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Personalized Learning in the Pandemic

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Abstract

The COVID-19 crisis will likely breathe new life into a misguided education model that has gained prominence in recent years. The suite of reforms called "personalized learning," having benefited from institutional, government, and philanthropic support in recent years, stands to rise further in prominence as schools pursue increased online education and suffer from diminished student contact with teachers. Contra the claims of its proponents, personalized has potential to impede learning, frustrate teachers, and further divide our nation.

In this paper I outline the reasons for personalized learning's rise to prominence, explore three harmful education ideas the model is likely to enhance, and provide theoretical and research-based objections to each. I conclude with future negative societal implications of this popular trend, both in terms of immediate pedagogical effectiveness as well as wider cultural influence.

Key Words: Personalized learning, COVID-19, education, curriculum.

Introduction

School leaders face enormous obstacles these days. Buffeted by conflicting guidance from state, county, and national authorities while trying to weigh the concerns of parents and teachers, they are left with a series of bad options to choose from. Open, online, hybrid – no matter their choice, they are certain to face outrage. Nevertheless, among some school leaders, a strong concern for student safety has been subtly tempered by a sense of cautious hopefulness behind the concern.

This optimism stems from an idea that this crisis will be the catalyst for the real change in education many reformers have been dreaming of for some time (Hadwen, 2020). After acknowledging the devastating impact of online education, many leaders pivot to a hopeful coda – maybe this will be the "disruption" that will painfully but necessarily usher in the changes we have been hoping for. These wished-for set of changes, growing in cache for several years now, fall vaguely under the rubric of a new reform movement called "personalized learning," hereafter PL.

According to Richard Pondiscio (Pondiscio, 2020), education leader Doug Lemov has predicted this crisis will generate a spate of TED talks about "reimagining" some aspect of education. This zeitgeist is evident in education leaders' portrayals of a golden era of customized learning journeys elucidated in the triumphalist tones of the TED stage. Surely education will be forever changed once students can track their own progress and discover the joy of learning whenever and whatever they choose without suffocating constrictions like required curriculum and a bell schedule.

PL is a reform model aimed at granting greater student autonomy in choosing content, pace, and style of learning, as well as an emphasis on data analysis on a granular level. A 2017 Rand report (Pane et al., 2017) partly funded by the Gates Foundation characterized PL as philosophy that "prioritizes a clear understanding of the needs and goals of each individual student and the tailoring of instruction to address those needs and goals." This reform retains the feeling of the corpus of mainstream education reforms E.D. Hirsch (Hirsch, 1999) traced to the publication of Rousseau's *Emile* in 1762. That book conveyed the misguided but well-meaning suggestion that the best education modality is essentially a personal tutor, a suggestion that PL reformers hope to now fully activate with the help of technology.

Aside from injections of technology, PL certainly shows little departure, for example, from more recent calls for "differentiation," which Katherine Birbalsingh (Birbalsingh, 2017) called "madness" due to the logistical nightmare creating activities tailored to the various capabilities in the class. Personalized learning might be viewed as the pre-existing madness now on technological steroids.

Though its advocates' prophecies can roam widely into utopic fancies of globalism, a dissolution of classroom walls, and a resurgence of "student voice" (Wolf et al., 2010), a common image seems to run through these accounts of an individualized learning program augmented by technology. Most PL proponents consistently describe students as "customers" and enthuse that education technology can now mimic the algorithms and practices of large corporations. Proponents often praise the algorithms of corporations such as Google, Amazon, and Apple, and wonder why education cannot similarly create programs tailored just exactly right for the individual student.

Accelerating PL Trends

As the pandemic moves the PL movement further into the education limelight, three articles of faith are likely to gain further prominence: the centrality of technology, a diminishment in the role of teachers and knowledge, and a shift towards what Hirsch (2016) called "hyper-individualism." All three of these articles of faith will have underexamined consequences for students far beyond their schooling years.

Centrality of Technology

There is simply no way to imagine a fully realized PL classroom where technology (and its concomitant screen time) is not king. For one thing, the stock in trade of PL – tracking learning goals, compiling portfolios – requires cloud-based computing. Furthermore, teaching in a PL universe, as Daniel Willingham (2017) argued, gets "bushier and bushier" as the model requires an exponentially increasing supply of activities and assessments to suit individual choices. Advocates traditionally counter that the Internet will somehow surmount this obstacle. Whatever the case, one can infer that Birbalsingh's (2017) description of "several different worksheets in a class" is now being replaced by 25 different computer screens.

It is easy to see why school leaders enamored with PL find consolation in the silver linings of the moment. Students *forced* into personalized educational technology are no longer tied to the

tyranny of a classroom pace in which some are left behind and others bored. Parents, on the other hand, might question the hours of screen time schools are piling on to the already generous amounts students binge at home – an amount that has undoubtedly bloomed due to the ennui of quarantine. While our quarantined shift to digital platform is certainly not the fault of PL, there are models of technology use that can encourage socialization and community over individual advancement.

Attendant to the screen time issue is a concern about the way PL technologies are tracking and sorting students (Regan & Jesse, 2018) which has been brushed aside in the rush to move online. Despite ed tech companies' pledges of integrity (*Student Privacy Pledge*, 2020), existing state laws are still not up to the task of fully protecting student data in the face of powerful national companies such as Google, who can get around pledges by using apps and devices nominally outside the scope of education to track student data (*Legal Overview: Key Laws Relevant to the Protection of Student Data*, n.d.; Peterson, 2015). The PL model requires richly developed individual profiles that follow the student, and corporate temptations to use these data for marketing purposes will outpace patchwork state-based legislative attempts to safeguard the privacy of students.

Diminishment of Teachers and Knowledge

An insidiously pervasive argument of PL advocates is that teaching is fundamentally different in the information age. The ubiquitous hive-mind of Google, available at the swipe of a finger, obviates the need to know anything, advocates claim, and certainly replaces the teacher as a source of knowledge. A representative scholarly paper (Jaros & Deakin-Crick, 2007) declared that "students no longer need to know 'facts' in their brains," but "with the help of tutors, [the student] selects the specialist knowledge to match the ways in which learning power is actualized" (p.4). A prescribed curriculum wherein every student learns the same content seems anachronistic in an age when everyone has access to all of the knowledge. Hence, students need only be taught to find information for themselves when and where they need it, after which it can be forgotten, leaving only skills behind.

This is a very liberating idea. Unfortunately, it misconstrues the relationship between skills and knowledge, and contradicts decades of research in cognitive science that proves memorized information is actually central to learning, expertise, and even reading comprehension. As early as 2006, a meta-analysis by Kirschner, Sweller, and Clark (2006) declared long-term memory "the central, dominant structure of human cognition." Letting this structure atrophy behind the crutch of Google represents an abandonment of education itself.

To bring home the point, imagine calling a plumber to one's house who has no factual memory of plumbing techniques. Or, forget this scenario entirely. Why would anyone ever call an expert as long as Youtube videos are available on one's phone with all the information needed to fix the clogged pipes? Beyond the very simplest examples, this argument falls apart in a flood of sewage and broken pride.

One might concede the importance of facts but still argue that students could put off memorization until a career is selected. Or, to the point of PL advocates, students may merely gobble up facts of their choosing, unfettered by prescribed curricula and instead motivated by personal interest. Would self-selected content not be just as useful for the things mentioned above? Proponents will speak of "deep knowledge" now possible in our golden age, as teachers are able to trade coverage of shared content for the encouragement of profound study on a topic in which a student has interest.

The first problem with the "any content will do" approach involves reading comprehension, a subject in which Hirsch made unorthodox findings. His insight, confirmed repeatedly, was that basic cultural background knowledge enables comprehension in a way that training in reading strategies or focus on "skills" cannot (Hirsch, 2010). Moreover, knowledge required to read the articles in the popular press is specific. Authors do not explain common knowledge, as this would make reading tedious – they drop references to The Civil War or the Trail of Tears without explanation. One could look them up, to be sure, but too many unfamiliar terms makes reading overwhelming. Willingham (2017b) has estimated that a comfort level of word familiarity in a passage is about 95%. The implications of this are serious. Philosopher Richard Rorty's open question of "how 18-year-olds who find *Newsweek* over their heads are to choose between political candidates" (Rorty, 1999) is ever more urgent in an age where graduates' reading comprehension is not keeping pace with society's exigencies. The numbers are depressing: A mere 35% of 8th graders reached the NAEP "proficient" category (Center for Education Statistics, 2019) and 19% of students could not achieve the basic "read to learn" benchmark on the latest PISA test (Schleicher, 2019), both measures that have been largely stagnant for decades.

As for the role of teachers, PL's model of an empty-headed "guide on the side" is not new. Personalized learning's characterization of the educator as "learning facilitator" echoes Emile's tutor who prompts and encourages, but never tells or transmits knowledge. Hannah Arendt bemoaned a diminishment of teacher knowledge in 1954, and we would recognize a lingering canard in her (1961) lament that "A teacher, so it was thought, is a man who can simply teach anything; his training is in teaching, not in the mastery of any particular subject."

For all its sleek branding, PL has deep roots in the high saints of America's education orthodoxy. Paolo Freire was central figure of many who advocated for increased student autonomy. Freire wrote rapturously (and quotably, the education student always realizes) of his Marxist dream of humbling the teacher to the level of the student in the Bolshevik spirit of October 1917. Freire wanted schools to "reconcile the poles" of the "teacher-student contradiction so that both are simultaneously teachers and students" (Freire, 1972). It is as if the teacher's years of experience, knowledge and expertise were not only impossible to transmit, but completely irrelevant to the workings of the classroom. The PL evangelical would nod approvingly.

Teachers have long been taught the myth that teacher-led instruction is passive. Thus, many arguments for PL, having discarded the importance of disciplinary knowledge, now push the teacher (and the authority of the school) to vanishing irrelevance. In fact, as Daisy Christodoulou recounted in her wonderful book *Seven Myths About Education* (2014), many of the keenest advocates of independent learning, very similar to PL, actually have wanted to abolish schools.

A recent (Roberts-Mahoney et al., 2016) meta-analysis of PL writings made the subordination of teacher roles clear. In a model where "non-educators and computer algorithms [are seen] as more credible than teachers," it is not difficult to see how teachers quickly become "largely reduced to

facilitators and data analysts" (pp.9,3). This casual dismissal of the importance of teachers and schools makes PL a strange soapbox for school leaders to stand on

Fortunately, most families are fond of their neighborhood schools and feel high regard for their children's teachers. And most American citizens understand that the careful work of transmitting civilization requires a trained human capable of being, in Arendt's words, a "representative of a world" (Arendt, 1961) and not simply a caddie to help students use the Internet. The things we want students to learn are, as Christodoulou wrote "highly complex and abstract inventions of civilization. There is nothing natural about them" (2014, p.36). Thus direct, content-rich instruction will always be necessary, and a knowledgeable teacher will always be essential not merely to help students explore their own interests, but to breathe life into the important content and vital skills necessary for participation in society.

Hyper-Individualism

Most regrettably, PL accentuates and sharpens some cultural formations generated by education reforms of the past century that continue to have pernicious impact. Beyond the anti-knowledge impulse described above, PL encourages exactly the kind of solipsistic selfishness that breeds the vicious polarization we now see in American society.

Reading the words of reformers themselves, you cannot help but recoil at the kind of student PL would create. Schwahn and McGarvey, in their (2012) book *Inevitable* wrote approvingly that "the customer [student] has been empowered to expect and accept only those things that meet his/her specific needs and desires" (p.34). Other enthusiasts promote the cultivation of a "market of one" feeling for students, defined as "a level of customization and customer service at which a customer feels that he or she is an exclusive or preferred customer of the firm" (Wolf et al., 2010).

Certainly we all want students to feel comfortable at school, but functioning societies are not made of people who think they are the "preferred customer." Such people cut in line, ask to see the manager, and generally make life miserable for the rest of us.

To the contrary, perhaps the primary social lesson of school in a pluralistic democracy must be the opposite of a "market of one," a lesson which runs, against human instinct, something like this: Your needs are not more important than those of others. Your opinions are not better than established truths simply because you feel them strongly. In summary, you are part of a classroom, a community, a nation, and you must learn its warp and woof before you commence to create your own identity.

Before being able to adopt group culture, the student in a PL environment is cast alone, formerly symbolically and now physically. The urge of some school leaders will be to simply embrace this atomization and allow ever broader "choice and voice" to students to forge individual learning journeys in their bedrooms or plexiglass cubicles.

Even those attending school will do so in decreased amounts, favoring a "playlist" model where teachers assign a list of assignments and merely check in as a case manager from time to time. Beyond the hours of wasted time I have observed in personalized playlist sessions (even in the

"before times"), there is a certain sadness to the trade we have sanctioned, in Eddie Vedder's words "a greed to which we have agreed." It is a glum bargain, a trade of classroom community, teacher direction, and high standards for all in favor of solitary students tapping away on screens, darting off to Youtube, social media, games, and who knows where else in between snippets of uninspired time logging required minutes on education technology. Hirsch's wry label for this failure of customized education was "individual neglect," a term I think is due for a resurrection.

Hirsch also accused personalized education theories of indulging in a blinkered, "hyperindividualism," that eroded the heart of democracy (2016). The misguided dogma rooted in Piagetan notions that "each child's uniqueness is honored and allowed to develop providentially according to its nature" has caused educators to form curriculum around a young child's "interests, strengths, and impulses" to disastrous effect (p.69). Not only are reading teachers prevented from building a unified, coherent curriculum that transmits shared cultural values, but the system now in vogue, of leveled readers and personal choice, has been shown to mislabel and channel students in place (Cunningham et al., 2018), as well as preventing academic progress (Castles et al., 2018) by offering few challenges to poor readers. This is not to mention the overwhelming pressure, even with technological help, this approach puts on teachers to constantly develop and re-write curriculum for the individual learning styles, content interests, and progress levels of individual students. The result of hyper-focus on one student, as any experienced teacher knows, is individual neglect of the other 24 in the classroom, with the electronic baby-sitter a poor substitute for the social engagement of expert group instruction.

Furthermore, a true system of equity would transmit important cultural knowledge to all, as indicated above, and not allow family background to determine differences in achievement. Natalie Wexler (Wexler, 2018) pointed out that well-heeled middle-class students like PL advocate Mark Zuckerberg would have enjoyed the freedom of the model. But that does not mean it would have been the best thing for him, or, more crucially, for disadvantaged students. In her (2019) book *The Knowledge Gap* Wexler cast grave doubts about PL's likelihood of widening achievement gaps, citing research that finds "low income students – and any novice learners – generally do best when they receive direct instruction" (p.120). Any educator who understands the gap between a Youtube video and actual "direct instruction" will understand how PL reinforces class differences.

Advocates for PL also speak volumes in their omissions. They claim their scheme uniquely prepares students as nimble, digitally literate members of the new global economy. But they make nary a mention of students as citizens of our American democracy, or the responsibility of teachers to enhance the communities they serve (Roberts-Mahoney et al., 2016). If you squint you can see the sleight of hand in the PL narrative right at the end, whereby the coddled consumers become the products, empty of cultural knowledge or national loyalty but loaded with the "competencies" that make them compliant workers and uncritical consumers.

The road to national unity directly opposes the direction of PL - towards prescribed curriculum and *away* from fragmentation. It is not hard to see how this works. Students working at individually selected projects become adults who wallow in "personal truths," never deigning to do the hard work of negotiating with others. Worse, communication across chasms of identity

becomes ever more impossible as we lose the supply of cultural touchstones so vital to civil dialogue.

This is easy to see in the straightforward example of reading comprehension. It becomes more subtle in the way different groups now perceive history and create fissures that will only widen under PL-type reforms. The debate about which statues should be removed and which deserve positions of glory is only constructive with a common narrative about the founding values of the nation, such as used to be provided by the work of the school. Our narratives are now fragmented – on one hand, we have the 1619 project, on the other, the gauzy, gospel-soaked sermonizing of Glenn Beck, and never the twain shall meet. The right piously wraps itself in platitudes and the flag while the left seems increasingly unable to discern any value to be gleaned from once-revered historical figures now blighted with disqualifying views.

Like the universe, we accelerate apart, and the reaction of the school, perhaps symptom and cure, is to encourage further inwardness, further reliance on personal experience, fewer attempts to bridge divides of interest and identity.

Conclusion

My fear is that education leaders, intoxicated with PL's fantastic claims, will double down on this model as a way to not only endure the pandemic but try to cast it as a "disruptive" moment. Its ingredients, including choice of content, individual pace, and jettisoning of knowledge, seem easy to swallow, but they nevertheless conspire to hamper student progress and coarsen common discourse.

While the verdict on PL is technically still out, the research community has already handed down some harsh judgments on its basic tenets. Mark Zuckerberg has said PL "just intuitively makes sense," (Wexler, 2018) but school leaders must rely on research over intuition, and that research is sobering. Hirsch found, after a careful perusal of research, that "focused and guided instruction is far more effective than . . . learn-at-your-own-pace instruction" (1999), a conclusion that has not been refuted. John Hattie's rigorous and oft-quoted (2009) meta-study on teaching contains this dagger in its concluding discussion: "The role of the constructivist teacher is claimed to be more of *facilitation* to provide opportunities for individual students to acquire knowledge and construct meaning *through their own activities*. . . These kinds of statements are almost *directly opposite* to the successful recipe for teaching and learning" (emphasis added). Again, these scholars did not criticize the entire meal of personalized learning, which was not yet on the menu, but they did discredit the major entrees of each course.

One might dismiss these concerns as fiddling while Rome is burning. After all, such unprecedented times call for grace and flexibility, and maybe PL is just the best of many bad options right now. But in another way, our tumultuous moment calls for an education that unites us in national unity rather than fragmenting us.

Emerging from a system that advocates personal choice of content, we can expect citizens ignorant of history. From a system that treats the student as "preferred customer" we can expect citizens who are entitled and selfish. From a system that devalues established knowledge and expertise,

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we can expect keyboard warriors who pursue conspiracy theories, bumptious in the fact that they "did their own research" and ignored the experts.

PL seems like an enticing frontier that will undoubtedly receive a shot in the arm of enthusiasm this year, just as its hype may have been starting to wear off (Walker, 2019). Nothing I have heard from the model's advocates has inspired me with its power to challenge students, ease inequalities, fight for truth, or heal our divided nation. I hope American school leaders are not yet too jaded to defend the notion that these causes still lie at the heart of our k-12 education system, and I hope that when this experiment is over we can be honest about its results.

About the Author

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References

Arendt, H. (1961). Between past and future. Viking.

Birbalsingh, K. (2017). Katherine Birbalsingh: Ripping up the rule book.

- Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, 19(1), 5–51. https://doi.org/10.1177/1529100618772271
- Center for Education Statistics, N. (2019). Results from the 2019 mathematics and reading assessments.

Christodoulou, D. (2014). Seven myths about education. Routledge.

Cunningham, J. W., Hiebert, E. H., & Mesmer, H. A. (2018). Investigating the validity of two widely used quantitative text tools. *Reading and Writing*, *31*(4), 813–833. https://doi.org/10.1007/s11145-017-9815-4

Freire, P. (1972). Pedagogy of the oppressed. Herder and Herder.

Hadwen, A. (2020). *Opportunities for personalized learning in the pandemic*. Competency Works Blog. https://aurora-institute.org/cw_post/opportunities-for-personalized-learning-in-the-pandemic/

Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.

Hirsch, E. D. (1999). The schools we need and why we don't have them. Anchor.

Hirsch, E. D. (2010). Teaching content is teaching reading. *Principal*, 10–14.

Hirsch, E. D. (2016). Why knowledge matters: Rescuing our children from failed educational theories. Harvard Education Press.

Jaros, M., & Deakin-Crick, R. (2007). Personalised learning for the post-mechanical age. *Journal* of Curriculum Studies, 39(4).

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. In *Educational Psychologist* (Vol. 41, Issue 2, pp. 75–86). https://doi.org/10.1207/s15326985ep4102_1

Legal overview: Key laws relevant to the protection of student data. (n.d.). Electronic Frontier Foundation. Retrieved June 9, 2020, from https://www.eff.org/issues/studentprivacy/legalanalysis

Pane, J. F., Steiner, E. D., Baird, M. D., Hamilton, L. F., & Pane, J. D. (2017). Informing progress: Insights on personalized learning implementation and effects.

Peterson, D. (2015). Ed tech and student privacy: California law as a model. *Berkley Technology Law Journal*, 31(2), 961–996.

- Pondiscio, R. (2020). *The worst is yet to come*. Education Week. https://blogs.edweek.org/edweek/rick_hess_straight_up/2020/06/the_worst_is_yet_to_come .html
- Regan, P. M., & Jesse, J. (2018). Ethical challenges of edtech, big data and personalized learning: 21st century student sorting and tracking. *Ethics and Information Technology*, 1–36.
- Roberts-Mahoney, H., Means, A. J., & Garrison, M. J. (2016). Netflixing human capital development: Personalized learning technology and the corporatization of K-12 education. *Journal of Education Policy*, 31(4), 405–420. https://doi.org/10.1080/02680939.2015.1132774

Rorty, R. (1999). Philosophy and social hope. Penguin.

Schleicher, A. (2019). PISA 2018: Insights and interpretations.

Schwahn, C., & McGarvey, B. (2012). Inevitable: Mass customized learning. Self-published.

- *Student privacy pledge*. (2020). Future of Privacy Forum and The Software Information Industry. https://studentprivacypledge.org/
- Walker, T. (2019). Has the personalized learning hype worn off? *NEA Today*. http://neatoday.org/2019/08/19/personalized-learning-research-raises-red-flags/
- Wexler, N. (2018, April). Mark Zuckerberg's plan to "personalize" learning rests on shaky ground. *Forbes*, 4–7.
- Wexler, N. (2019). *The knowledge gap: The hidden cause of America's broken education system and how to fix it.* Random House.
- Willingham, D. (2017a). Three versions of personalized learning, three challenges. Dan Willingham - Science and Education Blog. http://www.danielwillingham.com/danielwillingham-science-and-education-blog/three-versions-of-personalized-learning-threechallenges
- Willingham, D. (2017b, May 17). You still need your brain. *New Y*. https://www.nytimes.com/2017/05/19/opinion/sunday/you-still-need-your-brain.html
- Wolf, M. A., Wolf, E., Partoyan, E., Schneiderman, M., & Seltz, J. (2010). System [re]design for personalized learning: A report from the 2010 symposium. 1–44.

