Children file in one-by-one, eagerly waiting their turn to log in attendance on an iPad hanging on the wall. Like experienced pros, the kids expertly drag their profile pictures from one side of the screen to the other then obediently grab a personal iPad from their neatly-stacked cubbies. No teacher instructions required.

Already at work is a thirteen-year-old boy comfortably consumed by an enormous beanbag, headphones on, intently typing away at his laptop. In another corner of the classroom, a girl wields a watering can, tending to a collection of assorted pots on the windowsill labeled “indoor tea garden,” and just yards away from her, another boy tinkers with nuts and bolts scattered on the floor, independently assembling what looks like the workings of a go-kart piece by piece.

Class is underway at San Francisco’s AltSchool.

The CBS This Morning segment, “AltSchool combines personalization and technology” gives us a quick glance into Silicon Valley’s latest education start-up, and it reveals a world of schooling like no other. Spanning the walls, pastel finger-paintings and neon sticky notes colorfully complement the room’s chrome laptops and minimalist design, striking the perfect balance between playfulness and professionalism, creativity and technology.

Here, the “factory model of education” is nothing more than a foreign idea of the past. Rather than prioritize mass efficiency for all, AltSchool zeroes in on individual personalization for each student. Some of the changes are more tangible: instead of rows of desks and chairs rigidly oriented to the front of the room, there are stools and couches casually arranged in collaborative circles. Other changes are more abstract: instead of multiple rooms housing thirty kids of a specific grade-level, there’s just one class housing all the kids grouped based not on age but on ability (Robinson). But perhaps the greatest
difference at AltSchool is its approach to teaching, or rather to learning. Instead of teachers prescribing lectures to cover distinct and narrow subjects, students initiate their own projects to explore a vast array of interdisciplinary inquiries—all driven by their individual passions.

Amidst all the Chromebooks and iPads, beanbags and makerspaces, it’s hard not to like AltSchool or at least find the whole idea of its mission somewhat thrilling. Even I find myself wishing I could travel back in time to trade my traditional schooling experience for one with the freedom to grow a tea garden or assemble a go-kart during class if I so desired. However, take away the advanced technology and modern design space, and I’m left wondering if this Silicon Valley start-up is worth the hype. Yes, the students might more fully enjoy attending school and learning in class every day, but is an AltSchool education really that effective? And how effective is it, if it only benefits the generally more affluent students that can attend these select microschools?

While AltSchool’s technology-based personalized-learning model is successful in terms of increasing student-motivation and advancing achievement within its existing domain, this preliminary model must be adapted if it is to expand beyond just wealthy microschools and to the remainder of America’s public-school system. Although seemingly flawless upon first glance, further examination of AltSchool’s circumstances reveals a lofty mission complicated by the financial and resource constraints typical of less privileged communities. If AltSchool is to truly live up to its reputation as the potentially revolutionary and transformative means to more equitable education, it must refocus its attention to the students and schools most in need of reform.

The Personalized Model and the AltSchool Approach

Before we can assess the quality of AltSchool’s personalized approach to learning, we must first define just what personalized learning is. In her book *Personalized Learning: the Evolution of the Contemporary Classroom*, author Allison Zmuda attempts to narrow down an established understanding of this concept and proposes: “Personalized learning is a progressively student-driven model in which students deeply engage in meaningful, authentic, and rigorous challenges to demonstrate desired outcomes” (7). This definition of personalized learning centers the method on two main premises:
students control both the direction of learning and the pace of learning as a means to achieving certain educational goals. Students – not teachers – decide what the student is to study and at what speed, catering to their authentic interests and rigorous needs.

At AltSchool, the value of in-depth learning is emphasized just as heavily as the value of the enjoyment of learning. Centered on this feature of a personalized education, AltSchool strives to “[cultivate] the next generation of lifelong learners who possess the knowledge, strength of character, creativity, and drive to impact the modern world” by equipping kids with the lifelong love of learning needed to navigate the twenty-first century (AltSchool.com). Left unsatisfied when touring pre-schools for his then two-year-old daughter, AltSchool founder and Google head of personalization Max Ventilla set out to reform what he saw as an outdated “one-size-fits-all” approach to learning and instead build a more modern education founded on principles of passion.

Like technology continues to adapt to the needs of a rapidly-changing society, today’s schools must also adapt to equip kids with the skills needed to navigate such an advancing world. Given the recent strides in technological advancements, the future of this century is all the more unpredictable at this unprecedented point in time. Therefore, schools would do better to draw upon students’ individual interests and teach the skills of successful adaptation to ongoing change rather than perpetuate the current linear model of education that just gets kids to next grade-level (Zmuda et al. 5). Ventilla argues that the “factory model” in which he grew up is well past its expiration date, claiming that the personalized method more competently prepares kids for these constantly-changing needs of a career in the twenty-first century by “reconceptualizing learning from a compliance-oriented structure to a passion-filled learning structure” (Zmuda et al. 6). Now almost four years in, AltSchool strives to do just this through its individualized approach, using technological platforms to tailor learning goals to each student’s strengths, weaknesses, and passions (“Can a Silicon Valley start-up transform education?”).

In practice, this model might look like the group of students each independently working on his or her individual assignments – one on a bean bag, one at the windowsill, and one on the floor – thanks to AltSchool’s online learning software. Every week, teachers upload a playlist – a set of twenty-five lesson
cards – to the student’s personal learning cloud, and the student completes these lessons at his or her own discretion over the course of that week (“Can a Silicon Valley start-up transform education?”). Each card is customized to that student based on how fast the child is making progress in terms of his or her learning goals. In the video “AltSchool combines personalization and technology,” student Lia Caraccilio explains how one of her friends and classmates “gets a little harder [playlist] math cards because she’s on a different level, but [Lia] gets a little easier ones.” These lessons can cover topics as traditional as solving mathematical ratios, but the application of this assignment can vary depending on the students’ interests; some playlists may cover such material by having the child construct a small-scaled model home or explore concepts of coding online (“A Day in the Life of AltSchool’s Middle School”). The application of this playlist software varies between each child’s specific needs.

Through the playlists, teachers can maintain a structured curriculum while still giving students agency over how and when they cover the material on a personalized basis. Students keep track of their progress and document their work directly onto their playlist clouds, taking pictures of their projects and uploading typed reflections for the teachers – who have access to the kids’ playlists – to monitor their growth in real time. Provided with this constant dataflow, AltSchool teachers can then respond with feedback and suggestions on the students’ playlists, engaging in collaborative conversation with the student. They can even “bump” back certain assignments, if they feel the child might need to review or revisit some missed concepts (“Can a Silicon Valley start-up transform education?”). While some view personalized learning as a shapeless framework in which kids are freely let loose to explore anything on their own, AltSchool views the concept in a more collaborative manner between students and teachers.

At its most core mission, the AltSchool approach strives to reorient learning in a way that most prepares kids for success in the rapidly-advancing twenty-first century. Rather than define such success in terms of teaching kids solely what they need to know in order to achieve the next step in a predefined sequence, AltSchool aims to equip kids with the passion to constantly learn more, using the playlist software to customize an education specific to each student’s unique interests and progress.

**Groundbreaking Innovation and a Transformative Mission**
In perfect practice, applying AltSchool’s personalized model to cater to students’ individual needs seems like the most ideal, most equitable form of education: it gives them exactly what they need to know, when they need to know it, and in a way that is personally meaningful.

Rather than standardize the learning process with a single lesson for an entire class of students and hope that the majority of the students will end up performing at a uniformly high level, AltSchool individualizes this experience for every single student with a slightly different lesson for each child and hopes that all students will end up making progress. Ventilla maintains that AltSchool “isn’t thinking about the global population as one unit that gets this experience or that experience. [A model] that’s better for 70% of the kids and worse for 30% of the kids – that’s an unacceptable outcome for us” (Harris). Instead of assigning numbers or percentiles to student achievement, the kids are assessed on a standards-based framework, and even these assessments are customized to the learning styles of each individual child (AltSchool.com). AltSchool strives to personalize and digitize most every aspect of the learning experience for all students.

In popular culture, many proponents of educational reform tend to hold AltSchool’s lofty mission in high regard, employing overwhelmingly positive rhetoric to describe AltSchool’s efforts to improve the education system. In one Fast Company article, technology expert Ainsley Harris deemed AltSchool the “start-up microschool network [that] could change the way we educate” with the “potential to transform the student experience, school operations, and ultimately, the structure of the education industry.” In another Wired article, journalist Issie Lapowsky referred to the AltSchool as “the school Silicon Valley thinks will save education” in the headline title. In both cases among many others, these writers glorify the unique technology and student-centric method at AltSchool as the “best hope for the future of education,” suggesting that AltSchool is America’s long-awaited answer to the education’s greatest woes of student apathy and disengagement (Lapowsky). Because AltSchool’s approach is often perceived as so vastly different from traditional schooling, advocates of educational reform tend to buy into the irresistible hype surrounding such a seemingly groundbreaking model and promote AltSchool with “optimistic speculation” (Russo).
In other words, sources are often blinded by fascination with such a new education reform, and they rush to latch onto the idealistic potential of AltSchool’s mission before focusing on the perhaps more complicated reality of its effectiveness. In order to assess the reality of AltSchool’s personalized approach, we must first investigate whether AltSchool achieves its fundamental goals of increasing student engagement and increasing student achievement.

**Effectiveness of AltSchool’s Personalized Learning**

Given that AltSchool is only in its fourth year of operation, quantitative statistics and figures regarding AltSchool students’ classroom involvement and academic performance are relatively limited. This lack of available data makes it difficult to definitively comment on AltSchool’s particular effectiveness in comparison to traditional schooling and to other educational reforms. However, existing research on other personalized learning efforts can generally offer insight into the effectiveness of AltSchool’s specific personalized-learning model, suggesting that their playlist approach is effective in the same way.

**Increased Enjoyment of Learning**

Considering personalized learning as a whole, there is generally little disagreement whether the personalized model achieves its central goal of increasing student interest and engagement in the classroom.

When kids can control the direction of their education, they can explore the topics that resonate with them and inspire intrinsic motivation within their interests; they can more actively re-engage in and take agency of their own learning (Zmuda et al. 7). In one AltSchool-sponsored YouTube video titled, “A Day in the Life of Upper Elementary,” we get a glimpse into the daily routine of one student who contrasts her experience with education at her old school – where “everybody had to learn the same exact thing at the same exact time” – with her experience at AltSchool – where “you get to learn at your own level and you learn things you want to learn in a fun way.” She characterizes her school days as “fun,” even sharing that “every time it’s the end of the day, [she] can’t wait to come back the next day to keep doing [her] projects.” In contrast to the traditional approach that stresses the value in making education
beneficial to students’ futures years down the line, AltSchool’s personalized learning approach stresses the value in making learning applicable to students’ interests now. When students can realize this connection between their education and their passions in real time, they better realize the value in engaging in and enjoying the process of learning. Because AltSchool students can make their own decisions over what they’d like to learn, this process of learning becomes less tedious and less mundane, rather becoming more self-driven and more applicable to the students themselves.

However, the real debate surrounding AltSchool’s effectiveness arises not when considering whether the playlists approach sparks student engagement but when considering whether it produces student achievement just as well as the “factory model.” When AltSchool founder Max Ventilla re-emphasized how much kids love going to AltSchool to argue the effectiveness of personalized learning, CBS correspondent Ben Tracy challenged, “Some kids would say they love going to Chuck E. Cheese’s, so how [does AltSchool] gauge an outcome and say this child is better educated?” (“AltSchool combines personalization and technology”). Tracy makes an important distinction here: AltSchool may very effectively foster student passions in the classroom, but just because kids enjoy the process of learning more, it doesn’t mean that they necessarily gain more from the process. To consider a new education model an improvement from already-existing models, academic performance must also be taken into account (Riley).

Increased Student Achievement

In regard to other models, personalized learning efforts generally indicate that AltSchool’s playlists are similarly effective in terms of improving students’ achievement. Recent studies indicate that students in personalized learning schools often reflect greater academic progress than students in non-personalized learning schools. This is not to imply that traditional schools are inherently lower-performing than personalized schools, but rather that personalized learning – where it is implemented today – often produces greater strides in academic growth in comparison to more typical educational models. In a research study called “Continued Progress: Promising Evidence on Personalized Learning,” the RAND Corporation – in partnership with the Bill & Melinda Gates Foundation – followed the
academic progress of two groups of students “with similar academic performance… from schools with similar demographic profiles.” One group of students learned through personalized learning while the other group learned without. Over the course of two years, the study found: “The [personalized-learning] students in the study made gains in math and English language arts that were significantly greater than their peers in other schools. Importantly, average performance of students in the study’s schools were below the national averages for their starting grade, and above the national averages for their ending grade two years later” (1). This evidence seems to suggest that personalized learning models are indeed successful at improving achievement as well as engagement. It should be noted, however, that the Gates Foundation is a third-party with a specific policy agenda, and it has a history of funding a larger movement towards charter schools (Brown). This track record may include funding research that specifically demonstrates greater progress in schools that don’t necessarily reflect the need to equitize education, but rather highlight the advantages of alternative forms of schooling. So while this data exhibits that personalized learning is more effective that the factory model in terms of academic performance, we must remember that it reflects such success only within a specific scope of schools.

Given the unprecedented freedom that kids have in personalized learning, many skeptics debate whether the approach leaves students too unfocused in the education process. In his blog post Don’t Personalize Learning, Benjamin Riley – founder of Deans for Impact, an organization dedicated to improving education by transforming educator-preparation strategies – challenges that without teacher-driven instruction, students will simply choose to take the “easier” or “less challenging” approach to learning, never truly pushing themselves to achieve more than they think possible. Furthermore, critics add that even if students are challenging themselves with a rigorous curriculum geared toward their interests, they will tend to focus solely on these favorite courses and neglect the less preferable ones. This criticism is not without merit as many personalized-learning schools still struggle with this complication. In the Idaho public school system that recently implemented personalized learning, one student “delayed starting on math until too late in the year” as a result of exclusively studying his favorite subjects and ended up “[having to attend several days of summer school to finish the course” (D’Orio). With too much
freedom, kids can lose sight of the end game of education: learning. Skeptics argue that it is too wishful in thinking to hand over the heavy responsibility of educating our nation’s youth over to kids in the hopes that they’ll naturally raise education standards themselves.

While it is idealistic to believe that young children would voluntarily choose to productively study on their own one-hundred percent of the time, AltSchool’s playlist technology attempts to remedy this issue by keeping students on track with constant collaboration with teachers. In 2012, a similar software-driven approach called Teach to One — founded to help teachers guide middle schoolers through an online math curriculum — was adopted by a number of schools in New York City. And in its second year, “eleven schools made higher-than-average gains, two made gains significantly lower than the national average, and two performed at par” (Mead). When technology mediates the student-teacher learning process, models centered on student initiation — much like the one at AltSchool — can still produce improved results across various academic settings. By using the online software via the students’ personal learning clouds, AltSchool teachers always have access to students’ work. In this way, young students aren’t left floundering amidst the freedom of choice and opportunity in their studies; a teacher is always on the other end, ready to guide them through the lesson if needed. This combination of student-driven learning with constant teacher supervision gives kids the agency to take charge of their work while allowing teachers to ensure they stay on the right path.

Existing research regarding recent personalized learning efforts indicates that AltSchool’s personalized approach is similarly effective in increasing engagement and increasing achievement for the students attending them. However, we must not just consider the extent of AltSchool performance, but also the extent of AltSchool’s influence and the make-up of their student body — just who is benefitting from AltSchool’s reforms?

The Microschool Reality

When we look back on AltSchool’s success in order to look forward to its implementation, we must also keep in mind AltSchool’s financial and socioeconomic situation. While this model may appear
effective in its current state, the question of feasibility in larger scopes poses entirely new concerns regarding educational equity and sustainability.

Considering the conditions and expenses of an AltSchool education as it is today, the current AltSchool model primarily gears its efforts towards educating the more affluent kids of America’s upper class. With a hefty price tag that charges families more than a whopping $20,000 of tuition per year, students tend to come from higher socioeconomic backgrounds in the Bay Area and New York City region (Madda). While the school emphasizes financial aid options for select applicants, “only about a quarter of students receive financial aid” (Lapowsky). Even then, this tuition is a lot to ask of America’s middle and lower classes, especially for an education at the elementary and secondary levels. However, the tuition is necessary in funding the many expenses of such an individualized and technology-based education at the core of AltSchool’s mission. Still, tuition money alone isn’t enough to cover the costs, for AltSchool must also rely on the $133 million in investment funding raised from Silicon Valley billionaires like Mark Zuckerberg and Priscilla Chan or John Doerr, Jonathan Sackler, and Adrian Aoun among others (Konrad). Given the financial reality of sending one’s kids to AltSchool, it is hard to argue that an AltSchool education is equally accessible to students of diverse socioeconomic backgrounds and equally sustainable in such communities.

AltSchool’s class structure similarly makes the model unlikely to expand past particularly privileged and resourced schools. Designed to where classes are no more than 25 students in size and the student-teacher ratio consistently hovers around 8-to-1, the overall dynamic of the school is heavily contingent on a strong student-teacher relationship in the classroom (Madda). Since the personalized model depends on individualized attention to each student, these conditions are necessary if AltSchool is to continue educating students in the same manner. However, consider the larger scheme of an American public-school system with 50 million kids and 3 million teachers, and this model seems less likely to expand much further than America’s resource-richest cities (“Can a Silicon Valley start-up transform education?”). In a podcast, Ventilla even articulated this idea: “The truth is, [educational reform] the easiest in one of two settings—where you have the most resources, or you have the least constraints,” and
this setting most often happens to be “well-funded private schools” (Madda). Without such privileged financial and resource-abundant circumstances, AltSchool can’t continue to operate more widely at the same level.

Even outside the context of the classroom, AltSchool’s playlist software is unsustainable beyond its current comforts. AltSchool’s administration is only able to personalize the learning process through the playlist technology thanks to teachers in the classrooms and software engineers behind the scenes. When describing the unique marriage of education and Silicon Valley technology central to AltSchool, journalist Dan Simon explains, “Technology firms have made an art of serving up specialized content based on your preferences. Ever wondered how Netflix always knows what to recommend? AltSchool’s teams of 50 engineers do sort of the same for students.” While the teachers are present on site to work face-to-face with students and to give them in-person feedback, software engineers are responsible for tracking student activity on playlists and then coding the cards needed to relay the lesson to the student. Therefore, teachers can’t customize lesson plans for each child based on their individual progress without the constantly up-to-date software supplied by AltSchool’s engineers. The problem is that not all schools in the United States can support a “team of 50 engineers” to fuel this model of personalized learning. The typical public school in average America can’t afford the luxuries that AltSchool takes as standard.

However, AltSchool’s plan for growth directly contradicts this unfortunate and constrained reality. As of now, AltSchool hopes to open new lab schools in Chicago and New York and maintain partnerships with nearby private schools in order to expand its operations (“Can a Silicon Valley start-up transform education?”). In essence, their expansion model is to open their own private AltSchools in different regions across the country, slowly spreading AltSchool’s personalized-learning influence one-by-one since “having their own schools [helps] inform the content and [AltSchool] platform” (Konrad). After all, these engineers can only code and update the software in a manner truly relevant to the students’ strengths, weaknesses, and interests if they have direct access to the activity and feedback of students in currently-running AltSchools. Because of this reality, Ventilla’s visions for expansion include a future in which AltSchool “[operates] four small schools in a spread-out rural area with one central administrator”
(Konrad). With this approach, AltSchool only can only expand its influence by literally inserting itself into communities with already existing schools, primarily serving as an education alternative for the rich.

While hopeful for the future, the logic behind AltSchool’s expansion mission to bring improved education to the masses ultimately falls apart. When we take into account the financial and resource demands essential to operating AltSchool, the reality of this model tends to focus more heavily on educating particularly advantaged students rather than strive toward equitizing education for all students. So while AltSchool does generally improve the learning process through its personalized software, it does so only to the extent of its already privileged students – not necessarily to the students who need it the most.

Looking Beyond Silicon Valley

Shifting the emphasis of schooling from one of standards to one of passion, AltSchool’s uniquely individualized and technology-based model offers a promising modern-day alternative to traditional schooling. AltSchool better prepares students for the twenty-first-century reality of unpredictable progress and innovation by equipping them with the passion to continually learn and adapt to changes in the world rather than prescribe them a preconceived set of ideas in the hopes that they will prove useful in the future. They achieve this more passion-oriented model by customizing the curriculum to each child, making the learning process more relevant and enjoyable for each individual student. By mediating a constant conversation between students and teachers via its online playlist software, AltSchool effectively fosters this love of learning and exploration in its students while still keeping them focused in terms of academic growth and achievement.

Although AltSchool appears to offer what seems like the paragon of education – the ultimate agent of equity in addressing every single student’s unique strengths, weaknesses, and passions – we must shift the way we view the rhetoric surrounding AltSchool from this rose-colored tone of hyper-idealism to one of more grounded realism. Its personalized approach does indeed have the potential to spark the same positive impact beyond its current influence. However, if its current plan to open new private schools one-by-one is too costly and too impractical for most middle and lower-class America, this is a plan to be
reconsidered. To have as revolutionary of an impact as its supporters predict, AltSchool must turn its attention and resources to a more sustainable solution focused on creating deeper, longer-lasting change in the schools that need it most. While AltSchool may be successful in improving education in terms of genuine passion and long-term achievement for its own students, we cannot and should not praise AltSchool as a long-awaited savior if this influence can’t expand much past its already particularly privileged and resourced realm. Rather, we should be cautious to refer to AltSchool and other educational reforms as a final solution to every nuanced flaw in the education system.

This is not to say that all aspects of AltSchool’s model are irrelevant to the conversation of education reform at large, though, as its personalized approach still serves a promising launching point to more realistically implementing other forms of personalized learning. Its many shortcomings shouldn’t imply that all personalized learning efforts are only possible amongst particularly wealthy communities or that personalized learning hasn’t already been successfully implemented in low-income schools, but that AltSchool’s specific approach necessitates adaptation if it is to expand beyond Silicon Valley and live up to the praise of its optimistic supporters. Fortunately, though, AltSchool’s approach to education is just one out of many potential forms of the model, and taking the best individualizing aspects of AltSchool’s model and applying them over a wider scope can help advance the cause towards education reform. Education inequity is an increasingly-complex issue in a world complicated by factors of class and privilege, and one Silicon Valley software isn’t going to solve it alone. However, a true and concerted effort to personalize learning rather than standardize it just might.
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