot of people who looked like me in that space," he said.

That only made the task of navigating a complex workplace seem even more foreign. But Bazemore resolved that he would work to ensure others would have access to relatable



mentors. "I really wanted people to springboard to find the new issues, not go through the same obstacles that I faced. Let me help cover that part for you, and then you can take on the challenges for the next generation."

That recalls the "Why" of Ey3, and why Bazemore and his wife founded the company not just to take on cybersecurity but to help diverse workers feel more secure about their career navigation. "My wife, being a minority woman in tech, faced very similar issues just navigating that space," he said. "Cybersecurity is such a huge field, and there are so many different aspects where you can get lost, or believe you want to do something when you have no idea what that even really is."

THE "KEYS" TO INCLUSIVE EMPLOYEE-EMPLOYER PARTNERSHIPS

When Bazemore heard about Employ Prince George's KEYS (Knowledge Equals Youth Success) program, he was impressed with how it was able to target young people facing barriers to employment. "They introduced me to the opportunity to mentor, do career coaching, all the things that we wanted to do anyway and were doing on our own time," said Bazemore.

The KEYS program also introduced him to a valuable source of talent. "They said, 'Look, you have a business? We would love to provide you with interns," recalled Bazemore. When he told them he didn't have a salary budget for interns, he was pleasantly surprised to learn that covering that cost was part of the KEYS program.

"I thought that was such an amazing opportunity for them not only to help a small business trying to grow, but then also to support our commitment to help the community,"

he said. "We were able to provide interns an opportunity to learn cybersecurity, office etiquette, and all the things necessary to springboard off of for the rest of their career. It was a win-win all around."

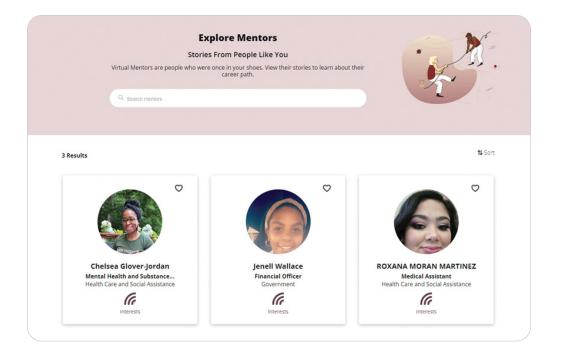
THE POWER OF PERSONALIZED PATHWAYS

It was through his work with the KEYS program that Bazemore heard about the XP pilot and was invited to take part in it. "Terry is an exemplary employee partner not just of XP, but of the broader workforce board function," said Rob Garcia, who, as director of initiatives at CAEL, spearheaded the XP pilot launches. "I've worked with a lot of workforce boards, and what I spend most of my time talking about is the role that employers need to play in the workforce system for it to perform well. Terry exemplifies the positive impact an employer partner can make within a workforce system."

Bazemore was immediately impressed with XP's ability to house the critical waypoints that define education-employment pathways under one roof. But it is XP's virtual mentors and their ability to show, rather than dictate, career pathway choices, that stood out most for him.



Terry Bazemore Jr. Ey3 Technologies



Perhaps that's because Bazemore himself had turned to a kind of virtual mentor when he was growing up, although admittedly not as attuned to personal circumstances as those available via XP. "Because of the lack of mentors that I had, a lot of them were people I'd never met; they were on a bookshelf and on YouTube." he said.

And while he was able to learn from it, canned content only goes so far. "It was information that was more for everybody, not something tailored toward me and my direct path," said Bazemore. In contrast, he praised XP's virtual mentors, who can illuminate a career path within a context that users can not only understand but see themselves advancing along.

For Bazemore, XP users and virtual mentors hailing from the same community make for an "amazing pairing" that can inspire career explorers with personalized pathways bolstered by the incremental interventions of learning experiences building skills and momentum along the way. It doesn't matter if they follow in the same footsteps or simply watch mentor stories to get new perspectives about a different path. Either way, he says, XP users have a source of motivation much closer to their own experiences than what is typically possible with career exploration platforms.

EMPOWERING INDIVIDUALS TO NAVIGATE EDUCATION-EMPLOYMENT PATHWAYS

The ultimate success factor of the XP approach is empowering users to make the decisions that best support their own interests. Pointing to his own foray into graphic design, Bazemore said that XP can channel the momentum sparked by an initial impulse and redirect it to the structured intention of a tailored trajectory. "It will take you down a pathway to where you

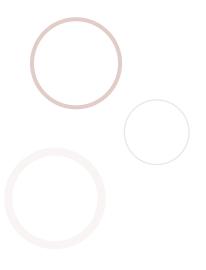
actually want to be, exposing you to even more areas and more aspects of things you didn't even know about."

That, he said, can even benefit the "real life" mentors who have good intentions but perhaps face the same lack of clarity. "A lot of times people don't really know how or where to steer a mentee or a young person coming up," said Bazemore. "But this tool allows for individuals to take a quiz on their passions and what they want to do, take that information, and then sculpt that into what their natural bent toward things may be. By showing what you actually care most about based on an assessment of yourself, it helps prevent false starts and false directions that can happen in somebody's career."

Again, Bazemore was speaking from experience. He recalled a somewhat ironic slogan he heard when enrolled in a leadership development program as a young employee during a previous role: "Take hold of your career." The program warned people about being passive in their career pathways, urging them to be purposeful in the direction they chose. But it's hard to steer a course over hidden terrain. "XP puts that information right in your hands so you can truly take hold of your career," said Bazemore.

As the Prince George's County XP pilot prepares to serve the first cohort of high school students, via the KEYS program, Bazemore is optimistic about XP's potential to boost equity in his field. "I'm so proud to see so many young minorities coming into the field and learning, growing, getting a piece of the funding that is pouring into this industry, and having the opportunity to make great careers for themselves," he said.

Bazemore has succeeded as an entrepreneur in spite of the obstacles strewn along his career path. That, he says, has helped him view XP "as the 18-year-old me." It's a perspective that makes him confident that XP can support the "Why" that is behind Ey3 — and in the future that is ahead of XP.



XP Marks the Spot: Flexibility and Focus Meet in Ohio's New Graduation Requirements

Ohio's high school class of 2023 will be the first to graduate under a reimagined set of state requirements. Much like the education-employment pathways they emphasize, the requirements overlap in some areas. These intentional intersections are part of an eclectic but coordinated set of options for aligning high school graduation with positive post-completion outcomes.

In addition to course completion, the new requirements include competency and readiness criteria. Students who fail state competency tests can choose alternate paths to success, including the Career Experience and Technical Skill option. On the other hand, the readiness criterion applies to all students. To meet it, they must earn two "graduation seals."

Also new to Ohio — or at least (for now) Southwest Ohio — is a career-exploration system designed for high school students and young adults. Known in its pilot form as Exponential Pathways (XP), the program is being tested in the Cincinnati area and five other regions around the country. CAEL and its partners designed the technology solution to boost economic mobility by integrating local education and employment resources so students can better navigate the complex pathways that connect education, training, and rewarding careers. XP is made possible by the U.S. Department of Education's Fund for the Improvement of Postsecondary Education.

Mark Edwards is director of curriculum and communication for Reading Community Schools, located north of Cincinnati in Hamilton County. He sees lots of upside in the contemporaneous timing of XP and Ohio's holistic high school completion requirements. Edwards, who is in his first year with Reading, arrived at the district with a focus on post-high school outcomes and some key connections to both the Ohio Department of Education and CAEL. He had become aware of the XP program through his involvement with Harvard's Proving Ground while serving as the director of college and career readiness for another Ohio school district.

In August 2022, shortly after joining Reading Community Schools, Edwards drew upon those connections to coalesce a group of area high schools, businesses, and colleges into the XP pilot program for Southwest Ohio. He explained that for traditional high schools like those in the pilot, which don't have their own comprehensive CTE programs, several options under the new state requirements are especially helpful. "We focus on providing industry-recognized credentials, the Ohio Means Jobs Readiness Seal, and pre-apprenticeship programs." Each resonates with XP, which offers students interactive access to skills and interest surveys, education and career pathways, and even virtual mentors.





EXPONENTIAL PATHWAYS | **EDUCATOR PERSPECTIVE**

The Ohio Department of Education compiled an expansive list of industry-recognized credentials, organized within 13 career pathways, from which students can choose. Based on degree of difficulty, the department assigns a point value between 1 and 12 to each. (Most are worth three points.) Students who earn 12 points of industry-recognized credentials are halfway to completing the competency graduation requirement.

While students can mix and match within any of the 13 career pathways, they must focus on one to reach their 12-point total. "The beauty of this is that it creates a meaningful learning experience that connects students with opportunities" vs. "checking a box," said Edwards.

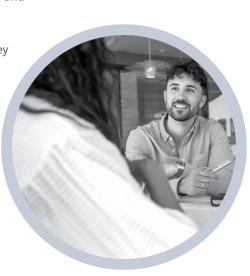
Much like the industry-recognized credentials, students have plenty of choices when it comes to earning a readiness seal. To graduate, all students must complete two seals, one of which must be state defined. Serendipitously, the Ohio Means Jobs Readiness Seal is not only state defined, but also satisfies half of the above-mentioned competency alternative. To earn the seal, students must display proficiency in 14 professional skills. Students work with mentors who document these proficiencies across at least two of three contexts: school, work, and community.

While Reading high school students can earn some industry-recognized credentials in house, many must be completed through partnerships. That keeps the school tapped into the latest workforce demands and businesses tapped into a healthy talent pipeline. "The whole system incentivizes school districts to gain industry partners to work together to fill these credential requirements," said Edwards. He added that several employers are using Ohio Department of Commerce grants to help their current workers upskill using the same credentials, further testament to the interconnection of education-employment pathways and the credentials' relevance.

Edwards praises the premium the state's approach places on such connections. But as they grow, so does complexity. For Edwards, that's where XP especially shines. XP's ability to link disparate opportunities in one platform is a major benefit, he said. "Because every single district has a different organizational structure, employers may not know whether to contact a counselor, a curriculum director, a superintendent... whoever has the passion around this can be hard to identify district to district."

At the same time, connecting resources within a central portal allows educators to present them to students in an accessible and navigable fashion. "The power behind this is you have one contact who is running this platform and able to connect all students in the entire area," said Edwards. In the case of the Southwest Ohio pilot, that is the Hamilton County Educational Service Center, which is coordinating XP collaboration among the participating school districts.

Policymakers prize such connections because of the life-changing impact they can deliver for students and communities, said Edwards. That is one reason XP has become a passion project



EXPONENTIAL PATHWAYS | **EDUCATOR PERSPECTIVE**

for him. Especially for students from disadvantaged socioeconomic backgrounds, "We need to get them connected with employers prior to leaving high school. When we do that, we see much better outcomes that can break the cycle of generational poverty."

Edwards recalled one high school student at his previous school who participated in an internship before graduating, about six years ago. The student recently finished college and has been hired by the same company that partnered with the district on the work-based learning experience.

Edwards describes the workforce pivot in Ohio secondary education as a shift from a "sit and get" learning paradigm to one that embraces experiences "outside of our walls." While he thinks student hesitancy is a hallmark of any new approach, "As the infrastructure grows, it will become more commonplace. That's why XP fits so well. It will help school districts better manage these pieces with employers and students."

Edwards believes the battery of XP and the new state requirements can help students unbundle the traditional education-employment pathway, a benefit to all involved. "It's really flipping the model of 'I need to leave high school, go to a college for four years, sit and be trained, and then be ready to go," he said. "We have such a shortage in workforce right now that we need to accelerate this, we need to get kids embedded and have them work toward some credentials along the way."

Employers, he said, are willing to take a chance on students not yet fully trained, knowing they can play a direct role through pathways like apprenticeships, which also leave the door open for traditional college completion. Edwards described how one of his employer partners starts high school graduates at \$23 per hour and offers them 100% college tuition reimbursement. "People think about athletic scholarships and academic scholarships; that's a work scholarship. It's a different pathway. And it's one that can be very viable for many different folks."

Edwards hopes XP opens up such pathways to many more high schoolers. Beginning this month and continuing throughout the year, Edwards and his colleagues at the other participating southwest Ohio school districts will add the first students to the XP pilot.

Edwards is thankful for the manifold support XP has received, from the state and county level to Reading Community School District's own leadership. "They have the foresight to allow me to pursue this work for the benefit of Reading students.

"I am also grateful for the leadership at our state level and the coordination on creating a systematic approach that is helping not only businesses develop stronger pipelines to workforce development, but also students who come from disadvantaged backgrounds to be able to connect to rewarding careers."

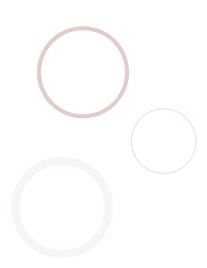
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Reading Community Schools



Edwards added that without the partnership of the Hamilton County Educational Service Center and Donna Lauver, the center's regional workforce coordinator, the pilot wouldn't have been possible. "They have been an integral part of helping bring so many partnerships together."



Guidance From a Fellow Traveler: A College Student Pilots CAEL's Career Navigation Platform

Education-employment pathways may be roads to success for adult learners and workers, but it takes strategic partnerships to build them. That is evident in the aptly named Connected Pathways, a six-region pilot of CAEL's interactive career navigation platform, Exponential Pathways (XP). XP is the product of a partnership CAEL is leading that includes the U.S. Department of Education, which is funding the initiative, Lightcast, Vantage Point, Junior Achievement, The Mentor Method, and the American Council for Education.

As each pilot aligned to meet its community's needs, it welcomed the addition of local partnerships and the complementary perspectives they could contribute. A recent example is the five-week intern program that coalesced within the Prince George's County pilot. A handson opportunity for CAEL to exemplify experiential learning, the internship would help localize key content on the XP platform.

Inspiration for including interns arose during meetings with Employ Prince George's, the workforce board (and CAEL institutional member) coordinating the pilot region's onthe-ground work. While building out XP content, CAEL personnel learned about an active intern program at an Employ Prince George's training provider, ADC Solutions. They figured the interns' perspectives and experiences could go far in fine-tuning XP for local audiences. After all, who better to vet a resource for clarifying career and course choices than someone with both employment and education top of mind?

Pie'ta Bernard, a sophomore at the University of Maryland, Baltimore County (yet another CAEL member), was among the interns who participated in the XP pilot. Like most college students, Bernard is acutely familiar with how challenging career decisions can be. She also brought a dedication to helping others in her community and an appreciation for the power of mentor stories to the task of enriching the XP experience.

"When I was a senior in high school, I felt very lost and worried constantly as to what my future was going to look like," said Bernard. "There are so many careers to choose from, so I found it hard to pick just one. I tried to do my own research, but when there were so many options out there, it seemed impossible."

In the end, Bernard decided to study biology because it was one of her favorite subjects. But she is considering changing her major, as many college students do. (Even more go on to



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Pie'ta Bernard
Sophomore, University of Maryland

EXPONENTIAL PATHWAYS | **STUDENT / INTERN PERSPECTIVE**

regret them after leaving college, underscoring the importance of such decisions and why XP is offering new approaches to weighing them.) "If I had found a platform like Exponential Pathways, I'm fairly confident that I would have found a major I'm passionate about — or at least been closer to finding it," said Bernard.

It was that potential impact that most interested Bernard in joining the XP internship program. "When I heard that I would be helping to build pathways for those who may be uncertain about their future, I was ecstatic," she said.

One of the pilots' early findings had been how much XP's virtual mentors contributed to that impact. They personify XP's preference for relatable demonstration over rigid dictation. As one participating business owner noted, by pairing users with virtual mentors from their own communities, XP channels the power of common experiences to motivate and inspire career path exploration.

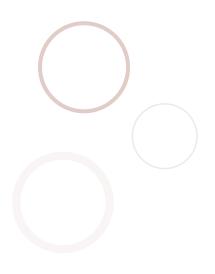
Bernard used her own experiences and creativity to develop an approach for enriching XP's locally sourced virtual mentors. First, she surveyed job titles already represented among XP's mentors. She then considered what careers were most prevalent in her home community, including input from friends and family members. She used her findings to generate a list of in-demand roles in her home community that were underrepresented by participating virtual mentors.

It was a painstaking process, but Bernard feels it was well worth it. "I think that a lot of people already have the skills or the potential to pursue a postsecondary education or career, but lack the resources or the support to do so," she said. "It is extremely difficult to figure out what you want to do, career-wise, especially at a young age. Mentors help to take that weight off your shoulders, even if that means just sharing their own story."

Virtual mentors, in particular, offer certain advantages, she added. "It's extremely convenient for both the mentor and the mentee. Finding a mentor is a daunting task, especially for introverts or for people who have never been mentored before. I really like how the platform showcases mentors' career pathways from a variety of fields. Sometimes, all it takes is a story to inspire you."

In addition to researching potential virtual mentors, Bernard analyzed careers and skill-building experiences to help delineate education-employment pathways for users. Using O*NET data, Bernard again focused on occupations prevalent in her own community.

Bernard developed three career pathways, including ten skill-building experiences supporting them. "A lot of time and research goes into each pathway," she said. "I had to make sure to add as much detail as possible and make things easy to understand. It was especially difficult to find certain pieces of information for some occupations."



EXPONENTIAL PATHWAYS | **STUDENT / INTERN PERSPECTIVE**

Most of the skill-building experiences Bernard incorporated are notable for their ability to accelerate a user along a chosen career path. But she also emphasized how XP frames them as opportunities for users to test and refine interests at points that can become seamless junctions to other career pathways. "Skill-building experiences can help people find out what they like and don't like about the field they are interested in," she said. "From there, they can have a better idea of what comes next or if they want to start a new pathway. Of course, those experiences can also give a preview of the tasks and skills that may be required for a future career."

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Her experience helping shepherd disparate parts into a cohesive whole has left her impressed with the level of detail behind XP's user-friendly interface. "Every piece of information, no matter how small, contributes to a helpful and informative pathway that someone can look to for guidance," she said. "The skills that I have learned and developed while creating skill/career pathways will definitely prove to be invaluable. I hope that my efforts will help many uncertain young adults find their calling. I think that it is extremely important for everyone to have access to career navigation resources to help guide them toward a better future."



CAEL's Career Navigation Platform Helps Siblings Steer a Clear Course to Credential Completion

Siblings Cassandra Munoz and Gael Munoz came to the United States to pursue college and career goals. First-generation students, they soon discovered that their high school diplomas would not be recognized in the U.S. Amid their research of different programs, the adult education program at Rio Salado College, a public community college that is part of the Maricopa County Community College District in Arizona, stood out because it supported their long- and short-term goals. Not only would it offer Cassandra and Gael classes to prepare them for the GED® test, but it also featured career training programs and support for college transition, including scholarship opportunities.

After passing their GED® exams and earning their high school equivalency diplomas, Cassandra and Gael each earned a retail industry fundamentals certificate through the National Retail Foundation, which Rio Salado College recognizes for college credit. They also entered Rio Salado's business entrepreneurship studies level 1 career training program. Aligned to local workforce demands, the program confers an industry-recognized certification that stacks into an associate degree.

Through their enrollment at Rio Salado College, which is a CAEL institutional member, the students received access to Connected Pathways, a six-region pilot of CAEL's interactive career navigation platform, Exponential Pathways (XP). XP is the product of a partnership CAEL is leading that includes the U.S. Department of Education, which is funding the initiative, Lightcast, Vantage Point, Junior Achievement, The Mentor Method, and the American Council for Education. As part of the Maricopa County, Arizona pilot, Rio Salado College included XP among resources available to several cohorts of its adult education program.

Both students have clear career goals, which include completing associate degrees in business and transferring to Arizona State University, and they found XP a valuable resource in working toward them. They said they were able to quickly immerse themselves in the platform, gaining a perspective of how the career training they chose within the program would align to jobs in their community.

Cassandra plans to earn a degree in sustainable design architecture, while Gael's ambitions include becoming a successful entrepreneur. The siblings agreed that XP helped confirm potential career pathways that aligned to their competencies. They especially valued XP's ability to track progress toward educational and employment goals while also broadening awareness about opportunities students may not have considered.



EXPONENTIAL PATHWAYS | **USER: STUDENT PERSPECTIVE**

For example, the students reported that the platform helped them discover other types of skills they hadn't explored or realized they possessed. In addition, while XP indeed confirmed their leanings toward business/management career pathways, they said it also helped build connections, develop their curricula, and gain more credibility.

Cassandra and Gael also reported that XP was easy to use, with dynamic activities and spot-on recommendations. They valued its online access, which allowed use at the times most convenient for them. They encourage any students to seek out career navigating resources like XP, which can help direct them along a clear path and recognize what type of jobs or certifications are suitable depending on their future goals.

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