Considering the Possible Relationship Between Personalized Learning and Service Learning: A Historical and Pragmatic Perspective

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Abstract

Personalized learning (PL) is not new, but it has morphed and re-emerged as an approach that might re-engage today's students in the classroom and better prepare them for college and careers in the 21st century. Amid this re-emergence of personalization is the implementation of new technologies in the classroom. While technology may offer efficient ways to deliver PL, the impact of PL on the educational system and the narratives that guide learning, as well as its effect on the larger community, the workforce, and the democratic principles that guide America, need further exploration. This essay looks at personalized learning historically and pragmatically using a technoskeptic approach. This paper examines personalized learning's implications and offers ways personalized learning via service learning may be more effective in engaging students while also continuing to contribute to a communal, democratic narrative. When properly applied, service learning encourages students to use their knowledge to solve real-world problems in their communities. As modern culture moves toward isolated media environments and individualized experiences, students need more exposure to other people and differing worldviews to maintain democratic ideals, a robust learning experience, and humanity in reality, as opposed to what is offered on a screen.

Keywords: *personalized learning, service learning, educational technology*

Introduction

Educational trends in American schools come and go as often as changes in teen fashion. Some last only a few years and gain a quick following as educational stakeholders jump on the bandwagon to incorporate new, progressive-appearing positions. Shortly after, they fade away and are replaced by the next trendy concept or catchy term that is often rebranded from an earlier idea, methodology, or pedagogy. Others take root more deeply in the educational realm as stakeholders within local education communities and larger national and corporate interests provide training, money, and resources that enable these movements to gain momentum for the long term. One such trend is personalized learning (PL).

Attempting to define PL proves difficult due to the myriad ways the term is used across the literature and in various contexts (Bernacki et al., 2021; Walkington & Bernacki, 2020). A cursory

glance through the literature finds such definitions as PL being "instruction in which the pace of learning and the instructional approach are optimized for the needs of each learner…In addition, learning activities are meaningful and relevant to learners, driven by their interests, and often self-initiated" (US Department of Education, 2017, p. 9). This definition implies that personalization is achieved through time and approach as well as through content.

Educational technologists define PL a bit differently by stating that it "requires a digital learning environment to be classified as a personalized learning environment to be adaptive to individual knowledge, experience and interests and to be effective and efficient in supporting and promoting desired learning outcomes" (Shemshack & Spector, 2020, p. 2). Further still, other advocates of PL promote adopting technology as a means of expanding opportunities for learning. Patrick (2015) suggested that through applying "modalities of blended and online learning using advanced technologies, personalized learning is enhanced by transparent data and abundant content resources flowing from redesigned instructional models to address standards" (p. 57). The use of the words "efficient" and "data" in these two definitions imply a technological focus, since technology will speed up the learning process and allow for easier data gathering from the instructor's viewpoint.

Following the above definitions, most conceptions of PL in recent years are built on integrating some form of technology into the classroom experience (Herold, 2019; Shemshack & Spector, 2020). The rise in educational technology has increased the focus on PL, but calling it new and trendy is problematic due to PL's roots in the philosophies that guided learning in the schoolhouses of the 19th century. Yet, PL has morphed and re-emerged via new technologies as an approach that might re-engage today's students in the classroom and better prepare them for college and careers in the 21st century.

This revived interest in PL could result from a shift toward personalization in other aspects of current culture. Streaming services like Netflix and Hulu offer personalized entertainment viewing options specific to user interest, while on-demand services from both streaming and cable services allow for any-time viewing. Amazon has revolutionized the retail industry by providing more personalized shopping experiences and forced other retail corporations to shift toward their models in order to compete. Many aspects of American culture, from home and personal technology to medicine to automobiles, have been personalized to give the user at least the illusion of control over the product's use and development. Some suggest that education is just the latest cultural component to embrace a concept that other industries have already grasped for several years (Herold, 2019). This personalization gives the user perceived control over the products used or purchased. Personalization also gives the student the illusion of control over the content studied in the educational realm.

Others suggest that personalization reduces education to a product to be consumed rather than maintaining it as a communal activity where learning occurs through rhetorical engagement with others. Kesson (2021) argued that "A software-based, reductionist understanding of personalization might rightly be understood as merely the latest weapon in the arsenal of late capitalism, branding our interests and us in order to squeeze maximum profits out of our desires" (p. 7). Kesson's commentary implies that corporate interests insist that education is a problem in America that needs to be solved, and their products offer the best possible solution.

Perhaps another reason for the re-emergence of personalization is the implementation of new technologies in the classroom. With such innovations as one-to-one technology ratios, educational apps, and learning management systems, technology seems to be creating a path to personalization that is easier for both the student and teacher. Online programs like Khan Academy and

apps like Nearpod, Kahoot, and IXLs offer students the ability to learn at their own pace, practice skills, and in some cases, be entertained while they work. These programs redefined the concept of drill and practice to make it appear more entertaining and, by proxy, more engaging.

On the surface, the benefits of PL seem to support a need for immediate implementation; however, the PL movement has taken hold much differently than when it was introduced, and many educators are critical of the appropriate way to implement it. Much of the debate may result from the current implementation of PL via technological means. While technology may offer efficient ways to deliver PL, the impact of PL on the educational system and the narratives that guide learning, as well as its effect on the larger community, the workforce, and the democratic principles that guide America, need further exploration.

An initial glance at the problems demonstrates such issues as the time a learner is exposed to the material to be learned and whether the student actually learned or merely shows the illusion of learning. Patrick et al. (2016) suggested that personalization of learning occurs through the realignment of how credits are earned, such as students earning high school credits in middle school. Students can request waivers from the state for "seat time" to award credit more flexibly. Learning, in this case, is illusory, not exemplary. This practice simply changes the time frame, not the content.

The practice of personalization varies across states and districts. For instance, Oregon offers credit "based on mastery rather than seat time" (Patrick et al., 2016, p. 13). Ohio also gives the ability to offer "high school credit based on a demonstration of subject area competency, instead of or in combination with completing hours of classroom instruction" (Patrick et al., 2016, p. 13)—but the subject area is still determined by the state and the district. This is the illusion of personalization, not actual personalization.

Perhaps the reason that so many states and local districts are using technology to implement PL is that they define PL in a temporal sense. By using technology to implement learning, students can learn on their own time, at their own pace, and complete their degrees faster or slower. Technology merely changes the time frame in which education is completed. It does not alter the content. Students are still required to complete all of the same coursework, engage the same content, and complete the same learning requirements. Describing this as "personalized learning" merely feeds the illusion that students are in control of the learning when instead, they are just controlling the time it takes to obtain it.

Personalized learning presents opportunities and challenges, but to use it most effectively, educators and other stakeholders must ask: Can PL be used in grades K-12 in a way that fosters creative development and individual engagement without sacrificing the communal narrative and, if so, what form(s) should it take? This essay will look comprehensively at the topic by examining PL historically and pragmatically. This paper adopts a technoskeptic approach wherein technology is not seen as a neutral entity (Krutka et al., 2020; Strate, 2012). Technology has a way of fostering attitudes and behaviors that are often harmful. Still, these elements are generally dismissed in light of the positive aspects given to various devices and platforms.

This paper will evaluate PL integrated through technology in the 21st-century classroom, examining its implications philosophically, and suggest a counter definition of PL to include service learning. Service learning (SL) is a form of education rooted in the progressive and pragmatic tradition of John Dewey (Sheffield, 2005). As a methodology, SL "provides the opportunity to apply classroom-developed knowledge and skills to a community problem thereby increasing the depth and understanding of that knowledge and skill while solving a community problem through interaction with diverse community stakeholders" (Sheffield, 2005, p. 46). The implications of this

definition involve attention to not only learning, but also in applying that learning in a democratic and socially conscious manner.

Regarding the definition of PL, this paper advocates including student-designed SL projects that are inspired by a common narrative or communal need, that foster the development of critical thinking and problem solving skills, and that allow students to incorporate content knowledge learned in other courses or on their own. Personalized learning should not require technology for implementation nor be limited to simply speeding up the learning process. In offering a counter definition to the tech-driven concept of PL, this paper hopes to resituate learning in a manner that is constructive and engaging for the student as an individual, while also being attentive to their personal learning outcomes in a course.

Historical Consideration

Glancing back at the past gives an overview of humanity's stance on issues and helps place current trends into perspective, encouraging an ecological outlook. This practice reduces the likelihood of repeating past mistakes, asking previously asked questions, and "reinventing the wheel," as it were. Too often, though, the educational field is largely ahistorical. Bull (2016) argued that "Education is rich with a constant influx of new terms, methods, models, technologies and frameworks…If we look at them from an historical perspective, it is interesting to discover that few of them are completely new" (p. 313). Take, for instance, the emphasis on technology in education as a means to supplement (arguably replace) teaching endeavors. While seemingly new, the pitting of traditional schooling, where the teacher teaches and the students passively learn, against progressive education, which focuses on the students as agents in their own learning, is over a century old (Brass & Lynch, 2020; Dewey, 1963; Watters, 2021).

Plugh (2020) probed the education field by asking, "What is a school for?" (p. 491). The question comes after asserting that people can learn regardless of whether it is in a school setting. With endless information at one's fingertips through the Internet, people today have unlimited access to the world's knowledge. The issue is people generally do a poor job of navigating the informational landscape in any educational manner. Plugh (2020) suggested that the problem goes further than education, encompassing all facets of the public sphere: "Online environments have swallowed every aspect of public life from work, to entertainment, to religion, to politics and education as well" (p. 491). During the COVID-19 pandemic, most schools turned to some form of technological resource to continue their attempts to educate their students. To what effect? Was learning achieved? Plugh (2020) asked the pointed question, "As for online life, have you learned to be more humane" while being a digital citizen and "What is citizenship" in this online environment (p. 492)? These questions are similar to those John Dewey and Neil Postman asked in the 20th century.

Much like the initial aims of PL, Dewey saw the classroom as a democratic platform. For Dewey, "The full humanization of people depended not upon externally imposed curriculum and management systems, but rather on responding to the intrinsic needs, interests, and powers of the individual to be educated" (Kesson, 2021, p. 1). Williams (2017) suggested that appropriately aligning new technology in the classroom embraces Dewey's notion of democratic learning, wherein the learner actively participates in choosing what one wants to learn. Still, other scholars have argued that technology in the classroom is not democratic and can often have a dehumanizing effect where the learning environment is divorced from human interaction and student behavior is

modified through reward mechanisms (Brass & Lynch, 2020). This type of conditioning was previously used on animals by behaviorists such as Pavlov (dogs), Thorndike (rats), and Skinner (pigeons). The issues with equating animal learning to humans have been negated by cognitive science over the last 50 years. Watters (2021) described behaviorist techniques and technology used on unwitting or unwilling participants as undemocratic.

Numerous scholars have attempted to define PL, and while some definitions are similar, there are subtle nuances worth noting. Scholars like Carolan and Guinn (2007) defined PL as a way of student learning characterized by the students' learning style and needs that progresses at the student's pace. Childress and Benson (2014) concurred that PL occurs when "student learning experiences—what they learn, and how, when, and where they learn it—are tailored to their individual needs, skills, and interests, and that their school enables them to take ownership of their learning" (p. 34). Dunn and Dunn (1978) added student preference to the term and implied that student engagement in things they prefer helps increase student achievement. Generally, most scholars believe that PL requires movement away from a common lesson and thus a common narrative presented by the teacher who would lead the class in a traditional environment and move toward individualized learning paths directed by the student.

Other scholars contend that PL requires a personal connection between teachers and students. McLaughlin et al. (1990) argued that a personalized environment in schools should be "founded on intimate, personal knowledge about one another's lives outside as well as inside the classroom" (p. 230). Accordingly, this knowledge will enable scaffolding of learning to occur so that students move from what they know to what they do not based on their personal interests and help to create bonds between students and teachers (McLaughlin et al., 1990). While this implies interest on the teacher's part in the interests of the students, it also may make teachers uncomfortable by blurring the lines between student and teacher. Students engrossed in social media apps that beckon them to put their deepest personal information out for public consumption may be tempted to reveal inappropriate information to teachers for the learning environment. Perhaps a better way to approach this concept of personal knowledge would be to base the relationship on scholarship—academic interests—rather than suggesting that knowledge of a student's personal life is necessary for engagement in learning.

Pragmatic Consideration

Some who have studied the work of pragmatist and educational philosopher John Dewey suggest that his view of learning supports personalized learning as it is being offered in today's public school system (Blasco, 2017). In contrast, others suggest an opposing view wherein Dewey would have focused more on actual learning in the classroom instead of merely applying educational technology because it is available (Spector, 2020). Dewey (1903) was less interested in acquiring more knowledge simply because it could be done. He was more interested in the inquiry and discovery process and how they impacted the individual's freedom within the community. Dewey believed that educators must "engage pupils in these activities in such ways that while manual skill and technical efficiency are gained and immediate satisfaction found in the work, together with preparation for later usefulness, these things shall be subordinated to education" (Dewey, 2012, 196-7). While preparing for occupations is important, Dewey believed it should be secondary to engaging in real learning in schools. Teachers should not engage in teaching simply to provide students with the skills to become workers.

A closer inspection of Dewey's perspective implies that a more service-learning model might be an effective way to personalize learning rather than simply allowing students to engage in rogue learning in an isolated, technological environment. Dewey (1997) argued that not all classroom activities are "genuinely or equally educative" and that "experience and education cannot be directly equated" (p. 25). The discussion surrounding the use of technology in PL environments often assumes that click-through and completion rates, higher percentages on performance, and time spent on given tasks equate to objective learning (Bulger, 2016).

Recently though, PL has been connected more closely to technology (Shemshack & Spector, 2020). While original definitions of the term do not specifically mention a required technological component, the use of technology is implied now as more schools are embracing the trend, perhaps due to a need for efficient delivery methods of PL. In a 2019 survey of principals in the US, *Education Week* found that 97% of schools embracing the concept of PL in their schools were doing so using some form of technology (Herold, 2019). Patrick (2015) argued that using technology in the PL environment has the "potential to close achievement gaps, prepare more students for college and career, and reduce inequalities in our educational system" (p. 59).

Dewey's concept of democratic education was a place where students learned in a social context creating a community of sorts in which children solved problems together (Williams, 2017). If community and socialization are imperatives of Dewey's educational philosophy, the push to outsource education to technological platforms in PL environments undermines these concepts in several ways. First, it decontextualizes the information from the other students in the room (Brass & Lynch, 2020). Second, it places the onus of information on an algorithm and, by extension, on big tech companies who create the software (Herold, 2017).

Lastly, the use of technology is about making the experience more efficient and more emotionally appealing to the student, which is antithetical to Dewey's concept of learning. Discussing Dewey's notion of community-based learning, Sheffield (2015) wrote, "for learning to be genuine, long lasting, and transformative—both personally and communally—it must be sourced in emotional discomfort…the stronger the discomfort, the more educational potential there is" (p. 48). For learning to happen, there must be an element of emotional discomfort present. With PL and many of the current tech-driven platforms, discomfort is not the emphasis, far from it. Many of the platforms and programs emphasize enjoyment and entertainment. One might say that students are amusing themselves to death (Postman, 2005).

Closely associated with the pragmatic tradition (Sheffield, 2020; Strate, 2011), Postman argued similarly to Dewey that education, particularly the public sector, has implications for the public sphere. In his book *The End of Education*, Postman (1996) stated, "What makes public schools public is not so much that the schools have common goals but that the students have common gods. The reason for this is that public education does not serve a public. It *creates* a public" (p. 17-18, emphasis in original). He then asked what kind of public this education creates, the answer to which he said "has nothing to do with whatever with computers, with testing, with teacher accountability, with class size, and with the other details of managing schools. The right answer depends on two things, and two things alone: the existence of shared narratives and the capacity of such narratives to provide an inspired reason for schooling" (p. 18).

According to Postman's thoughts about shared narratives, what kind of shared narrative does a computer-mediated educational environment create? Is it co-created among the students in the room? Do online meeting platforms such as Zoom, Microsoft Teams, etc., create a learning community, and is that learning community ethic akin to an in-person group ethic? To his suggestion that the purpose of education is to provide reasons for continuing to learn, does online learning

encourage continued learning, or is the continued use simply due to entertainment factors? Postman (1974) argued that the "total facilities" of the community should be used to educate children and that "it is necessary for students to participate actively in the political, social, economic, and ecological life of a community" (p. 63). This directly implies a need for service learning. Through service, students can engage in politics and solve social, economic, and ecological problems they identify within their communities.

Regarding the notion of isolated learning environments, Postman said that radio, television, and the Internet are media "whose formats encourage isolation" (Postman, 2000, p. 14). He predicted in 2000 that humans would do many things alone in the future, including going to school. This isolation encourages embracing a selfish narrative rather than a communal one. This could be applied to the concept of technology-based personalized learning. Students engage only in what interests them at that time, and their learning is devoid of anything outside the scope of their already-learned content areas. In this respect, PL applied through technology divorces students from a community context, which Dewey saw as essential to learning and democracy.

Implications and Suggestions for the Future: Effective Uses of PL

Some educators assume technology must be used to personalize learning because it makes developing PL initiatives more efficient. Theoretically, using technology will result in greater student engagement simply because students are often erroneously labeled "digital natives" (Prensky, 2001) who supposedly prefer to learn via technology. The belief that technology will automatically engage students simply because they have grown up with the Internet, video games, and other digital offerings, has been largely disputed by scholars (Kirschner & van Merriënboer, 2013). When Marc Prensky coined this term in 2001, many "digital immigrant" educators were nearing retirement and were unfamiliar or uncomfortable with computers and digital gradebooks. This is no longer true of 21st-century educators who have grown up with digital technologies and received countless hours of professional development in this area from their school districts. Some suggest that both terms are irrelevant in today's educational sphere because most faculty are now "digital natives" using Prensky's definition (Spiegel, 2021). Additionally, Prensky served as a founder and CEO of Corporate Gameware, an educational software company specializing in developing games for training, thus making clear his financial interest in using video games in educational settings (Prensky, 2020).

Some scholars are also critical of the term "digital natives" because they believe their use merely exacerbates generational differences and, thus, does not help understand today's learners. Smith (2013) discussed the problematic use of the digital natives metaphor and argued that it marginalizes teachers by applying immigrant status in the burgeoning new world of technology wherein the tech is supposed to save modern education from the old-fashioned, undemocratic methods of the past. Building on Smith's argument, Mason (2018) believed this elevation of technology to the position of savior puts significant trust in technological resources while undermining public confidence in human educators, leaving the populace to think that technology provides a superior learning option.

In addition to this criticism, danah boyd (2014) suggested that educational stakeholders from all areas have adopted Prensky's digital natives metaphor, much to the peril of today's learners. She claimed students only want to use digital technology to socialize with their friends in a world where they can be unsupervised by adults. She makes the analogy of social media and other digital platforms in the 21st century being like the shopping malls of the 1980s and 90s. They give

kids places to hang out without constant adult interference (boyd, 2014). They do not prove that kids are more adept at using technology for productive purposes. As a result, many school districts have eliminated the teaching of basic computer skills simply because they believe the "digital natives" already know how to use them. According to boyd, this assumption is a dangerous error.

Currently, school districts often personalize learning by utilizing apps and sites that track student progress, like IXLs, Accelerated Reader, or Khan Academy. While these can track student progress and allow students to work at their own pace, they are hardly individualized regarding content. The content is the same for all users. The users simply reach different pieces of content at different points in their study. If the true goal of personalization is engagement based on choice and interest, these programs do not fill the bill.

Some school districts also utilize their own learning management systems (LMSs) to personalize student learning. Teachers create "playlists" of items for students to work through on LMSs like Canvas, Blackboard, or Schoology, and students work at their own pace to accomplish certain academic tasks. Kesson (2021) argued that "This technological "fix" brings a host of problems: isolation of young people from each other and their communities, privacy concerns, the dehumanization of learning, and the reduction of what is a highly complex endeavor—learning—to its simplest elements" (p. 7). Once again, this does not necessarily give students the voice and choice that allows them to pursue their interests. It simply allows them to work through an already prescribed curriculum in a time frame that they see fit as they reach certain skill levels.

In both cases, the curriculum is still being determined by the teacher and the district. Students are given the illusion of control because they work through things alone, but they really have no control over the content. They only control the speed at which they accomplish tasks. Students are still required to complete tasks by certain dates and, at the bare minimum, by the end of the grading term. Even the speed is not totally controlled by the student, nor should it be. Giving students the ability to do what they want, when they want, seems counterproductive when preparing them for the eventual world of work that requires tasks to be completed as directed within a specified time frame.

Bulger (2016) argued that the conversation currently surrounding PL conflates ed-tech as a solution to the education system's problems and suggested that what is missing from the discussion is the "interests of students, parents, teachers, (and) society" (p. 20). Indeed, the tech industry benefits from the adoption of technology in the classroom, however, the schools do not share the same benefits because adopting ed-tech's solutions "removes from schools and educators significant decisions about how learning is defined and how that definition shapes curriculum and assessment" (Boninger, Molnar, & Saldana, 2019, p. 44). When tech companies and policymakers control the narrative, the voices of schools and educators are often left out of the conversation. What if PL did not require technology? What if teachers could personalize learning by taking a more service-based approach?

What is Service Learning and how can it offer an Entrance into PL?

When considering Dewey's views on learning, it is important to note his focus on engaging in social relationships as part of the learning process. Dewey (2012) believed that the learning process should actively engage students to give them "a personal interest in social relationships and control, and the habits of mind which secure social change without introducing disorder" (p.

99). Dewey implied that students should learn in a communal setting where they can engage socially and develop relationships over scholarship that could create change. Service learning projects may offer this focus on the community that Dewey intended.

Service learning can be defined and implemented in multiple ways. Service learning can include student-designed projects or school-based projects. A school-based service project benefits the community and the student but is implemented by a school faculty member (Obert, 1995). A student-designed project is one created by the individual student in response to a need or problem identified by that student and offers the student a chance to apply what they have learned to a community problem (Sheffield, 2005). The student designs a project to solve the problem or address the need, then completes the project as designed. Building on this definition, Kaiser-Drobney added that SL is a "meaningful and authentic" service that is beneficial "both for students and for those served" (Kaiser-Drobney, 1997, p. 179). Experts agree that "mutuality" in an SL project is necessary for students to learn empathy and help create equity (Sheffield, 2005). Through SL projects, it may be possible to address long-existing cultural and social problems that have gone largely unaddressed by most social and governmental bodies in the US.

Some argue that the learner learns best when participating in a project that includes the four elements of service: pre-service training, meaningful service, structured-post service reflection, and finally, celebration (Kaiser-Drobney, 1997). These elements are what differentiate SL from mere volunteerism. In his work, *The Call to Service,* Coles (1993) agreed that the inclusion of the post-service reflection is imperative to the process and wrote that the deep reflection required of these projects must be "turned inward on the service provider if it is to have lasting impact" (p. 59). Only when all elements of the SL model are engaged can the project culminate in the meaningful learning experience that Dewey envisioned.

While PL projects, by nature, encourage students to operate independently and without a common narrative, SL requires students to engage in pre-service training (Kaiser-Drobney, 1997). Before the actual service activity, students must do research that includes studying best practices of service and training related to the specific project at hand (Kaiser-Drobney, 1997). This prior training requires appropriate readings, case study reviews, and other items that will provide students with the common narrative ground necessary to engage in the project. This allows students to learn what they do not know about the best ways to engage in service before building their own projects.

Prior training also requires that students build prior knowledge of stakeholders through "reading fiction, nonfiction, viewing films, and other texts accompanied by discussions" (Sheffield, 2005, p. 52), thus allowing students to enter into the project with a solid knowledge base. Using classroom activities and writing assignments, students can integrate various readings into their SL projects (Schwartz, 2012). Once this common ground is established, students can complete research to get information specific to the organizations and causes for which they will work. Even when students design a project of interest, this common narrative allows them to compare and contrast their projects with others, synthesize their learning, and engage in communal action.

Both school-based and student-designed projects allow students to apply academic skills learned in Math, English, Social Studies, or other courses as they work together in a group to complete the project. The reflective piece is the difference between these types of projects and community service projects. Students "reflect on the role of service to the well-being of a human community" (Obert, 1995, p. 30). This reflective piece allows students to evaluate their engagement with the Other and determine its value and impact. By reflecting on their service, students can "gain greater understanding of the emotional meaning and impact of their experience and its

connection to their academic study" (Kaiser-Drobney, 1997, p. 179). This final evaluation of their service can lead to future projects. It can also allow them to encourage others to participate in projects, creating a larger community of service.

Like PL, student engagement increases due to SL opportunities. Because students believe in the cause, they are more likely to see the project through to its fruition (Obert, 1995). Students also see an increase in self-esteem due to SL projects. The self-esteem increase results from the empowerment students feel after completing a project. High-risk students with low grades who are often at risk of dropping out or engaging in other behavioral problems in school and the community could benefit most (Obert, 1995). Service learning projects can enable them to feel connected to the community in a positive way and also empower students to see that they can contribute to the solution of real-world problems within their own communities. They learn how to engage diversity by realizing that "every individual is in need" of something within a community (Sheffield, 2005, p. 52). If everyone needs something, that need provides a common narrative, binding individuals together despite other differences.

Service learning also offers opportunities for developing interpersonal skills and relationships. In this historical moment where teens are engrossed in social media that calls upon them to focus on themselves and not others, children at this age are "typically in a stage of self focus" anyway (Obert, 1995, p. 31). The development of interpersonal skills and relationships could also be what Dewey called collateral learning. Collateral learning is learning that goes beyond the content that is intentionally studied. Dewey (1963) wrote:

> Perhaps the greatest of all pedagogical fallacies is the notion that a person learns only what he is studying at the time. Collateral learning in the way of formation of enduring attitudes…may be and often is more important than the spelling lesson or the lesson in geography or history…For these attitudes are fundamentally what count in the future. (p. 48).

In the case of SL, collateral learning may include things learned in conversation with others as part of the rhetorical engagement between students, teachers, and other external stakeholders involved in the service project. As Dewey indicated, students may engage in the service project to learn about homelessness, hunger, or climate change but may learn other skills and content collaterally.

Limitations to Service Learning

While SL provides many positive ways for students to engage in the meaningful learning that Dewey discussed, there are challenges to putting it into practice, particularly in the K-12 environment. First, time is a strong limitation in a public school system that focuses more on individual achievements than collective and communal learning. Students are required to take certain core courses and a limited number of electives, all of which need a focus on their academic progress. This focus on individual achievement has decreased civic engagement, which concerns some scholars (Ostrander & Portney, 2007). A lack of time to schedule the courses where students may conduct these projects could limit the scope of student projects. With the vast number of state and federal curricular mandates required of public schools, SL could be difficult to implement and sustain due to the time it takes to complete all stages of any student project.

While time is a pertinent factor for any institution or teacher to address regarding SL, according to Sheffield (2015), for effective SL to occur, the teacher or facilitator must have both

patience and courage. Patience affords the learner(s) the time needed to see outcomes of their work, while also encouraging reflection over the process being used and problems being addressed. Courage is needed to endure the struggle and discomfort that so often accompanies learning situations. Neither of these elements are prioritized or arguably present in the use of technology in personalized learning. Current tech-driven learning platforms prioritize speed, efficiency, ease of use, and pleasing aesthetics.

One possible solution to this problem is to complete SL projects by embedding them into already mandated courses. The College Board is attempting to accomplish this by developing of its "We Service" curriculum (*AP with we,* 2021). This collaboration between the College Board and the We Service charity organization allows students to engage core course requirements through service projects as part of their course work in English, Math, and other Advanced Placement subjects. The group claims to provide opportunities "based on a structured academic foundation that lets students go beyond volunteering or doing community service" (*AP with we,* 2021, para 6). According to their promotional materials, the program's goals are to increase student motivation, apply academics to real-life situations, build communication and leadership skills, and allow students to show their civic engagement (*AP with we,* 2021). By embedding these projects into the already required curriculum, students can complete state requirements and engage in service where the mandated curriculum that is the common narrative of the course can be utilized.

A second concern for using SL is community support. The success or failure of any SL project relies on partnerships between students, schools, and community businesses and organizations that will physically host students doing these projects (Raskoff & Sundeen, 1999). A lack of these partnerships could be difficult for some schools, especially in rural areas, to obtain. Raskoff and Sundeen (1999) suggested that providing opportunities to complete SL projects instead of mandating them will help to lessen the demand on local organizations and make them more willing to develop long-term relationships with students and districts. Additionally, these organizations will benefit by having additional student labor that lowers overall costs, allowing them to supplement their labor force for free and allocate their funds to those in need rather than to labor (Raskoff & Sundeen, 1999). Raskoff and Sundeen (1999) argued that once local organizations and businesses discover the benefits of collaborating with students, this problem will be solved.

A third limitation is a lack of funding for projects. Schools with few businesses may have difficulty locating corporate donations, and schools in high-poverty areas or towns with small populations may be unable to obtain enough financial support. While crowdfunding sites like GoFundMe and Kickstarter may offer some help, their platforms have significant limitations. Each has its own fees that will take some of the funds donated to the project. GoFundMe requires that a user put in a social security number to track funds for tax purposes where needed. Students and parents may be reluctant to give that personal information. Some suggest that a faculty member or other school employee should handle all financial needs for student projects to ensure that there is no money missing during the process (Obert, 1995). This could also be problematic for schools where faculty are unwilling to keep track of funds obtained for student projects or perhaps are unable to do so because their collective bargaining agreements prohibit the collection of money for such projects.

According to Smith (2005), a possible way to overcome the funding limitation is to establish a faculty member as a director of SL and have that person keep a continuously updated list of community organizations willing and able to assist with student projects. Identifying a staff member as a point of contact is also beneficial when developing relationships with local agencies

(Raskoff & Sundeen, 1999). Once school systems establish these relationships, local organizations are more likely to host students at their facilities and/or help provide funding to student projects.

A final limitation to the potential of SL is a disgruntled view of the project that can result from negative emotions created within the service provider (Coles, 1993; Pratt & Danyluk, 2017). Students engaging in service may become frustrated or angry with the individuals and communities they serve if they feel there is no positive, long-term change or their work is not appreciated. After a lengthy project, SL participants may eventually feel that the scope of their work is not making the impact they believed it would or that "their contributions may be limited by an unrelenting societal need to maintain the status quo" (Pratt & Danyluk, 2017, p. 5). Those participating in SL are originally motivated to serve to make substantial change within their communities. They may become disheartened and lose interest in their projects if they believe that their communities are unwilling to change or that the change required is far more extensive than they can create on their own. While this could be an issue, there is hope that SL will create a "school-wide culture of learning and a sense of community" (Rutledge et al., 2015, p. 1060). Once this is created, this could take students beyond their experiences in that one project, allowing them to see the broader scope and value of this type of learning and engagement.

Conclusion

While acknowledging these limitations and the reality that implementing a SL framework will take time and effort from all parties involved, learning is hard work. It takes dedicated focus and effort for any substantive change to occur because the human mind is cognitively lazy (Kahneman, 2011; Willingham, 2009). Deferring and outsourcing thinking to algorithms and nudging systems does little to encourage students to think critically and consider their attitudes, beliefs, and behaviors fully. Bulger (2016) suggested that education is a longitudinal and collaborative endeavor. Tech-driven personalized learning embraces a narrative of expediency and individualism. If learning is truly a long game and expanding students' worldviews is the goal, does narrowing their focus to a screen, limiting their output to clicking through platforms, and minimizing other voices through algorithms achieve the expected outcome?

This paper has argued that, from a historical and pragmatic perspective, the narrative surrounding PL as the new way to educate students is highly problematic. A more skeptical approach to ed-tech is an appropriate response given the concerns mentioned above (Krutka et al., 2020; Strate, 2012). Some proponents of PL suggest that John Dewey, with his views of democratic learning, would agree with the current state of education using PL (Blasco, 2017; Williams, 2017). Others argue that Dewey would be more hesitant to adopt ed-tech before ensuring its effectiveness to his goal (Spector, 2020). Dewey wanted a practical application of the knowledge learned, not just the accumulation of information, to solve real-world problems. Service learning, despite its limitations, is nearer to Dewey's intentions (Sheffield, 2005).

Service learning also shifts the narrative from one of individualism to community. Bulger (2016) asked, "who gets to decide what education should be optimizing for?" (p. 19). If improving education is about cutting costs, saving time, and moving students along the conveyor belt of corporate production as efficiently as possible, implementing technology in the classroom seems a fitting response. But if the purpose of education, as Postman (1996) argued, is to create a shared narrative, one where students have a respect for learning and a sense of purpose, then learning has "nothing whatever to do with computers" (p. 18). Service learning stands as an alternative to the ed-tech paradigm. When properly applied, SL encourages students to use their knowledge to solve

real-world problems in their communities. As modern culture moves toward isolated media environments and individualized experiences, students need more exposure to other people and differing worldviews to maintain democratic ideals, a robust learning experience, and humanity in reality, as opposed to what is offered on a screen.

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