Do More History: U.S. Deficiencies and Project-Based Learning

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Social studies allows us to better understand and deal with human affairs than any other field. Social studies typically includes history, government and civics, geography, and economics. However, there are many smaller branches of this field, such as psychology, sociology, philosophy, and even anthropology. Given that all of these social studies disciplines help us in society, one would imagine that Americans would overwhelmingly prioritize and exemplify them and their related competencies. Sadly and possibly dangerously, the opposite appears to be true. Various data related to social studies in the U.S. reflect a cautionary tale needing not only attention, but a remedy that can be found in education. More precisely, a move in education towards skills and Project-Based Learning (PBL) may provide the best chance at combating an abundance of concerns.

Firstly, the competencies in social studies are troubling. For example, The Nation's Report Card, one of the leading authorities in collecting and analyzing educational information in the U.S., has shown in 2018 that only 15% of students scored proficient or advanced in U.S. history, 23% in civics, and 24% in geography.¹ Other studies find similar results, such as The Woodrow Wilson National Fellowship Foundation Research study in 2018 that highlights two of three Americans failing a basic U.S. citizenship test.² Similarly, the Southern Poverty Law Center found in 2017 that 68% of high school seniors did not know that it took a constitutional amendment to end slavery formally, only 22% could correctly identify how provisions in the Constitution gave advantages to slaveholders, and only 8% of could identify slavery as the central cause of the Civil War.³

Nor does the U.S. fare well regarding media and literacy. The Pew Research Data Center found in 2018 that only 26% of those surveyed could correctly identify all factual statements, while 35% could do the same with opinion statements.⁴ Comparably, The Stanford History Education Group (SHEG) tested digital and media literacy in 2019, finding that 52% of respondents believed a Russian video was evidence of voter fraud in the U.S., that two out of three could not distinguish between ads and news online, and that 96% did not ask who was behind a partisan website.⁵

Secondly, U.S. civic engagement is not only lacking in participation but is also inept. For instance, according to the U.S. Census Press Release, only 67% of eligible voters turned out for the 2020 Presidential Election.⁶ Regardless of best guesses, even 70% would seem less than ideal for the wealthiest and most powerful nation. The rate is also poor when compared to other commensurable nations. Rates worsen for non-presidential elections, especially for the state, local, and school board elections. Another notable concern in civic engagement is hyperpolarization, routinely observed online, in public, and around the dinner tables at any holiday celebration. This unique and

- 4 Amy Mitchell, Carrie Blazina, Michael Barthel, Nami Sumid, "Can Americans Tell Facts from Opinion Statements in the News?" *Pew Research Center*, 2018, June 18. https://www.pewresearch.org/journalism/2018/06/18/distinguishing-between-factual-and-opinion-statements-in-the-news.
- 5 Stanford University, "Reading Like A Historian." *Stanford History Education Group*, 2022. Retrieved March 6, 2022, from https://sheg.stanford.edu/history-lesson.
- 6 Jacob Fabina, "Record High Turnout in 2020 General Election," *The United States Census Bureau*, 2021, April 29: https://www.census.gov/library/stories/2021/04/record-high-turnout-in-2020-general-election.html.

¹ The National Assessment of Educational Progress (NAEP), "Civics: Highlights from the 2018 Assessment" The Nation's Report Card, 2018: https://www.nationsreportcard.gov/highlights/civics/2018; "Geography: Highlights from the 2018 assessment," 2018: https://www.nationsreportcard.gov/highlights/geography/2018; "U.S. History: Achievement-level results" 2018: https://www.nationsreportcard.gov/ushistory/results/achievement.

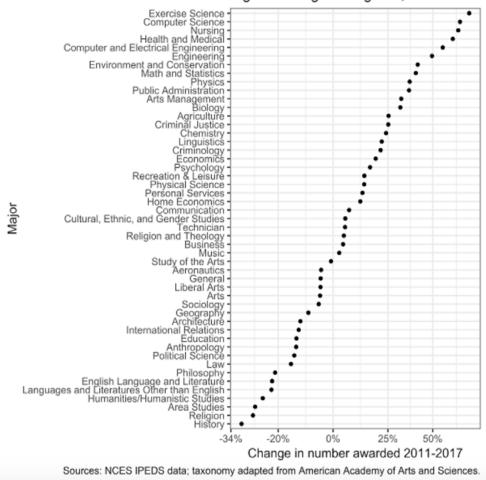
² Brittney Lewer, *Reimagining American History Education* (Princeton, NJ: The Woodrow Wilson National Fellowship Foundation, 2019).

³ Southern Poverty Law Center, "American Slavery," Teaching Hard History, 2018: https://www.splcenter.org/sites/default/files/tt_hard_history_american_slavery.pdf.

frightening phenomenon is drastically furthering the divide of the U.S. population. Issues of contention include gender acceptance, voter access, the minimum wage, the future of energy, immigration, and even maple syrup.

The differing definitions, perceptions of current events, and even views of history are more serious. For example, a 2021 survey from Ipsos/Reuters found that 56% of Republicans believe the 2020 election was rigged or the result of illegal voting, devoid of factual evidence.⁷ It is not exclusively a political party problem, but political bias is often powerfully shaping and reshaping Americans' perception of basic realities. This form of cognitive bias does real damage to society. Further population analysis is troublesome regarding U.S. data and statistics on consumption, waste, health, pollution, divorce, crime, death, disease, debt, education, and even inequality.

Thirdly, the number of those interested in higher education for social studies-related majors is declining.



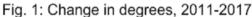


Figure 1: Change in degrees, 2011-2017

Figure 1 shows that, according to NCES IPEDS data, almost every declining major from 2011 to 2017 is related to social studies. Sociology, geography, architecture, international relations, anthropology, political science, law, philosophy, humanities studies, religion, and history are at the bottom of the list. It is hard to understand why this is happening, but perhaps it has to do with cultural beliefs that a liberal arts higher education is a scam or a waste and will leave one unemployed and poor. According to the Bureau of Labor Statistics, these gripes are often mythological since obtaining a college degree correlates with lower unemployment, less poverty, and higher

7 Reuters, "53% of Republicans View Trump as U.S. President," May 24, 2021,

https://www.reuters.com/world/us/53-republicans-view-trump-true-us-president-reutersipsos-2021-05-24.

wages.⁸ More specifically, the same can be said for a BA degree in history in which unemployment is as standard as any other profession, and the pay is also standard compared to most other majors outside of healthcare and engineering.⁹ Overall, the decline in these majors and college, in general, may lead to future societal deficiencies.

Competency in these fields is crucial, and a lack of knowledge and skills impacts the economy, democracy, and society. At the individual and collective level, this competency fosters more engaged citizenship and informed consent towards every element of society. When practicing social studies, we exemplify many different roles with real utility. We practice being storytellers, speakers, scientists, analysts, investigators, journalists, psychologists, economists, philosophers, lawyers, judges, writers, researchers, and statisticians, while simultaneously developing skills concerning critical thinking, reading, writing, research, inquiry, organization, speaking, presenting, empathy, evaluation, debate, pattern recognition, reasoning, awareness, and citizenship. That is powerful, regardless of career path, especially in the 21st century. At the very least, emphasis on social studies can allow us to be informed decision-makers who value evidence. At the very most, it can allow individuals to make fundamental changes in the world. With social studies offering such great potential or grim impacts, a greater emphasis on social studies must be taken seriously and sincerely.

A practical and trending solution is to focus on teaching history and civic skills rather than solely on content. These skills would include historical thinking, historical reading, data literacy, media literacy, and civic reasoning, or more specifically, evidence-based arguments, perspective taking, close reading, cause and effect, sourcing, contextualization, corroborating, bias awareness, logical reasoning, cost-benefit analysis, and lateral reading. Students can participate as active learners in an authentic hands-on way when building these skills. In short, students learn by doing the practice for themselves. Furthermore, this independence allows them to practice fundamental skills to foster lifelong learning and confident autonomy. When educators pair these skills with PBL, the outcomes are beneficial across the spectrum of outcomes.

PBL in education creates a student-centered environment. Students learn by doing, such as finding solutions to real-world problems. Reflecting part of educational theorist John Dewey's work, these methods allow students to experiment, much like in a science lab, and contribute to society in the form of a public product. This method improves interest, motivation, retention, and even the quality of student work while potentially improving society at some level. In addition, their work is not necessarily guided strictly by a teacher but by their own intrinsic interests, making it more personally compelling and effective. Thus, students determine their work by creating an authentic, substantive product for the public that demonstrates their skills.

An agreed-upon definition and encapsulating elements are non-existent since PBL is broad and related to projects, inquiry, community, problem-solving, skills, and even service. PBL projects include webpages, videos, presentations, essays, infographics, pamphlets, newsletters, magazines, speeches, policy, budgets, proposals, interviews, debates, and more. This project-based method often authentically focuses on the real world and on solving problems. Therefore, the topic or purpose of the project may be just as important and could include creating a budget, debating controversial issues, informing through published writing or presentation on contemporary issues, writing to public officials, creating a history series web resource, creating advertisements for public safety measures, starting a school newsletter, and so on. As a result, the possibility for civic engagement and impact becomes maximized due to the authentic and autonomous real-world contribution. In other words, to paraphrase a leading physicist at the Massachusetts Institute of Technology (MIT) to his students, it is not important what we cover but what you discover.¹⁰

10 Josh Jones, "Noam Chomsky Defines What it Means to be a Truly Educated Person," Open Culture, April 29, 2016:

⁸ Benjamin Schmidt, "The History B.A. Since the Great Recession," The American Historical Association, November 26, 2018: https:// www.historians.org/publications-and-directories/perspectives-on-history/december-2018/the-history-ba-since-the-great-recessionthe-2018-aha-majors-report; Elka Torpey, "Education Pays, 2020: Career Outlook: U.S. Bureau of Labor Statistics," U.S. Bureau of Labor Statistics, 2021. https://www.bls.gov/careeroutlook/2021/data-on-display/education-pays.htm

⁹ Paul Sturtevant, "History is Not a Useless Major: Fighting Myths with Data," *The American Historical Association*, April 1, 2017:. https://www.historians.org/publications-and-directories/perspectives-on-history/april-2017/history-is-not-a-useless-major-fighting-myths-with-data.

Unfortunately, social studies classes and education generally do not often experiment enough with PBL or skills exclusively. Specific data on implementation is limited.¹¹ One source states that only 1% of schools use PBL, but this is from 2013.¹² An updated but inconclusive source states that 68% of schools have implemented PBL in some classrooms.¹³ Often, the PBL literature reviews show the practice as something needing much more testing. The literature reviews almost always include some statements about PBL looking promising but not necessarily having adequate evidence as best practice. To improve educational outcomes that can combat the vast array of societal deficiencies and their lasting negative impacts, PBL implementation is perhaps the best solution. PBL can also develop real citizenship and lead students to skill-mastery for real-world use. Creating and replicating this lab-like environment will add to the PBL literature and hopefully push for the practice to be mainstreamed at all levels and subjects in education.

Given these points, PBL seems likely to provide a means to alleviate the various roots of social studies deficiencies. The dreaded norms of standardized testing, rote learning, and an overreliance on oversimplified boring textbooks is at most doing real harm to students, or at the very least not coming close to maximizing student potential.

PBL Origin and Progression

The origins of PBL are both complicated and unresolved. Those credited with starting PBL include the philosophers Confucius, Socrates, Aristotle, and the educational theorists John Dewey and William Kilpatrick.¹⁴ Confucius allegedly said, "I hear and I forget, I see and I remember, I do and I understand … Not having heard something is not as good as having heard it; having heard it is not as good as having seen it; having seen it is not as good as knowing it; knowing it is not as good as putting it into practice"¹⁵ The credit to Socrates and Aristotle similarly comes from learning by doing and learning through critical thinking, inquiry, and questioning.¹⁶ Later, and more commonly, Dewey and Kilpatrick are credited.

However, I should note other various points of origin as well. For example, in 1500s Italy, architectural and engineering education have been cited as early forms of PBL. In the U.S., other sources of PBL prior to Dewey include early education in agriculture, manual training, and domestic science.¹⁷ But the most widely credited founder of PBL is the educational reformer John Dewey. In the context of the Progressive Era, as a part of the nationwide push for reform and social change, Dewey argued that the classroom is just practice for real civic life and participation in a democracy that should foster social reform. To prepare students to be engaged citizens,

14 Suzie Boss, . "Project-Based Learning: A Short History," Edutopia, September 10, 2011:

15 Learniture, *Project-Based Learning*, 2018, January 23. Retrieved March 5, 2022, from https://www.learniture.co.uk/knowledge-hub/project-based-learning.

17 Capraro, Capraro, and Morgan, STEM Project Based Learning, 8.

https://www.openculture.com/2016/04/noam-chomsky-defines-what-it-means-to-be-a-truly-educated-person.html.

¹¹ For a collection of PBL research, see Buck Institute for Education, PBL Works, "Research Publications," https://www.pblworks.org/research/publications.

¹² Peter Glenn, "Why Project-Based Learning Hasn't Gone Mainstream (And What We Can Do About it)," *EdSurge*, April 23, 2016: https://www.edsurge.com/news/2016-04-23-why-project-based-learning-hasn-t-gone-mainstream-and-what-we-can-do-about-it.

¹³ Speak Up Research Project (SURP), "Why Project-Based Learning Works For Students," *Project Tomorrow & PBL Works*, 2020: https://drive.google.com/file/d/1bhsKJKqxTF_V6-sDi5dSS3wTXx-CJu5K/view.

https://www.edutopia.org/project-based-learning-history. ; Robert Capraro, Mary Capraro, Mary, James Morgan, James, ed., *STEM Project-Based Learning: An Integrated Science, Technology, Engineering, and Mathematics (STEM) Approach*, Second Edition (Rotterdamn: Sense Publishers, 2013).

¹⁶ Boss, "Project-Based Learning," Noelle Nelson, "Student Engagement and Project-Based Learning in the Social Studies Classroom," Ph.D. diss., Hamline University, 2016.

students should have opportunities to create their ideas, discuss and debate these ideas, and make a change.¹⁸ One of his biggest gripes in demonstrating his principles of practicing citizenship involved combating propaganda from The U.S. Committee on Public Information's Edward Bernay and Walter Lipmann.¹⁹ Dewey thought that instead of making a passive population step to the side for prominent folks to make choices for society, education must embolden, ennoble, and empower students with literacy to improve democracy, society, and the standard of living.²⁰ To obtain this, Dewey thought learners needed to be active, have authentic experiences and try to solve real-world problems.²¹

Dewey often said education is not preparation for life but life itself.²² Similarly, William Kilpatrick said, "we of America have for years increasingly desired that education be considered as life itself and not as mere preparation for later living. A man who habitually so regulars his life concerning worthy social aims meets once the demands for practical efficiency and moral responsibility. Such a one presents the ideal of democratic citizenship."²³ The parallel is no coincidence since Kilpatrick studied under Dewey in college. From Dewey to Kilpatrick, education began to shift toward being project-centered. Kilpatrick published The Project Method and would serve as another critical figure of origin. While Kilpatrick admits he was not the founder of the term or practice of projects in education, he was widely credited with expanding PBL.²⁴ Another figure in the progression of PBL is developmental psychologist Jean Piaget. Piaget would add the constructivist theory that suggested students learn better by making meaning from their experiences, building upon previous knowledge, investigating, interacting with others, and reflecting on those experiences overall.²⁵

Few educators or researchers used or studied PBL from the 1930s to 1960s.²⁶ Capraro et al. argue that the reasons point to the climate of society during this time, including the Great Depression and World War II. Moreover, PBL was on the back burner due to the state of society and education that prioritized perceived needs rather than educational wants.²⁷ Some work was being done in western Europe in the 1960s, and would also be formally developed in Canada.²⁸ Some evidence suggests that McMaster University in Canada introduced PBL into its curriculum around this time, which became standard practice in medical education.²⁹ In 1987, The Buck Institute of Education (BIE) created a framework and standards for PBL that remains the mainstream practice for

21 Boss, "Project-Based Learning," ; Daniel Bullock, "Real World Engagement: A Case Study of a Teacher's Implementation of Project Based Learning in Social Studies," Ph.D. diss., North Carolina State University, 2013. [Doctoral dissertation].

¹⁸ Sprouts, "John Dewey's 4 Principles of Education [Video]," *Youtube*, 2021, January 30. https://www.youtube.com/watch?v=y3fm6wNzK70.

¹⁹ Michael Boyle, "Lippmann and Dewey: Debating Democracy in the Age of Metropolis," *The Electric Agora*, November 16, 2015: https://theelectricagora.com/2015/10/02/lippmann-and-dewey-debating-democracy-in-age-of-the-metropolis.

²⁰ Noam Chomsky, "Manufacturing Consent: The Political Economy of the Mass Media," *The Noam Chomsky Website*, March 15, 1989: https://chomsky.info/19890315; Francesco Regalzi, "Democracy and Its Discontents: Walter Lippmann and the Crisis of Politics (1919-1938)," *E-rea:* Revue "Electronique d'études sur le Monde A nglophone 9, no. 2 (2012): https://doi.org/10.4000/erea.2538

²² Sprouts, "John Dewey's 4 Principles of Education."

²³ Bullock, "Real World Engagement," 22.

²⁴ Capraro, Capraro, and Morgan, STEM Project Based Learning, 8.

²⁵ Boss, "Project-Based Learning

²⁶ Bullock, "Real World Engagement," 23.

²⁷ Capraro, Capraro, and Morgan, STEM Project Based Learning, 13.

²⁸ Bullock, "Real World Engagement," 23.Kyna Doles, "What is Project-Based Learning?" PBS: Frontline July 17, 2012. Retrieved March 9, 2022, from https://www.pbs.org/wgbh/frontline/article/what-is-project-based-learning.

²⁹ Doles, "What is project-based learning?"

schools and teachers today.³⁰ In the 1980s and 1990s, elementary schools and then K-12 adopted PBL.³¹

PBL: Definitions and Elements

Similar to the origins of PBL, the definition or definitions of PBL can be complex and ambiguous. It may be implemented as both a teaching method as well as a learning concept.³² The Buck Institute for Education (BIE) describes PBL as a teaching method in which students gain knowledge and skills by working for an extended period to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. Students learn by actively engaging in a real-world and personally meaningful project.³³

PBL is hard to define and has no universally accepted set of practices, but it usually includes specific principles and elements.³⁴ Adding an additional complexity is that PBL overlaps and intersects with problem-based, inquirybased, place-based, and even service-learning approaches.³⁵ The principles can differ depending on the resource, school, or teacher. For example, comparisons in PBL with some educators focusing more or less on elements of their framework such as open-endedness; the degree of real-world problems; the direction of student interest; peer involvement; teacher involvement; class time spent; and even the use of technology.³⁶ Frameworks of principles differ circumstantially.³⁷

Bullock provides five themes that are needed in PBL: a real-world application to real-world problems; scaffolding and teaching strategies to help students research and better understand their content; accountability for students to be independent and responsible learners; teacher-student interactions, such as feedback, trust, respect, and responsibility; includes the benefits and challenges of technology, such as a student learning to navigate a research database.³⁸

Another similar framework points to ten elements that must be included in PBL. A paraphrased list from Badr includes coaching to get students familiar; concept generation for students to generate ideas related to their project; confrontation for students to work together; comprehension for students to develop clarity in their goals and vision; creation for students to do their project; critique for students to find an error and improve their work; change for the students to adjust and fix their work culmination for students to present their work; collaborative reflection for students to assess their peers; and composition for students to write about their experience.³⁹

BIE's "Gold Standard" states seven design elements for PBL: the need to address a challenging problem or question; sustained inquiry; authenticity of the real-world and students' lives; student voices and choices on their ideas and decisions throughout the process; student reflection on how they feel about their work; formative feedback from peers and from the teacher; creating a public product beyond the classroom.⁴⁰

38 Bullock, "Real World Engagement," 47-48.

³⁰ Bullock, "Real World Engagement," 23.

³¹ Kyna Doles, "What is Project-Based Learning?" PBS: Frontline July 17, 2012. Retrieved March 9, 2022, from https://www.pbs.org/wgbh/frontline/article/what-is-project-based-learning.

³² Buck Institute for Education, "PBL Works;" Nelson, "Student Engagement and Project-Based Learning," 10-11.

³³ Sierra Turner, "Project Based Learning for the History Classroom," Ph.D. diss., California State University, 2018, 14.

³⁴ Barbara, Condliffe, et al., "Project-Based Learning: A Literature Review," *Manpower Demonstration Research Corporation*, October 2017: https://files.eric.ed.gov/fulltext/ED578933.pdf. Candace Mulcahy and Jeanette Wertz, "Using Project-Based Learning to Build College and Career Readiness among Diverse Learners," *Teaching Exceptional Children* 53, no. 5 (2020):341-349.

³⁵ Condliffe, "Project-Based Learning," 4.

³⁶ Condliffe, "Project-Based Learning," 13.

³⁷ Condliffe, "Project-Based Learning," 20.

³⁹ Abdelfattah Abdelkafy Badr, "The Effect of a Proposed Blended Project-Based Learning Program on Developing the 4Cs Skills for Secondary Stage Students," *Journal of Education*, 92, no. 2 (2021): 49-107.

⁴⁰ Buck Institute for Education, "PBL Works."

Various PBL frameworks include overlapping elements, and curation can be helpful for a fuller understanding. To start, PBL should include questions, challenges, or themes to focus on and investigate issues that are for the students real, meaningful, and ethical.⁴¹ It should have targeted learning goals tied to standards, class concepts, and in-depth understanding needed for class.⁴² Students must be provided sufficient time depending on their needs and the complexity of the project, ranging from one week to an entire semester.⁴³ Student choice must be prioritized and guided, not just with topic selection but also with choosing their group members, roles, tasks, topics, questions, resources, and even medium, which in turn adds to their experience in creativity, innovation, self-direction, ownership, work ethic, integrity, and collaboration.⁴⁴ After creation, the project must be presented and accessible to the public in an authentic way as a contribution to society.⁴⁵ Lastly, the student must receive feedback from peers and teachers and reflect on the overall learning experience.⁴⁶

PBL Skills and Project Examples

Regardless of which PBL framework is implemented, various skill literacies are tied to these practices. The competencies are broken down into three domains: cognitive, intrapersonal, and interpersonal. The cognitive domains include competencies related to thinking skills, digital literacy, research and investigation literacy, active listening, reasoning, problem-solving, memory, content knowledge, and creativity.⁴⁷ The intrapersonal domain includes competencies related to achieving goals, such as time management, metacognition, flexibility, and determination. The interpersonal domain relates to competencies used to express, interpret, and react to information, such as communication, collaboration, and leadership.⁴⁸

PBL also inevitably exemplifies social studies skills. While the previously stated skills in the three domains also apply cross-circularly beyond just social studies, historical reading and thinking skills are another addition to the collection. The historical thinking skills include establishing historical significance, using primary source evidence, identifying continuity and change, analyzing cause and consequence, taking historical perspectives, and understanding ethical dimensions of history.⁴⁹ Likewise, the SHEG promotes historical reading skills including close reading, contextualization, corroboration, and sourcing.⁵⁰ Students that demonstrate these skills can create higher quality historical work more independently, just as professional historians do.

PBL is different from just doing a project, but the examples can be similar or the same. PBL project examples include various categories such as written, oral, digital, crafted, experiential, and service. Written projects may

46 Turner, "Project Based Learning for the History Classroom," 4, 68.

47 Craig Cash, "The Impact Of Project-Based Learning On Critical Thinking in a United States History Classroom," Ph.D. diss., University of South Carolina, 2017, 48; Condliffe, et al., "Project-Based Learning," 7, 33; Nelson, "Student Engagement and Project-Based Learning," 7.

48 Condliffe, et al., "Project-Based Learning," 35.

49 Centre for the Study of Historical Consciousness, "The Historical Thinking Project: Promoting Critical Historical Literacy for the 21st Century;" *The Historical Thinking Project*, n.d., 2016. Retrieved March 2, 2022, from http://historicalthinking.ca/historical-thinking-concepts.

50 Stanford University, "Reading Like A Historian."

⁴¹ Badr, "The Effect of a Proposed Blended Project-Based Learning," 62 ; Condliffe, et al. "Project-Based Learning," 22 ; Mulcahy, and Wertz, "Using Project Based Learning," 345.

⁴² Condliffe, et al. "Project-Based Learning," 6.

⁴³ Buck Institute for Education, "PBL Works;" Condliffe, et al., "Project-Based Learning," 7.

⁴⁴ Jason Brisini, "The Impact of Project-Based Learning on Student Learning Perspectives and Achievement in a Social Studies Classroom," Ph.D. diss; University of South Carolina, 2018 Buck Institute for Education, "PBL Works."

⁴⁵ Zuzana Chmelarova, Ladislav Pasiar, and Dominika Vargova. "The Level of Student's Creativity and Their Attitude to Project-Based Learning," *Journal of Educational Sciences and Psychology* 10, no. 1 (2020): 3-15;; Dominic Morais, "Doing History in the Undergraduate Classroom: Project-Based Learning and Student Benefits," *The History Teacher* 52, no. 1 (2018): 49-76.

include informative and persuasive essays, public policy, brochures, reviews, or even a cookbook. Oral projects may include speeches, presentations, oral histories, debates, and discussions, among other options. Digital projects may include creating wikis and wikiquests, videos, infographics, data collection and analysis, webpages, virtual museums, or even an online database. Crafted projects would be created by hand and skill, such as making an exhibit display or even a robot. Experiential projects may include role-playing, simulations, or even an acted-out drama. Last, projects can be more geared toward the community and service such as raising funds, organizing, or volunteering.

To illustrate PBL application in the social studies classroom, consider this hypothetical example: At "Dewey High," students can take an honors social studies course called "Civic Engagement & Public History." This class has twelve students, working in three groups of four. Their current unit for the marking period focuses on polling and data literacy to identify community problems. For three weeks, the teacher has completed standards-based training on data literacy and polling that includes types of polls, interview bias, sampling techniques, common data errors, data synthesis, and more. After reviewing the processes and content in the class, students apply their background knowledge and skills to their interests in the community. Group A decides to create a survey to sample as many of the 9th-12th graders in their school using a quick response (QR) code that is linked to a Google Form with their survey questions.

Group A hypothesizes that many high schoolers are unhappy with their educational experience, but the group is unsure about the specifics. Their work will identify the student population's source of dissatisfaction. Member A creates the form to be checked by other members and the teacher. Member B printed and spread the QR code around the school. Member C launched a massive social media campaign to spread the survey's reach. After the survey deadline is up, Group A analyzes the data. Member D is able to create visuals, such as graphs and charts, based on their findings. After routine checks with their teacher, Group A decides to take their findings to the school board meeting which is also live streamed for the public. The members take turns speaking to the board, illuminating student-perceived problems indicated by their data. Although potentially uncomfortable, Group A has not only showcased student problems, but also begun a conversation that will possibly lead to positive change for the school. In fact, Group A may continue their work, offering potential solutions. This hypothetical example demonstrates many elements of PBL such as scaffolding, background knowledge, skill-building, teamwork, teacher oversight, service-learning, problem-solving, critical thinking, rigor, investigation, technology, student interest, and real-life impact.

To conclude, PBL is not monolithic. Many versions share the same or similar principles and elements. When implementing PBL, various skills can be practiced and improved to proficiency. These skills go beyond exclusive subjects and social studies PBL adds even more to the skill sets. Whether utilized in social studies or other disciplines, PBL project potential capabilities are seemingly endless.

PBL Efficacy

The BIE and other purveyors of PBL claim that the practice improves academic performance, critical thinking, cooperation, problem solving, fulfillment, engagement, motivation, creativity, communication skills, collaborative skills, reasoning skills, learner autonomy, problem-solving skills, and even other previously stated skills.⁵¹ While PBL certainly does break convention and gets students away from the traditional routine, it must be demonstrated to prove its efficacy.

As previously stated, highlights from the PBL literature suggest that the practice is promising! While looking broadly, PBL outcomes can be generalized to improving graduation rates, test scores, college enrollment, collaboration, motivation, creativity, pride, and engagement. Interestingly, many studies also show that PBL is

⁵¹ Badr, "The Effect of a Proposed Blended Project-Based Learning. 60; Buck Institute for Education, "PBL Works," Rina Febriana, "The Effectiveness of Project-Based Learning on Students' Social Attitude and Learning Outcomes," *Jurnal Pendidikan Teknologi dan Kejuruan* 23, no. 4 (2017): 374-382; Sally Kingston, "Project Based Learning and Student Achievement: What Does the Research Tell us?" *PBL Evidence Matters* 1, no. 1 (2018):1-11.

effective regardless of background knowledge and economic status.⁵²

PBL succeeds in a number of widely supported educational outcomes. First, PBL has been shown to record higher scores on standardized tests than in traditional learning settings.⁵³ One study even showed better outcomes on A.P. exams, regardless of income!⁵⁴ Another study showed that schools using PBL had 8% higher graduation rates and higher scores and had students more likely to enroll in a four-year institution than their non-PBL counterparts.⁵⁵

PBL can improve student attitudes. Badr shows that PBL reduces student anxiety and increases positive perspectives on learning. Morais shows similar results: students thought they increased pride, motivation, and self-efficacy beliefs and even claimed to improve their critical thinking.⁵⁶ Their perceptions may have been correct and demonstrated by improved scores on standardized tests, which beat other students in traditional learning settings.⁵⁷

Student engagement also improves using PBL. Student engagement is the emotional, behavioral, and cognitive level of student attention, curiosity, interest, optimism, motivation, and passion while learning.⁵⁸ PBL provides an engaging and meaningful educational experience that fosters positive learning outcomes.⁵⁹ PBL seems to improve student engagement for all students. This includes students at risk of school failure, low socioeconomic status, high absenteeism, those with disabilities, students with emotional and behavioral disorders, and also students with attention deficit hyperactivity disorder.⁶⁰ Even student participation was improved. Interestingly, teachers also reported positive engagement experiences from PBL. However, more studies are needed to show objective conclusive evidence rather than minor qualitative data points.⁶¹

Narrowing the focus to efficacy per subject can present more valuable findings. First, a 2017 study of 684 students in an English class showed significantly higher growth in informational reading but not writing. Second, a 2015 study of 70 students using PBL in a math class showed significant gains in statistical literacy compared to those in the control group without PBL.⁶² Interestingly, math seems to have more trouble integrating PBL into the classroom than other subjects. Third, various studies from 2002, 2004, 2008, 2011, and 2014 tested PBL in science classrooms and showed gains in their test scores, knowledge, skills, and learning goals.⁶³

Regarding social studies, PBL appears easier in terms of connecting learning to real-world problems. The research on social studies PBL efficacy shows higher levels of satisfaction, enjoyment, and even teacher support than those in non-PBL classrooms.⁶⁴ In 2005, a study of 40 students showed more significant academic gains than their counterparts while also practicing higher-order thinking skills and research skills. A 2009 study of 70 students showed more significant gains in knowledge than their counterparts on pre and post-tests. A 2011 study

- 53 Morais, "Doing History in the Undergraduate Classroom," 52.
- 54 Saavedra, et al., "Project-based learning in AP classrooms."
- 55 Condliffe, et al., "Project-Based Learning,"48.
- 56 Morais, "Doing History in the Undergraduate Classroom," 67.
- 57 Nelson, "Student Engagement and Project-Based Learning," 12.
- 58 Nelson, "Student Engagement and Project-Based Learning,"15.

- 60 Mulcahy and Wertz, "Using Project-Based Learning," 342, 348.
- 61 Saavedra, et al., "Project-Based Learning AP Classroom," 38; Condliffe, et al., "Project-Based Learning,"44.
- 62 Kingston, "Project-Based Learning and Student Achievement," 4, 8.
- 63 Kingston, "Project-Based Learning and Student Achievement," 6-8.
- 64 Condliffe, et al., "Project-Based Learning," 42.

⁵² Anna Rosefsky Saavedra et al., "Project-Based Learning in AP Classrooms: Lessons From Research," *Kappan*, November 1, 2021, 34-38.

⁵⁹ Turner, "Project Based Learning for the History Classroom;" Nelson, "Student Engagement and Project-Based Learning," 61.

of 314 students showed significantly higher scores on the A.P. test vs their counterparts.⁶⁵ A 2012 study showed students outperforming their counterparts in both social studies and College/Career Readiness. A 2013 study of 289 students showed students scoring significantly higher on the A.P. test than their counterparts. Last, a 2017 study of 684 students showed significantly higher growth in social studies.⁶⁶

Conclusion

PBL has a rich and surprisingly long history of progression, theorizing, and demonstrating positive outcomes. Part of the history is its seamless and beneficial pairing of social studies and history skills, allowing students to create original work for the public. The literature on PBL seems to indicate overwhelmingly positive outcomes with subtle challenges that can be overcome. However, much more research is needed based on the current literature's limitations for conclusive affirmations of the practice. This research is consequential and should be taken seriously. Education, especially regarding social studies, shares a burden of blame for some American failings and must be improved. All involved should recognize this and work diligently to substantiate the array of benefits from PBL. If both the previously listed U.S. deficiencies related to social studies and the PBL literature review are correct in an honest context, then imagine the possibilities of a mainstreamed PBL that has cultivated an effective, engaged, informed, and critically thinking population. Perhaps this solution is naive or idealistic. Or PBL may be a catalyst for something truly special.

⁶⁵ Sally Kingston. Project based learning & student achievement.

⁶⁶ Kingston, "Project-Based Learning and Student Achievement," 4.