



Betterwise




The Power and P*potential of the Betterwise Adaptive Instruction M*del



AUTHOR:
MATTHEW PERRY, HEAD OF LEARNING



Table of Contents

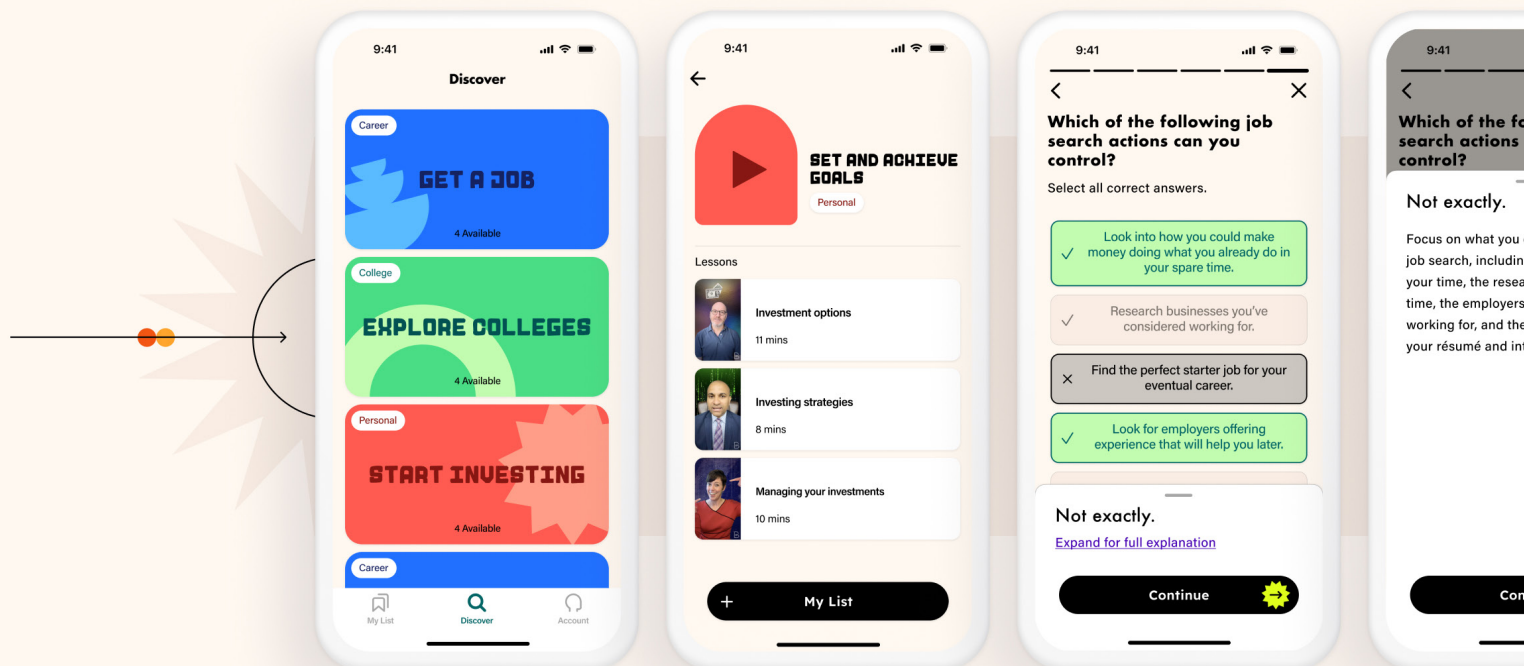
Abstract		03
Betterwise Vision		04
Problem and Solution		06
Our Product		07
Betterwise AIM		08
Outcomes		09
Principles		10
Evidence		11
Summary		13

Abstract

Today's high school students are well covered with standardized test prep and college admissions guidance. Yet when it comes to life prep – the acquisition of core skills such as opening a bank account, resolving conflicts, time management, succeeding in college, or exploring future careers – help is almost nowhere to be found. As a result, students feel inadequate and deeply anxious about their future.

At Betterwise, we've created a new learning application that prepares students for adult life, college, and career. Our innovative approach, which we call the Betterwise Adaptive Instruction Model (Betterwise AIM), features short video lessons and interactive quizzes about the subjects that matter most to students. Betterwise lessons are delivered by trusted subject matter experts in a format that aligns with how today's students learn, increasing student engagement and retention.

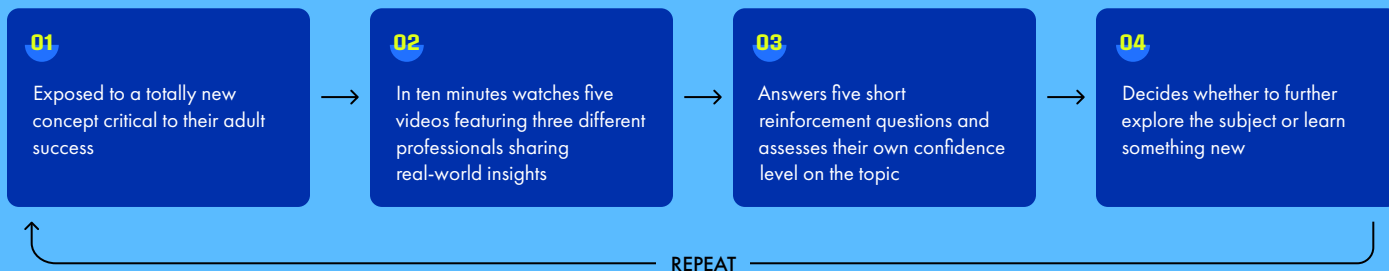
By giving students a new way to cultivate knowledge and life skills, Betterwise helps them build confidence for their future, reduce anxiety, and achieve better outcomes, in both the classroom and real world.





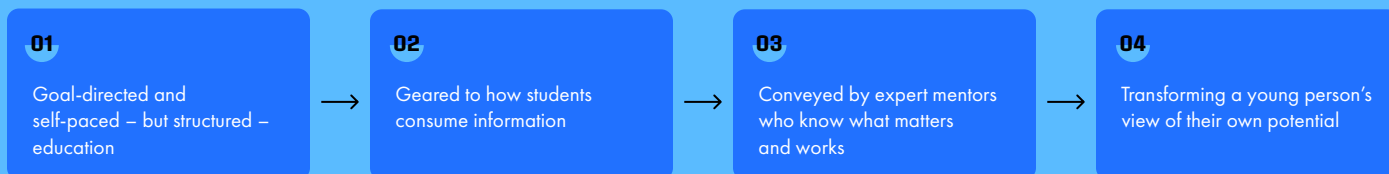
Betterwise Vision

Imagine a learning moment in which a student is:



Now picture this moment repeated three times a week, or three times a day, or over a typical school day.

This wouldn't be just a series of learning moments. It would be a whole new learning paradigm:



Now go another, even bigger, step further: Imagine that the learning is not just self-paced and customizable, but that it *responds in real time to the student's performance, engagement, location, age, and goals*. If education has traditionally been a lumbering freight train churning from point A to B, virtually unstoppable and without deviation, our model is a high-speed helicopter that can turn on a dime and land just about anywhere as passengers choose new destinations.

This is the power and potential of Betterwise AIM: It's not just that tailored, atomic learning is a better way to get students where they want to go, it is a fundamental redefinition of the journey. How much more can students learn when every step in the process matters to them because it's relevant to their goals and they're able to choose it?

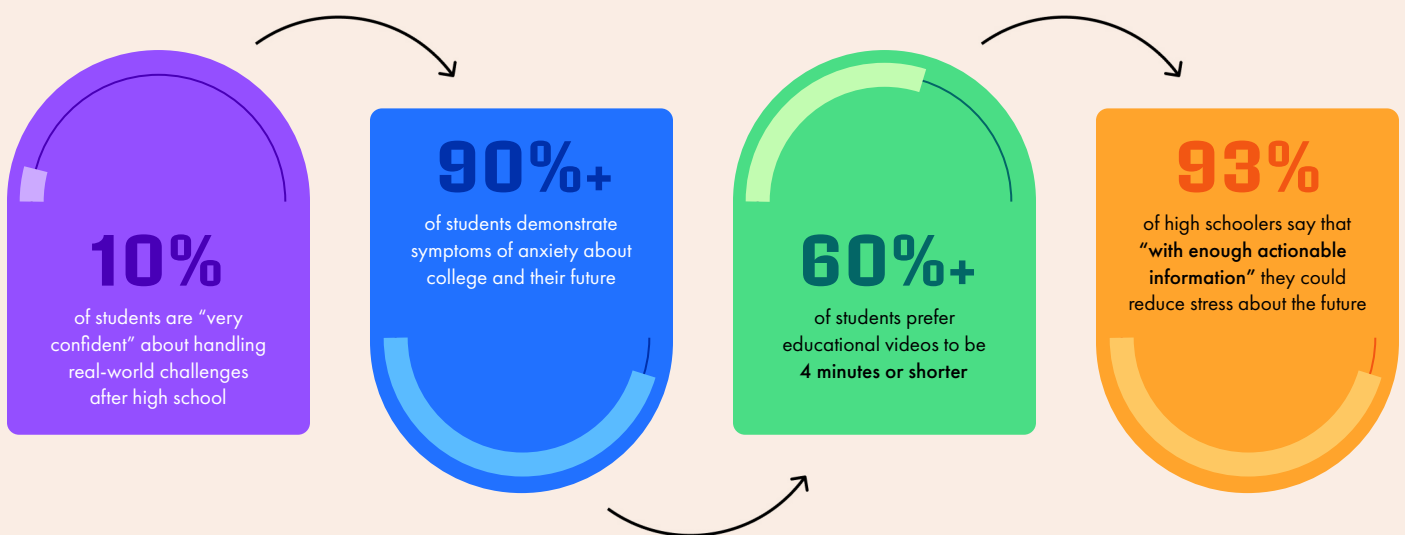


Making students the pilots of their own learning journey is key. As psychologist Albert Bandura, pioneer of self-efficacy theory, has written, “The rapid pace of technological change and accelerated growth of knowledge are placing a premium on capability for self-directed learning.”¹ Having students direct their own learning by declaring future goals on the app is so much more powerful than the usual passive picking of topics. Goal-setting involves intention, aspiration, and commitment. It actively constructs future scenarios of anticipated achievement.

In addition, ours is a learning model created from the bottom up, in which teachers with passion and new ideas design and iterate better ways to reach today’s students. We start by asking teachers, students, and parents a) What should be taught that isn’t? and b) What’s a better way to teach what’s already being taught? Then we partner with experts and educators to manifest their vision using adaptive instruction, built around rapidly responsive engagement, reinforcement, and impact.

Instead of seeing the requisite knowledge for a subject as a static, monolithic mass, embodied in the standard curriculum or textbook, Betterwise constructs it as constantly updating, integrating with other domains, and accessible into the future. “The curriculum” need not consist of 30 half-hour videos, a year’s worth of 90-minute class sessions, or a 750-page book. Instead, students can engage with a series of 1-minute videos, 10-minute discussions, or one-page lessons.

It’s self-paced, but structured – and structured in a way that makes sense to students. Bite-sized and streamlined, and more digestible as a result. Multi-sensory, and therefore more engaging. Taught by multiple mentors, who, as a group, represent *all* students. And the whole Betterwise Adaptive Instruction Model is driven by highly impactful educational and psychological principles: growth mindset, enhanced locus of control, a robust future self-concept, and the power of goal-setting.



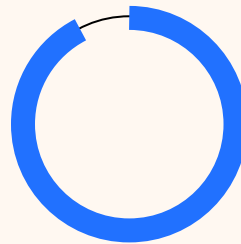
¹ *Self-Efficacy in Changing Societies*, Albert Bandura, ed., Cambridge University Press, 1995, p. 17.

Problem and Solution

Today's high school students finish high school both unprepared for the challenges of adulthood and riddled with anxiety about facing those challenges. Teachers and parents report that over 90% of Gen Z students demonstrate symptoms of anxiety about college and their future, with half of them showing "a lot" and 82% showing more anxiety than students did five years ago.²

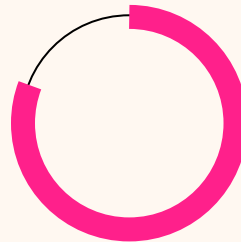
Students themselves confirm the observations of their parents and teachers, with only 10% saying they are "very confident" about handling real-world challenges after high school.³ They know they're not being taught essential skills like applying for a credit card, opening a bank account, getting a job, or communicating with strangers. And they crave this kind of adulting knowledge. They're ready.

Betterwise is a new learning application that teaches critical life skills and helps students manage their anxiety about the future. Our app meets student needs and learning styles where they are by using short format videos and a short comprehension quiz after every video. We carefully consider our students' feedback, the latest technological advances, and ongoing research into effective teaching. This allows us to quickly adapt to our students' needs, goals, and ways of learning. 93% of high-schoolers say that, "with enough actionable information," they could reduce their stress about the future.⁴ That's exactly what we'll provide.



90%+

of Gen Z students demonstrate symptoms of anxiety about college and their future



82%

of Gen Z students are showing more anxiety than students did five years ago

² "Report for 2022 Teacher Perspectives on Teaching Teens," Alchemer, 2022 [BWID 0342-0350] and "Report for Current Trends in Parent and Guardian Perspectives of Teens' Real-Life Skills," Alchemer, 2022 [BWID 0148-0152].

³ "Report for Teen Real-World Skills," Alchemer, 2022 [BWID 0439-0443].

⁴ "Report for Trends in Teens' Real-Life Skills," Alchemer, 2021 [BWID 0111-0113].

Our Product

Betterwise is an app available on iOS and Android. Users, typically high school students, can choose from dozens of different subjects within Life Skills, College Prep, and Career Exploration categories. Lessons are presented as a series of 60-90 second videos delivered by subject matter experts explaining topics such as personal finance, applying for jobs, living independently, critical thinking, and self-care.

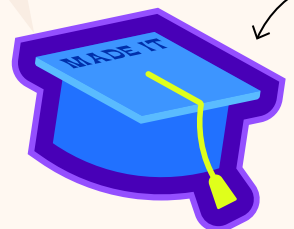
Students can learn how to get into and succeed in college, as well as explore a wide range of possible careers by hearing from professionals in those fields. Our mentors are experienced professionals who are excited to share their deep domain knowledge and practical wisdom with young people.

After each video students answer short comprehension questions to demonstrate that they have correctly internalized the information. When they complete a lesson (typically featuring 4-6 videos and take-away questions), students are asked to rate their confidence about achieving a real-world goal involving that topic. They receive immediate feedback on how they did on the takeaway questions, including an explanation that reinforces the main points of each video. The app helps students navigate through the real-world goals they select and tracks their progress through the lessons that prepare them to realize those goals.

Betterwise

Mission

The mission of Betterwise is to prepare students of all means and aspirations to meet real-world challenges with essential knowledge, self-efficacy, and excitement to discover their many possible paths to success. The Betterwise app will help students set and implement goals, adapt to changing circumstances and opportunities, and take care of themselves as they advance through school, career, and personal development.





Betterwise AIM

Betterwise AIM: Adaptive Instruction Model

FORM

- Self-directed
- Goal-based
- Mentor-taught
- Short videos

CONTENT

- Life skills
- College readiness
- Career exploration

PEDAGOGY

- Tangible tools
- Powerful mindsets
- Reinforcing interactives
- Immediate feedback

POWER

- Evidence-driven
- Responsive curriculum
- Adaptive software

Betterwise is built on a methodology we call the Betterwise Adaptive Instruction Model:

- **Engagement:** self-paced lessons made up of short-form videos,
- **Reinforcement:** interactive assessment of student comprehension and confidence, and
- **Impact:** curriculum customized by metrics of student progress.

Preparing young people for adulthood requires constant engagement. We engage our students by combining a novel educational format – short, focused, dynamic videos – with a known effective delivery system, caring expert mentors. We also engage students by balancing autonomy (choice of curriculum and self-pacing) and structure (taxonomy of curriculum and recommended lesson sequences).

Regular, immediate reinforcement of material through post-video interactive questions will also hold student attention by referencing what they've just learned before they go to a new lesson.

Continuous assessment of their progress and performance will also maintain a student's motivation to meet milestones of achievement by reminding them of the impact of what they're learning.

Our adaptive instruction model involves two core competencies: tools and mindsets. We teach users tangible real-world tools while infusing messages of growth mindset and self-efficacy into every lesson. The tools instruction provides essential knowledge, skills, and methods, while the mindset messages expand user confidence, persistence, and vision of their future selves.

Developed by our in-house curriculum experts, and informed by direct input from thousands of parents, students, and teachers, we believe this approach will greatly improve students' understanding and retention of critical life skill concepts – and ultimately transform their lives.



Outcomes

By giving students an opportunity for self-paced learning and assessment on the topics they desire, from mentors they trust, Betterwise can significantly improve educational outcomes. The most important outcomes for students include:

Engagement

Students want to learn because the content is compelling and presented in a way that resonates, and they retain high levels of both information and an understanding of how to apply it.

Mastery

Students develop wide mastery of domains such as personal finance by building micro-mastery of highly targeted knowledge, skills, and mindsets within those domains.

Agency

Students recognize their ability to pursue their passions and career goals, face challenges with equanimity and resilience, stay healthy, and contribute to their communities.

In other words, they possess a strong locus of control and excitement about the future.

Confidence

Students finish every Betterwise session feeling materially closer to achieving some real-world goal. We want students to translate use of our app into concrete statements about their place in the world, such as:

- I have control over how I handle this situation.
- There are multiple ways to succeed in this situation.
- I have specific tools that will help me succeed.
- This situation might involve long-term, as well as short-term, definitions of success.
- If this situation doesn't go as I hope, I will learn from it and do better next time.

Together, these four outcomes increase a student's **Self-Efficacy**, which is defined as a belief in one's "capacity to execute behaviors necessary to produce specific performance attainments"⁵ – i.e., engagement, mastery, confidence, and agency applied to a student's life goals.

⁵ "Teaching Tip Sheet: Self-Efficacy," American Psychological Association, <https://www.apa.org/pi/aids/resources/education/self-efficacy>



Principles

The efficacy of Betterwise AIM, and ultimately the Betterwise app, will follow from several underlying societal trends and pedagogical principles. These include the following:

- 01** Short videos are better teaching tools than alternatives, and nano-learning in general (≤ 3 min lessons) is the most effective way of learning, especially as this form increasingly dominates social media.
- 02** Tailored, adaptive curricula – created from the ground up by teachers to be self-paced and goal-based – are more effective than traditional topical curricula, delivered with rigidly paced sequencing.
- 03** Life skills are a critical aspect of learning that is being neglected, and mentors – teachers broadly construed to include expert practitioners – are the most effective life skill providers.
- 04** Immediate reinforcement of material, performance assessment, and feedback improve both learning outcomes and confidence.
- 05** Mindsets and information taught together are more powerful than either or both taught in isolation, especially in helping students develop a strong locus of control.
- 06** All of our claims will be increasingly valid throughout the 2020's and beyond.
- 07** An open, adaptable software architecture allows rapid surfacing and implementation of new, better ideas from educators.

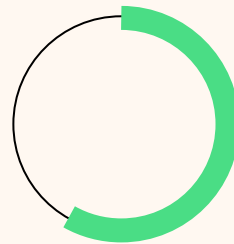
Evidence

Betterwise AIM's power derives from its inherent flexibility and responsiveness to changing modalities of student engagement, learning reinforcement, and educational impact. At this moment in the 2020's, evidence clearly points to a particular curricular feature that defines impactful teaching: highly targeted and engagingly structured short-form video.

Lessons composed of such videos are sometimes called micro-learning, or nano-learning if the videos are each under 3 minutes in length. A recent survey of 1,240 13-to-18-year-olds indicated that over 60% of students prefer educational videos to be 4 minutes or shorter.⁶

Academic researchers are finding the same thing. A 2017 study published in the journal, *Innovations in Education and Teaching International*, found that shorter online educational videos receive more views and likes from students than longer ones, with a statistically significant decrease in likes for every second of length reduction.⁷

Another study, "The Impact of Video Length on Learning in a Middle-Level Flipped Science Setting: Implications for Diversity Inclusion," found that students reported having "higher rates of retention of content [and] a greater degree of engagement and focus while viewing shorter videos. This higher degree of connection with the course material during short videos may lead to greater retention over long periods and an overall positive outlook regarding the material and course."⁸



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of students prefer educational videos to be 4 minutes or shorter, according to a recent survey of 13-to-18-year-olds

⁶ "Report for Trends in Teens' Real-Life Skills," Alchemer, 2021 [BWID 0057-0060].

⁷ "Satisfaction with online teaching videos: A quantitative approach," in *Innovations in Education and Teaching International*, Meseguer-Martinez, et al., 2017.

⁸ "The Impact of Video Length on Learning in a Middle-Level Flipped Science Setting: Implications for Diversity Inclusion," in *The Journal of Science Education and Technology*, Slemmons, et al., 2018.

The authors draw on recent educational psychology research to explain the power of curriculum designed around short videos:

Shorter videos provide a mechanism to categorize and compress information into discrete organized compartments ... and this may be more imperative in male students and those students with learning disabilities.... Furthermore, shorter videos may help to reduce the cognitive load (particularly extraneous cognitive load) and focus on germane cognitive load (i.e., the construction of schema).... Short videos may thereby aid in chunking of memory components ... and have the potential to aid in schema construction. This is particularly important for younger children who lack the general knowledge and have elevated cognitive loads when processing new information such as students of lower socioeconomic status or those with learning disabilities.⁹

These findings bode well for Betterwise’s mission of making our adaptive instruction model available to all students, regardless of location, learning style, socioeconomic status, or any other factor.

The findings also align with the Cognitive Theory of Multimedia Learning (CTML), formulated by Richard E. Mayer of UC Santa Barbara and one of the most influential Ed Psych frameworks of the internet age. CTML demonstrates the advantages of multimedia learning in all forms, including short-form video, and explains the benefits through a series of data-backed principles, all of which promote student focus on germane cognitive load – i.e., the things that matter.¹⁰

Most obviously, trends in popular culture demonstrate the potential of short-form videos for effective learning. The astronomical success among Gen Z of the social media platform Tiktok with its typically sub-1-minute videos – used for both entertainment and education – supports this finding. A recent study analyzed a one-time snapshot of 349 educational Tiktok videos that together had been viewed over 10 million times, finding their average length to be 23 seconds.¹¹ With the hashtag #LearnOnTiktok having been viewed over 400 billion times as of October, 2022, the trend toward short educational videos – no matter how recent – has incredible momentum.

⁹ *ibid.*

¹⁰ “The Cognitive Theory of Multimedia Learning,” by Stephen D. Sorden, of Mojave Community College/Northern Arizona University [https://www.academia.edu/29834388/The_Cognitive_Theory_of_Multimedia_Learning]

¹¹ “TikTok as a Knowledge Source for Programming Learners: A New Form of Nanolearning?,” in *10th International Conference on Information and Education Technology*, Garcia et al., 2022.



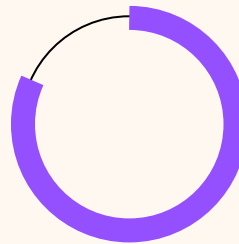
Summary

Like many observers of educational and cultural trends, we are worried about our students. They're riddled with anxiety about the future, and they are not receiving adequate instruction in a wide range of essential life skills. We know parents and teachers are not at fault; in fact they are on the front line with their kids, trying to plug a million leaks, even as the waters of educational dysfunction rise.

A recent survey of over 1,100 parents of teens showed just how anxious they are: 80% said they are concerned about how social and cultural trends are impacting the educational goals of their students, with more than a third saying they are "extremely concerned."¹²

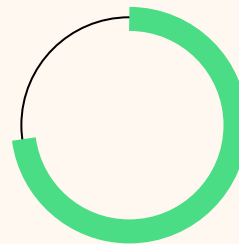
A similar survey of more than 1,000 high school teachers showed the same: 72% said they think high schools in the U.S. do not or only somewhat provide students with the knowledge they need to succeed as adults.¹³

Parents, educators, and students need help. The times demand that solutions come quickly and be effective. Betterwise has a plan and a product to provide that help and those solutions – now.



80%

of parents are concerned about how social and cultural trends are impacting educational goals of their students



72%

of teachers said they think high schools in the U.S. do not provide students with the knowledge they need to succeed



"The Power and Potential of the Betterwise Adaptive Instruction Model," Matthew Perry, et al. (Betterwise White Paper #1). Last updated: December, 2022

¹² "Report for Current Trends in Parent and Guardian Perspectives of Teens' Real-Life Skills," Alchemer, 2022 [BWID 0237-0240].

¹³ "Report for 2022 Teacher Perspectives on Teaching Teens," Alchemer, 2022 [BWID 0303-0307].