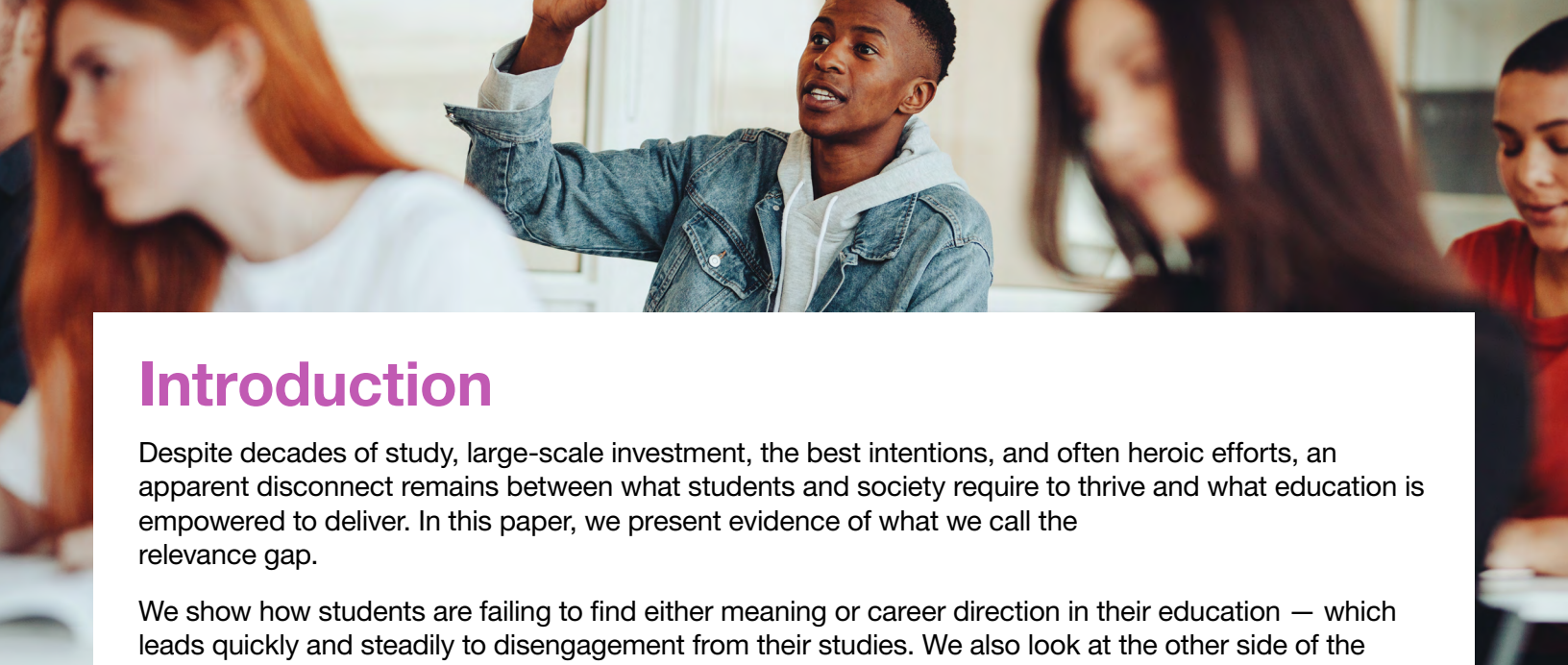




A YOUSCIENCE PERSPECTIVE PAPER

Solving education's relevance gap





Introduction

Despite decades of study, large-scale investment, the best intentions, and often heroic efforts, an apparent disconnect remains between what students and society require to thrive and what education is empowered to deliver. In this paper, we present evidence of what we call the relevance gap.

We show how students are failing to find either meaning or career direction in their education — which leads quickly and steadily to disengagement from their studies. We also look at the other side of the equation, where employers are unable to find individuals with the right skills for their needs, even when willing to pay considerably for those skills. We believe a clear-eyed look at the relevance gap is a necessary step to addressing it.

Addressing this gap is critical at many levels — for students and their families, for teachers and educational institutions, and for businesses and communities. The continued and systemic side-stepping of the relevance gap leads to a mountain of undesirable outcomes, such as unacceptable dropout rates, long-term underemployment, and education and workforce inequalities. It is, we argue, among the greatest challenges we collectively face.

But awareness of the challenge is only a starting point. In this paper, we introduce solutions to reduce the relevance gap. With some key shifts in the educational approach, students can move from disengaged to motivated, and from feeling they get no value in education to seeing it as the path to long-term, well-paid, satisfying careers, and, most importantly, to more meaningful, fulfilling lives. Reducing this relevance gap, even marginally, can have massive impact — for countless individuals from myriad backgrounds, and for society at large.

The education relevance gap

According to Gallup research, student disengagement starts early, with nearly a quarter of 5th graders considering themselves disengaged at school.¹ By high school, the majority — around 66% — of students are unengaged.¹

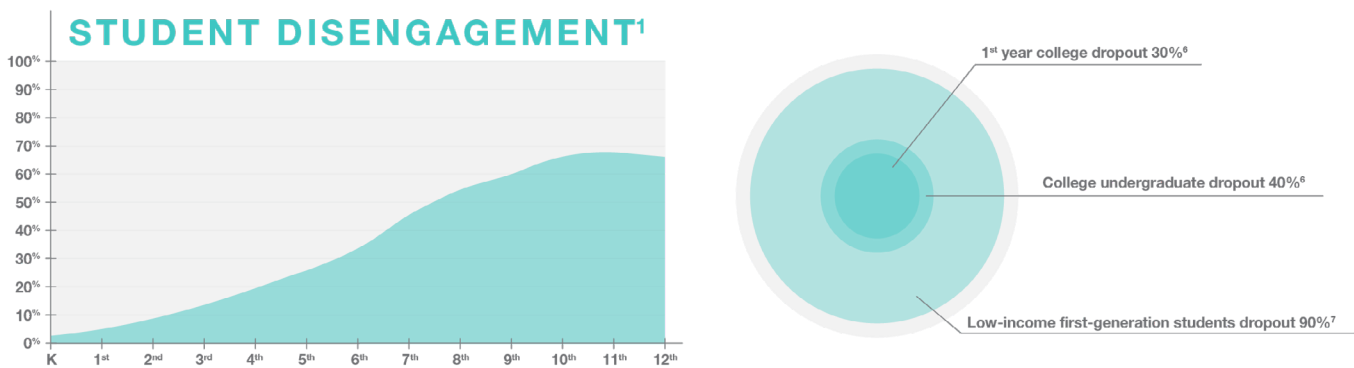
66% of students are unengaged by high school.¹

Why should we care? According to Gallup, engaged students are more than twice as likely to get high grades.¹ They're also more than four times as likely to be hopeful about the future.¹ This means an incredible number of disengaged students perform far below their potential and lack hope. For them, school can be a bleak place.

So, no surprise, most students stop caring about education and many stop attending school at all. Around a million students each year drop out of US high schools.² This continues the downward spiral. According to the Bureau of Labor Statistics, high school dropouts make substantially less than those

who graduate — roughly \$10K less per year.³ And they're almost three times as likely to be unemployed as those who go on to graduate from college.⁴ Beyond the negative impact on individuals, the high dropout rate has a direct impact on intergenerational poverty, crime, and even healthcare.⁵

Sadly, the student struggle doesn't end in high school either. Poor postsecondary outcomes are just as distressing. The first-year dropout rate for college students in the US is around 30%, and the overall dropout rate for undergraduates is more than 40%.⁶ Worse yet, nearly nine out of ten low-income first-generation students drop out of college.⁷ And what about those who do earn a degree? Completing a college degree doesn't lead to fulfillment for most. Among those who graduate from college, research shows only around a quarter of them end up working in fields related to their degrees.⁸



The life relevance gap

Students cite many reasons for their struggles with education — falling behind their grade level and becoming discouraged, needing to help provide for their family, lacking focus, feeling disenfranchised, and becoming discouraged by grading systems, to name a few. But the primary driver, both implicitly and explicitly, is the perceived lack of relevance. In short, they don't see the point and are bored because so much of what they study seems irrelevant to their life.

We need to understand that the notorious and nearly universal classroom question of “how will this help me in my life?” isn't rhetorical or an excuse. It's an honest plea for help by students searching to find their personal purpose in their schooling. They certainly want to find that purpose, but struggle to see the connection of, say, a quadratic equation or a sentence diagram to their own lives or to the careers they see around them. Although an educator might see the general value in learning these kinds of concepts or skills, it isn't wrong for a student to question when, how, and why they'd apply them in their own lives, now or in the future.

In fact, we should expect and even want that type of engagement and interest from students. It shows they're paying attention, making inferences from the world around them, and applying critical-thinking skills, which are among the top skills employers say they want from students.⁹

It's often difficult for students to connect what they're being taught to their future, especially if the curriculum focuses on abstract concepts or rote memorization of material without obvious practical application. This is when a truthful analysis of purpose is most needed. Even when the practical application seems clear to an educator, students still struggle to make the connection. For example, when a teacher says a quadratic equation can be used in business to calculate profits, it may not be obvious to students what that means for their own lives. Does it mean they can start a business if they know it? Will they make more money as a result? Without personalized answers to those kinds of questions, they continue to struggle.

The skills relevance gap

The education relevance gap isn't only a challenge for students. It also negatively impacts employers — particularly in the current economy, where there's a huge unmet need for employees. As of December 2021, there were 4.6 million more job openings than unemployed workers.¹⁰

How can that be? A primary factor behind that discrepancy is that employers are looking for, but not finding, people with specific skills. To succeed as a business, employers need employees with proven capabilities in disciplines, such as computer programming, project management, mechanical design, and machine operation. In most cases, the knowledge and skills employees have matters far more than the pedigree of the schools they attended or their majors. According to a Gallup poll, when looking for future employees, 79% of employers consider skills very important, compared to only 8% for alma mater.⁹

Yet this isn't regularly communicated to students who need this kind of guidance, nor is it placed at the center of their education. Top academic performers prioritize grades so they “can get into a good school” — not to achieve certain skills — because society does.

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And when asked what a good school means to their life trajectory, most don't have a clear answer. But for many employers and individuals, the answer to that question is clear: a good school is one that effectively helps prepare them for career success in their chosen field.

Unfortunately, school isn't where students first turn to learn practical skills. Increasingly, when students are looking to learn a capability required for either work or life, they tend to self-educate. They often learn the skills they truly need from YouTube instead of school.

The unfollowed path to \$100K a year

According to the Bureau of Labor Statistics, the median pay for construction managers in 2021 is just under \$100K a year.¹¹ Furthermore, construction management demand is expected to grow 11% from 2020 to 2030.¹¹ Despite the abundant and high-paying opportunities in construction management, very few college students pursue construction-oriented degrees. In Utah, for example, only .04% of four-year degrees are in construction management.⁷ Meanwhile, 22% of degrees are earned in general studies.⁷

How to overcome the relevance gap

The repercussions of the challenges we've discussed are varied and profound, but we believe there are clear opportunities to close the relevance gap and reduce the personal, educational, and societal negatives that arise from it, including to:

Help students understand the “why” behind their education.

We believe it's key that students understand their personal “why” behind their education. The reason is that it's essential to a future that

aligns with who they are. With that understanding, they're more likely to figure out the hows — how to overcome daily obstacles, how to succeed in school despite adversities, and how to leverage their education for meaningful, well-paying employment.

For example, if a student knows why the math they're studying can lead to a career that fits them, they're much more likely to engage and overcome its challenges. Perhaps it makes the animation career they desire possible or unlocks opportunities for high-paying roles in technology or manufacturing. The more personal it is, the better. If they have solid ideas of their own unique return on investment, they'll walk through walls to accomplish it.

Help students discover what they're good at and match it with what they're interested in.

Every student has aptitudes — natural talents that can be capitalized on. He or she might be inherently good at spatial visualization, idea generation, or inductive reasoning, for example. But how can students and their educators discover aptitudes — without being led astray by biases or subjectivity? It isn't through students, or even through their teachers, responding to subjective survey questions about things they think they may or may not like. For an individual to “like” or “dislike” something depends entirely on their exposure to that thing.

So how can a student know if they like something if they've had limited or no exposure to the things they're asked about? It's increasingly clear that the best way to help students discover their true capabilities is through scientific, objective discovery of their inherent talents through a proven aptitude assessment.

By helping a student discover their inherent aptitudes and abilities, we can then introduce them to a much larger set of career opportunities where they now know they have the talent to be successful. For most students, aptitude-based career guidance helps them see careers they may never have thought they could do before. And for many students, this may be the first time in their lives they've been told that they inherently have the talent to pursue in-demand careers.

At this point, knowing the student's natural talents and all the career possibilities open to them, it's important to refine their career matches with what's interesting and personally fulfilling to the student. Even if a student has an inherent aptitude at complex problem solving, it doesn't make sense to align them with a career in computer programming if they can't stand sitting at a computer all day. However, they might find a career in diagnostic medicine fulfilling if they apply complex problem solving to people they're caring for. This means it's critical to guide students towards careers that not only take advantage of their aptitudes, but also meets each individual where they are and where they want to be.

Certify the skills students learn so they and employers know there's a fit.

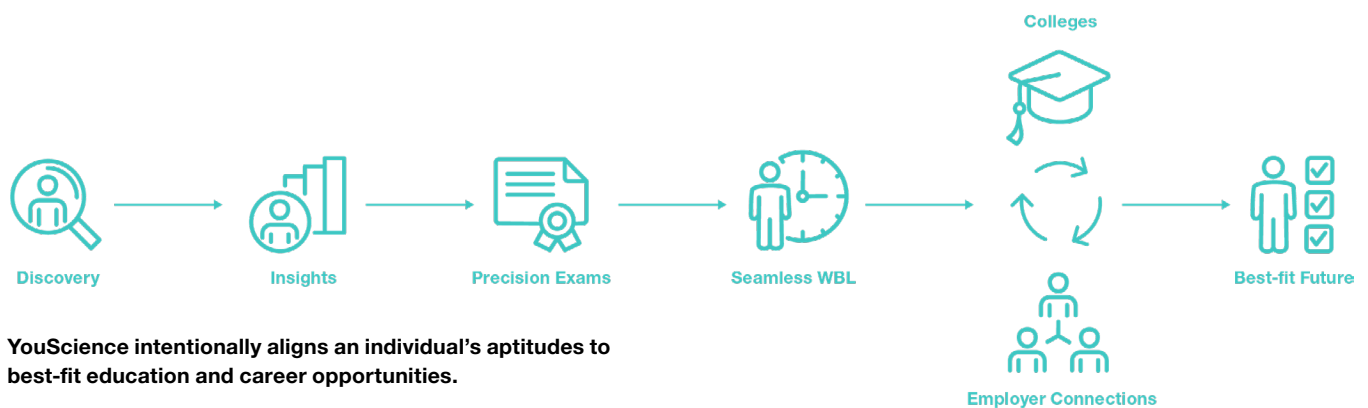
When someone has the right skills for a job, employers are more likely to hire them. And for certain skills, an employer will hire qualified individuals quickly, pay them well, and give them substantial incentives to stay.

But how does the employer know that an individual has the skills they need in the first place? Unless they have substantial experience in the field, it's incredibly difficult to determine if that person has the skills or not. This poses a significant problem for first-time job seekers and young adults as they build their careers.

Encouraging students to take skill- and career-oriented pathways in high school and college is one route to helping ensure students are building competencies needed by employers. And getting students into career-oriented pathways has benefits beyond better employer outcomes. Nearly every academic measure improves, and graduation rates increase substantially, when high school students participate in career courses — particularly among minority students and students in more educational at-risk populations. For English as a second language learners, for example, high school graduations rates rise from 65% to 90%, an increase of 25%.¹²

Another route to proving competency to employers is through certifications. A valid industry-recognized certification can help take the guesswork out of the process for both the student and the employer. It's tangible proof that a has the competence, knowledge, and skills needed to perform.

So, if an employer requires, say, mobile app development or automotive collision repair, they can trust that the person with a relevant certification has the appropriate training, knowledge, and skills. And that certification-validated trust leads to better, more efficient hires, which in turn can lead to lifelong careers.



YouScience intentionally aligns an individual's aptitudes to best-fit education and career opportunities.

What happens when the relevance gap closes?

As Maslow's hierarchy of needs describes it, self-actualization — or becoming the most that one can be — is the pinnacle of human accomplishment. A major factor in achieving sustainable self-actualization is aligning one's inherent interests and aptitudes with excelling in a personally satisfying career. Of course, that personally rewarding career can also go a long way toward meeting the more foundational needs, such as health, resources, family, and a sense of connection.

The many negatives largely attributable to the relevance gap — disengaged students, perceived educational irrelevance, lack of career paths, and the opportunity disparities — impact all of us.

But helping students in this way isn't just an individual story. The many negatives largely attributable to the relevance gap — disengaged students, perceived educational irrelevance, lack of career paths, and the opportunity disparities — impact all of us. It impacts the students going to elite colleges and racking up huge debt without a clear path to a career that'll pay off those loans, not to mention their families. It impacts employers who struggle to fill critical positions. For organizations in industries, such as healthcare, it can be a matter of life or death.

We at YouScience believe it's critical to address the relevance gap right now. If we don't act, the gap will remain and widen — creating even greater personal and societal issues for generations ahead.

We invite you to join us in solving education's relevance gap — and, in so doing, positively change the lives of students, educators, and communities alike. We firmly believe that when a student succeeds, we all rise together.

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