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*Our thanks to the cadre of scholars who serve as reviewers without whose services the journal could not exist.

Critical Questions in Education: Volume 17, Issue 2

June 15, 2026

Readers of *CQIE*,

Welcome to Volume 17, Issue 2 of *Critical Questions in Education*. I think you will find this issue to be thought-provoking and insightful—per usual. Before getting to those specifics, there are a few Academy announcements I'd like to share.

AES Director, Steve Jones, has officially retired from Missouri State University after decades of service to his students, the community, and the university—congratulations Steve! He will remain at the helm of the Academy for the time being as we look to transition to new leadership over the coming months and years. I had the opportunity to visit with Steve and Jackie in Springfield over the Memorial Day Weekend. That visit brought back some great MSU memories, including the day he came to my office "with an idea." That idea has flourished beyond what either of us could have imagined over these twenty years. Steve's "idea" has been one of the most important endeavors I've been involved with since entering higher education in 2003. Thank you, Steve, for bringing me along.

On another transition matter, it is with some bitter-sweetness that I've decided to step away from the Academy editorial work. After seventeen years, my editorial "chops" are wearing thin. Steve has identified a potential new editorial team and I will be working with them to take over both *Critical Questions in Education* and *Thresholds in Education*. Our goal: to continue publishing quality manuscripts and quality theme issues. More to come on that in our October issue.

Volume 17, Issue 2 begins with an incredibly interesting discussion of what Sonja Varbelow and Bill Yaworsky call "Truth Decay" and its relationship to educating in a democracy. More particularly, Sonja and Bill take up an analysis of schismogenesis and censorship in this regard. Following Varbelow and Yaworsky, Melody Armour navigates her readers through what she describes as the moral obligation to prepare future educators to include culturally responsive pedagogies in their future classrooms and schools. Armour's piece is followed by a study looking into the impact of an extended Service-Learning experience on the sense of belonging among STEM preservice teachers. Michael Dentzau and his colleagues see great potential in such experiences.

The fourth article in this issue, penned by Sarah Straub and Christina Tometchko, reports on Christina's experience "looping" with students for seven years—that is, teaching the same group for that extended time period—and its impact on teaching and learning. In the final manuscript, Habib Badawi and Taufikin Taufikin provide an analysis of how Japan's comprehensive humanities curriculum (Rekishi Sōgō—Comprehensive History and Chiri Sōgō—Comprehensive Geography*)* might foster critical thinking skills. Finally, Volume 17, Issue 1 closes with a review of Anindya Kundu*'s Transforming Educational Leadership: Non-TraditionalNarratives to Promote Equity in Uncertain Times* by Dennis Assiam.

And, as always, Happy Reading!

PAX,

Eric C. Sheffield, Editor

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Eric C. Sheffield, Founding Editor

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Polarized Truth Decay & the Role of Education in a Democracy

Sonja Varbelow, Angelo State University
William Yaworsky, University of Texas Rio Grande Valley (Emeritus)

Abstract

The purpose of this paper is to delineate the causes and dangers of truth decay for a democracy, the role education has played in the process, and how education can present a resistance to this dangerous trend. Truth decay has been characterized as an increase in quantity of opinion over fact, divergent views on what constitutes a fact, and decreased confidence of traditional sources of information. We agree that truth decay is a serious problem but would characterize it somewhat differently. Opinions, divergent views, and decreased confidence in traditional sources of information are not detrimental by themselves. Instead, we see truth decay as characterized by the abandonment of a tradition of subjecting our divergent views and opinions to critical scrutiny. We find that education needs to be deeply concerned with separating, as thoroughly as possible, true statements from falsehoods, which requires criticism. In this paper we draw attention to two phenomena that currently promote truth decay: schismogenesis and censorship. We explore how education over the past three decades has contributed to truth decay and how schismogenesis is reflected in school policies today. We conclude with suggestions and resources as to how education can present a resistance to this phenomenon.

Keywords: *truth decay, schismogenesis, democracy, education, censorship*

The purpose of this paper is to delineate the causes, workings, and dangers of truth decay for a democracy with the goal to identify the role education has played in the process and how it can present a resistance to this dangerous trend. Truth decay has been characterized by an increase in quantity of opinion over fact, divergent views on what constitutes a fact, conflation of opinion and fact, and decreased confidence of traditional sources of information (Kavanaugh & Rich, 2018). While we agree that truth decay is a serious problem, we would characterize it somewhat differently. Opinions, divergent views, and decreased confidence in traditional sources of information, in our view, are not in and of themselves detrimental. Instead, we see truth decay as characterized by the abandonment of a tradition of subjecting our divergent views and opinions to critical scrutiny. That means that education needs to be deeply concerned with separating, as thoroughly as possible, true statements from falsehoods, which requires criticism. In this paper we draw attention to two phenomena that in our view are currently undermining our tradition of criticism and hence promoting truth decay. These phenomena are (1) schismogenesis, and (2) censorship. Schismo-

genesis, which is the creation of division, is of course largely synonymous with divergent opinions/behaviors, but it is the manner in which these divergent behaviors come to be that alarms us. It is this dimension of schismogenesis that we will focus on here. Amidst schismogenesis and censorship combined with cognitive biases such as motivated reasoning and confirmation bias, new social media platforms, and 24-hour news cycles, counters to truth decay such as the teaching of critical thinking, propaganda awareness, and STEM (Hobbs, 2021; Varbelow & Yaworsky, 2023) only go so far.

In this paper, we hone in more closely on Bateson's original concept of schismogenesis. Numerous studies (Nadeem, 2019) corroborate the thesis that we live in a highly polarized era. Specifically, we are interested in examining some of the mechanisms driving polarization, such as schismogenesis, and some of the narratives in right-wing/populist and left-wing/progressive ecosystems that provoke people into action and are thus central elements in organized propaganda efforts that help drive polarization.

In the second section of this paper, we explore how education over the past three decades has contributed to truth decay and how schismogenesis is reflected in school policies today. We conclude with suggestions and resources as to how education can present a resistance to this phenomenon.

Philosophical Orientation

Before we proceed to the heart of our paper, one point that we want to state up front is that we authors come from "polarized" philosophical camps. Our anthropologist author takes a constructive empiricist stance which aims for truth about the observable sectors of reality and empirical adequacy concerning the unobservable dimensions, that is to say, the unobservable postulates used to explain the observable phenomena (van Fraassen, 1980). By contrast, our education author employs a postmodern lens to interpret the world, which critiques the Newtonian stability of modernism. At the center of postmodernism is space for Lyotardian (1984) doubt, meaning that knowledge is conditional and dependent upon social interactions within one's cultures. Postmodernism rejects the metanarrative as "the story of us" because it questions its authors—those in power. Instead, it recognizes that knowledge exists in cultural context and focuses on its sociology. For education, this means that objectivism is replaced with constructionism where students construct meaning by building new knowledge based on prior knowledge. This is done by interpreting information as it makes sense to them when placed in their singular narratives of the world and the self. It falls to the responsibility of formal education to assure that the scaffold of prior knowledge is built on hypotheses that are falsifiable (Popper, 1979). The constructed narrative, however, is singular to a person's individual interpretation of one's place in it. For example, there is overwhelming scientific evidence that the earth's temperature is rising, which makes this statement a firmly established fact. What to do with this fact, however, is open for interpretation, e.g., one can be concerned and start recycling and stop flying, or one can choose to feel impotent about it and ignore it. So, what is open for interpretation is not the fact but rather its personal meaning.

Despite the tensions inherent in our positions, we have been able to find a common ground in uniting against what we perceive to be truth decay. As fellow thinkers we meet again at Lyotard's (1984) distinction between narrative knowledge and scientific knowledge whereas the latter is immune to personal interpretation. We further hypothesize that truth decay is an unexpected bifurcation of postmodernism. In other words, the social world exists in multiplicities and pluralities, which is the place where seemingly discrepant narratives exist concurrently without negating

one another. And with that comes the danger that the narratives of the few whose voices carry louder in the resulting cacophony, such as those of powerful politicians and lobbyists, are monopolizing The Truth thereby creating a new metanarrative. If this hypothesis were to have merit, schools would have the power to equip the citizenry with the skills necessary to interpret the never-ending hurricane of information and distinguish between facts, propaganda, truths, and conspiracies.

Schismogenesis

Motivated reasoning and taking cues from elites is, in our estimation, likely to be a major force in the phenomenon of schismogenesis. Bateson (1935) introduced the concept of schismogenesis and expanded on it when he defined schismogenesis as "a process of differentiation in the norms of individual behavior resulting from cumulative interaction between individuals," (Bateson, 1965, p. 175). He identified at least two forms of schismogenesis: (1) complementary, and (2) symmetrical. Complementary schismogenesis is characterized by an increase in divergent behavior (e.g., liberal wearing masks and getting vaccinated during the pandemic, conservatives not doing so). Symmetrical schismogenesis has more to do with increased boasting among both groups, for example, each group claiming elite status and denigrating the other group, which also leads to culture change. One process of schismogenesis we wish to concentrate on is the process in which divergent identities are formed within two groups based largely on automatic opposition to one another, and not based on thought-out, well-considered differences of opinion. Many years ago, there were two television shows worth mentioning: "Hannity and Colmes" and "Crossfire." "Hannity and Colmes" featured a conservative (Hannity) and a liberal (Colmes) debating issues of the day and criticizing one another's positions. "Crossfire" likewise featured a conservative and a liberal engaged in critical debate. Fast forward to the current media environment and we now have Hannity throwing red meat to the base without Colmes providing critical rebuttal. Similarly structured shows with liberal hosts can be found on MS Now. Crossfire has been cancelled. These newer programs illustrate how schismogenesis is operating, driving further apart already divergent identities. It is the creation of division, the creation of in-groups and out-groups. As Michael Palin (Monty Python, 1972) said with frustration during a Monty Python sketch, schismogenesis at times appears to be driven by "just contradiction."[1] For example, we see no obvious reasons why Republicans in 2020 would be less supportive of vaccines and masks than Democrats. It doesn't seem to be an inherently liberal/conservative issue like tax rates or universal health care. But once one side signaled preference for one position, the other side moved rapidly to flaunting the other point of view. That's complementary schismogenesis in a nutshell.

If this is indeed a well-entrenched dynamic in political discourse and identity formation, it's hard to see how truth decay will be arrested by simply teaching critical thinking and STEM courses, although these are of course important and part of the solution. We draw the reader's attention to those social sciences like psychology and sociocultural anthropology that investigate the nature of schismogenesis, boundary maintenance, and identity formation. Social anthropologist Thomas Hylland Eriksen (2010) wrote on the characteristics of boundary maintenance among socio-political groups. He found that the following four properties were prevalent: (1) over-communicating differences between groups on different sides of a boundary, (2) under-communicating

1. A sketch from Monty Python's Flying Circus (1972) illustrates this idea: Michael Palin states, "An argument is a connected series of statements intended to establish a definite proposition." John Cleese responds "No, it isn't."

differences within bounded groups, (3) myth creation, and (4) highlighting victimization of one's own group while demonizing other groups as needed. Alongside Eriksen, both Harari (2015) and Anderson (1983/2006) identify myth creation as a central element of in-group cohesion. While all these phenomena, alongside Durkheim's (1995) "collective effervescence," are conducive to boundary maintenance and in-group cohesion, they don't really help in the fight against truth decay. What all this suggests is that the search for truth (or empirical adequacy concerning unobservable postulates) may be central to education and science, but the search for myth is central to politics, and we should not expect myth-making to ever go away. Hence, all we can do is educate students about these dynamics so they are at least aware of them, which might give the rational side of their minds a chance to compete with the emotional (Haidt, 2011).

If schismogenesis, with one of its manifestations being the acceptance of ideas based on mere opposition and not too concerned with evidence or critical scrutiny is indeed helping to drive polarization in societies, it is understandable how such a process drives truth decay. As a counter, we contend that scholars should weigh the costs and benefits of giving unpleasant hypotheses a fair hearing, even if they contradict the preferred public relations messaging strategies of their political allies, including those considered to be vulnerable groups. And if we can explain the appeal of conspiracy theories to students and equip them with the tools to analyze critically, it may prevent them from drifting into all out belief in very dubious hypotheses.

We will now take a closer look at conspiracy theories and censorship. The reader should be aware that these phenomena afflict both coalitions (Enders et al., 2022; Goldberg, 2023).

Conspiracy Theories

Conspiracy theories may be defined as "the belief that certain events or situations are secretly manipulated behind the scenes by powerful forces with negative intent" (European Commission, 2021). Some conspiracies are real, e.g., in 1999, a Florida jury ruled that cigarette companies were guilty of conspiracy for hiding evidence of health risks associated with smoking (Charatan, 1999). Many are false, yet these false ones often have a staying power that surprises. While earlier studies (Hofstadter, 1964) suggested that conspiracies theories were more prevalent on the right, a recent study by Enders et al. (2022) found that liberals and conservatives were both prone to conspiracy theories, and neither side showed a significantly greater susceptibility. Other studies corroborate this thesis. For example, Jensen (2013) and Smallpage et al. (2017) found that belief in conspiracy theories referencing chem-trails, lizard people, the moon landing, fluoridization, and television mind control had approximately equal support among the right and left. Yet wherever their locus, conspiracy theories do proliferate and can be dangerous because they can radicalize people into violent action. One study conducted by the Public Research Institute found that 23% of Republicans agree with the quote that "the government, media, and financial worlds are controlled by Satan-worshipping pedophiles who run a global child sex-trafficking operation," (Contreras, 2023). This compelled one believer to enter a pizza parlor wielding a firearm in search of both perpetrators and hostages. Finding none, the individual was eventually arrested without any injuries (Lancaster, 2016).

For progressive examples, note that Special Counsel Robert Mueller found no evidence for the conspiracy theory linking the Trump campaign to Russian interference in the 2016 US election, and in the 1960s some left-wing Black revolutionaries held Jews responsible for the Atlantic slave trade and other malfeasance directed at the African American community (Harper and Skyes 2023).

Some Republicans believe a conspiracy theory pushed by Donald Trump, Rudy Giuliani, and others involving stories about a stolen election. This culminated in the January 6, 2021, assault on the U.S. Congress that resulted in at least one death and numerous injuries. Attorney General Bill Barr, hand-picked by Donald Trump, stated that there was no compelling evidence of fraud on a scale to overthrow the election, that Republican election officials in both Georgia and Arizona upheld the election results, and that numerous judges dismissed Trump's claims in court for lack of evidence and related deficiencies (Balsamo, 2022; Bluestein, 2022; Durkee, 2020).

Finally, there is the belief on the right that nanobots were placed in the COVID-19 vaccines to control our thoughts and behaviors. What remains unexplained is why the government doesn't bother to put the nanobots in flu shots, tap water, or Cheerios. These examples illustrate how conspiracy theories are a currently popular, powerful method for organizing and motivating political acts that manifest truth decay. As we shall see, these conspiracy theories benefit by taking advantage of (1) the observable/unobservable distinction in our sensory apparatus, (2) the motivated reasoning, often in the form of in-group/out-group dynamics, that appears to be a universal feature of human cognition, (3) cues from partisan elites, and (4) our emotions, whether they be fear, hatred, anxiety, or sympathy. Any successful strategy to counteract truth decay will need to contend with these structural properties associated with conspiracy theories.

What Makes a Conspiracy Theory Appealing?

There are several elements that heighten the credibility of conspiracy theories. First, they appeal to our motivated reasoning, and studies show that we take cues from elite partisan sources (Enders et al., 2022). Conspiracy theories also take advantage of our sensory limitations, carefully exploiting the observable/unobservable divide. That is to say, whether liberal or conservative, religious or not, we all track observable phenomena for the most part adequately and thus generally drive safely to work each day, avoiding crashes, driving off of bridges, etc. In other words, our senses allow us to strategize and produce purposeful, goal-directed behavior. But if propagandists can fixate our imagination on unobservable postulates that purport to explain the observable phenomena, they can lead us into, to use van Fraassen's (2008) phrase, an "enchanted forest." Conspiracy theories are rife with the unobservable, yet their adherents seem to wade into the forest without any worries. Conspiracies are generally conceived of as being shadowy events, shrouded in secrecy. Thus, even with no direct observation of nanobots in our vaccines, folks stealing elections, or government-affiliated Satanists abusing children, adherents show little in the way of skepticism and much in the way of belief. It's an inflationary form of metaphysics that contradicts an empirical stance.

Why do conspiracy theories seem natural, and why do people's imaginations run rampant? Stewart Guthrie (1995) has argued that we have a hyper-active agency detection module in our brains that predisposes us to see intentional behavior in innocuous things, such as faces in the clouds or mistaking wind blowing through the leaves for a dangerous animal. According to Guthrie, such an adaptation would dissuade people from wandering into a thicket with moving branches by providing the mildest of paranoia and caution: "It's just the wind" would be replaced with the thought "it could be an enemy warrior or a tiger." Better safe than sorry. In Guthrie's formulation, David Hume's (1776/1957) idea of religion as anthropomorphism is combined with a variation on Pascal's hedging (1680/1975) and evolutionary theory to interpret ambiguous phenomena as potential threats. Conspiracy theories seem to be understandable from Guthrie's position. Pascal Boyer (2001) makes related points about our cognition: mildly counterintuitive points—such as

Trump is JFK in disguise, nanobots control our thoughts - capture the imagination and are memorable; hence, they proliferate quite well. This form of in-group/out-group psychology and the demonization of enemies are strategies straight out of the U.S. Department of the Army's Field Manual on Psychological Operations (1987). It is an example of how elites cue audiences to alter their behavior to achieve desired ends.[2] All of these elements make conspiracy theories understandable, and thus teachable, from an educator's point of view.

Censorship

Censorship is a problem that affects both coalitions. Regarding censorship in higher education, survey research by Horowitz et al. (2023) suggests that large numbers of scholars are currently self-censoring. This is hampering the honest evaluation of competing points of view, thus augmenting truth decay. Why scholars are self-censoring is not too difficult to ascertain: many scholars state that they fear career repercussions (Clark et al., 2022; Clark et al., 2023; Horowitz et al., 2023). In extreme cases, scholars can even be threatened with physical violence. For example, when Randy Thornhill and Craig Palmer (2000) put forth the unpleasant hypothesis that rape may be an evolutionary adaptation, some progressives were so outraged that they made death threats against Thornhill who was consequently assigned a personal bodyguard while on campus (Dreger, 2015). A similar effect was brought about by J. Michael Bailey's (2003) *The Man Who Would be Queen*, which delved into the reasons people transition. Bailey's hypotheses that sexual orientation had much to do with transgender transition decisions upset many in the progressive community who were more interested at the time in the "female brain trapped within a male body" messaging, and this led to similar threats (Dreger, 2015). In our polarized environment it's not savvy to entertain controversial notions. These examples point out the need for educators to question if students are taught not only the emotional appeal of conspiracy theories, but also the ability to compose measured responses to unpopular hypotheses that are bound to pop up in the social sciences, education, and daily life.

Well intentioned, pro-social motives have been documented to be a key reason scholars, editors, and reviewers in the USA censor manuscripts with research findings that are potentially harmful to historically disadvantaged groups (Liu & Ditto, 2013; Clark et al, 2023). For example, we remember an incident when a journal rejected a manuscript one of us co-authored concerning politics in Guerrero, Mexico. One reviewer who recommended rejection argued that our analysis was "disrespectful" to Indigenous communities. The reviewer was apparently upset because we had argued that Indigenous community members in the region, much like people in Mestizo communities, routinely activated patron-client ties to maneuver for advantage. The reviewer did not argue that our hypothesis was false, just that it was disrespectful. Similarly, the American Anthropological Association (AAA, 2023) announced that a conference session about the utility of the concept of biological sexes was cancelled due to it being viewed as likely to cause harm to the Trans and LGBTQI communities (Kinkade, A.E., 2023). The AAA also noted that this cancellation

2. One of the authors of this paper is a U.S. Army veteran who served in a psychological operations battalion that was active in 1980s Latin America and experienced first-hand the procedures for and results of creating propaganda and attempting to manipulate target audience behavior. Much of military psychological operations focuses on the creation of schismogenesis (in-group/outgroup in military terminology) and assessing vulnerabilities and susceptibilities of potential audiences.

was not a suppression of academic freedom since they were not a degree granting institution but merely a professional organization (Patel, 2023).

On February 14, 2025, the Trump administration banned the Associated Press from the Oval Office and Air Force One for using the phrase "Gulf of Mexico" (Stelter 2025). Conservatives have also frequently attempted to ban books such as "Slaughterhouse Five," "The Handmaiden's Tale," and "Harry Potter and the Sorcerer's Stone" from libraries. These examples show that censorship is popular on both the left and right ends of the spectrum.

Research indicates that compared to conservatives, scholars with egalitarian/progressive sympathies are more prone to censor information potentially harmful to minority groups (Moss & O'Connor, 2020). We observe that disrespect and harm are fairly elastic concepts that can be extended to include cases where scholarly articles merely contradict the preferred public relations/messaging strategies of special interest groups. In sum, whatever potential benefits accrue to vulnerable groups due to censorship should be weighed against the notion that censoring evidence or arguments presented in good faith will likely produce a body of literature marked by increasing levels of truth decay. A good theory can survive criticism. Criticism is how we examine theories, and if we exempt certain ideas from critical scrutiny, we grant them a form of impunity.[3] Inconvenient views are censored, and threats to career precipitate further self-censoring among scholars. Clark et al. (2023) state an alternative to outright censorship would be to publish more "forum" style articles, in which a controversial paper can be published alongside commentaries from other scholars and an opportunity for the author to leave a reply. They also call for more transparency in the decision-making process used when rejecting and accepting manuscripts.

All we can add is that all of us should renew our appreciation for free speech. Scholar Alice Dreger quit her job at Northwestern University in protest against academic censorship directed by administration financial/public relations interests (Dreger, 2015).[4] Dreger (2015) argued forcefully that all of us can, and should, strive to do better in combatting truth decay. We tend to agree with her.

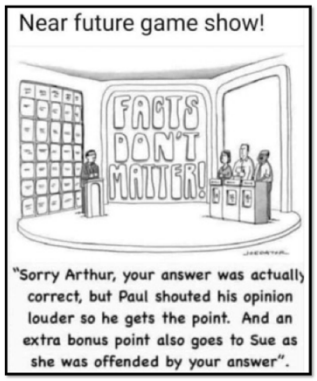
How Did We Get Here—The Role of Education in Truth Decay

Marked by disagreement over topics for which reasonably definitive data exists, this is not the first time we find ourselves experiencing truth decay. Kavanagh and Rich (2018) identified the present as the fourth period of truth decay. The first era was the Golden Age of the 1880s-1890s, which was driven by the invention of printing technology. This facilitated access to information resulting in competition among news outlets. One effect of the increased competition was "yellow journalism," which was a sensationalist way of covering events aimed at increasing sales. The second wave was the Roaring Twenties and the Great Depression in the 1920s-1930s. During this time, the distribution of information was lifted from paper when radio broadcasting of news began. This feature undergirded the sensationalist style of journalism as the focus of news shifted from

3. The replication crisis that has plagued psychology and related clinical studies demonstrates that science, too, has its methodological crises and biases. Still, criticism, which science provides, is better than censorship, which admits no criticism. For further discussion on the replication crisis and the shortcomings of peer review, see gwern.net (2021).

4. We should also mention that watering down standards and inflating grades was widely reported by respondents in the recent Horowitz, Haynor, and Kickham (2023) survey of higher education departments because these occurrences are probably not helping to defeat truth decay. Corporatization of the university brings with it another set of truth decayers.

reliable information to public figures and celebrities. The Civil Rights Movement of the 1960s-1970s was identified as the third wave. During that time, the U.S. fought a controversial war in Vietnam, which was broadcast on television. Kavanagh and Rich (2018) assert that this exacerbated the importance of opinion over fact since moving pictures appeal directly to emotions and can therefore be easily used as a tool for manipulation.



(Xatepex, 2022)

The current wave differs from the previous three by the way in which information is available independently from traditional news sources 24/7 at our phones and with no distinction between vetted information or facts and opinions. In order to survive in a massively competitive market, media today is driven by a cut-throat business model where what matters most is the number of viewers rather than the content. This determines what news is presented, by whom, and in which manner, based on whatever keeps people tuned in, and nothing achieves that more effectively than emotionally charged and subjective content presented in such a manner. This kind of media presentation and consumption resembles a reiterative cycle with increasing influence of opinion over fact based on personal, anecdotal experiences as trust in traditional media outlets continues to decline. Rauch (2021) points out that modern state-sponsored propagandists intentionally flood social media with falsehoods in order to demoralize and confuse target audiences.

At the same time, this changed media landscape exacerbates confirmation bias because of the ease with which people can find information that supports their views while effortlessly avoiding any information that might challenge them. This is in part caused by the overwhelming amount of information – it's much easier and emotionally more comfortable to find information that bolsters existing views than to analyze massive amounts of facts and falsehoods to rethink one's ideas critically. Search algorithms that create self-enforcing feeds make sure of that.

The Past Three Decades of Kindergarten-12th Grade Education

Since truth decay is a fundamental threat to a democratic society, it falls to education to prepare a citizenry that is able to distinguish between fact and opinion, that is capable to think critically, and that is open-minded enough to question one's beliefs. But competing demands on teachers hinder effective education toward critical thinking. First, teachers and administrators are held accountable for standardized test scores, which do not necessarily evaluate critical thinking abilities. And second, the education system has been reduced to a political tool (Varbelow & Yaworsky, 2023) where powerful politicians pass legislation that effectively ties teachers' hands regarding which topics and which books they're allowed to talk or be silent about.

And yet, propaganda education is addressed less in schools today than it was in the 1940s (Hobbs, 2021). To create educational guidelines for standards across states, Common Core State Standards (CCSS) were introduced in 2010. These standards are primarily aligned with mathematics and English language arts and reading skills, and while they have a critical thinking component, they are only loosely connected to the ideas of inquiry and democratic decision-making, which are central to the College, Career, and Civics Life (C3) Framework. For example, CCSS prioritize argumentation, which originally was a much-needed change from the concentration on persuasion in the standardized tests of the 1990s. Argumentation focuses on the merit of an argument, but as taught in the CCSS, it concentrates on only one of the three aspects of an argument, namely logos

or reason. This is insufficient in times when propaganda is rampant. CCSS analyze neither pathos, which uncovers the planned emotional draw of an argument that is so fundamental to propaganda, nor ethos, which is the purpose and the authority of the author. If youths do not learn how to distinguish between authority and authenticity, they might adopt a bandwagon approach and follow those whose voices are louder, e.g. celebrities, or those whose voices are more authoritative, e.g. the textbooks.

Further, the way in which CCSS require students to learn to distinguish between fact and opinion is often done as an either-or approach where students simply sort statements by whether they are true and can be proven (facts) or whether they are opinions (beliefs) (Hobbs, 2021). When reducing a phenomenon to a dichotomy, students do not learn to think about issues in complex terms, which are often closer to a truth. At the same time, during a cognitive process that involves criticality, opinions are likely to be devalued and discounted. As a result, the importance that opinions and beliefs have in people's decision-making is diminished. A better approach to preparing students to become contributing members to a democratic society would be to incorporate C3 principles to the CCSS and other areas of the curriculum such as the core STEM subjects assessed in standardized state tests but also in non-core subjects like foreign languages. If this were to be done successfully, limitations currently experienced by social studies teachers would have to be considered. For example, Thacker et al. (2017) found that social studies teachers did not incorporate inquiry as much as they felt was necessary because they lacked time and resources and felt restricted by standardized testing.

Hobbs (2021) speculates one reason that the study of propaganda is absent from the k-12 standards is because it's not a skill tested on SAT tests. College writing is usually dense, academic, and neutral. College readiness does not include the skill to analyze the complexity in propaganda or one's proficiency for inquiry and democratic decision-making. As a result, a proper study of propaganda has been neglected for three decades, and not just any decades but those of the birth and the evolution of the internet, which is presently culminating in artificial intelligence.

The CCSS were conceived of as a solution to solve the problem of unequal standards among the states and raise the bar for the education of America's child. The opposite, however, is the case. Data shows that SAT and ACT scores, which test CCSS but hardly the C3 Framework, are directly related to parental income. Research of test scores of the 2010s shows that 33% of children whose families were in the top 20% of earners were seven times more likely to score a 1300 on the SAT or a 29 on the ACT compared with children in the bottom 20% of earners; the gap for the top and bottom 1% of earners was a 13 times likelihood (Cain Miller, 2023). This is caused by wealthy parents' ability to spend large amounts of money simply on test preparation such as materials, courses, and private tutors in addition to providing a better out-of-school education. For example, upper middle-class children are more likely to be raised by two parents who make learning experiences like travel or field trips to museums and the theatre possible while lower middle-class children are more likely to grow up with extended family and in impoverished neighborhoods. As a result, children of wealthy parents are better prepared for college, to get accepted into elite universities, and have a better chance to receive scholarships, which are directly tied to test scores. While the SAT and ACT provide some data on students' current reading, writing, and mathematical abilities, they are not useful indicators of a well-rounded education. Newkirk (2013) likens the situation to having pharmaceutical companies write health standards because the authors of the standards, the major college testing agencies such as the College Board and the ACT, were engaged in determining them, which then aligned with their testing instruments.

Testing standards, which dictate what kids learn, are out of focus with students' needs and the realities of the world they live in. For example, already in 2008, Newkirk noted that kids failed to develop the grit to read complex texts around middle school and began instead to resort to spark notes. Today's social media landscape, which communicates in short, easily digestible soundbites, facilitates kids' lack of motivation to engage with complex readings. While one goal of the CCSS is for kids to read more complex texts in order to increase their college readiness, they fail to address the process of acquiring the skills needed to actually engage with such texts because those skills are not something that can be assessed in standardized tests.

For instance, students are taught to leave emotions out when reading a text and to focus solely on content. This is not a natural way to engage with any text. All aspects of an argument - logos, ethos, and pathos—are deeply human and a fundamental part of the meaning-making process. Humans know the world in difference (Bateson, 2002). Hence, to purposefully suppress all prior knowledge, which comes from one's interpretation of experiences, is unnatural and counterproductive to how humans understand the world. Kids are left with large amounts of information, either interpreted in the gospel of textbooks or uninterpreted on TikTok and X, in an education system that teaches rote learning and memorization but rarely meaning-making and the construction of knowledge. It comes as no surprise that, amidst the way education has been approached for the past three decades, we find ourselves in the fourth wave of truth decay.

Finally, a word about how postmodernism in education may have facilitated truth decay. We began our paper by noting that our education author views and interprets the world through a postmodern lens, which, in education, employs a constructionist approach to teaching and learning. She teaches based on the premises that learning is the construction of new knowledge based on prior knowledge. Knowledge is personal because we know the world through experiences. The way we make meaning of experiences is through interpretations of events whose significance and emotional and cognitive connections we determine in our individual narratives that both reflect and create our identity. This is different from the objectivist paradigm of modernism, which allows only logic rather than experiential knowledge to direct the creation of meaning. But is interpretation based on one's personal understanding of the world not the very definition of conspiratorial thinking?

While postmodernism is impossible to define, one fundamental premises is the incredulity of the grand narrative. With that it makes room for diverse perspective and narratives, which do not negate each other but exist simultaneously, adding information to the whole by illuminating different aspects. Postmodernism criticizes the univocity of meaning, but it does not indulge the distortion of facts. For example, if Floridian law makers claim that slavery offered the development of skills that can be useful (Álvarez, 2023), it's a justification and not one aspect of the whole. Postmodernism is not ambiguous to untruths. It merely acknowledges that scientific and narrative knowledge exist simultaneously and interact with one another. Lyotard (1979/1984) states that the way postmodernism approaches epistemology "should not be accorded predictive value in relation to reality, but strategic value in relation to the questions raised" (p. 7). The point is to think about how knowledge evolves. The question that must be raised then is why Floridian lawmakers create distorted versions of history. What is their agenda?

Whether proponent or opponent of postmodernism, it undoubtedly contributed to today's perfect storm: unvetted information available to all 24/7, political polarization nationally and globally, postmodern approaches to epistemology, and a citizenry that has been ill-prepared since the lid of Pandora's Box has been lifted and released the "curses" of overpopulation, limited resources, the internet, and AI upon mankind. The metaphor is a cautionary tale about human curiosity, which

is a driver for evolution and therefore must be acknowledged and dealt with. Perhaps, if we start educating people by giving them the tools to do so, we can come out of the perfect storm on a higher level.

Schools Today

So why don't we? Why don't we just teach kids about propaganda, the appeal and fallacy of conspiratorial thinking, and the workings of schismogenesis? Classrooms and schools are fractals—self-similar patterns across different scales—which mirror the society they are part of (Varbelow, 2008). As such, educational institutions have always been a realm where ideology and critical thinking compete. On the one hand, teachers want to just teach, which ultimately means to help youths along their journey to become their own person. On the other hand, they find themselves part of a system that severely limits their ability to do so.

As we showed throughout this paper, our society at present is driven by schismogenesis and censorship. In education this trend is evidenced by numerous house- and senate bills that have recently been passed across the nation specifically targeting race and gender equality, parental overview, library control, and race education. In general, these bills prohibit teachers from talking about anything remotely related to the conservative interpretation of critical race theory while giving parents the power to directly determine their child's curriculum. Parents constitute an important stakeholder of the education system, and their voices must be part of the conversation. But there are other stakeholders, like students, teachers, and less vocal parents. The case of book banning illustrates how these bills empower a highly engaged minority to determine the curriculum for all kids. In the 2021-2022 school year, a total of 1,065 complaints to remove books from school libraries were filed (Natanson, 2023). Nearly two thirds of those were filed by just 11 people. This is because ideologically motivated parents, e.g. Moms for Liberty, organize groups of volunteers to do the library searches and then file in bulk. This kind of censorship is predominantly driven by ideologues. Common concerns voiced by these parents are that those books will lead their children to think that they are gay or that it is ok to be gay (Natanson, 2023). If a few overzealous parents are given the power to hold a veto over the curriculum, other stakeholders are disempowered.

A side effect of this trend is that students' trust in teachers is declining (Merod, 2021; Natanson, 2022). As the distrust in traditional media grows while students are being warned to be cautious with online resources, the academic aspects of school have become estranged from their lives. Much of what is going on in the current polarized climate where families are split by partisanship cannot be talked about in school. Teachers are met with cognitive bias and sorted into "woke" and "MAGA" by engaged parents and present part of some authority that cannot be trusted by students.

While the obvious goal of such actions is to determine what is and is not taught, another goal is to create a chill effect. The message is that it is safer to be silent. The question about the place of religion in school illustrates this. For example, in Oklahoma, the Bible is incorporated as an instructional material while Louisiana recently passed a bill demanding that schools and universities display the Ten Commandments. When Louisiana's governor Jeff Landry was asked whether he is concerned with the separation of state and church, he replied, "I can't wait to be sued," (Hawkins, 2024). In other words, he challenges anyone who doesn't support a conservative, Christian ideology to dare to oppose him and the power his office represents.

Teachers are threatened with losing their job and their license simply by engaging in difficult conversations or making lessons relevant, e.g., by connecting a lesson on the Civil Rights

Movement to the Black Lives Matter movement. As politics empower a censorship-minded, outspoken minority to scrutinize teachers, the four-year education degree and the preparation to actually teach is devalued; critical thinking is suppressed. The realities of today's classrooms suffocate intrinsic motivation, which results in an ever-increasing nation-wide teacher shortage.

The bottom line is that for teachers, parents, and students, the public education system no longer represents a body of truth. So how can we change direction before we end up where we are headed with this trend?

Teacher Education Programs as a Path of Resistance to Truth Decay

While university professors are not immune to the policies and politics driven by schismogenesis and censorship, they have significantly more academic freedom than k-12 teachers. Therefore, they play a fundamental role in preparing their future colleagues to feel confident to be aware of and combat truth decay in youths. Many novice teachers express that they feel underprepared entering an education system that is steered by the current political climate (Castro et al., 2025). The reasons for that are manifold: one, they are the graduates of the education system that contributed to the ill-prepared citizenry as delineated in the previous section. Two, traditional novice teachers are still very young and have not yet made sufficient life and classroom experiences to become fully mature in their individual- and their teacher-personhood. And finally, young teachers express that their teacher education programs did not prepare them to do what they came for in a system that severely limits their ability to make academic decisions without endangering their professional livelihood.

While we would like to suggest that teacher education programs include courses on media literacy, propaganda, etc., this is not practical. Degree plans leave no room for extra courses, and existing programs are not likely to change their requirements, especially if it takes away from certification test preparation. But we would like to conclude our paper with tangible, practical takeaways. We have identified three dimensions fundamental to better prepare teachers to help with the resistance to truth decay that can easily be incorporated into existing education courses. The most fundamental one is media literacy, which presupposes the other two, namely, becoming aware of one's biases, and understanding what it means to be part of the authoritative discourse.

Media Literacy

There is a plethora of research delineating the importance of media literacy to resist truth decay (Huguet et al., 2019; McGrew et al., 2018; Ranschaert, 2020). Currently, students are barely able to evaluate more than the veracity of a source, which is nonetheless an important first step. What stands out from the literature are three main aspects: the importance of teaching media literacy on a large scale, teaching it in a context-embedded fashion, and doing so in a non-partisan manner. This is especially practical when done through secondary methods courses. In these courses, aspiring middle- and high school teachers learn how to design relevant and engaging lessons. An easy way to include the teaching of media literacy is by creating lesson plan assignments[5] where teacher candidates are asked to teach media literacy in their content areas, such as ELAR, history, life sciences, agriculture, etc. Incorporating media literacy into methods courses addresses the fact that it is more effective when taught in a context-embedded way since secondary teachers

5. A useful list of resources can be downloaded for free from this link: https://www.rand.org/pubs/research_reports/RR3050.html.

design those lessons in their content areas. It is also important to help teacher candidates incorporate into these lessons media that they and their future students are familiar with and use on a daily basis, e.g. social media. The need for scale is potentially addressed when 7-12 grade students are exposed to media literacy education in many subject areas.

The third aspect—teaching media literacy in a non-partisan manner—entails talking about charged issues and using those to challenge students to include sources from across the political spectrum. The point here is not to provide students with answers but with guidance, for example, in the form of classroom conversations where students raise their own questions and issues are explored deeply, critically, and in their complexity.

The assessment of media literacy skills remains a challenge, which is also a reason it is not easily integrated in k-16 education. Assessment cannot be limited to checking if students use the skills accurately. Rather, it must focus on how and whether they apply what they have learned in daily life. It is a life skill or better, a way of thinking about the world that goes beyond dichotomies and axiomatic assumptions. And this presupposes one's awareness of and reconciliation with one's own biases.

Becoming Aware of One's Biases

If we want our future colleagues to teach in a non-partisan, unbiased way, it is essential to make them aware of the fact that we are all bigots in some way because all of us prejudge people and issues on something. This is an uncomfortable truth that is part of the human condition. Since we cannot just turn it off, our best chance is to become aware of our biases so we can respond thoughtfully regarding what to do with them rather than react emotionally.

Our first author uses an experiential learning experience to achieve that. The Bias Project (Varbelow, 2019) is designed to make students comfortable with the fact that, as humans, they are innately biased. In this four-step process, students first become aware of this truth in themselves and of their own biases. They then compose four conversation questions that follow guidelines for qualitative research interviews before getting together with a relative or acquaintance who embodies their bias. Common topics they choose to explore include their preferences for presidential candidates, pro-life/pro-choice, transgender issues, and homo-/heterosexuality. After their conversation, students are asked to compose a first-person narrative from the Other's point of view. The final part of the project is a reflection in which students think through whether/how this experience has influenced their relationship with the Other and what this means about human relationships. The most important insight aspiring teachers gain is that humans are inherently biased toward or against something, which makes it challenging to resist confirmation bias and truth decay. This is a fundamental realization for an educator who is about to be charged to teach these concepts in an unbiased way.

Being Part of the Authoritative Discourse

By the time a novice teacher enters their first classroom, they have been on the other side of the teacher's desk for 16+ years. For at least 12 of those years, they have been a near passive recipient of authority. Even during their college years, they have tried to "figure out the professor" and what they want, always keeping an eye on their course grades, GPA, and chances for scholarships. Based on the lead author's experiences with teacher candidates over the past 17 years, students come to teacher education programs thinking that they will teach just their content area. They

come to teacher education programs thinking that they will teach just their content area. They do not yet realize that once they enter the classroom as a teacher, they will have become part of the authoritative discourse, whether they are comfortable with that fact or not. Students will perceive them as such just like they did their teachers and professors. This means they have to re-think their idea of themselves. Even if students' trust in teachers is declining, a good teacher will form relationships with their students, and the latter will undoubtedly be curious about how their teacher navigates life, which includes their take on difficult issues. And the more sincere a teacher is, the more trustworthy they are for their students. Therefore, teacher education programs must prepare candidates for the realities of the classroom, which is teaching in a test-driven environment while still being able to do what drove them to the profession. This means that they have to find their "north star," in other words, clarify for themselves why they want to be a teacher and what their beliefs about the purpose of school for the individual and for society are. And they must have thought about "how school is done" today, which includes reflecting on difficult phenomena like school shootings, book banning, a massive teacher and administrator exodus, etc. The goal is for teacher candidates to find the space where they can be true to themselves while keeping a foot in the door, so to speak.

Many professors of education probably already implement this idea in their foundations courses. Our lead author does it through a series of "Expert Panels" where students select a charged topic in education like those listed above and two peer-colleagues with whom they research this topic to become "experts." This is then presented in a fashion not unlike the talk shows featured on common TV media (see "The Rachel Maddow Show on MSNBC or "The Five" on Fox News). The "experts" begin by having a conversation among themselves about the topic during which they illustrate the different facets of the issue before opening the floor to the "audience," which is the rest of the class, for questions and engagement. It is preferable for a group of experts to come from different viewpoints on the topic because this makes the conversation more nuanced while modeling true conversation rather than argumentation for the "audience." Since our lead author uses the question "Why school??" as the foundation for the entire course, each expert panel seminar concludes with individual reflections about the issue, about how their take fits in the bigger picture in relation to their "colleagues'" thinking, and what it means for their personal answers to the fundamental course question. Assessment is once again difficult because it is not a skill that is assessed but rather a complex and critical way of thinking about the world and one's place in it.

But if teacher education programs include versions of all three dimensions—media literacy, bias, and being part of the authoritative discourse—the possibility of creating resistance to truth decay is real.

Conclusion

The purpose of this paper was to understand the mechanisms of schismogenesis and censorship as the underpinnings of the current wave of truth decay. We have shown how education has played a role in setting up conditions for the present situation. We believe that education is the bedrock of democracy. And while public education has significantly contributed to truth decay and so to the endangerment of democracy, we believe that it also contains the possibility for its future. A quote often attributed to the physicist Niels Bohr comes to mind: "Every great and deep difficulty bears in itself its own solution. It forces us to change our thinking in order to find it." This is not the first time we find ourselves in a situation where truth and epistemology are manipulated. Our world is nuanced, multi-faceted, complex, and discrepant, so it will not be the

last time. We hope that understanding the causes and workings of this phenomenon will contribute to the search for finding a path to resist it.

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Sonja Varbelow is a professor in the Department of Teacher Education at Angelo State University. Her research explores the role that schooling and education play in the evolution of individual human beings and a democratic society. Previous publications include qualitative studies of how early educational experiences enable agency throughout life, multicultural education, and propaganda.

William Yaworsky (Ph.D. University of Oklahoma 2002) is Professor Emeritus in the Department of Anthropology at the University of Texas Rio Grande Valley. His research interests include propaganda, social psychology, and social organization in Latin America. He has conducted ethnographic research in Guerrero, Mexico and published in journals such as Current Anthropology, Biological Theory, and the Journal of Borderlands Studies.

Navigating the Ethics of Teacher Preparation: The Moral Responsibility to Equip Future Educators with Culturally Responsive Practices

Melody Armour, Bowling Green State University

Abstract

In recent years, our 21st century classrooms have become increasingly more diverse. In response, culturally responsive pedagogy has begun to gain more traction within the field of teacher preparation while simultaneously attracting political scrutiny. The fragmented landscape of stakeholders involved in teacher preparation is one which undergoes a deeper analysis within the context of this paper. More specifically, an ethical lens is used to explore the moral obligation of teacher educators, school leaders, teachers, and policy makers to collaborate in critiquing the current teacher preparation system (ethic of critique), take action for more equitable practices (ethic of justice), and maintain relationships with those involved in the process of improving education (ethic of care). Following the examination of the ethical considerations involved, concrete recommendations are provided for equipping future teachers with culturally responsive practices in order to respond to the call to act grounded in moral principles.

Keywords: *culturally responsive pedagogy, ethic of critique, ethic of justice, ethic of care, teacher preparation, educational change*

The lens of ethical leadership provides a necessary and politically relevant framework for exploring the moral obligations inherent to teacher preparation. Although effective teacher preparation programs (TPPs) hinge on a wide range of crucial variables such as curriculum design, field experiences, and faculty expertise to name a few, culturally responsive practices are a complex variable under recent scrutiny and must be included in the equation for equipping effective future teachers. Teachers' levels of self-efficacy regarding the use of any of the pedagogical tools with which they were equipped within their TPPs are a strong determining factor for their successful implementation in the real-world classroom (Bandura, 1977). Although each university TPP is comprised of a unique group of faculty members with a vast array of diverse experiences, do they all not share a common goal? If this goal is to develop competent future teachers with the knowledge, skills, and dispositions necessary for effective teaching, it would be important then to reflect on the choices that faculty members and programs make both individually and collectively for the inclusion or exclusion of specific content in their courses. The focus of the following discussion will be on the choices regarding culturally responsive teaching practices specifically.

Introduction

Gloria Ladson-Billings first defined the phrase "culturally responsive pedagogy" within her seminal research as a pedagogy which, "empowers students intellectually, socially, emotionally, and politically using cultural referents to impart knowledge, skills, and attitudes" (1994, pp. 16-17). This focus on culturally responsive pedagogy derives its importance from the critical role that teacher educators play in adequately preparing future teachers for the reality of an increasingly diverse 21st century classroom. Recent literature supports that upon graduating from TPPs, teachers' confidence related to implementing culturally responsive practices declines within the first years of teaching (Madler et al., 2022; Nahal, 2010). More specifically, recent literature has also demonstrated that novice teachers have reportedly low levels of perceived self-efficacy for teaching English language learners (ELLs) (Madler et al., 2022). Self-efficacy, as theorized by Albert Bandura in his work with Social Cognitive Theory (1977), is a teachers' belief in their own ability to succeed in effectively instructing their culturally and/or linguistically diverse students in this context. Self-efficacy is a critical focus due to the fact that increased confidence in one's ability in a specific area is a strong predictor for future behavior. That is, the more confident a teacher feels effectively implementing culturally responsive practices, the more likely they will implement them well in the future. Recent research has substantiated Bandura's theory demonstrating that higher levels of self-efficacy have led to improved instructional and assessment practices as well as increased engagement with families of diverse learners (Bodine, et al., 2020; Carbonneau et al., 2022). Given the importance of self-efficacy, this idea will be explored more in-depth within the subsequent review of literature.

Another complicated facet of teacher preparation in this context worth considering is that TPPs are at times lacking in coherence of faculty beliefs regarding multicultural education thus weakening any central program focus in this area (Assaf et al., 2010). To dig a bit deeper into this idea, Rowan et al. (2021) performed a more extensive review of the literature as it relates to the framing of challenges for preparing teachers for student diversity in schools. They state that there exists an explicit gap within current research regarding teacher educators and the fact that, "little attention is given to the ways that teacher educators select, access, reflect critically on, and evaluate various standpoints about diversity and select epistemic aims" (p. 149). Echoing this gap in the literature, other studies have shown discrepancies between the perceptions held by both teacher educators and school leaders as it relates to the preparation of future teachers for the challenges of the classroom, as well as a lack of faculty alignment toward teacher preparation goals (McFadden & Sheerer, 2006; Assaf et al., 2010). This has inevitably led to a collective call to action for a stronger collaborative partnership between teacher educators and school leaders in order to better prepare future teachers with culturally responsive practices.

Current data support the vital need to focus on equipping teachers with culturally responsive teaching practices. The National Center for Education Statistics (2023) reported that within United States public schools from 2012 projected to 2031, the percentage of Hispanic students, Asian students, and students who identify as two or more races will increase. However, is is projected that by 2031, the percentage of White public school students will decrease. These statistics help to demonstrate the increasing ethnic and cultural diversity across classrooms in the United States. It was also reported by the National Center for Education Statistics (2023) that the percentage of ELLs in public schools from 2011 to 2021 increased from 9.4% to 10.6% showing a parallel increase in linguistic diversity within U.S. classrooms. Notably, in the fall of 2020 it was reported

that Spanish was the most common home language spoken among English language learners representing more than three-quarters of all ELL public school students. In the vein of the ethic of critique, there is no room for our future teachers to have any lack of preparedness with culturally responsive practices in the face of an inevitable rise in cultural and linguistic diversity represented in classrooms across the nation.

Perhaps more important than the ethnic, cultural, and linguistic makeup of public school students is the substantial achievement gaps that exist between White, English-speaking students and their diverse peers. As these achievement gaps are prevalent across all subject areas, room will be spared to solely discuss the gaps that exist in mathematics and reading. It was reported in 2024 that Black students scored 34 points lower than White students on the nationwide 8th grade mathematics assessment and 23 points lower on the 8th grade reading assessment (National Center for Education Statistics, 2024). Furthermore, in the same year, Hispanic students scored 27 points lower than their White peers on the 8th grade mathematics assessment and 21 points lower on the respective reading assessment (National Center for Education Statistics, 2024). With relation to ELLs, the greatest gap exists with reports of ELLs scoring 39 points lower on the 8th grade mathematics assessment and 41 points lower on the reading assessment compared to their English-speaking peers (National Center for Education Statistics, 2024). It is difficult to argue, then, that teacher preparedness for diverse student groups is not a moral or ethical issue when the current, bleak reality indicates such staggering disparities.

Literature Review

The current base of literature related to culturally responsive pedagogy and the realities of classroom diversity consists of research studies that predominately explore pre-service or novice teacher perceptions of preparedness for teaching diverse learners and the value placed on the many teaching experiences within their programs. Conversely, very few studies have recently begun to shift the focus to teacher educators' perceptions of culturally responsive teaching and their perceived levels of teaching efficacy. The latter area of focus is significant as faculty members who teach within their respective TPPs play a vital role in developing curriculum and facilitating learning opportunities that have the potential to increase teacher candidates' preparedness for diverse classrooms. In the following sections, several studies will be reviewed which explore both pre-service and novice teacher perceptions of preparedness for teaching in diverse classrooms as well as teacher educator perceptions and beliefs regarding culturally responsive teaching.

Teacher Perceptions

There are many studies within the current literature with a focus on teacher candidates' low levels of self-efficacy for teaching culturally and linguistically diverse populations (Cho et al., 2020; Clark & Andreasen, 2020; Madler et al., 2022). More notably, there are also many recent studies that investigate the factors that have demonstrated the ability to increase teacher self-efficacy to effectively instruct diverse learners (Cho et al., 2020; Carbonneau et al., 2022; Zaier & Maina, 2022; Mahalingappa, 2023; Putman et al., 2023). All such studies point to the need for TPPs to bolster their strategies for equipping future educators with culturally responsive practices. The review of literature regarding teacher perceptions is one which will help to frame the gap that exists between teacher educator strategies for teacher preparation and their students' perceptions of this preparedness.

One significant qualitative phenomenological study conducted by Nahal (2010) aimed to explore the experiences of first-year novice secondary teachers as they related to the discrepancy between the expectations of teaching before entering the classroom and the realities of teaching after one year. Results of this study revealed that all participants indicated that their TPPs did not provide them with all the tools and approaches necessary for the reality of the classroom. The researcher suggests that teacher educators reconsider the theoretical frameworks that underpin their individual programs in order to move from theory to practice more effectively. Nahal's study is a valuable starting point for providing the most general overview of the greater problem that teachers feel unprepared for the reality of the classroom and offers broad suggestions for teacher preparation improvement.

A similar qualitative study conducted by Jakopovic and Gomez-Johnson (2021) also focused solely on novice secondary teachers but at the pre-service level instead. This study aimed to explore the experiences of pre-service teachers in a specific university STEM preparation program in order to determine which components students perceived to be most valuable. The results of this study suggested that pre-service teachers found immediate and potential value in both formal teaching opportunities and those not centered on explicit teaching alike. Most relevant to the current discussion of literature however, researchers note that results indicated that faculty members often acted as gatekeepers to diverse opportunities that pre-service teachers found offered them immediate and potential teaching value. These results are critical as they indicate the influential role that teacher educators and their respective programs have in preparing future teachers for the reality of the classroom.

Lastly, a more recent quantitative study conducted by Madler et al. (2022) consisted of a study aim most closely related to the current discussion. The purpose of this study was to explore novice teachers' perspectives of their preparedness to teach diverse learners both before teaching and after one year of teaching. This study is similar to that of Nahal's as they both focus on the differences in teacher perceptions of preparedness after one year of teaching but is much more specific as the focus is exclusively on perceptions of teaching diverse learners. The results of this study indicated that novice teachers felt least prepared to teach gifted learners, English language learners, and students with mental health needs. Researchers suggest that teacher educators have the responsibility of providing coursework and experiences to address these weaker areas of teacher preparation. These results shed light on the many growing areas of student diversity that teachers are confronted with in the classroom and the lack of preparation that needs addressed as it relates to the current discussion. Each of these studies explored pre-service and novice teachers' perspectives highlighting the substantial deficiency in teacher preparation for the reality of diverse classrooms as well as the crucial role that teacher educators play in potentially addressing this gap.

Teacher Educator and School Leader Perceptions

As previously mentioned, the majority of studies within recent literature have placed a heavier focus on teacher perceptions of preparedness for diverse classrooms whereas very few have focused on teacher educator and school leader perceptions. One relevant quantitative study conducted by McFadden and Sheerer (2006) helps to highlight the juxtaposition between teacher educator and school leader perspectives within the k-12 school system. This study aimed to explore the differences in perceptions between superintendents and teacher education faculty with regards to recent criticisms posed against TPPs. Researchers surveyed superintendents in the state of North Carolina about their perceptions of the professional knowledge base, research, structural design

and curriculum within local TPPs. The results indicated a considerable gap between superintendent and teacher educator perceptions with 88% of superintendents expressing that TPPs required significant revision as opposed to only 36% of teacher educators who often insisted that "significant" was too strong of a word. More specifically, researchers reported that superintendents felt much more strongly that TPPs needed to devote more attention to student motivation and every day, real problems within the profession.

Assaf and colleagues (2010) conducted a qualitative study with the purpose of exploring early and middle childhood teacher educators' perspectives concerning multicultural education. The results suggested that there were a wide variety of perspectives and practices which could indicate a lack of coherence within the preparation program itself. Researchers discussed the importance of clarifying a shared vision within their respective programs in order to achieve greater success teaching future educators for diverse student populations. Similarly to the findings discussed in Jakopovic and Gomez-Johnson's study (2021), Assaf and colleagues mention the pivotal gatekeeping role that teacher educators play in the preparation of pre-service teachers.

A more recent study (Siskind et al., 2022) is one that helps provide a different perspective to paint a more detailed picture of teacher educators' beliefs surrounding culturally responsive practices. The researchers of this quantitative study aimed to explore early childhood teacher educators with regards to the relationship between their self-reported levels of cultural competence and their perceived levels of teaching efficacy in this area. The results indicated that there was a positive relationship between these two variables and the authors suggest that the findings could support the notion that higher levels of teacher educator cultural competence may lead them to have a greater focus on developing these same skills within their pre-service teachers.

All in all, each of these studies broadly outline that there has been a heavier focus in the literature on investigating teacher perceptions of their experiences and preparedness gleaned from their TPPs. The research in this area has suggested that teacher candidates do not feel as prepared after confronting the reality of the culturally and linguistically diverse k-12 classroom environment. This journey through the current research in the field then inevitably leads to the central question of how ethical leadership might emphasize the moral duty of TPPs and school leaders to ensure that teachers are well-prepared to teach diverse learners.

Ethical Considerations

An ethical discussion in this context begins with the ethic of critique. To echo the beliefs of Starratt (1991), it could be argued that beginning this conversation with critique is done purposefully in order to emphasize the systemic injustices that exist. As the ethic of critique is rooted in the heart of critical theory, teacher educators and school leaders must reflect on the ways in which they might contribute, consciously or unconsciously, to perpetuating the inequitable practices that continue to endure within our school systems. Only then might the discussion have enough viability to turn to subsequent considerations of the ethic of justice or the ethic of care. Could it be possible that the lack of collaboration and differing perspectives of preparedness between teacher educators and school leaders attributes to the aforementioned achievement gaps in our increasingly diverse classrooms? Current literature certainly appears to suggest that this may be the case as any lack of collaboration and decision-making amongst teacher educators and school leaders will inevitably, eventually affect underprivileged student groups (McFadden & Sheerer, 2006; Wilson & Kelley, 2022). That is, the disconnect between teacher educators and school leaders could contribute to future teachers' adoption of deficit mindsets in student learning and

achievement due to a lack of preparation and low levels of self-efficacy with culturally responsive practices.

As a central criticism of the ethic of critique is often that there is an overemphasis on criticism without any offering of solutions, the solution to be explored in this context is a critical pedagogy in the spirit of Paulo Freire. In his words, "There's no such thing as a neutral education. Education either functions as an instrument to bring about conformity or freedom" (p. 70, 1970). Thus, culturally responsive pedagogy is an example of critical pedagogy offered as a possible solution with its inherent intent to leverage education as social justice, offering individual agency and liberation. When considering the achievement gaps prevalent within our classrooms, we should be driven to engage in reflective morality, examining and criticizing the "traditional" to reflect on what principles ought to direct our TPPs, given the results involve the rights and interests of students.

Callahan (1988) might argue in this case that educational researchers, stakeholders, and leaders have an obligation to assess the ethical appropriateness of how we are choosing to train our future teachers. When considering the current data, literature, and political landscape surrounded education in this nation, an argument could perhaps be made to advocate for culturally responsive practices in teacher education on both the teleological and deontological ends of the ethical justice spectrum. Equipping teachers with these practices could surely produce the greatest good for the greatest number of students but could also be regarded as the right thing to do based on a sense of duty to bring justice for underserved students. It is precisely within the ethic of justice that this conversation then should continue to develop as it may offer a system-centered solution for providing students with equal respect, increasing the greater good of society, and developing a stronger public school system.

We might first consider Howe's (1993) interpretation of three justice theories (utilitarian, libertarian, and liberal egalitarian), as they may help offer a more detailed picture of offering equal educational opportunity for every student from both sides of the justice spectrum. Starting with a utilitarian interpretation, the drive would be to maximize the overall total benefit for society. If we were to consider that equipping future teachers with culturally responsive practices might improve their levels of self-efficacy, then this would in turn lead to better instructional outcomes for their students, and student achievement would improve. Thus, a utilitarian perspective would maximize the total educational benefit in society, especially for those historically underserved. It is possible, then, to take the stance that equipping teachers with culturally responsive practices would lead to better outcomes for the greatest number of students overall, thus making it morally crucial to do so.

However, a Rawlsian perspective on justice (1971) would make the counterargument that utilitarianism depends on how one defines what the greatest good is for the greatest number. In the same context, it is possible to argue that investing in equipping teachers with culturally responsive practices is too costly, complicated, and only directly benefits a smaller subset of the student population. From this point of view, a focus on culturally responsive pedagogy would not benefit the majority which is precisely Rawls' critique of utilitarianism in this case. That is, utilitarianism has the potential to deem individual rights as negotiable in the name of the greatest good for the majority. It could be, perhaps, that the current state of the nation's education system has built itself on utilitarian soil, maintaining the status quo due to the fact that it works fine enough for the White, English-speaking majority. But is this sufficient enough?

If we move toward a more non-consequentialist perspective, Howe's libertarian lens is driven by setting individual liberty as the overriding value to be maximized. An interesting angle

can be taken in light of libertarian thinking if we consider that teacher educators should each have autonomy in their instructional choices without any infringement of institutional mandates. Given this view, it seems that the notion of requiring faculty to impose culturally responsive teaching practices within their courses violates their individual freedom of choice when designing their courses. However, the previously mentioned literature highlights the lack of program coherence that exists in many TPPs, which in turn leads to teachers' low levels of self-efficacy and consequently inequitable education for our students (Assaf et al., 2010; Cho et al, 2020; Clark & Andreasen, 2020; Madler et al., 2022). Said another way, perhaps too much decentralization and unregulated choice in preparation programs involuntarily perpetuates the systemic injustices harming culturally and linguistically diverse students. The tension present at this point should be noted, where one may ask whether more uniform and standardized teacher preparation would be able to achieve preparing candidates for such diverse classroom envrionments. However, there is arguably an important balance between alignment with shared ethical commitments while still leaving room for pedagogical flexibility. In this sense, teacher preparation programs need coherence around shared commitments such as culturally responsive pedagogy and equity but the freedom to enact these commitments in varied ways which align with unique contexts and faculty expertise.

A response to this argument then could be the liberal egalitarian perspective. Justice in this view is driven similarly toward maximizing individual liberty but while intervening in social activities to ensure equality. Liberal egalitarianism arguably aligns most directly with the central ethical claim in this paper. Since culturally and linguistically diverse learners often begin their educational journeys with structural disadvantages, such as inadequately prepared teachers, a justice approach would attempt to even out the playing field. Equipping teachers with culturally responsive practices emphasizes supporting the "minority" of the student population, but in the end serves and benefits all. Moreover, echoing the sentiments of recent literature, cultivating collaborative conversations on this topic among school leaders and teacher educators allows schools to move further away from neutrality and closer to becoming agents of equity. Returning to Rawls' earlier critique of utilitarianism, the full circle is made here with his idea of justice as fairness, which aligns with the liberal egalitarian perspective.

The response to the objection of utilitarianism includes two principles. The first being equal basic liberties which would propose that every student has the same fundamental rights that cannot be traded for any sense of societal efficiency. That is, the linguistic and cultural minority hold the same value and deserve the same respect for their right to an education as the majority. Secondly, the difference principle and fair equality of opportunity supports the moral obligation to equip future teachers with culturally responsive practices since Rawls argues that inequalities are only permissible if they benefit the least advantaged so that all have the same opportunities in the end.

Lastly, Gilligan's interpretation of the ethic of care (1987) offers a slight shift in perspective that helps us consider a relational approach to morality in this context. The importance of considering this perspective lies in the attention that should be given to everyday, lived relationships (between teacher educators, school leaders, future teachers and students) as opposed to these moral agents acting under abstract principles of justice. To further elucidate this idea, Gilligan would argue that our moral failure does not stem from inequality alone, as was discussed previously, but from our detachment. That is, if we neglect to see the needs that our culturally and linguistically diverse students have and then neglect to respond to these needs with, for example, equipping teachers with culturally responsive practices, then we have morally failed. As a result, these ethical considerations have hopefully shed some light on the need to critique the current educational system, to take action in the name of justice, and to open our hearts to the very real

relationships that exist between all of us involved in continually improving education in this nation.

Recommendations and Conclusion

A stance has now been provided which outlines the ethical obligation of teacher educators and school leaders to engage in more collaborative decision-making processes to prepare future teachers with culturally responsive practices as a way of challenging inequity. The next question then naturally poses itself as to how this obligation might be carried out. The faculty and staff members within TPPs possess a wide range of knowledge, research experiences and practical understanding to equip our future teachers with methods for teaching diverse learners. One of the first and most important steps in forging a path to preparedness is creating a space for meaningful dialogue. Strike and colleagues (2005) support this notion arguing that free and open expression allow for a marketplace of ideas which leads to the advancement of knowledge and competent decision-making. In this context specifically, this open dialogue must not be solely constrained to those in colleges of education but instead must be an interdisciplinary conversation to tap into the knowledge of a variety of different areas of expertise. Said another way, we should create a dialogical space that welcomes faculty members from other disciplines within higher education as well as school leaders who have the experience working with teacher graduates each and every day. Only then will we be able to launch a fruitful and meaningful conversation with our future teachers in mind.

This open dialogue should include the development of an overarching vision for future teachers. We must all come together and consider what every student needs in the classroom, and then what kind of educator we want to cultivate and equip to respond to these student needs. These considerations will begin to allow us to dismantle systemic injustices that are continually perpetuated within our education system. The following might be offered as an exemplary starting point to the creation of this vision as based on relevant research with ELLs specifically:

> (a) a strong background and experiences with second language learning principles and practices, (b) knowledge about the differences between conversational language proficiency and academic language proficiency, (c) the importance of access to comprehensible input and opportunities for producing output for meaningful purposes, (d) the role of social interaction for the development of conversational and academic English, (e) the positive impact of strong native language skills on ELLs' achievement, (f) the necessity of a welcoming classroom environment for ELLs, and (g) the need for explicit attention to linguistic form and function. (de Oliveira, 2011)

Moreover, as previously mentioned, there is a wide variety of recent studies which point to a number of beneficial strategies for increasing teachers' self-efficacy for teaching culturally and linguistically diverse learners. For example, direct exposure with culturally and linguistically diverse student populations through field experiences has been shown to significantly influence self-efficacy beliefs in a positive way (Cho et al., 2020; Putman et al, 2023). As a result, TPPs should ensure that their students are given as many opportunities as possible to be immersed in the field in order to gain direct experiences with diverse student populations. Furthermore, other recent studies have indicated that targeted coursework within teacher training is both needed to assist our

future educators in improving differentiation practices and enhancing confidence to support multilingual learners (Zaier & Maina, 2022; Mahalingappa, 2023). Thus, it would be most advantageous for teacher educators and school leaders to implement specific, focused instruction and professional development in this context to support our teachers. Following the example above, specifically for equipping teachers to effectively support their *linguistically* diverse students, a few suggestions are offered which could be added into current TPP courses or professional development opportunities:

- An overview of how the Department of Education identifies and evaluates our English language learners as well as a brief overview of their prevalence in schools across the U.S. and their unique needs (example: introduction to education course)
- An introduction to culturally responsive pedagogy (CRP) and the importance of recognizing teacher bias and understanding language ideologies (example: schools, society, and cultural diversity course)
- The role of English as a Second Language Teachers (ESL) and the responsibility of all content area teachers to be able to understand and provide for the specific needs of ELLs aside from ESL support (example: teaching students with exceptionalities course)
- Specific models and supports for teaching English language learners in the mainstream classroom including, for example, the Sheltered Instruction Observation Protocol (SIOP) Model, translanguaging practices and comprehensible input demonstrations (example: instruction and differentiation course)
- The principles of second language acquisition, additive vs. subtractive bilingualism and common misconceptions about second language learning and multilingualism (example: disciplinary literacy course)
- Where to access English language learner fluency levels and current status within a school district as well as how this information might be used to create equitable assessments and evaluations for these students (example: assessment and evaluation course)

By no means is this an exhaustive list of focused instructional opportunities, but rather a starting point. With an interdisciplinary approach to open dialogue regarding teacher improvement with culturally responsive practices, there will inevitably be a much more extensive list of prospective supports not just for ELLs, but for each of the unique needs of our diverse student population. It should be acknowledged that although some of these recommendations could be integrated into existing coursework and field experiences, others require a higher cost and investment. Large-scale institutional changes are highly difficult, but as argued in this paper, laden with considerable ethical obligations.

In conclusion, this paper is only the beginning of many conversations that must be had over the years to come. As it has been outlined, the current national data show an increasingly diverse student population in our future school system but a great disparity in student achievement between the now ironically White minority and their culturally and linguistically diverse peers. Current literature supports the notion that teacher educators often lack alignment in their beliefs and approaches regarding teacher preparation for diversity and teachers consistently report low levels of self-efficacy for the teaching of diverse student populations (Aalde & Staal Jenset, 2024; Cho et al., 2020; Clark & Andreasen, 2020; Madler et al., 2022; Sandoval et al., 2021). However, recent

literature also supports the idea that offering targeted teacher training and professional development for culturally responsive teaching practices has been shown to improve teachers' self-efficacy (Cho et al., 2020; Carbonneau et al., 2022; Zaier & Maina, 2022; Mahalingappa, 2023; Putman et al., 2023). From an ethical standpoint, it could be argued that there is great importance in making space to engage in the critique of this reality and engage in discussion about the perpetuated systemic injustices in our education practices. It could also be argued that our teacher educators, school leaders, and teachers are morally obligated to take a stand for justice to even out the playing field for our underserved students, no matter the cost, and remind ourselves of the real relationships that exist with our students. This paper is a call to action for all of us involved in education to step up to the plate and engage in what we are morally called to do.

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Melody Armour is a doctoral student in the Leadership Studies program at Bowling Green State University currently involved in educational research. Her professional background includes K-12 and higher education teaching and coaching, as well as advocacy work within the criminal justice system. Her research focuses on teacher preparation and the role of leadership in navigating educational systems and change.

Creating a Sense of Belonging through an Extended Service-Learning Experience for Pre-Service STEM Educators

Michael W. Dentzau, Kimberly Shaw, & Basil Conway IV, Columbus State University
Nicole Martin & Lisa Garbrecht, University of Texas at Austin

Abstract

This research focused on unpacking the perceptions of preservice and early career science and mathematics teachers of a service-learning experience embedded within an undergraduate teacher preparation program. Participants completed 30 hours in a high-need school setting for multiple semesters, designed to provide an opportunity to deeply understand the context of these settings and the populations they serve. In these placements, participants were encouraged to go beyond observation and instruction and attend faculty meetings, parent-teacher conferences, and student extracurricular activities. Supplementing this service, seminars were designed to bring together participants, graduates, faculty, and mentor teachers to consider issues relevant to teaching. Data analyzed included Likert-scale questions and open-ended prompts from the external evaluators focusing on the value of interacting with the students, faculty, administration, and high-need settings. The project team also used semi-structured interviews with ten Noyce graduates focusing on the service-learning component. Review of Likert-scale questions in the annual surveys indicated that all the participants found the service-learning component to be valuable or extremely valuable for them with respect to their future careers. The open-ended prompts and the interviews were open coded inductively, yielding four emergent themes—gaining perspectives, relationships, confidence, and transformational experiences, and scholarship funding. Evidence supporting these themes and the implications of the service-learning experience for the participants is discussed.

Keywords: *service-learning, STEM teacher preparation, high-need schools, possible-selves theory, community engagement, teacher retention*

Teachers continue to be cited as the single most important factor contributing to student success (Opper, 2019; Shen et al., 2020). Close relationships between teachers and students are cumulative over time, and support and strengthen both academic achievement and socio-emotional development (Ansari et al, 2020). Therefore, as educators, it is concerning that conservative estimates have suggested 36,000 nationwide vacant teaching positions and an additional 163,000 positions filled by underqualified teachers (Nguyen et al., 2022). Contrast this with data from the Learning Policy Institute that placed the number of unfilled teaching positions and those filled by uncertified teachers at 406,964 (Tan et al., 2024).

Suggested causes for this shortfall are varied. The National Council on Teacher Quality cited a drop in enrollment and completion in preservice teacher preparation programs of approximately 30% in the period between the 2010-11 and 2020-21 academic years (Saenz-Armstrong, 2023), perhaps suggesting problems with the supply side of the equation. Ingersoll (2023) suggested the issue was not a shortage of teachers entering the field as much as the large numbers leaving well before retirement. This departure has been disproportionally represented by early career (Ingersoll & Smith, 2003), special education and STEM teachers (Dee & Goldhaber, 2017; Nguyen et al., 2019), and those teachers in schools serving low-income students (Carver-Thomas & Darling-Hammond, 2019; Dee & Goldhaber, 2017; Ingersoll, 2001).

It has been recognized there is a need for educators, especially early career teachers, to develop a sense of belonging to the school, students and culture. Dewhurst et al. (2020, p. 17), identified this sense of belonging as being "crucial to preservice teachers' cognition" and "well-being" in early field placements. This aligns with Deci and Ryan (2000) who identified "relatedness" as one of the three innate, essential psychological needs of humans that help us achieve "effectiveness, connectedness, and coherence" (p. 229).

Liou et al. (2010) suggested preservice teachers (PSTs) should be provided with positive experiences in challenging contexts to help develop a level of comfort in those settings. Similarly, in a study exploring the perceptions of seasoned teachers in an urban setting, Diffily and Perkins (2002, p. 57) stressed the need for early experiences that helped PSTs "understand intergroup and intragroup cultural differences and the culture of poverty." Therefore, creating a sense of belonging in these high-need contexts is essential for PSTs (Pendergast et al., 2020), and may support both the initial recruitment and retention in these challenging settings.

This research examined the following question: What are preservice and early career STEM teachers' perceptions of the value of a service-learning experience (SLE) embedded in their preservice teacher education program?

Service-Learning

Service-learning has a long history in higher education (e.g. Bringle et al., 2013). Finley (2011, p. 2) labeled it "an umbrella term," used to represent a variety of programs and activities with varying pedagogical emphasis. At its core, service-learning is experiential in nature and situated within a social framework (Conway et al., 2009). Its roots have stemmed from the philosophical writings of John Dewey (Giles & Eyler, 1994), who first emphasized the fundamental link between real-world experience and learning (Dewey, 1938).

Most scholars and practitioners have aligned service-learning within the paradigms of social justice and democratic principles (e.g. Sheffield, 2011). Sheffield, who used the term community service-learning (CSL), differentiated between weak and strong CSL. While both are based in democratic pedagogy, the strong version "has the radical potential to reconstruct individuals, communities, and institutional structures that are currently oppressive" (Sheffield, 2011, p. 125).

Although there are variations of definitions of service learning, Bringle and Clayton (2012, p. 105) offered the following definition that is broadly applied:

> service learning involves the integration of academic material, relevant community-based service activities, and critical reflection in a reciprocal partnership that engages students, faculty/staff, and community members to achieve academic, civic, and personal learning objectives as well as to advance public purposes.

This study most closely aligns with the related perspective offered by Tatebe (2013) who considered service-learning "as a means of bridging the socioeconomic divide between teachers and students through the provision of experience in disadvantages settings as part of PTE [preservice teacher education] programs" (p. 241).

Theoretical Framework

While universally agreed that service-learning has its conceptual basis in the philosophy of Dewey, Warchal and Ruiz (2004) have suggested that it lacks a comprehensive theoretical framework able to capture the complexity of the experience. With this in mind, the researchers adopted the dual lenses of belongingness and possible-selves theory to understand the students' perceptions of the SLE. There is ample evidence to support the "belongingness hypothesis" that represents the human need to develop interpersonal relationships (Baumeister & Leary, 1995). Within educational settings, the opportunity to "build a sense of belonging is a highly significant aspect of student teachers' identity development" and "is closely linked to students' sense of themselves as real teachers" (Johnston & Dewhurst, 2021, p 8).

Aligning with this construct, possible-selves theory considers an "individuals' ideas of what they might become, what they would like to become, and what they are afraid of becoming," and links together "cognition and motivation" (Markus & Nurius, 1986, p. 954). This image of oneself in the future may be positive or negative and arises from the individual's goal, hopes and fears, all situated in a specific context. Possible-selves theory has been used to study preservice science teachers' views of themselves as future teachers (Hong & Greene, 2011), and to frame identity development of new teachers (Erdem, 2020; Hamman et al., 2010; Pellikka, et al., 2022).

Setting

The setting for this research was a preservice teacher education program (PTEP) at a comprehensive university in the southeastern U.S. The participants were preservice teachers and recent graduates that participated in a service-learning experience that was part of the implementation of a Robert Noyce (Noyce) Teaching Scholarship Grant (Noyce Award #1852688). Noyce is administered by the National Science Foundation and has a primary goal of increasing the STEM teacher workforce in high-need settings (Feng et al., 2021). Preservice teachers were classified as interns or scholars. Interns were STEM undergraduates that were considering teaching as a career, while scholars were STEM undergraduates that had already committed to receiving secondary teaching certification. Over the span of this study there were 26 scholars and 14 interns; only five of the interns transitioned to scholars. Also participating were 10 in-service teachers that were former scholars (graduates) teaching in high-need settings ranging between 6-36 months. Interns, scholars and graduates are all classified as study participants and referred to as PSTs.

Noyce Service-Learning

PSTs were required to complete 30 hours of service in a high-need classroom related to their content area each semester of financial support. In addition to observing classroom interactions, participants were encouraged to immerse themselves into the culture of the school, attend faculty meetings, observe parent/teacher conferences, provide individual tutoring, attend school-related extracurricular activities, and discuss classroom issues with their mentor teacher. The goal

was to broaden the typical experience of placements to engender a more comprehensive understanding of the context of high-need settings.

Twice a semester, PSTs were asked to participate in evening seminars focused on reflection. These seminars brought together scholars, interns, mentor teachers, university faculty and clinical faculty, and occasional external speakers to develop a community where issues surrounding secondary STEM education could be problematized and discussed. Each seminar began with casual conversations that related to experiences from the field to develop rapport and opportunities to foster a deeper understanding of PST involvement in the school and community. This was followed by special presenters from the educational community with expertise in particular areas such as co-teaching, co-planning, equity, social justice, asset-based mindsets, and other areas of research known to improve and sustain schools labeled as at-risk. After these focused sessions, participants engaged in a modified dilemma protocol (McDonald et al., 2015), where one PST suggested a dilemma from their experiences and the other attendees were positioned as informants and discussants offering valuable opportunities to think critically as both problem providers and solvers.

Methodology

The research utilized a single-case methodology (Yin, 2017), that was bound within the PTEP within years 1-4 of the Noyce grant. Data came from surveys completed annually at the end of academic years 1-4 of the grant by the external evaluators of interns, scholars and recent Noyce graduates, and semi-structured interviews of graduates completed in year 4 by the principal author.

Data

The annual survey contained 4-point modified Likert-type scale questions (Likert, 1932) and several open-ended response questions. Likert-type questions used a value scale or an agree scale. Those questions pertinent to the research question are provided in Tables 1 and 2, respectively. The 10 graduates participated in individual interviews after the completion of year 4 using the semi-structured protocol outlined in Table 3. Of that total, nine were still teaching and one had left to pursue an alternative career.

Table 1: *Likert Questions from Annual Survey used in the Study & the Scale Category used for Each*

Question	
1.	Value of being able to interact with school administrators and teachers in high-need schools
2.	Value of the field experience/service-learning experience
3.	Program provided opportunities to gain experience serving high-need students
4.	Program has increased my motivation to teach high-need students
5.	Program has increased my interest in pursuing teaching
6.	Program has expanded my skills to teach high-need students

Table 2: *Open-Ended Questions from Annual Survey used in the Study*

1.	Please describe ways in which the internship/scholarship Program has impacted your experience this year.
2.	What aspect of the internship/scholarship Program has been most useful to you this year? Why?
3.	What aspect of the internship/scholarship Program has been most challenging to you or other interns this year?

Table 3: *Semi-Structured Interview Questions for Graduates*

1.	How many semesters/years have you been teaching in a high-need school or district?
2.	How important was the scholarship funding to your completion of your degree and certification? Can you provide specifics?
3.	If you had not received the Noyce scholarship, would your trajectory have changed at all?
4.	How did the experience gained through the Noyce service experience impact your ability to be successful in a high-need school or district?
5.	How did the experience gained through the Noyce seminars or collegial support impact your ability to be successful in a high-need school or district.?
6.	What specific skills or knowledge do you think you gained through the service-learning experience?
7.	What specific skills or knowledge to you think you gained from overall participation in the Noyce Program?
8.	What specific skills or knowledge to you think you gained from overall participation in the Noyce Program?
9.	Is there anything you wish you had received in training, professional development, course work, etc. to better prepare you for teaching in high-need settings?

Data Analysis

The Likert-type scale questions from the annual survey were converted to numerical values (4 = strongly agree/very valuable; 3 = agree/valuable; 2 = disagree/somewhat valuable; 1 = strongly disagree/not valuable) and analyzed with IBM SPSS Statistics (Version 29). Responses to open-ended questions from the surveys and from the semi-structured interviews were transcribed verbatim. Open coding of the data was completed by the principal author, and analysis continued iteratively until codes were stable and no new codes developed. These codes, along with a code book and a random sample of the transcripts, were provided to two coauthors. Reviewers independently reviewed and coded the data to assess reproducibility of the codes (Patton, 2002). Discrepancies were negotiated and the codes were adjusted as necessary. A modified thematic analysis procedure was employed to coalesce codes into themes representing the perspectives of the participants (Braun & Clark, 2006; Creswell, 2012).

Results

The response rate for scholars and interns across years 1-4 on the annual surveys was 95% and 83%, respectively. Since most participants received more than one academic year of support, the total number of survey responses exceeded the total number of unique participants. Ten of the 16 scholars that had graduated and began teaching responded to requests to participate.

Quantitative Data

The six questions asked of both interns and scholars (Table 1) were determined to have good internal consistency with a Cronbach's alpha of 0.915. Most PSTs considered the ability to interact with administrators and teachers in high-need schools and the SLE as very valuable or valuable. They also agreed or strongly agreed that the SLE provided opportunities to gain experience serving high-need students, increase their interest in pursuing teaching, and increase their motivation, interest and skills to teach high-need students. Descriptive statistics are provided in Table 4.

Table 4: *Descriptive Statistics for Likert Scale Questions*

Question	N	Minimum	Maximum	Mean	Std. Deviation
1.	60	2	4	3.85	.404
2.	60	2	4	3.82	.431
3.	60	3	4	3.92	.279
4.	60	2	4	3.75	.508
5.	61	2	4	3.80	.477
6.	61	2	4	3.80	.477

Qualitative Data

All transcript and short answer data were combined for the qualitative review. A total of 22 open codes were derived from the data and coalesced into four dominant themes representative of PSTs and graduates—Gaining Perspectives, Relationships, Confidence, and Transformational Experiences.

Gaining Perspectives

This theme represented new or revised understandings of teaching and of the culture within high-need settings. A graduate offered that the experience "...highlighted the needs of all students, and this has helped refine what I need to focus on as a teacher." Another felt the experience allowed them to be "able to interact with high-need students and learn about their interests and the ways in which they like to learn."

Some participants realized that high-need settings were similar to other settings they had experienced throughout their preservice journey. "The kids, they really aren't that much different." However, others developed a more nuanced understanding of the students and acknowledged the different challenges that high-need populations may face. One graduate offered:

> They've got stuff going on at home, they've got jobs that they work after school, they help take care of their younger siblings after school, and everything. So, it kind of helped me to realize that sometimes I need to have a little bit more grace with them, you know, because they do have other stuff going on. And also, be prepared to encourage them to care about school more, whereas I feel like if I hadn't had the experience already, that I might have just gone into and being like, what the heck, why did these kids not seem to care? But it's because I knew, you know, like, they got a lot going on. There's outside factors here that I don't know about.

Another dominant thread within the theme was experience witnessing pedagogical strategies in action. A graduate offered:

> I have always written very detailed lesson plans and tried to follow them flawlessly, but my experiences in the classroom at my mentor school have helped me develop my ability to think on-the-spot and respond to students in a way that helps them think without just handing them the answer.

One scholar gained insight on communication strategies. “I feel like I gained a little more knowledge about how high school students in my mentor school learn and communicate.” A graduate felt that much of their ability to implement effective classroom management “...came from Noyce relationships.”

Participants also gained insight in the Connections Seminars. One reflected on a seminar and the dilemma protocol.

> ...I really enjoyed, like connecting with the other scholars, and even with the teachers. I think it was just cool to see everyone's different perspectives and everyone's different placement of the schools...the dilemma protocol, I think that really helped just opened my eyes to what I could be facing in my job and given me, I guess, a good head start of how to navigate certain situations.

The Connection Seminars also fostered dialogue that was valued by the participants. When discussing issues raised, particularly through the dilemma protocol, one PST offered,

> Really, there’s not one answer for any of those things. There’s multiple answers and it’s going to depend on what works for the teacher and the student, [and the] ...seminars were so helpful in just breaking that barrier of knowing how to professionally talk about things.

Another graduate offered: “The readings this semester, the presentations at the Connections Seminars, and the experiences I had last semester and in the previous year have helped me stay conscious of the effect of my words and actions on students.” The community that developed as a product of participation in the seminars was also relevant: ...being a part of those Noyce seminars really helps kind of structure what an educator community looked like...it helped me, you know, understand perspectives and also helped me learn how to, you know, discuss challenges I'm facing...

Relationships

This theme focused on the relationships that developed with the mentor teachers, the students and other scholars. Some of the experiences reported by the mentees reflected the value of seeing how their mentor teacher implemented class logistics. "The most useful part of this internship is learning the 'tools of the trade' from my mentor teacher." Another commented on the value of first-hand knowledge of some of the profession's contextual aspects. "My mentor teachers…allows me to experience things I would never be able to experience as a student. I get to see behind the scenes of what teaching at high-need schools is all about because of her." A similar perspective was offered by another scholar, "It allowed me the opportunity to connect with my mentor teacher and discuss issues I didn't even know existed." A graduate offered, "My mentor allows me to experience everything that I can, and she strives to help me better understand the students."

Several scholars and graduates appreciated interaction beyond the classroom. "I got to participate in recreational activities like setting up for a Halloween dance and going to events. Being able to experience the classroom and school activities made me feel even more excited to become a teacher." Others felt they made connections with the students. "The relationships made with my students are valuable connections that have helped to guide and encourage me."

In some situations, the insight gained by the candidate was more specific. "Miss Conner (pseudonym) taught me how to how to handle challenging situations...I think she handled tough situations with students very well and I took that to heart, and that I think of her whenever I handle a tough situation with a student." Another graduate offered, "My first mentor had a really good ability to get the kids communicating with each other, and that's something that is carried over into my work significantly." One scholar offered, "I am learning how the students think and talk the more I speak with them. On the other hand, I am learning how to be more professional when I speak to administrators." One graduate adopted their mentor's style of greeting students:

> I stand in the hall in between classes every time and I greet all of my students as they come the whole year, even the last week of school, as they're coming in, I'm like, hey, JoJo (pseudonym), hey...every single person as they come in.

In a minority of cases, the fit between the scholar or intern and the mentor teacher was misaligned. One scholar offered that it was difficult working with their mentor because they were "...kind of burnt out..." and lacked "commitment." Another felt some disconnect because the mentor did not adopt the student-centered instructional practices modeled in the PTEP program. "That wasn't something that she would do."

Confidence

The theme of Confidence, that was evidenced by a number of participants, describes ways the extended service experience supported their sense of self.

> The program has significantly impacted my view of teaching in high-need schools. Before I would have been worried about handling such a situation, but now I feel I have the tools (and the support) of a broad range of teachers, faculty, and fellow education students to help me.

Another scholar offered, "This scholarship changed my life. I had little to no self-confidence. …I've gained knowledge and skills that I feel will be very helpful in my years to come as a teacher. I am excited for the future." A graduate reflected on the confidence gained in comparison to some other beginning teachers in their school,

> I just think that the experience in total has definitely made me more confident and just a little more ahead of some of the first-year teachers that I've met before and all those teachers that have been in those alternate programs.

In some cases, confidence was reinforced by the mentee/mentor relationship continuing after graduation while in their full-time position.

> She thought about me a few times this year...and she actually messaged me and said, hey, remember that day that you did the lab on genetics with my kids? Can I have that information from you? So, I think we mutually learned from one another during that experience, but that definitely was a huge confidence booster for me.

Transformational Experiences

This theme represents core shifts in scholar and graduate thinking related to the service-learning experience. One intern expressed how the experience changed their perspective: "It opened my idea of teaching. It's no longer [just] helping these students academically, but emotionally as well. Providing students with a 'safe place' in the classroom is something that is now at the top of my list." Several scholars commented on the impact participation in service-learning had on their educational path.

> I was reconsidering my degree path...but being with the students reignited my passion to teach…Being part of the Noyce Program has made a huge difference in the trajectory of my life. Being in the schools and learning with my mentor was a major motivator that helped to propel me through the difficulty of the math portion of my degree.

Another offered, "This program has opened [my] eyes to schemas that I had previously about high-needs students…Without the Noyce Program I most likely would have never considered teach at a high-needs school."

The holistic nature of the experience and the extended interaction with mentor teachers was summed up by one scholar: "I feel more aware of a teacher's full role outside of just lesson planning and executing the lesson." A graduate offered, "I learned that students in high-need schools deserve the time and attention that we give any other student. Their environment may make it difficult at first, but consistency and intentionally breaking the cultural barriers allows teachers to truly get to know their students." Addressing the value of the experience one scholar offered "If it were not for the scholarship, I would not be a teacher. This has opened doors for me that I could have never imagined.," and other expressed, "This program opened my eyes to the need of good, caring, intentional teachers in high-need schools."

In at least one case a graduate spoke of increased cultural relevance:

> This program has been extremely valuable to me, especially in ways of racial awareness. Many of the readings and the overall experience of interning at a predominately African American school has opened my eyes to biases towards people of color and helped me develop skills to combat them in my future endeavors to thus help create a more inclusive environment.

Discussion

While the SLE in this study could not be labeled as strong community service-learning, it did achieve what Sheffield (2011) termed reciprocity, where the provider of the service, in this case the preservice teacher candidates, also received a service. The data coalesced around the participants' sense that they belonged to and were part of the communities they served in the experience and will continue to serve in their careers. Overwhelmingly, the PSTs and recent graduates found substantial value in the embedded SLE associated with the Noyce grant. This was not only supported in the annual evaluation Likert-type scale questions but was also demonstrated in the exploration of the four major themes that arose from open-ended questions on the annual surveys and the interviews with recent graduates. Of the ten graduates participating in the interview, nine were still teaching in high need settings.

A sense of belonging is a basic human, physiological need, next in priority after water, food and shelter (Maslow, 1954) and is therefore at the core of human existence. Baumeister and Leary (1995, p. 497) defined belongingness as "the need for frequent, nonaversive interactions within an ongoing relational bond." Allen et al. (2021, p. 87) defined belonging as a product of the "competencies, opportunities, motivations, and perceptions" of an individual, all interacting within a cultural context over time. Central to this concept was feeling that one was part of a whole or of a system (Hagerty et al., 1992).

The research on K-12 student belongingness and the positive correlation to better learning outcomes, attitude and overall well-being has been considerable (e.g. Osterman, 2023), yet the application of this framework to better understand preservice and early career teachers has not been as robust. Balgopal et al. (2022) concluded that a feeling of belonging can develop when early career teachers feel a connection and support from professional organizations and their PTEPs. Research finds that PSTs' sense of belonging to their teacher education program was positively related to their increased self-efficacy, and that it was important for PSTs to be afforded the opportunity to build network connections and to be provided with opportunities to interact in meaningful ways (Bjorklund et al., 2020). Johnston and Dewhurst (2021) concluded that the ability to foster interpersonal relationships was one essential theme in the promotion of a sense of belonging with Scotland's equivalent of student teaching. Bjorklund (2023) found novice teachers struggled to feel a sense of belonging to their context.

Belonging has also been an important component to identity development as PSTs see themselves joining a group of practicing educators (Wenger, 1988). This enculturation into a community was initially spawned by a sense of belonging and then transitioned into a positive possible self, where the participants saw themselves as existing and thriving within the setting. This was evidenced clearly by one participant who remarked "I had never been to a high-needs school before, but after my experience at my mentor school I have fallen in love with the students and faculty." Another participant's transformative experience was seen in their words "I have gained a growth mindset and believe I can be good at anything now." Comments such as these demonstrated the PSTs were developing their own identity as a teacher in high need settings and gaining

confidence in that role. Possible selves "provides a way of conceptualizing the process of change" as they move from students to teachers (Hamman et al., 2010, p. 1358).

Possible selves, however, are dynamic and respond to the changing situational environment (Markus & Wurf, 1987), and these data only follow preservice educators and in-service teachers in their first three years teaching. In a meta-analysis of teacher attrition and retention, Nguyen et al. (2019) discussed significant correlates of attrition to level of experience, with teachers having less than three years of experience having a 54% increase in their odds of attrition when compared to those with more experience. Therefore, it remains critical to provide experiences for candidates in their preservice journey that help them navigate those early years. Those experiences aid students in developing a sense of belonging, via the themes documented herein.

Taken together, these findings provide a framework for understanding the perceptions of the value of the SLE to the PSTs and graduates, that helped to engender a sense of belonging and create a positive teacher image of themselves in the future. The themes emerging from the data align with the four components of belonging (competencies, opportunities, motivations and perceptions of an individual), interacting with the cultural context over time (Allen et al.,2021). Central to the SLE was providing an extended experience for PSTs to allow for the opportunity to challenge pre-existing perceptions of the students and the setting. Acknowledging "kids are kids, no matter where you go," while also understanding that there are "outside factors here that I don't know about" was a huge perceptional shift for PSTs. While the amount of time participating in the SLE varied individually, it was in most cases prolonged, allowing for their conceptual understanding of context to mature. The themes also showcased a sense of increased competence resulting from increased confidence in their ability to perform and even thrive in settings with marginalized populations, supported in part by the relationships. "...I made relationships with teachers...and like when I still talk to them, whenever I have questions about stuff, if nobody like in my group at school can answer them, you know, I have their phone numbers....".

While evidence has suggested that early field experience in general was related to increased preservice teacher self-efficacy (Li & Zhang, 2000), the authors believe the current model with a direct and extended focus on the context of the school settings elevates efficacy to higher levels, allowing the emergence of a sense of belonging and a vision of themselves as educators in high-need settings. This model differs from other placement models where students are preoccupied with delivering carefully crafted student-centered lessons designed to address specific course learning objectives. One scholar offered, "I will say that I was more prepared…because of the semesters of the 30 hours, especially when I went into student teaching."

Sleeter (2008 p. 1947) recommended that PTEPs develop avenues to counterbalance the neoliberal agenda rooted in high-stakes accountability and the shift "toward preparing teachers as technicians." Connecting preservice candidates with marginalized and underserved populations can work to mitigate the dominant agenda and address what Milner (2013) identified as the de-professionalization of teaching. Coffey (2010, p. 335) supported Sleeters' assertion of the value of a service-learning experience:

> [S]ervice-learning offers an exceptional opportunity to engage pre-service educators in diverse communities in order to contextualize their classroom experiences and reflect on the stereotypes and assumptions they bring to the classroom, thus better preparing them to enter the diverse classrooms of the 21st Century.

Providing students with the opportunity to immerse themselves in the school context and allow them to attend to the culture and the community, differs from observing in-service teachers and preparing lessons to demonstrate to university faculty that they have the appropriate pedagogical skills. Service-learning in conjunction with a professional learning community may be one strategy to help foster a sense of belonging in preservice educators, who are often unsure of their abilities to teach and address the needs of all students. This can lead to the development of a sense of self in these settings, envisioning themselves as future teachers able to meet their students where they are.

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Dr. Michael W. Dentzau is a Professor of Science Education and Executive Director of Oxbow Meadows Environmental Learning Center at Columbus State University. His work focuses on science education, environmental education, STEM learning, and informal science experiences. Dr. Dentzau has extensive experience in higher education and environmental science and has published research related to environmental education, inquiry-based science teaching, and student learning in both formal and informal settings. He is actively involved in community outreach, sustainability initiatives, and science education advocacy.

Dr. Basil Conway previously spent 10 years teaching in public middle and high schools before he became a teacher educator in 2015. He has published works related to teaching mathematics for social justice in numerous books and journals. Additionally, his research has focused on diverse clinical placements, statistics education, mathematical reasoning, social justice in mathematics, teacher preparation, and equity-based instruction. He has advocated as a leader in regional, state, and national mathematics education networks such as MTEP, AMTE, and NCTM.

Dr. Kimberly Shaw is a Professor of Physics and the Co-Director for the UTeach Columbus program at Columbus State University. Dr. Shaw has extensive experience in higher education and in teacher education. Her research has focused on factors impacting student success in STEM education classrooms and programs, assessing curricula and interventions, as well as self-efficacy and academic tenacity in physics classrooms.

Dr. Lisa Garbrecht is the Director of Evaluation Services for The University of Texas at Austin, Texas Advanced Computing Center. Dr. Garbrecht has extensive experience leading research and evaluations on STEM education and teacher professional learning programs. Her research focuses on STEM attitudes, identity, and belongingness. She has taught at Arizona State University and University of California, Irvine Colleges of Education.

Dr. Nicole Martin is a Senior Evaluation Researcher for The University of Texas at Austin, Texas Advanced Computing Center. Dr. Martin has extensive experience leading research and evaluations on projects focused on broadening participation in STEM and strengthening support for K-12 STEM and computer science educators. Her research focuses on understanding effective strategies to improve teacher work environments and making teaching a more sustainable profession.

Looping for Success: How Seven Years with the Same Students Transforms Teaching & Learning

Sarah M. Straub, Stephen F. Austin State University
Christina Tometchko, Chelsea Public Schools

Abstract

Educational looping has been associated with positive student outcomes. And yet, it is not a widespread phenomenon in the United States, with many studies focusing on two-to-three year cycles. With limited research on long-term, multi-level looping, this longitudinal study investigates the perceived benefits and challenges of a seven-year looping case at a Title-1 urban school district in Texas. This longitudinal descriptive, single case study followed one teacher and sought to share this case through interview, journal, and archival data. Ultimately, the benefits of long-term educational looping were personal and professional growth, relational stability, and culturally responsive teaching development. Challenges explored including emotional strain, isolation, and workload. Findings suggest that the benefits outweigh the challenges and indicate the potential of extended looping to deepen teacher-student relationships and instructional responsiveness.

Keywords: *educational looping, case study, culturally responsive teaching, teacher-student relationships, multicultural education*

Introduction

Educational looping, also known as multi-year teaching or continuous progress, is a pedagogical practice where a teacher remains with the same group of students for two or more consecutive years, advancing with them to the next grade level (Burke, 1999; Cistone & Sheyderman, 2004). While existing literature primarily addresses two- to three-year cycles, this study explores an extended seven-year longitudinal case of a teacher-student cohort traveling from sixth grade through senior year of high school. The relational depth and academic consistency afforded by shorter looping models suggest potential transformative benefits; however, the impact of such an extended multi-level trajectory remains underexplored in the literature.

This research focuses on the experiences of Author 2, a teacher who initiated and completed a seven-year educational loop with a single cohort of students. This provides a unique data point in the study of teacher-student relationships and long-term academic success. Author 1, whose own background included non-traditional three-year looping cycles, sought to observe this seven-year dynamic to understand the full scope of its impact.

The successful implementation of long-term looping hinges not only on classroom dynamics but also on the teacher's professional support system. Therefore, this study investigates the

intersection of teacher-student relationships and collegial relationships within this distinctive case. This inquiry leads to the following research questions:

- What are the perceived benefits of educational looping for the teacher and students?
- What are the perceived challenges of educational looping for the teachers and students?

In order to explore these two research questions, Author 1 opted for a descriptive single case study approach. This type of case study is used to describe a phenomenon (seven year educational looping) and the real-life context in which it occurred (Yin, 2003).

Literature Review

Educational looping, also known as multi-year teaching, is a practice where a teacher remains with the same group of students for two or more consecutive years. Looping is often used to enhance continuity in instruction, provide emotional stability in a classroom, and deepen student-teacher relationships. This strategy has been employed in various global settings, with notable historical roots in European education systems (Cistone & Shederman, 2004). In the United States, looping has gained attention as a potential method to boost student outcomes by minimizing the disruption of annual teacher changes.

Understanding the effects of educational looping is critical in addressing both academic and emotional challenges students face. Looping may play an essential role in fostering cultural responsiveness and inclusivity as well. This study aims to assess both the benefits and challenges of looping, particularly in culturally diverse classrooms. This study seeks to explore and synthesize existing literature on this topic. By examining relevant studies and identifying gaps, this review will suggest areas for future research on looping, particularly in multicultural settings.

An important note for this literature review is that educational looping can be known by other terms, depending on the context or region. This review of the literature used an additional term "multi-year teaching" (Chainey & Cassity, 2021). Author 1 used the term "educational looping" in this paper because it is more widely represented in the research.

Benefits of Educational Looping

Educational looping has known success around the world. These examples can be used to highlight what specifically about looping can be so beneficial. It must be noted that research on this topic peaked in the late 1990s and early 2000s and has since declined. As the current literature is dated and in need of revitalization, our study is highly relevant in today's context. It is also important to note that while historically rooted in European systems, extended educational looping is a relatively rare and distinct phenomenon within contemporary U.S. public education, and is often limited to two- or three-year blocks. This study, which focuses on a seven-year trajectory, is therefore crucial for demonstrating the potential applicability and generalizability of deep, longitudinal relationships to a domestic audience that is grappling with student engagement and achievement.

One study, conducted in Quebec, Canada, followed two teachers for two consecutive years. The study focused solely on academic achievement and used a strict protocol to ensure that the teachers in both settings had similar profiles and pedagogical practices (Tourigny et al., 2020). The ultimate takeaway after this two-year endeavor was that the students in the looping classroom

showed higher grades in mathematics and writing when compared with the non-looping teaching counterpart. The authors argue that looping is a simple and inexpensive way to benefit students. This was further reinforced in a study comparing two groups of students between the fourth and fifth grade. One group looped with their teacher and the other group changed teachers for the second year. The authors analyzed standardized test scores and found statistically significant improvement in reading test scores for the students who had looped (Meeks, 2008). By reducing the time needed for teachers to acclimate to new students each year, looping enables teachers to dive into the content much more quickly than for teachers who are new to their students and need to dedicate more time to classroom culture or management.

Academic achievement is a wonderful indicator of success, but educational looping has so many more benefits. According to Hitz et al., (2007), an educational looping program enhances stability for the students and can lead to stronger connections among peers. This sense of belonging is something that students tend to struggle with, especially at the middle level grades, and so looping can be an effective strategy to combat this potential loneliness or disconnect. Additionally, culturally responsive teaching is critical in today's diverse classrooms and educational looping can provide an opportunity for our educators to deeply understand their students' cultural backgrounds. Ladson-Billings (1995) emphasized the importance of educators valuing and affirming the cultural identities of their students, which can be more effectively accomplished in looping classrooms. This study extends the literature on educational looping by demonstrating how sustained relationships can also support culturally responsive pedagogy, allowing teachers to tailor their practices to meet the cultural and emotional needs of a diverse student body. By focusing on multicultural and multilingual classrooms, this research fills a significant gap in the literature on the intersection of relational teaching practices and cultural responsiveness.

Challenges of Educational Looping

Conversely, educational looping can present some unanticipated challenges for the teachers. Close relationships can help our teachers craft lessons that meet unique needs, but the emotional stress that our teachers may feel from these deep and longitudinal relationships should not be discounted. Teachers may experience heightened stress as they take on the emotional and academic well-being of the same group of students for multiple years (Hedge & Cassidy, 2004).

Another challenge is the potential for professional isolation if the setting in which the looping occurs is one where looping is not the norm. While the teacher and classroom dynamic remains consistent throughout each year, the teacher is moving from grade-level team to grade-level team and can be seen as an outsider by peers, which can limit opportunities for peer learning (Hanson, 1995).

Theoretical Framework

This study is grounded in culturally responsive pedagogy (CRP), a theoretical framework that emphasizes the importance of integrating students' cultural backgrounds into the learning process to support academic success, cultural competence, and sociopolitical consciousness (Ladson-Billings, 1995). CRP provides a lens through which the practice of looping can be examined, particularly in culturally diverse classrooms where long-term teacher-student relationships create opportunities for culturally relevant and responsive teaching practices. Gloria Ladson-Billings (1994)

defines CRP as an approach to teaching that "empowers students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes" (pp. 17-18). Three core principles form the foundation of CRP: academic success, cultural competence, and sociopolitical consciousness. Academic success ensures that all students meet high expectations while fostering a deep understanding of the content. Cultural competence requires teachers to affirm and incorporate students' cultural backgrounds and identities into the curriculum. Finally, sociopolitical consciousness prepares students to critique and address systemic inequities in their communities and beyond.

The Role of Sustained Relationships in Operationalizing CRP

The extended teacher-student relationships inherent in looping provide a unique context for the operationalization of CRP. Emotional bonds and relational continuity, which are central features of looping, foster trust and connection between teachers and students. While not explicitly connected to educational looping, Spilt et al. (2012) suggests that supportive relationships - stable relationships - between teachers and students foster students' engagement and academic achievement. This relational stability creates a platform for teachers to learn about and integrate their students' cultural assets into the classroom.

Multidimensional Frameworks Supporting CRP in Looping

Brofenbrenner's Ecological Systems Theory (1979) offers a complimentary perspective by situating looping within broader systemic contexts, including the family, community, and school. This framework highlights the interconnectedness of these systems and their impact on students' educational experiences. Looping classrooms serve as stable microenvironments within this broader system, supporting both academic and emotional development.

Additionally, Critical Race Theory (CRT) provides a lens to address systemic inequities in education. By sustaining relationships over multiple years, teachers in looping contexts can better understand and challenge inequitable practices that affect their students (Ladson-Billings & Tate, 1995). This study highlights how the teacher's growing awareness of systemic barriers, such as language inequities and access to resources, informed her practices and advocacy efforts.

Reflective Practice as a Mechanism for Culturally Responsive Growth

Reflective practice is integral to the teacher's ability to align her instruction with CRP principles (Schön, 1984; Gay, 2018). In this study, the teacher engaged in continuous self-reflection, using student feedback and personal journaling to refine her curriculum and instructional strategies. By combining the principles of CRP with insights from ecological systems theory and CRT, this theoretical framework underscores the transformative potential of looping in culturally diverse classrooms. It provides a foundation for understanding how sustained relationships can support culturally responsive teaching.

Methods

Research Design

A qualitative case study is a research approach that allows for the analysis of an experience through various data sources. To achieve the most reliable results, the data must be triangulated, meaning it must come from at least three different sources. Case study methodology is best informed by two practices - one outlined by Robert Stake (1995) and the other by Robert Yin (2003, 2017). A benefit of this approach is the relationship between the researcher and the participant. Both Authors worked on the same grade level team during Author 2's time teaching 7th grade English Language Arts. During that time, they were able to form a strong relationship mostly based on their shared experiences with the students. It was during this year that Author 1 began to collect stories from Author 2's experiences and the experiences of her students.

Author 1 selected a qualitative case study approach for several reasons. The first is that a larger study would prove to be almost impossible. Author 2 spent seven years with her students. Her story will be a unique and uncommon one. Additionally, Yin (2003) outlines considerations for successful case studies; they are most advantageous when (a) the focus of the study is to answer "how" and "why" questions; (b) you cannot manipulate the subjects; (c) there are contextual conditions that are relevant to the phenomena under study; or (d) the boundaries are not clear between the experience and the context.

This study is longitudinal in nature, spanning seven years of Author 2's teaching experience with the same group of students. Longitudinal case studies are particularly valuable as they allow researchers to observe changes and developments over an extended period, providing insights into how relationships and teaching practices evolve. Longitudinal case studies, which track phenomena over extended periods, are deemed essential for capturing developmental processes and complex, evolving relationships (Creswell, 2014). The extended timeframe of this study enables the exploration of how sustained teacher-student interactions foster cultural responsiveness, emotional stability, and academic success over time.

Data Collection

One fundamental feature of case study research is the implementation of multiple data sources. This serves to enhance the data credibility (Patton, 2015). The data sources utilized in this case study include interviews, archival records and subject journaling. The interviews were originally scheduled to be conducted at the end of each semester ($n = 12$)[1], and followed a semi-structured approach where the majority of the questions were repeated each time while still allowing for open dialogue should a particular response require additional context. Ultimately, the impact of the COVID-19 pandemic required a bit of flexibility with the consistency of the interviews, with many occurring at the end of the semester, but in some cases, only occurring at the end of the academic year. The interviews focused on the personal and professional background of Author 2, providing insights into her experiences in teaching and classroom leadership. It begins with demographic questions, exploring her age, gender, ethnicity, and socio-economic background. The personal story section delved into her college and professional experience. It then examined her path through alternative certification, such as Teach for America (TFA) or Teach for Texas (TE), and

1. There were two instances where interviews did not occur—once at the end of the first semester of Author 2's year in sixth grade and once during the pandemic.

the lessons learned during this process. The interviews reflected on each year of teaching, assessing her preparation as both an instructional and cultural leader, as well as her experiences with student and parent relationships. It included reflections on the academic performance of students, particularly in high-stakes tests, and ended with a look ahead to the decision-making process involved in transitioning to a new position at the end of each academic year, highlighting expectations versus reality. The interviews were conducted with consent from Author 2.

The archival records came straight from the participant herself and include such items as notes from students, notes from parents, and communication from administration both on campus and at the district content level. Finally, the participant kept a personal journal documenting her experience with this group of students. These were archival in nature and not reviewed until after Author 2 had left her school.

The data was analyzed using thematic analysis (Braun & Clarke, 2006), which is a method for identifying, analyzing, and reporting patterns within the data. The steps for this process include (1) Data Familiarization, (2) Generating Initial Codes, (3) Searching for Themes, (4) Reviewing Themes, and (5) Defining and Naming Themes. To do this, the authors began with a process of data familiarization. Author 1 transcribed each of the interviews and then both of the authors read through the transcriptions, the archival records and the journal entries multiple times to become deeply familiar with the data. While Author 2, as the teacher of record, was intimately aware of her lived experiences, the process of reviewing the data—much of which came from over five years ago—allowed both Authors to write down their initial thoughts and observations from a fresh viewpoint.

At that point, the authors began the process of systematically coding to identify the patterns that existed. While this coding process was guided by the research they had done on educational looping, they worked to derive codes that emerged from the data as well. For example, "academic continuity" was a theme that emerged frequently in the literature. From there, the authors looked to group these codes into broader themes that aligned with the initial research questions. "Positive Impacts," "Challenges," and "Cultural Responsiveness" emerged as obvious themes.

Once these themes were identified, they were reviewed across all datasets—interviews, archival records, and journals. The resulting triangulation of this data showed that these themes were consistently reinforced. This helped to ensure the credibility of this study. Reflexivity was also considered by acknowledging the researcher's role in shaping the interpretation of the data, particularly given the close relationship between the Authors and the relationship between Author 2 and her students. Regular checks were conducted where preliminary findings were presented and shared with Author 2 for feedback and validation.

School Context

This study took place at a public charter school in a large urban school district. The school serves a diverse student body with a wide range of cultural, ethnic, and socioeconomic backgrounds for grades 6th through 12th. The school community, including administration, was supportive of the research process. The initial sixth grade class included approximately 140 students. There was student attrition over the course of the seven years, as can be expected. Reasons for this attrition included family relocation, expulsions, and changing to other public schools that had larger athletic opportunities. The graduating class was approximately 120 students. The policy of this school district is not to take any new students after ninth grade. In the year that these students graduated, 71.7% of the students enrolled were considered at risk of dropping out of school, 96.4%

of enrolled students were considered economically disadvantaged, 51.6% of students enrolled were in English language learning programs, and 92.4% of that graduating class received their high school diplomas on time (Texas Tribune, n.d.). Additionally, the demographics for this campus in the graduation year was 7.9% African American, 0.6% American Indian, 0.9% Asian, 75.4% Hispanic, 0.7% White, and 14.5% Two or more races (Texas Tribune, n.d.).

Participant

The participant of this study was the teacher who engaged in the seven-year educational looping process. The teacher, referred to as Author 2, took a non-traditional path towards becoming a teacher. She received a B.A. in Political Science through her undergraduate studies and joined Teach For America upon graduation. Teach for America and the public charter school referenced in this study provided her with an alternate path to certification. Through these programs, she became certified as a teacher in Texas with the following licenses: Generalist 4-8; ELAR 7-12; and English as a Second Language 4-8. Author 2 began her teaching career as a sixth-grade writing teacher with the students referenced in this study and continued to loop with them through to their senior year of high school. She taught the following classes each year: 6th grade- Writing, 7th Grade- ELA, 8th Grade- ELA, 9th Grade- English I, 10th Grade- English II, 11th Grade- Introduction to Rhetoric and Compositions; and 12th Grade- AP English Language and Composition. Throughout the study, the teacher worked with students from diverse cultural and socioeconomic backgrounds, providing a rich context for exploring culturally responsive pedagogy (CRP) in action.

Author 2's experience with looping developed organically rather than through a formalized school initiative. Near the conclusion of her first year of teaching, her principal informed her that the seventh-grade English Language Arts (ELA) teacher would be transitioning into an instructional coaching role, creating a vacancy at that grade level. Having established strong relationships with her sixth-grade students and recognizing the potential benefits of instructional continuity, Author 2 expressed interest in moving up with her cohort. The following year, a similar opportunity arose when the eighth-grade ELA teacher departed to attend law school, prompting Author 2 to advance with her students once again. This pattern continued through high school, as staffing shifts resulted in open ELA positions at each subsequent grade level. Up through Year 5 (tenth grade), the school principal actively supported Author 2's decision to continue looping, viewing it as advantageous for student development and school culture. By Year 5, however, the principal expressed a preference for Author 2 to remain in a state-tested grade level to strengthen standardized assessment outcomes. Despite this, Author 2 advocated to remain with her students, emphasizing the importance of consistency and long-term academic growth. The principal ultimately approved the request, and shortly thereafter, the onset of the COVID-19 pandemic further shaped the trajectory and significance of her looping experience

As Author 2 looped with the same cohort of students over seven years, her day-to-day professional responsibilities evolved in response to both student needs and structural changes within the school. Although the school schedule shifted multiple times during this period, the general hours remained 8:00 a.m.–4:00 p.m. on Mondays, Tuesdays, Thursdays, and Fridays, and 8:00 a.m.–1:00 p.m. on Wednesdays. In Year 1, when her students were in sixth grade, Author 2 taught six periods of Writing, with approximately 20–25 students per class. She was allotted two preparation periods, though one was frequently designated for class coverage as needed. From Years 2 through 7, Author 2 taught three sections (six periods total) of English Language Arts with 24-28

students per class, which represented approximately half of the grade level each year. As a result, a small subset of students—approximately five—had Author 2 as their English teacher for the entire seven-year span, while others had her for three to five years. Beginning in Year 3, Author 2 additionally served as the Grade Level Chair, a leadership role that entailed acting as the first point of contact for disciplinary matters, coordinating cultural and community-building events, monitoring academic progress, and facilitating team collaboration. Although she did not directly teach all 140 students from the original cohort each year, she maintained consistent interactions with them in various academic and extracurricular capacities throughout the looping process.

Positionality Statement

The authors acknowledge their positionalities in shaping this study and its findings. Author 2, the teacher in this study, had a unique, long-term relationship with her students, making her an insider with an intimate understanding of their academic and emotional needs. This relationship provided deep insights into how educational looping can foster culturally responsive pedagogy. However, Author 2 also recognized the limitations of her perspective, particularly in terms of her emotional attachment to her students, which may have influenced her interpretation of their experiences.

Author 1 served as the researcher responsible for data collection, analysis, and interpretation. While Author 1 worked closely with Author 2, as a colleague and researcher, this dual role influenced the interpretation of data. As an outsider, the researcher approached the data with the aim of being objective, yet acknowledged the potential biases and assumptions that may have arisen from their professional relationship and familiarity with the school context. Both authors engaged in regular discussions to ensure that their interpretations remained grounded in the data and reflective of the participants' lived experiences.

Results

The interviews began in the fall semester of Author 2's year in the seventh grade. Interviews were planned for the end of each semester but flexibility was needed during the COVID-19 pandemic. During this seven year span, Author 2 dealt with the transition to online teaching during the COVID-19 pandemic and this warranted an additional interview. The average duration of each interview was 40 minutes and 57 seconds. The shortest interview was 23 minutes and 41 seconds. The longest interview was one hour five minutes and 44 seconds. Over the seven years, technology changed as well. For the first few interviews, the interview was audio recorded and transcribed by hand. Eventually, this process changed to a Zoom recording with automatically generated transcripts. In both cases, the transcripts were reviewed by both Authors and revised for accuracy. Interview questions followed a semi-structured approach—while there was a guide for what would be covered (challenges, benefits, relationships), this semi-structured approach allowed for Author 1 to ask probing questions and for Author 2 to provide additional context (Appendix A).

The second data source—Author 2's personal journals—were collected unsystematically via the Notes feature on her personal mobile device. In total, Author 2 shared 34 journal entries. This averages approximately 4.857 journal entries per academic year. The final source also were self-reported by Author 2. These included notes received from students, administrators, and colleagues throughout the seven years. Examples of the types of notes collected include unofficial observation notes from administrators, end of year notes of gratitude from students, and shout outs

(positive descriptive praise) notes from colleagues. There were 20 notes included with an average of three per academic year over the course of the seven years.

Ultimately, four themes were identified resulting from the analysis of the three data sources: (1) Personal and Professional Growth, (2) Relational Stability for Students, (3) Enhanced Understanding of Culturally Responsive Teaching, (4) Challenges and Resilience. Each of these themes will be described below with evidence from the data sources.

Personal and Professional Growth

Author 2 and her students experienced many transitions and unique challenges over the course of their seven years together. Her students transitioned to middle school, transitioned to high school, and prepared for post-secondary plans. Author 2 was a novice teacher in her first year of this study, but by the end of the seven years was considered an instructional leader on her campus. Both Author 2 and her students dealt with massive disruptions such as prolonged school closures due to hurricane-related damage and the 2020 global pandemic. Regardless, the personal and professional growth demonstrated by Author 2 was a dominant theme in the data. Author 2 wrote in a journal entry from Year 7,

> Every moment throughout the last seven years was moving me closer to my life's purpose. I made mistakes along the way. I wasn't perfect by any means, but I was growing and learning and becoming a stronger, more fulfilled version of myself. (Author 2, 2022)

This recognition of personal growth was further articulated in a journal from year 6 in which Author 2 wrote,

> I can't help but look forward with hope and some slight anxiety about what this next year has in store. I am optimistic, energized, and excited to see seven years of hard work pay off for me and my kiddos. (Author 2, 2021)

Further analysis of Author 2's journal entries reveal that looping not only allowed her to grow personally, but also professionally. She notes in a journal entry from 2020 that looping feels "safe and consistent" while simultaneously "fulfilling [her] desire to continuously learn and grow because it's a new subject and material" (Author 2, 2020). Later that summer she expresses excitement about the upcoming year, sharing,

> I'm excited about my proposal to switch up the IRC curriculum. I'm thrilled beyond measure to have another year with my students. And I feel energized getting involved with Teach Plus, starting High School Dems, and dreaming of the possibilities the future holds. (Author 2, 2020)

These quotes show that not only did Author 2 learn and teach a new curriculum each year, but she also was actively involved with a variety of clubs and organizations both on and off campus. Not only was this growth noticed by the author herself in her journals, but it was reinforced by notes from her colleagues and administrators. In year 5, her school principal wrote,

> I am so grateful you're leading [the class of] 2022 through this closure. I actually believe 10th grade is one of the toughest [grade levels] to lead in times like this. You've been creative about incentives and energized your deep personal relationships to motivate kids. (Principal, 2020)

One noticeable development for Author 2 is her focus on connecting with the families of her students. In Year 1, Author 2 stated, "I really wasn't great about [family relationships] my first year teaching…I was afraid of speaking Spanish or messing up all the words to these parents" (Author 2 Interview, 2017). However, by the time that 2020 came around, Author 2 was much more connected with the families, "Parents are used to me texting; they have [had] a consistent person to contact" (Author 2 Interview, 2020).

Relational Stability for Students

To continue that focus on consistency, a second theme that emerged from the data analysis was that of relational stability for the students. Author 2 highlighted the impact of this approach in creating a supportive environment:

> [In seventh grade], I had a lot more kids who would come to my room and cry to me about something that was going on outside of school. And, I think that they felt comfortable doing that because they had a relationship with me from sixth grade. (Author 2 Interview, 2017)

The sense of comfort and familiarity extends, with Author 2 expressing, "I think the kids are a lot more comfortable with me than they are with their other eighth-grade teachers" (Author 2 Interview, 2018). This comfort plays a crucial role in addressing students' personal challenges and concerns. Furthermore, she recognizes the significance of her role in providing stability and positivity during transitions, as elucidated by the comment: "I see the transitions and the people that leave and how that impacts them. That I can provide some type of consistency or just be any type of positive presence for them, I want to do that" (Author 2 Interview, 2018). The overarching sentiment emphasizes her commitment to being a constant and positive influence in her students' lives. Additionally, the joy derived from witnessing students' growth and development becomes a profound source of fulfillment. As expressed in one interview,

> Just being able to see them grow, it's amazing just what wonderful humans they are, how kind and sincere they are, just being able to see that growth…see kids taking on leadership roles, developing their own personalities and their own beliefs and ideas. (Author 2 Interview, 2019)

Notes and letters from students highlight the strong emotional bonds that Author 2 formed with her students and the sense of belonging that this created in the classroom. Connections started to form during Author 2's first year teaching, with one student writing, "You make learning so much fun. You're very kind and cheerful and funny" (6th Grade, Note from Student. 2017). This foundation continued to grow over the next few years and by 8th grade graduation another student shared, "Whether small or big, you have positively affected everyone you've met, created a warm and joyful classroom environment that positively impacted many students in the grade" (8th grade,

Note from Colleague, 2018). Even when there were rough patches, students felt connected to Author 2 with one student sharing, "I know for a fact that you and me have had our ups and downs but just know that I still truly care about you deeply and of course I'll count on you whenever" (9th Grade, Note from Student, 2019).

By the time Author 2's students graduated from high school, the connections had grown far beyond the typical relationship that is formed after students spend one year with a teacher. As graduation neared, students wrote letters to Author 2 sharing that: "You have been there for me through thick and thin. I wish one day I would be able to do the same for you" and "For me, you are a teacher, friend, therapist, and family" (12th Grade, Note from Students, 2022). These quotes suggest that not only did students view Author 2 as a teacher, but as a support system, mentor, and cheerleader who cared about them as human beings, not just students.

Throughout the years, students expressed excitement about continuing their educational journey with Author 2, writing "I can't wait until next year because you're going with us to 9th grade" and "Thank you for staying with us despite how crazy it got" (8th Grade, Note from Student, 2019 and 12th Grade, Note from Student, 2022). Staff also noted the continuity that Author 2 provided for students with one teacher sharing, "You clearly care deeply about this class and act on that care to give them the best school experience you can" (8th Grade, Notes from Teachers, 2018).

This was especially evident at the start of the Covid-19 pandemic when Author 2 found herself teaching English II and leading the 10th grade level team. In a letter shared during teacher appreciation week that year, her principal noted the stability she brought to both the teaching team and students saying, "You've been creative about incentives and energized your deep personal relationships to motivate kids. I'm sure it is so meaningful to kids to have such a champion in their court during times like this" (10th Grade, Note from Principal, 2020). From the staff and student perspective, looping brought a sense of continuity, stability, and safety, especially during uncertain times.

It is evident through studying Author 2's journal entries that looping allowed her to develop deep and strong relational bonds with her students. Countless journal entries over the years highlight this fact, like this one from 12th grade in which Author 2 shares,

> My students are some of the brightest, kindest, smartest, funniest people I know and I truly can't put into words how grateful I am to know them and how hopeful I am for the change they will make in the world. (12th Grade, Journal Entry, 2022)

Even in the midst of the uncertainty of the Covid-19 pandemic, Author 2's commitment to her students is clear with her writing,

> Teaching in a pandemic is soul sucking, yet I can't help but feel that I'm meant to be in [the city] experiencing this with my kiddos right now. The universe has allowed me to move up with them every year and the reward of seeing them grow into their own intelligent, kind, and thoughtful people is well worth the struggle. (11th Grade, Journal Entry, 2020)

The deep emotional connection that Author 2 built with her students can be best seen in a journal entry she wrote in the weeks leading up to graduation,

> Seven years with this bright, talented, funny group of kids is ending in the blink of an eye. I feel like a parent sending their kid off into the real world. Did I teach them enough? Was I kind enough? Did I tell them how proud I was of them and how much I care for them? Do they like me? Do they respect me? Will they look back on our time together with fond memories? Was I the teacher for them that I needed in school? I can't and wouldn't go back and change a thing. I hope through it all they know how much of an impact they've had on my life and I hope I've been able to provide even an ounce of consistency, love, and support to each of theirs. (12th Grade, Journal Entry, 2022)

This entry, written at the end of a seven year looping journey, highlights that Author 2's bond with her students was akin to that of family and the years they spent together and the challenges they overcame together only helped to solidify that bond.

Enhanced Understanding of Culturally Responsive Teaching

In the context of Author 2's journey as a culturally responsive practitioner, educational looping emerges as a pivotal factor shaping her instructional approach. A key revelation from her alternative certification underscores the profound impact of focusing on cultural responsiveness within the classroom setting. Author 2 recalls,

> The most influential thing [I learned in my alternative certification] was the focus on being culturally responsive in my classroom—specifically in terms of choosing what texts we were going to read or what policies and procedures I had in place. (Author 2 Interview, 2017)

This emphasis on cultural responsiveness is not merely theoretical but translated into tangible changes in her teaching methods and curriculum. Through a survey conducted at the end of one academic year, Author 2 gleaned valuable insights into the students' learning experiences. The feedback indicated a heightened awareness among students about issues such as inequality and differential treatment based on identity and origin:

> I did a survey at the end of the year, and a lot of them talked about how they learned about inequality or about how people are treated differently because of who they are and where they're from. It's like these big, enduring understandings and essential ideas that I wanted them to get out of my class. (Author 2 Interview, 2018)

This attests to the effectiveness of her culturally responsive instructional approach in fostering critical awareness and understanding. Furthermore, Author 2's commitment to adaptability and responsiveness is evident in her modifications to instructional activities. For instance, she strategically altered the format of "Vocabulary Day" to incorporate discussions on current events, demonstrating a proactive effort to integrate real-world context into the curriculum: "I changed up the recommended 'Vocabulary Day' so that I could talk about current events with students" (Author 2 Interview, 2018). Rather than spending an entire class period doing rote vocabulary practice as suggested by the curriculum, Author 2 embedded vocabulary practice into real world scenarios. She sourced articles from Newsela about current events that were thematically linked to the books students were reading in class and provided opportunities for students to practice vocabulary in

context rather than in isolation. Moreover, Author 2 leveraged student feedback to refine her teaching strategies, as evidenced by adjustments made based on survey results: "Based on the surveys I gave last year, I made some changes to my class and to the curriculum. Kids wanted more projects and more access to technology. (Author 2 Interview, 2018)

This feedback inspired Author 2 to create "Real World Application of Learning" projects for each unit that integrated technology, current events, and themes from each novel study that they were doing in class. For example, in 2019 when Author 2 was teaching 9th grade English I, students read *Farewell to Manzanar*, a memoir about Japanese internment camps in America during World War II. As part of their project for that unit, students compared and contrasted Japanese internment camps of the 1940s with present day immigrant detention centers, focusing on honing writing skills while advancing critical thinking and social awareness. Later that year, as her students read *A Raisin in the Sun*, and discussed the American Dream, prejudice, and hope, Author 2 developed a project in which students researched the impact of gentrification on their city and crafted an argumentative essay explaining the benefits and drawbacks of these types of policies. This iterative and reflective approach underscores Author 2's dedication to continuously enhancing her pedagogy to better align with the cultural needs and preferences of her students. In essence, the impact of educational looping on Author 2's development as a culturally responsive practitioner is vividly illustrated through her intentional integration of cultural responsiveness into her instructional practices and her responsiveness to student feedback.

A key component of culturally responsive teaching is the centering of the students' cultures, experiences and perspectives to improve the learning outcomes for all students. This was definitely a focus for Author 2 that was developed over the course of her seven years and which can be seen in the letters from students was the ways in which Author 2's guidance and support encouraged them to grow both academically and personally. Many students mentioned being inspired to work hard, to excel academically, and to make positive changes in their lives because of Author 2. Some students became more invested in their coursework, with one sharing "Before I met you I really hated reading and never really cared how my grades were. But you pushed me and brought out the best in me" (8th Grade, Note from Student, 2018). Others noted how Author 2 helped shape their worldview, sharing "You taught me a lot, not just about ELA or English, but about life and society as well" (9th Grade, Note from Student, 2019). Finally, some expressed gratitude for the ways in which Author 2 helped them develop personally with one student sharing, "I just want to thank you for being patient with me and not giving up on me. You're the reason I've decided to make a change" (7th Grade, Note from Student, 2017). These artifacts from students suggest that looping facilitated not only academic progress but also character development and self-improvement.

Challenges and Resilience

The emotional stress associated with the commitment to looping with the same group of students annually is a pervasive theme in Author 2's teaching experience. Her profound emotional investment in the well-being and success of her students is evident throughout the interviews, highlighting the intense connection she develops with each individual. Author 2 candidly expresses the depth of her emotional involvement, stating, "I feel very emotionally invested in my students. So, when kids have moved away or even if they're going through other hard things and are still here, I care so much and I feel all of those emotions" (Author 2 Interview, 2018).

This emotional connection, while a testament to her dedication, introduces a considerable challenge, as she grapples with the stress induced by such deep involvement. The drawback to looping becomes apparent as the emotional toll makes it challenging for Author 2 to strike a sustainable work/life balance. She acknowledges the difficulty of this balance, attributing it to the substantial time invested in creating unique materials for her class each year, preventing the reuse of resources: "It's hard finding work/life balance because I am spending so much time creating things for my class that I can't reuse" (Author 2 Interview, 2018). Additionally, the emotional challenges are compounded by the inevitable transitions students go through, whether through family relocation, a desire for a larger school with more programming, expulsions, or other circumstances, leading to a sense of loss and personal responsibility for their success: "It's challenging because you become so attached to the kids and then they move to other things (get expelled, etc.), and then it just falls away" (Author 2 Interview, 2019). The emotional depth Author 2 experiences is a double-edged sword, driving her commitment to her students but also exposing her to the inherent difficulties of letting go and adapting to the changes that come with each academic year. The emotional stress she endures underscores the complex nature of sustained relationships in an educational context, shedding light on the intricate balance between devotion to students and the imperative of maintaining personal well-being. This emotional toll parallels broader concerns in the field, where teacher stress, burnout, and compassion fatigue contribute to ongoing teacher shortages in the U.S. (Juárez & Becton, 2024).

Navigating relationships with fellow staff members and the broader school community posed a significant challenge for Author 2, ultimately influencing her decision to leave after her group of students graduated. Despite the deep connection she forged with the class of 2022, her interactions with colleagues were limited, with her admitting, "I don't know that many teachers on my team really" (Author 2 Interview, 2018). The disparity in her relationships with students versus staff members became apparent, as she expressed, "I really would not still be teaching in Texas and at my school if it weren't for these kids. Now, I'm thinking about staying until they graduate" (Author 2 Interview, 2018). The absence of close ties with her team members is emphasized when she acknowledges not being particularly close to many adults on her team (Interview 4). This disconnect is further highlighted by her reluctance to engage in conflicts between students and teachers, fearing bias or appearing partial (Author 2 Interview, 2018). Despite her unwavering dedication to her students, Author 2 faced challenges in gaining the support or understanding of her colleagues, with some expressing skepticism about her classroom management style (Author 2 Interview, 2020). As the pandemic and virtual teaching added additional strain to her profession, Author 2 grappled with thoughts of leaving, with the prospect of staying tethered to the job primarily driven by her commitment to the students: "I wouldn't actually quit my job, but I would probably consider quitting at the end of this year if it weren't for the students and wanting to see everything work out for them" (Author 2 Interview, 2020). Once those students had graduated, the connection to the school was no longer present and served as permission for her to leave her school.

Author 2 also noted challenges such as "learning to teach a new content every year," "adapting to a new team of teachers," "and adjusting based on ever changing expectations at [her campus] and [her district]" (Author 2 Journals, 2020). She shares that she spends a large portion of her free time planning lessons, hosting tutorials, and grading. While she acknowledges that many teachers do this, Author 2 highlights one of the challenges of looping, musing, "Imagine every year being like your first year" (Author 2 Journals, 2020). While looping allowed Author 2 to be creative and try out new instructional strategies, a very real drawback was the time and energy that looping took from other personal and professional pursuits.

Discussion

The findings from this study underscore the profound impact of educational looping on teacher-student relationships and instructional practices. This discussion section interprets the results in the context of the broader literature on teacher-student relationships, culturally responsive teaching, and professional development.

The theme of personal and professional growth underscores how looping fosters a reciprocal learning experience between teachers and students. Author 2's transition from a novice educator to an instructional leader aligns with existing research suggesting that long-term engagement with the same group of students provides a unique opportunity for iterative learning and reflective practice (Tourigny, et al., 2020). This growth is evident not only in Author 2's journals but also in external recognition from colleagues and administrators. Notably, her involvement with new clubs and curriculum changes demonstrates a proactive approach to professional development. These findings suggest that looping can serve as a powerful mechanism for sustained professional learning, allowing teachers to refine their practice and build confidence in addressing challenges.

The results emphasize the pivotal role of looping in providing relational stability, particularly during significant disruptions such as school closures and the COVID-19 pandemic. Author 2's ability to maintain strong emotional bonds with students over multiple years aligns with the literature on the importance of consistent teacher-student relationships for student well-being and academic success (Thijssen, et al., 2022). This stability appears to have created a classroom environment where students felt safe, valued, and supported, as evidenced by their notes of gratitude and reflections on her role as a mentor and advocate. These findings contribute to discussions on the critical importance of emotional safety in promoting resilience among teachers and students, especially during periods of uncertainty (Wang, et al., 2021).

Author 2's increased connection with students' families and her reflections on overcoming language barriers illustrate the role of looping in enhancing culturally responsive teaching practices. The iterative nature of looping allowed Author 2 to develop a deeper understanding of her students' cultural backgrounds, fostering stronger partnerships with families and tailoring instruction to meet diverse needs (Ladson-Billings, 1995). This aligns with the theoretical framework of culturally responsive pedagogy, which emphasizes the value of long-term relational commitment in bridging cultural gaps and fostering inclusion (Chirichello & Chirichello, 2001).

Finally, the challenges encountered throughout the seven years, such as natural disasters and the transition to online learning, highlight the resilience required in teaching. Looping provided Author 2 with a unique perspective on these challenges, as her long-term relationships with students allowed her to identify and address their evolving needs. This finding supports the argument that looping can mitigate the negative impacts of external stressors on students by providing a stable and familiar support system (Burke, 1999).

This study demonstrates that educational looping holds significant potential for enhancing teacher-student relationships and fostering culturally responsive teaching practices. Despite challenges such as language barriers and emotional stress, the benefits of relational continuity in education are profound. Future research should further explore strategies to mitigate these challenges and capitalize on the strengths of looping to promote inclusive and supportive educational environments.

Limitations

This study has several limitations that should be considered when interpreting the findings. First, the sample size is limited to a single teacher and her cohort of students, which restricts the generalizability of the results to broader educational settings. Additionally, the study relies on self-reported data from both Author 2, which may introduce biases due to the subjective nature of personal recollections and experiences. Furthermore, while the longitudinal nature of the study offers valuable insights into the long-term impact of looping, the findings are specific to one teacher's experiences and may not fully capture the complexities of looping in other contexts.

Another limitation is that Author 1, at the time of data collection, was in progress with her doctoral degree and had not yet taken many research classes, which may have influenced the initial stages of the study in terms of research design and methodology. Additionally, because this looping was not planned in advance, Author 2 did not keep exact records of the specific students that she started teaching in 6th grade, how many left or joined the class in the interim, and how many years she taught each individual student. Overall, Author 2 knows that she started with roughly 140 students in 6th grade and ended with roughly 120 students in 12th grade. Despite these limitations, the study provides an in-depth exploration of the effects of looping and offers a valuable contribution to understanding culturally responsive pedagogy in longitudinal teacher-student relationships.

Conclusion

Author 2 grew up with her students. They experienced the rollercoaster of middle school together. They experienced the tumultuous 2016 Presidential Election, which rocked our community. They were disrupted by Hurricane Harvey and the aftermath. They worked through the challenges of remote learning during a global pandemic. So, as the authors conclude, they must acknowledge that these experiences were anything but typical. And, they must reaffirm that being able to go through this together, as a school family, made it something special. Back in 2018, Author 2 wrote, "When they go to college, I'm going to cry with their parents…and then I'll maybe go to grad school. Onto the next adventure, Like them" (Author 2 Interview). And, wouldn't you know…she did just that!

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Dr. Sarah M. Straub is an Associate Professor at Stephen F. Austin State University. She has experience with informal looping, having taught the same group of students throughout middle school and high school.

Christina Tometchko is currently an Assistant Principal at Chelsea Public Schools and previously looped with a class of students from sixth grade through twelfth grade at an urban Title-1 school district in Texas.

Appendix A: *Semi-Structured Interview Protocol Example*

Educational Looping

An Ethnographic Study of Educational Looping at an Urban Title-1 Middle School in Texas

Interview 3: (Teacher)

I. Reflections on Year 3
   a. Refresh questions:
      i. When did you decide to move to 8th ELA?
      ii. What prompted this decision?
      iii. How did students react when they first heard?
      iv. What did you expect it to be like when you moved up with your students?
   b. What were the first few weeks like?
   c. Did you notice a difference in student behavior towards you verse other teachers on your grade level team?
   d. What are your general reflections on the start of the year? Mid-year? End of the year?

II. Relationships
   a. Highs/Lows – Student Relationships
   b. Highs/Lows – Parent Relationships

III. Academic Performance
   a. Curricular changes based on student interests?
   b. What are the high stakes tests for your students in 8th ELA? (CA, Unit Tests, STAAR, etc.?)
   c. How did the students perform relative to the partner teacher?
   d. How did the students perform relative to the district?
   e. How did the students perform with respect to your own personal goals for them?

IV. Weaknesses of Looping
   a. What were some of the challenges of moving up with your students?
   b. Can you share specific stories of individual relationships and group dynamics in general?

V. Strengths of Looping
   a. What are some of the benefits of moving up with your students?
   b. Can you share specific stories of individual relationships and group dynamics in general?

VI. Questions for the Future
   a. What are your plans when the students move to HS?
   b. Would you move to HS English I with them if presented the opportunity?
   c. How has traveling with the students been hard for you? Been a benefit for you?
   d. Will you move back down to 6th grade and loop again if offered the opportunity?
   e. What, if anything, would you do differently if you looped again?
   f. Would you decide to not loop in the future? Why or why not?

Fostering Critical Thinkers Through Japan's Comprehensive Humanities Curriculum: Rekishi Sōgō (Comprehensive History) & Chiri Sōgō (Comprehensive Geography)

Habib Badawi, Lebanese University, Beirut
Taufikin Taufikin, Universitas Islam Negeri Sunan Kudus, Central Java

Abstract

Japan's 2022 curriculum reform introduced rekishi sōgō (Comprehensive History) and chiri sōgō (Comprehensive Geography) to shift secondary humanities education from rote memorization to reflective, inquiry-based learning. This study investigates how these integrated humanities subjects cultivate students' critical thinking skills within a cultural context emphasizing harmony (wa) and sincerity (kokoro). Employing a sequential explanatory mixed-methods design, quantitative data were collected from 327 students across six prefectures, complemented by qualitative interviews with 24 teachers and six principals. Statistical analysis revealed significant gains in students' analytical and evaluative reasoning ($p < 0.05$), while thematic analysis identified three interrelated pedagogical mechanisms: dialogic learning, reflective inquiry, and contextual reasoning. These mechanisms form the Integrated Humanities—Critical Thinking Framework (IHCTF), illustrating that Japanese critical thinking develops through the synthesis of logic, empathy, and contextual awareness. The findings affirm that comprehensive humanities curricula can nurture both cognitive and moral dimensions of critical reasoning without eroding cultural continuity. Japan's experience thus offers a non-Western model of critical thinking education—anchored in local ethics yet responsive to global competencies. This study contributes to comparative curriculum theory by redefining critical thinking as a culturally embedded intellectual practice that harmonizes analytical rigor with humanistic reflection.

Keywords: *critical thinking, Japan, humanities curriculum, mixed methods, educational reform*

Introduction

In the continuously evolving landscape of global education, critical thinking has emerged as one of the most essential competencies of the twenty-first century (Ennis, 2018; Halpern, 2013; Pandeeka & Maneekul, 2019; Saikia & Roy, 2024). It not only represents the intellectual capacity to evaluate facts and construct arguments but also serves as the foundation for cultivating reflective and adaptive citizens capable of navigating social, economic, and cultural complexities in an era of globalization (Ennis, 2018; Facione, 2006; Paul & Elder, 2019). Within secondary education, this skill is regarded as a defining indicator of learners' readiness to confront the challenges of the knowledge society and digital democracy, where the abundance of information demands analytical

discernment and reflective reasoning. Comparative studies across diverse countries reveal that successful educational systems tend to embed critical thinking within interdisciplinary learning, active student engagement, and the integration of humanistic values (Amin et al., 2022; Halpern, 2013; Holley, 2024; Zhao, 2025). Consequently, examining how critical thinking is cultivated through humanities education—particularly in non-Western contexts such as Japan—holds strategic relevance for both theoretical and practical advancements in global education.

Humanities education in Japan presents a distinctive phenomenon situated at the crossroads between Eastern cultural traditions and Western modernity. Since the post–World War II educational reforms, Japan's education system has continuously sought a balance between collectivist, moral, and nationalistic values and the need to develop analytical capacities aligned with international standards (Ninomiya, 2016; Nishino, 2017). The most significant transformation has taken place through the implementation of *rekishi sōgō* (Comprehensive History) and *chiri sōgō* (Comprehensive Geography)—two interdisciplinary subjects introduced to encourage students to perceive historical events and geographical dynamics in a more responsive and reflective manner (Sakaue et al., n.d.; Yamanaka & Suzuki, 2020). These reforms not only mark a paradigm shift from factual memorization to analysis-based learning but also represent a systematic effort to promote global awareness and social responsibility through a cross-disciplinary approach (Bamkin, 2018; Kitagawa, 2015).

Nevertheless, this transition has not been without challenges. The most pressing obstacles in implementing Japan's comprehensive humanities curriculum include teachers' preparedness, disparities in regional resources, and the persistent dominance of exam-oriented academic evaluation. Furthermore, international assessments such as the *Programme for International Student Assessment* (PISA) indicate that Japanese students' critical thinking skills still require consistent improvement, particularly in argumentation and contextual analysis (OECD, 2018). These findings raise a fundamental question: To what extent has the humanities-oriented curriculum reform genuinely contributed to the cultivation of critical thinkers within Japan's secondary education system? This question forms the central focus of the present study.

A substantial body of literature underscores the significance of learner-centered curricular design as an effective strategy for fostering critical thinking. Brookfield (1998) argues that critical thinking develops through reflective processes in which individuals examine and challenge their established assumptions, whereas Ennis (2018) and (Paul & Elder, 2019) emphasize its evaluative and dialogical dimensions—requiring learners to assess arguments logically and open-mindedly. In the East Asian context, Tan et al. (2017) found that Singapore's curriculum innovations grounded in reflective and problem-based learning significantly enhanced students' critical thinking capacities (L. S. Tan et al., 2017). Similar approaches, albeit shaped by differing moral and cultural contexts, have also emerged in South Korea (Ayhan, 2024) and Finland (Seikkula-Leino, 2011), both of which position teachers as facilitators of dialogue and collaboration. These studies collectively indicate that the successful development of critical thinking requires curricular designs that integrate interdisciplinary content with reflective and participatory pedagogy (Alexander, 2018).

Within the Japanese context, Ninomiya (2016) and Yamanaka & Suzuki (2020) reveal that *rekishi sōgō* and *chiri sōgō* were conceived not merely to expand factual knowledge of history and geography but also to cultivate analytical competencies enabling students to connect past events with contemporary issues. This approach reflects an educational philosophy that emphasizes the dynamic interrelationship among knowledge, context, and judgment. While Kitagawa (2015)

demonstrates that such curricular reforms nurture reflective awareness and historical empathy, Nishino (2017) identifies ongoing tensions between traditional values of social harmony and the argumentative nature of critical inquiry. In practice, the success of these reforms largely depends on teachers' capacity to translate these values into effective classroom pedagogy. Furthermore, Bedenlier et al. (Bedenlier et al., 2020) highlights that the integration of educational technology into humanities instruction has expanded reflective dialogue, increased student participation, and strengthened analytical reasoning (Çiftçi, 2025; Shamsieva et al., 2026).

Multidisciplinary research further supports the notion that humanities education serves as an effective medium for internalizing humanistic values while cultivating intellectual rigor. Dumitru (2019) argues that the arts and humanities provide students with opportunities to challenge biases and to engage with diverse perspectives. Frykholm (2021), in a study conducted at Stockholm University, found that students enrolled in *cinema studies* courses demonstrated significant gains in reflective and analytical thinking. Similarly, Edwards and Ritchie (2022) contend that the humanities function not merely as cultural enrichment but as a platform for developing *critical consciousness* that integrates analysis, empathy, and social responsibility. In this regard, *rekishi sōgō* and *chiri sōgō* may be viewed as tangible expressions of humanities education explicitly designed to cultivate critical awareness among Japanese students in an increasingly plural and globalized society.

Despite these promising directions, empirical studies examining the impact of Japan's comprehensive humanities curriculum on the development of critical thinking remain relatively scarce. Much of the existing scholarship focuses on policy analysis and curricular content rather than on learning outcomes or the lived experiences of teachers and students (Bamkin, 2018; Nishino, 2017). Additionally, the predominance of English-language sources introduces potential biases that may obscure nuanced understandings of Japan's local educational realities. This gap highlights the need for empirical field research that evaluates how *rekishi sōgō* and *chiri sōgō* reforms tangibly foster critical thinking within classrooms. Therefore, the present study positions itself as an effort to fill this void by employing a mixed-methods approach that integrates quantitative and qualitative data from various educational settings across Japan.

The primary objective of this research is to analyze how *rekishi sōgō* and *chiri sōgō* contribute to the cultivation of critical thinking among Japanese high school students. Specifically, the study seeks to answer three key questions: (1) How do pedagogical strategies and curricular designs within these subjects foster critical thinking development? (2) To what extent do students' learning outcomes reflect measurable improvements in reflective and analytical skills following the 2022 reform? and (3) What facilitating and inhibiting factors influence the implementation of the comprehensive humanities curriculum across diverse school contexts? Conceptually, the study integrates Brookfield's (1998) reflective theory, Facione's (2006) taxonomy of critical thinking, and Paul and Elder's (2019) *active inquiry* framework to produce a more holistic mapping between theory and practice.

The novelty of this research lies in three interrelated contributions. First, it offers an empirical, field-based analysis of how humanities curricula affect critical thinking in a non-Western educational setting—an area seldom explored in international scholarship. Second, it unites reflective, analytical, and contextual approaches within a single mixed-methods framework, enabling a deeper exploration of the relationship between policy, pedagogy, and learning outcomes. Third, it contributes to the global debate on the relevance of humanities education in the digital era by demonstrating that Japan's curricular model provides a meaningful balance between cultural continuity and analytical modernity. In doing so, the study not only enriches theoretical discourse on

critical thinking and humanities education but also offers practical implications for policymakers and educators worldwide striving to nurture reflective, analytical, and culturally grounded learners.

Literature Review

This literature review systematically examines the theoretical and empirical foundations that link humanities education with the development of critical thinking in a global context, focusing on its application within the Japanese curriculum. It is organized around three conceptual axes: (1) definitions and theories of critical thinking, (2) the role of the humanities in fostering reflective and analytical reasoning, and (3) comprehensive learning within Japan's curriculum reform. The goal is to construct a conceptual framework that explains how *rekishi sōgō* (Comprehensive History) and *chiri sōgō* (Comprehensive Geography) are designed to cultivate reflective, open-minded learners.

Theoretical Foundations of Critical Thinking

In international scholarship, definitions of critical thinking vary but share a common epistemic core: the ability to evaluate information, analyze arguments, and make defensible judgments based on evidence (Ennis, 2018; Facione, 2006). Brookfield (1998) emphasizes that critical thinking is not purely cognitive but also affective and reflective process involving self-awareness of one's biases, values, and assumptions. (Dwyer et al., 2014; Paul & Elder, 2019) conceptualize it as *"thinking about thinking,"* a conscious effort to assess the validity of one's reasoning according to criteria of logic, clarity, and accuracy. Halpern (2014) adds a psychological dimension—the *transfer of skills*—referring to the ability to apply critical-thinking patterns across new contexts. Hence, critical thinking represents not merely a set of logical skills, but an intellectual disposition oriented toward independence of thought, openness, and moral responsibility in evaluating truth.

Pedagogical Conditions for Developing Critical Thinking

These perspectives converge on the idea that effective instruction must expose learners to open-ended problems and diverse viewpoints. In both secondary and higher education, Brookfield (1998) shows that guided discussion, personal reflection, and problem-based learning consistently strengthen students' critical-thinking capacities. Follow-up studies by (Zhao, 2025) and (Facione, 2006) identify four measurable domains of critical thinking: argument analysis, evidence evaluation, logical inference, and metacognition. These dimensions underpin widely used assessment tools such as the *California Critical Thinking Skills Test (CCTST)*, enabling cross-cultural comparisons of critical-thinking outcomes.

The Humanities as a Locus of Critical Reasoning

The next strand of literature highlights the humanities as a primary arena for cultivating critical reasons. Dumitru (2019) asserts that disciplines such as history, philosophy, literature, and the arts provide discursive spaces where learners confront ambiguity and weigh values from multiple perspectives. Edwards and Ritchie (2022) add that humanities education fosters *critical consciousness* through dialogic and sometimes confrontational learning experiences that challenge

students' moral and cultural assumptions. Frykholm (2021), in a case study at Stockholm University, found that students enrolled in cinema studies reported marked improvement in analytical and reflective engagement with social reality. The interdisciplinary orientation of the humanities thus reinforces critical-thinking ability by placing human meaning at the center of intellectual inquiry.

Cultural Contexts in East Asian Education

The cultivation of critical thinking through the humanities cannot be detached from its cultural setting. In East Asia, Tan et al. (2017) observed that Singapore's curriculum—emphasizing school-based innovation and reflective inquiry—produced significant gains on the *Watson–Glaser Critical Thinking Appraisal*. Yet, they also noted that such success depended heavily on teacher readiness and institutional support. Similarly, Park et.al (2020) in South Korea found that curriculum reform is effective only when accompanied by professional development and collaborative pedagogy. These findings underscore that integrating critical thinking into the curriculum cannot be achieved solely through policy documents; it must be enacted through transformed classroom practice.

Curriculum Theory & the Japanese Reform

From a curriculum-theory standpoint, embedding critical thinking within humanities education requires a balance between *knowledge transmission* and *knowledge construction*. (Kulkarni et al., 2025) argues that curricula overly centered on content delivery often fail to develop reflective reasoning because students remain passive recipients of information. By contrast, constructivist models position learners as active agents who build understanding through dialogue and contextual exploration. In Japan, this constructivist orientation is evident in the 2022 revision of the *Course of Study* issued by MEXT (the Ministry of Education, Culture, Sports, Science, and Technology). The reform redefines learning objectives from "learning to remember" to "learning to understand and evaluate"—the very essence of critical thinking.

Empirical Insights from Japan's Humanities Curriculum

Empirical research demonstrates that Japan's humanities curriculum has adopted a comprehensive model connecting various social-science disciplines. Ninomiya (2016) explains that *rekishi sōgō* and *chiri sōgō* were structured to build analytical ability through multi-perspective engagement with historical events and geographic phenomena. By prompting students to identify relationships among time, space, and social values, the curriculum seeks to nurture *contextual reasoning*—the capacity to relate knowledge to contemporary sociocultural dynamics. Kitagawa (2015) shows that integrating disaster education into *rekishi sōgō* expanded the humanities' function as a medium for real-life learning. Nishino (2017), however, highlights conceptual tensions between Japan's traditional moral ideals (*kokoro no kyōiku*) and the open argumentation demanded by critical thinking. These contradictions reveal the distinctive complexity of Japanese education as it strives to balance cultural cohesion with intellectual freedom.

Pedagogical & Technological Support

Recent studies also emphasize the importance of pedagogical and technological support in strengthening the humanities' role in developing critical thinking. Through a systematic review of 243 articles, Bedenlier et al. (2020) found that interactive technologies in arts and humanities education enhance engagement, reflection, and argumentative depth. Kurth-Schai (Kurt, 2020) further observes that peer-teaching models promote self-awareness, social empathy, and civic responsibility—core components of critical thinking. In Japan, such approaches are particularly relevant for addressing the hierarchical tendencies of traditional pedagogy by opening more dialogic spaces for teacher–student collaboration.

Gaps & Methodological Limitations

Despite these contributions, significant gaps remain in empirical evidence from non-Western contexts. Most previous studies are conceptual or conducted in English-speaking countries and thus fail to capture the socio-cultural and policy dynamics of Japanese education (Bamkin, 2018; Yamanaka & Suzuki, 2020). Direct analyses of how *rekishi sōgō* and *chiri sōgō* influence students' cognitive outcomes are still limited, while extensive Japanese-language scholarship remains untranslated, creating an epistemic gap between domestic policy discourse and global perception of Japan's educational reform.

Toward an Integrated Framework

Building on this review, the present study recognizes the need for empirical examination of how Japan's comprehensive humanities curriculum shapes students' critical-thinking abilities. The gap is not only geographical but also methodological since most prior research has not combined quantitative and qualitative data in curriculum analysis. By employing a mixed-methods approach that integrates teacher interviews with students' learning-outcome analyses, this study seeks to fill that void. Such an approach allows for a holistic interpretation of how Japanese cultural values, MEXT's educational philosophy, and classroom pedagogy interact to cultivate critical reasoning among youth.

Theoretically, this synthesis forms the foundation of the study's conceptual framework: humanities education fosters critical thinking through three core mechanisms—dialogic learning**,** reflective inquiry**,** and contextual reasoning**.** These mechanisms operate within the *rekishi sōgō* and *chiri sōgō* curriculum, demanding the integration of content, context, and reflection. Consequently, this study not only reaffirms the relevance of classical theories of critical thinking from Brookfield, Facione, and (Dwyer et al., 2014; Paul & Elder, 2019) but also extends them into an empirically grounded, culturally contextualized domain. In this sense, the research contributes new insight into the global discourse on how non-Western education systems can adapt universal principles of critical thinking without losing their own cultural and moral foundations.

Methodology

This study adopts a mixed-methods approach (Creswell & Creswell, 2022b) that integrates quantitative and qualitative techniques to develop a comprehensive understanding of how Japan's comprehensive humanities curriculum fosters critical thinking. This design was selected because

the research objective is not only to measure students' learning outcomes numerically but also to interpret the meanings behind teachers' and students lived experiences in real classroom contexts. The combination of empirical and interpretive data is therefore expected to illuminate, more holistically, the relationships among curriculum policy, pedagogical strategies, and learners' cognitive development.

Paradigmatically, the study is grounded in a reflective constructivist framework in which knowledge is understood as a socially constructed product that emerges through interaction, dialogue, and reflection (Brookfield, 1998; Paul & Elder, 2019). Constructivism provides the theoretical basis for interpreting classroom learning processes, whereas reflectivism underpins the assessment of the extent to which students can interrogate assumptions, weigh evidence, and construct arguments independently. This orientation further positions teachers not merely as transmitters of knowledge but as facilitators of intellectual dialogue who catalyze students' critical thinking.

Research Design

The mixed-methods model employed is a sequential explanatory design, wherein quantitative data collection and analysis are undertaken first, followed by qualitative inquiry to deepen and explain the findings. The first phase focuses on measuring changes in student learning outcomes and critical-thinking abilities before and after the implementation of *rekishi sōgō* (Comprehensive History) and *chiri sōgō* (Comprehensive Geography). The second phase utilizes in-depth interviews and thematic analysis to explore teachers,' students,' and administrators' perceptions of the curriculum's implementation and effectiveness.

The sequential approach serves two primary aims: (1) to explain empirically how the humanities curriculum influences the development of students' critical thinking through standardized measures; and (2) to uncover educators' practical experiences and reflections in translating curricular aims into classroom strategies. This design enables robust triangulation because quantitative results can be tested against and enriched by qualitative insights, thereby increasing interpretive validity(Creswell & Creswell, 2022a).

Sites & Participants

The research was conducted across six prefectures that reflect Japan's geographic and socio-economic diversity: Tokyo, Kanagawa, Osaka, Hiroshima, Aichi, and Hokkaido. Sites were selected to capture varied school contexts—from metropolitan public schools to semi-rural institutions—to obtain a representative picture of *rekishi sōgō* and *chiri sōgō* implementation.

The quantitative sample comprised 327 upper-secondary students who were enrolled in both subjects for one full academic year. A stratified random sampling technique was used, with strata defined by school region and student gender. The qualitative sample included 24 humanities teachers and 6 principals, selected through purposive sampling based on their direct involvement in teaching and in planning the new curriculum. Participation was voluntary and adhered to research ethics protocols that guaranteed the confidentiality of all participants.

Data Collection

Quantitative data were gathered through two primary instruments. First, a critical-thinking test adapted from the California Critical Thinking Skills Test (CCTST) and contextualized for Japan. The instrument consisted of 34 items measuring five indicators: analysis, inference, evaluation, deductive reasoning, and inductive reasoning (Facione, 2006). Validity and reliability were examined using Cronbach's alpha ($\alpha = 0.87$), indicating high internal consistency (Cronbach, 1951).

Second, quantitative evidence is also derived from consolidated academic records before and after the reform, allowing assessment of the curriculum's influence on students' cognitive achievement. Descriptive and inferential statistics were conducted with SPSS (version 28), employing paired-sample t-tests to determine the significance of pre–post score differences ($p < 0.05$).

Qualitative data were collected through semi-structured interviews with teachers and principals and through document analysis (syllabi, lesson-implementation notes, and learning reports). Interview protocols were informed by Brookfield (1989) and Paul & (Paul & Elder, 2019) and covered four core themes: (1) perceptions of critical thinking within instructional practice; (2) teaching strategies used to foster student reflection; (3) challenges in implementing the comprehensive curriculum; and (4) perceptions of institutional support. Each interview lasted 45–60 minutes and was audio-recorded with consent. All recordings were transcribed and translated into English for analysis (Knott et al., 2022). Regarding language and translation: the CCTST-adapted survey instrument was originally developed in Japanese by the research team, with items formulated to be linguistically and culturally appropriate for Japanese secondary-school students. The survey was piloted with a small group ($n = 15$) to verify clarity before administration. All interviews were conducted in Japanese; verbatim transcripts were produced in Japanese and subsequently translated into English by a bilingual researcher with expertise in education. To ensure translational fidelity, a second bilingual reviewer independently back-translated a randomly selected 20% of the transcripts, and discrepancies were resolved through consensus. The English-language references cited in this study reflect the international scholarship engaged by the authors; primary data collection, survey instruments, and thematic analysis were conducted in Japanese.

Data Analysis

Quantitative analysis followed a pretest–posttest comparison model to evaluate significant gains in students' critical-thinking scores after curriculum implementation. Beyond estimating mean differences, the analysis examined variation by school type and students' socio-demographic backgrounds.

Qualitative analysis used reflective thematic analysis (Braun & Clarke, 2019). The procedure comprised six stages: (1) familiarization with the data; (2) open coding of salient statements; (3) clustering codes into initial themes; (4) reviewing and refining themes; (5) naming and defining final themes; and (6) integrating the findings with the theoretical framework. Three core themes emerged as analytic anchors: dialogic learning, reflective inquiry, and contextual reasoning.

The two strands were then integrated at the interpretive stage through triangulation. This integration enabled cross-walking between numeric outcomes and experiential narratives to yield a comprehensive account of the curriculum's impact on critical-thinking formation. Interview excerpts that reflected classroom practice informed the interpretation of quantitative score differences, while statistical trends helped test the generality of the qualitative insights.

Trustworthiness, Ethics, & Limitations

Research trustworthiness was ensured through three strategies: source triangulation, peer debriefing, and member checking. Triangulation compared results across data sources (teachers, students, principals) and across methods (quantitative and qualitative). Peer debriefing involved two Japan-education experts from partner universities who reviewed the initial interpretations. Member checking entailed returning preliminary analyses to selected participants to verify interpretive fit. Ethical procedures included formal school permissions and informed consent from all participants. Respondents' identities were anonymized, and data were stored securely in line with international research integrity standards.

The study acknowledges several limitations. First, much of the literature engaged is Anglophone, which may constrain the depth of local contextualization. Second, although the participant pool is substantial, the intent is not statistical generalization but analytic generalization—deepening understanding of how curriculum policy relates to the development of critical thinking. Third, the one-academic-year window limits observation of long-term reform effects.

Theoretical Validity & Design Justification

The choice of mixed methods rests on the view that critical thinking is a multidimensional phenomenon that cannot be captured solely by numerical scores but must also be understood as a social, reflective process enacted through classroom interaction (Brookfield, 1998; Facione, 2006). Quantitative data provide objective evidence of gains, while qualitative data explain the pedagogical mechanisms that produce them. Accordingly, the design aligns with a critical–reflective inquiry tradition widely used in humanities education studies (Dumitru, 2019; Edwards & Ritchie, 2022).

Methodologically, the study not only evaluates the effectiveness of Japan's curriculum reform but also advances a conceptual account of how critical thinking can be cultivated through the integration of humanities content, cultural reflection, and social engagement. The synthesis of statistical analysis with narrative reflection yields evidence that is both scientifically robust and practically relevant for policymakers and educators seeking to adapt a humanities model that balances cognition, affect, and values.

Results

Quantitative Findings: Enhancement of Critical Thinking Skills

A quantitative analysis was conducted with 327 high school students from six prefectures who participated in the *rekishi sōgō* (Comprehensive History) and *chiri sōgō* (Comprehensive Geography) curricula over one academic year. Results of the paired-sample t-test revealed a statistically significant improvement in critical-thinking scores ($p < 0.05$). The overall mean score increased from 68.7 on the pretest to 77.9 on the posttest. The greatest improvements were observed in the dimensions of *analysis* and *evaluation*, while the *inference* dimension showed more moderate progress.

Table 1: *Mean Scores of Students' Critical Thinking Ability (n = 327)*

Critical Thinking Indicator	Pretest (Mean)	Posttest (Mean)	Δ Increase	Significance (p)	Effect Size (d)
Analysis	13.4	16.2	+2.8	0.002	0.74 (large)
Inference	12.8	14.1	+1.3	0.041	0.41 (moderate)
Evaluation	13.0	16.0	+3.0	0.001	0.81 (large)
Deductive Reasoning	14.5	15.9	+1.4	0.028	0.38 (small-moderate)
Inductive Reasoning	15.0	15.7	+0.7	0.049	0.19 (small)
Total Average	**68.7**	**77.9**	**+9.2**	**0.001**	0.87 (large)

Overall, 78% of students demonstrated significant score gains, 17% remained stable, and only 5% showed slight decreases. Regional analysis revealed that schools in urban areas (Tokyo, Kanagawa, Osaka) achieved an average gain of 11 points, while semi-rural schools (Hokkaido, Hiroshima, Aichi) averaged 7 points. An independent-samples t-test was conducted to assess whether this regional difference was statistically significant ($t(325) = 3.47$, $p = 0.001$, 95% CI [1.72, 6.28]), confirming that urban schools significantly outperformed semi-rural schools. The observed gap may reflect differences in contextual factors such as access to learning resources, availability of qualified teachers, and integration of educational technology; however, these associations are interpretive and were not directly measured in the present study. Future research with targeted instruments is warranted to formally test these relationships.

Reflective questionnaires distributed after the intervention indicated that 84% of students believed that discussion-based learning, historical debates, and thematic map analysis helped them "think more deeply" and "understand the relationship between the past and present contexts." Moreover, 76% reported that teachers more frequently asked them to "explain the reasoning behind their answers," an essential indicator of critical instructional practice. Only 12% found the innovative approach "confusing" due to the heavier reflective workload.

Qualitative Findings: Three Core Themes from Interviews and Observations

Thematic analysis of interviews with 24 teachers and six principals yielded three overarching themes that explain how Japan's comprehensive humanities curriculum fosters critical thinking: dialogic learning**,** reflective inquiry**,** and contextual reasoning.

Dialogic Learning: Dialogue-Based Instruction as a Catalyst for Reasoning

The first theme highlights that dialogue-based instruction serves as a primary driver of students' analytical and argumentative capacities. Most teachers reported shifting from one-way lectures to group discussions and case-based debates.

A history teacher in Osaka remarked: "I started asking open-ended questions such as 'Why did the Meiji reforms matter?' instead of 'When did the Meiji era begin?' As a result, students learned to listen, weigh, and respond to one another's arguments critically."

Another teacher in Hiroshima added that Socratic questioning techniques encouraged students to explore the reasoning behind historical interpretations. This aligns with dialogical pedagogy, which positions teachers as facilitators rather than sole authorities of knowledge.

However, some teachers noted challenges in balancing open discussion with exam requirements. A teacher in Aichi explained: "The evaluation system still emphasizes memorization, so I often have to negotiate between deep discussions and students' need for exam preparation." This tension illustrates the ongoing friction between dialogic pedagogy and Japan's traditionally hierarchical educational structure.

Reflective Inquiry: Self-Awareness & Value Analysis

The second theme shows that reflective practice bridges factual knowledge and moral understanding. Teachers encouraged students to write reflective journals or short essays evaluating historical events from multiple perspectives.

A geography teacher in Kanagawa shared: "When students study natural disasters in Japan, they are asked to reflect on how society learned from past mistakes and how moral decisions were made."

These reflective activities strengthened the affective dimension of critical thinking, prompting students to assess not only facts but also the human values underlying them. Teachers noted that this practice helped students connect local issues to global contexts, such as climate change, migration, and social inequality. A rekishi sōgō teacher in Tokyo offered a particularly illustrative account of how this reflection can deepen students' analytical engagement:

> After studying the Tokyo air pollution crisis of the 1960s, I asked students to write a personal reflection: if you had been a resident then, what would you have done differently, and why? Many students wrote with genuine emotion. One girl compared it to the debates her family has about recycling today. That moment showed me that history had become real for her—it was no longer just facts to memorize.

Student responses to the post-intervention reflective questionnaire further echoed this pattern. One student wrote: "This class taught me to ask 'why' about everything—not just in history, but in my daily life too." Another noted: "I used to think geography was about memorizing maps. Now I see it as a way of understanding why people live and act differently." Such responses illustrate how reflective inquiry translates into a durable disposition toward critical engagement beyond the classroom.

Analysis of interview transcripts revealed that 83% of teachers assigned reflective tasks at least twice per semester. Nonetheless, several educators expressed difficulty assessing students' reflections due to the absence of national evaluation rubrics. This underscores the need for more systematic reflective assessment guidelines to ensure interregional consistency.

Contextual Reasoning: Connecting Knowledge, Culture, & the Real World

The third theme concerns students' ability to relate learning to social realities. Many teachers integrated project-based activities such as field research, interactive mapping, and discussions of contemporary issues.

A *chiri sōgō* teacher in Hokkaido described: "We designed a 'Local Footprints' project where students mapped spatial changes in their village over the past 50 years and compared them with national policies. They learned to interpret spatial and temporal dynamics analytically."

This approach helped students develop *contextual reasoning*—the capacity to connect academic knowledge with concrete situations. Consistent with *place-based education* theory, it fostered students' social connectedness while training evidence-based reasoning.

Nineteen of the twenty-four teachers (79%) stated that such contextual projects improved students' motivation and engagement. However, they also cited limited resources, especially in rural schools lacking digital tools. A principal in Hiroshima concluded:

"The curriculum successfully fosters curiosity and critical thinking, but its success still depends on teachers' creativity in overcoming constraints."

Triangulated Synthesis: Integrating Quantitative & Qualitative Findings

Integration of quantitative and qualitative results yielded a comprehensive understanding of how Japan's humanities curriculum influences students' critical-thinking abilities. Three mechanisms consistently emerged across numeric and narrative data.

First, dialogic learning directly contributed to improvements in *analysis* and *evaluation* scores. Students who actively participated in class debates and group discussions achieved higher average scores (Mean = 80.1) than those less engaged in dialogue (Mean = 73.4). This supports Paul and Elder's (2019) view that argument-based learning enhances analytical capacity through the exchange of ideas.

Second, reflective inquiry correlated positively with *inference* and *deductive reasoning* dimensions. Students who regularly wrote reflections or assessed moral values exhibited a 12% improvement in identifying historical cause–effect relationships. This finding aligns with Brookfield's model of *critical reflection*, in which self-awareness of bias forms the foundation of critical thought.

Third, contextual reasoning strengthened the *application of knowledge*—how students applied historical and geographical understanding to evaluate contemporary issues. Community-based projects not only increased engagement but also fostered the ability to assess public policy ethically and rationally.

The interconnection among these three mechanisms produced an empirical model termed the Integrated Humanities–Critical Thinking Framework (IHCTF)**.** This framework illustrates a dynamic relationship among three pedagogical dimensions: dialogue (as a medium for analytical reasoning), reflection (as a medium for moral reasoning), and context (as a medium for applied reasoning). Together, they form a self-reinforcing cycle of sustained critical learning.

Conceptual Overview of the IHCTF:

1. Dialogic Learning → Builds evidence-based argumentation**.**
2. Reflective Inquiry → Internalizes moral and affective awareness**.**
3. Contextual Reasoning → Applies critical thinking to real-world contexts.

This cycle emphasizes that critical thinking in the Japanese context is not equivalent to Western rational confrontation but rather represents a synthesis of logical analysis and socio-cultural consciousness rooted in the values of *wa* (harmony) and *kokoro* (heart). Thus, the *rekishi sōgō* and *chiri sōgō* curricula exemplify the integration of modern rationality with Eastern humanism.

Summary of Key Findings

1. Quantitatively, students' critical-thinking abilities improved significantly, particularly in the areas of analysis and evaluation.
2. Qualitatively, dialogic, reflective, and contextual learning practices effectively cultivated balanced critical awareness encompassing cognition and values.
3. Triangulatively, the study identified an integrated humanities-learning model—the Integrated Humanities–Critical Thinking Framework (IHCTF)—which can inform other education systems seeking to design comparable curricula.

These findings affirm that Japan's humanities curriculum reform is not a superficial initiative but a strategic effort to cultivate a generation of critical, reflective learners capable of navigating the complexities of modern life while remaining grounded in their cultural roots.

Discussion

The findings of this study affirm that Japan's comprehensive humanities curriculum—implemented through *rekishi sōgō* (Comprehensive History) and *chiri sōgō* (Comprehensive Geography)—has made a tangible contribution to the cultivation of critical-thinking skills among secondary students. The significant improvements in the dimensions of analysis, evaluation, and inference found in the quantitative data, alongside the emergence of reflective and contextual learning patterns in the qualitative evidence, demonstrate that the 2022 curriculum reform successfully shifted educational paradigms from rote memorization to reasoning-based learning. However, this success stems not merely from curricular design, but from the complex interplay among national education policy, Japan's pedagogical culture, and teachers' classroom practices.

Relevance of Findings to Theories of Critical Thinking

The results are consistent with Brookfield's (1998) conceptual framework, which proposes that critical thinking develops through three interrelated processes: recognizing assumptions, evaluating the rationality of beliefs, and engaging in reflective action. In the Japanese context, these processes do not occur within adversarial debate, as in the Western tradition, but through dialogic and reflective learning harmonized with the value of *wa* (social harmony). When teachers encourage students to pose open-ended questions and listen to diverse viewpoints, they not only sharpen argumentative logic but also internalize empathy and collective awareness. This expands the notion of critical thinking from a purely cognitive ability into a moral–social competence grounded in interdependence—aligned with the Japanese ethos of communal balance.

Paul and Elder's (2019) notion of critical thinking as a process of self-directed intellectual assessment—demanding consistency, clarity, and fairness in reasoning—is also reflected in this study's findings. When students compose reflections on the moral implications of historical events or environmental policies, they engage in metacognitive evaluation of their beliefs and values. Thus, Japan's humanities curriculum operationalizes critical thinking as "reflective empathy," rather than merely "rational analysis." This aligns with Dumitru's (2019) argument that the arts and humanities cultivate reflective awareness of human complexity and social values.

The study further supports Facione's (2006) model of five critical-thinking indicators—analysis, inference, evaluation, deductive reasoning, and inductive reasoning. The three pedagogical themes identified—dialogic learning, reflective inquiry, and contextual reasoning—correspond directly with these indicators. Dialogic learning enhances analytical and evaluative skills through argumentative exchange; reflective inquiry strengthens inferential and moral reasoning; and contextual reasoning bridges academic knowledge with empirical reality. These correspondences indicate that the *rekishi sōgō* and *chiri sōgō* curricula have deliberately restructured pedagogical processes to align with multidimensional models of critical thinking.

Humanities Education as a Foundation for Critical Learning

The significant role of humanities education in nurturing critical thinking is clearly reflected in this study. The dialogic and reflective approaches employed by teachers in history and geography illustrate how the humanities serve as a space for developing historical awareness, social empathy, and analytical reasoning simultaneously. As Edwards and Ritchie (2022) observe, humanities education enables students "to confront" diverse values and worldviews, thereby fostering a critical consciousness rooted in human experience. In this sense, *rekishi sōgō* and *chiri sōgō* are not merely academic subjects but vehicles for humanizing the learning process.

This approach also reveals how the humanities can serve as a site of synthesis between tradition and modernity. Ninomiya (2016) emphasizes that *rekishi sōgō* is designed not only to promote factual understanding but also to help students interpret causal relationships and extract moral lessons from the past. By linking temporal and spatial dimensions through *chiri sōgō*, students learn how geography shapes cultural and political evolution. This resonates with the concept of contextual reasoning identified in the present study, wherein students view social phenomena as interconnected within multidimensional causal networks. The findings also reinforce Kitagawa's (2015) argument that context-based learning effectively nurtures reflective and globally responsive thinking.

At the practical level, this humanities-based approach challenges Japan's long-standing examination-oriented educational model. The pedagogical transformation from memorization to dialogue requires teachers to shift their roles from knowledge transmitters to learning facilitators. The educators in this study demonstrated creativity in facilitating debates, field projects, and moral reflections despite pressures from national evaluation standards. Their practices embody what Kurth-Schai (Kurt, 2020) describes as "learning to teach and teaching to learn"—a symbiotic relationship between instruction and inquiry.

Tensions Between Traditional Values & Modern Rationality

One of the most compelling aspects of this study is the epistemological tension between Japan's traditional moral values and the modern rationality that underpins critical thinking. Nishino (2017) observes that Japanese moral education often emphasizes *kokoro no kyōiku* (education of the heart), oriented toward harmony and obedience, while critical thinking demands the courage to question and reassess. In this study, that tension was reconciled through pedagogical approaches balancing reflection and dialogue—principles that reinterpret rather than reject traditional values within a modern framework.

For example, when students discuss government climate policies, they are not encouraged to criticize confrontationally but to understand the rationale behind public decisions and evaluate

their social implications. This pedagogical stance integrates collective morality with individual critical reasoning—a uniquely Japanese form of "rational harmony." Here, critical thinking is not an antithesis to cultural values but an evolution of traditional wisdom toward a more reflective rationality.

This insight contributes to global discourse on the universality of critical thinking. While Western models often associate critical thinking with individualistic rationalism and open debate (Halpern, 2013), the Japanese model demonstrates that it can also thrive within a social ecology emphasizing collaboration, respect, and ethical awareness. Japan's curriculum reform thus diversifies the epistemology of critical thinking, presenting a relational and contextual paradigm distinct from purely cognitive frameworks.

Policy & Educational Practice Implications

The study's findings carry significant implications for educational policy and practice in Japan and beyond. First, the evidence highlights that the success of critical-thinking development depends heavily on teachers' competence and readiness. Insufficient professional training was identified as a major constraint in interviews. Hence, the Ministry of Education (MEXT) should reinforce continuous professional development programs emphasizing teachers' capacity to design reflective, dialogic, and interdisciplinary learning activities.

Second, the effective implementation of *rekishi sōgō* and *chiri sōgō* requires adequate learning infrastructure. The disparities in facilities between urban and rural schools found in this study may hinder contextual learning. Educational policy must therefore address equitable resource distribution to ensure all students have access to reflective and interactive learning environments.

Third, these findings open pathways for more balanced international comparisons. The Japanese approach offers an alternative model for developing countries seeking to strengthen critical thinking without replicating Western educational systems wholesale. The Integrated Humanities–Critical Thinking Framework (IHCTF) proposed by this study can be adapted to diverse contexts through three core pillars: dialogic learning (constructive argumentative communication), reflective inquiry (moral and social reflection), and contextual reasoning (local reality-based analysis).

Theoretical Contributions & Research Novelty

Theoretically, this study contributes to two keyways. First, it broadens the framework of critical thinking from a cultural perspective, asserting that its development is contextual rather than universal. The IHCTF model demonstrates that critical thinking in Japan evolves through the integration of analytical logic and moral awareness grounded in culture. This enriches the models of Brookfield and Paul & Elder by embedding more complex social and emotional dimensions.

Second, the research provides empirical evidence of how humanities education addresses the crisis of instrumentalism in modern education—the tendency toward excessive emphasis on technical competence and labor-market utility. By demonstrating that history and geography foster both moral reflection and analytical reasoning, this study reaffirms the enduring relevance of the humanities in shaping holistic human beings: rational, empathetic, and value-conscious.

Ultimately, Japan's success in fostering critical thinking lies not in imitating Western theory but in adapting it to local cultural values and social needs. Thus, Japan's experience exemplifies *cultural translation* in global education—a creative adaptation that preserves the universal essence of critical thinking while reinforcing national identity and humanistic values.

Conclusion & Implications

This study was driven by the need to understand how Japan's comprehensive humanities curriculum—through *rekishi sōgō* (Comprehensive History) and *chiri sōgō* (Comprehensive Geography)—cultivates students' critical-thinking abilities. Amid global educational trends that demand learners to be creative, reflective, and intellectually resilient, Japan offers a model that balances analytical rationality with moral–social consciousness. Based on both quantitative and qualitative analyses, this study demonstrates that dialogic, reflective, and context-based learning not only enhances students' cognitive outcomes but also revitalizes the affective dimension of critical thinking rooted in Japan's cultural values.

The quantitative results revealed significant improvements in students' critical-thinking scores, particularly in analysis and evaluation. Meanwhile, qualitative findings identified that the most effective learning strategies were those that fostered open dialogue, integrated moral reflection, and connected knowledge to real-life contexts. Together, these three mechanisms—dialogic learning, reflective inquiry, and contextual reasoning—form a reinforcing cycle of critical learning. When students engage in dialogue, they learn to think logically; when they reflect, they cultivate empathy and moral judgment; and when they connect learning to social contexts, they develop ethical reasoning to evaluate reality.

The conceptual model emerging from this study, the Integrated Humanities–Critical Thinking Framework (IHCTF)**,** illustrates the interdependence of these three dimensions. The model offers a new perspective that critical thinking is not a linear skill to be taught, but a layered interaction between rationality, reflection, and cultural context. Within this framework, humanities education does not merely transmit knowledge—it facilitates the transformation of students' thinking through social dialogue and reflective self-awareness.

Key Conclusions

First, the study reveals that the *rekishi sōgō* and *chiri sōgō* curricula successfully achieve a balance between tradition and modernity in Japanese education. These curricula foster *critical reasoning* without abandoning the ethical foundations of *wa* (social harmony) and *kokoro* (sincerity of heart)—two moral pillars defining Japanese pedagogy. Here, critical thinking is not confrontational, but an intellectual practice aimed at understanding and moral equilibrium.

Second, the success of this reform demonstrates that critical thinking can thrive within a highly structured educational system, provided that deliberate spaces for dialogue and reflection exist. Teachers serve as the central agents of transformation—not mere curriculum transmitters. Field data show that teachers who actively facilitated dialogic and reflective learning achieved a significant impact on students' learning outcomes. This underscores that national education policies are meaningful only when supported by strong pedagogical capacity at the micro level.

Third, the study highlights that critical thinking can be cultivated through the interaction between formal learning experiences and local cultural values. This approach rejects the outdated dichotomy between "Western critical education" and "Eastern moral education," offering instead

an epistemological alternative that integrates both. Globally, this presents a paradigm of *context-sensitive critical thinking*—a form of intellectual reasoning that grows organically from each society's cultural and social ecology.

Theoretical Contributions

Theoretically, this study extends the classical boundaries of critical-thinking theories proposed by Brookfield (1989), Paul and Elder (2019), and Facione (2015). While those theories focus on individual cognitive processes, the IHCTF introduces social and cultural dimensions as key catalysts in the development of critical reasoning. In this model, critical thinking encompasses not only *how to think* but also *why to think*—emphasizing ethical awareness of the purpose of reasoning itself.

The study also reaffirms the humanities' significant role in developing reflective and moral intelligence. Consistent with Dumitru (2019) and Edwards and Ritchie (2022), it shows that the humanities are not merely repositories of historical knowledge but disciplines that train the intellect and emotions to grasp human complexity. Thus, the humanities function as a bridge between intellect and humanity space where *critical empathy* emerges: a form of awareness that thinks and feels simultaneously.

Beyond enriching critical-thinking theory, this research contributes to comparative education studies by positioning Japan as a non-Western case that broadens the global spectrum. The findings show that critical thinking can emerge within distinct cultural frameworks, challenging the universalist assumption that it flourishes only in individualistic societies.

Policy & Educational Practice Implications

From a policy perspective, the findings highlight the importance of designing curricula that balance academic achievement with reflective-critical reasoning. The Ministry of Education (MEXT) should strengthen reflective pedagogy components in the national curriculum, including the development of assessment standards that measure not only cognitive outcomes but also the quality of argumentation and moral reflection. Project-based portfolio, and reflective writing evaluations can serve as alternatives to the still-dominant memorization-based examinations.

Furthermore, teacher training emerges as a decisive factor in implementing critical-thinking curricula. Continuous professional development programs should prioritize teachers' abilities to facilitate open discussions, guide reflection, and integrate digital tools as instruments of critical inquiry. The teachers' experiences in this study confirm that reflective capacity directly determines the quality of dialogic and humanistic learning.

Another implication lies in the need for equitable educational resources. The disparities between urban and rural schools, as revealed in this study, indicate unequal access to learning materials and teacher training. Sustainable educational reform must therefore address the distribution of facilities and pedagogical support to ensure all students have equal opportunities to engage in reflective and analytical learning.

In a broader context, Japan's experience can inspire other countries—including Indonesia and Southeast Asian nations—to develop contextualized humanities education models. By adapting the principles of the Integrated Humanities–Critical Thinking Framework (IHCTF), education systems can nurture generations who are not only intellectually competent but also ethically, socially, and spiritually conscious.

Directions for Future Research

This study opens three main avenues for future research. First, longitudinal studies are needed to assess the long-term impact of *rekishi sōgō* and *chiri sōgō* curricula on students' critical-thinking development and social character formation. Such studies can reveal how these competencies contribute to graduates' readiness to face real-world challenges.

Second, international comparative research should explore how the IHCTF model can be adapted across different educational contexts—such as in countries undergoing curriculum reform, including South Korea, Finland, or Indonesia. These comparisons would enrich global scholarship on the diversification of critical-thinking epistemologies and strengthen the concept of *global–local synergy* in education.

Third, future studies should expand participatory dimensions by engaging students more explicitly as *co-researchers*. Within a reflective educational framework, students are not merely research subjects but active knowledge co-creators. Involving them in designing reflection instruments or community-based projects will deepen understanding of how critical thinking emerges through lived social practice.

Final Reflection

Overall, this study concludes that Japan's success in fostering critical thinking through its comprehensive humanities curriculum is not a product of Western theoretical adoption but of creative adaptation that places cultural, moral, and social values at the heart of learning. The humanities, embodied in *rekishi sōgō* and *chiri sōgō*, demonstrate that critical thinking can develop contextually without losing its universality.

Ultimately, the central contribution of this study lies in proposing a new paradigm for global education: that critical thinking is not only an intellectual ability but a living cultural and moral practice. When curricula integrate logical analysis, value reflection, and social context, education produces not only individuals who think well but also those who act wisely.

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Professor Habib Badawi is a Professor of International Relations at Lebanese University and an independent researcher specializing in Japanese studies, modern history, and comparative international education. Since 2005, he has contributed extensively to scholarship on Japan's modernization, completing both his M.A. and Ph.D. in the field. In recognition of his pioneering role in advancing Japanese studies in the Arab world, he was awarded the Academic Personality of the Year Award in 2018. His research focuses on comparative history, international relations, curriculum reform, cultural diplomacy, and the role of integrated humanities education in fostering critical thinking and contextual reasoning in secondary education.

Associate Professor Dr. Taufikin Taufikin is an Associate Professor at Universitas Islam Negeri Sunan Kudus. His academic interests include education, digital pedagogy, pesantren transformation, artificial intelligence in education, and multicultural sustainability. His research explores the relationship between technological innovation, educational reform, and culturally responsive learning within contemporary educational systems.

Transforming Educational Leadership: Non-Traditional Narratives to Promote Equity in Uncertain Times
Anindya Kundu

Oxford University Press (November 3, 2025). 224 pp., $39.99. First edition, paperback.
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Reviewed by Dennis S. Assiam, Florida International University[1]

Abstract

This review examines Anindya Kundu's Transforming Educational Leadership: Non-traditional Narratives to Promote Equity in Uncertain Times (Oxford University Press, 2025), which draws on interviews with twenty-two educational leaders to theorize equity-oriented leadership amid book bans, curriculum restrictions, and systemic disinvestment. The book is reviewed from the standpoint of a first-generation Black international doctoral student researching self-efficacy among underrepresented graduate students; the review identifies the book's principal contributions, its grounding of collective efficacy in lived experience, its repositioning of "hand-ups" over deficit-based interventions, and its integration of theory with practitioner narratives, while raising concerns about the under-theorization of the "non-traditional narratives" framework, its limited cross-cultural reach, and its tendency to foreground triumph over the structural costs equity-oriented leaders frequently bear. The review situates Kundu's contribution within transformative and applied critical leadership scholarship.

Keywords: *educational leadership, equity, collective efficacy, transformative leadership, student agency, non-traditional narratives, critical leadership*

As a first-generation Black international doctoral student from Ghana conducting research on self-efficacy and persistence among Black international graduate students, I approach educational leadership scholarship from a distinctive vantage point. My journey through multiple U.S. institutions—from serving as a multicultural programming coordinator at Canisius University to residential life roles at Brown, Syracuse, and Marshall Universities—has shown me firsthand how leadership shapes the experiences of students navigating intersecting identities of race, nationality, and academic status. When my mentor, Dr. Amy Li, recommended that I write a book review for my

1. The author of this review and the book author are both affiliated with Florida International University but have no prior professional or personal relationship. This review was undertaken at the suggestion of the reviewer's doctoral advisor, Dr. Amy Li, as the reviewer's first publication effort. The reviewer's doctoral research on self-efficacy among Black international graduate students aligns with the book's themes of agency and leadership.

first publication, I was drawn to Anindya Kundu's *Transforming Educational Leadership: Non-traditional Narratives to Promote Equity in Uncertain Times* precisely because it speaks to questions at the heart of my research: How do leaders create conditions for agency? What role does collective efficacy play in student success? And whose stories count when we theorize about educational leadership?

At a moment when public education in the United States faces unprecedented challenges—from book bans and curriculum restrictions to teacher shortages and systematic disinvestment—Kundu's work arrives as both a timely intervention and a call to action. Building on his PROSE Award-nominated book *The Power of Student Agency* (2020), Kundu shifts his analytical lens from students to the leaders who shape educational ecosystems. The book's central thesis is deceptively simple yet profoundly important: effective educational leadership in our current moment requires "non-traditional narratives"—approaches that challenge meritocratic assumptions, center human dignity, and recognize that systemic change demands both individual agency and collective action.

Through interviews with twenty-two educational leaders—ranging from former U.S. Secretary of Education Arne Duncan to Miami-based literacy advocate Debra Bazile—Kundu constructs a montage of leadership philosophies across six thematic chapters. Following a theoretical foundation drawing on social and cultural capital, collective efficacy, and the structure-agency dichotomy, subsequent chapters explore how leaders apply research to address injustices, leverage networks, provide "hand-ups over handouts," and center human dignity. This structure positions the book as both a theoretical contribution and a practical guide, distinguishing it from traditional leadership texts that often prioritize one or the other.

One of the book's most significant strengths is its methodological approach. Rather than offering abstract prescriptions, Kundu grounds his arguments in lived experiences of diverse leaders. The storytellers include researchers like Amanda Lewis, whose ethnographic work on race in schools has shaped a generation of scholarship, and practitioners like James Whitfield, a Black principal in Texas who faced backlash for his equity-focused leadership. Particularly noteworthy is the inclusion of Jacqueline Rodero, an FIU student who emerged from the foster care system to become a peer mentor—exemplifying how individuals who have navigated systemic barriers often become the most effective advocates for change. This methodological choice aligns Kundu's work with the narrative turn in leadership studies (Ospina & Foldy, 2009) while offering something those more traditionally academic texts lack: the visceral weight of lived experience.

Kundu's treatment of collective efficacy resonates strongly with my research on self-efficacy and achievement among underrepresented students. His argument that "the power of collective efficacy among educators is more significantly predictive of student achievement than socioeconomic status" (p. 67) aligns with Bandura's (1997) foundational work while extending it into educational leadership. This theoretical move is significant because it suggests that building shared beliefs among educational stakeholders may be more consequential than addressing resource disparities alone—though Kundu is careful not to discount the latter. The distinction between "handouts" and "hand-ups," illustrated through Chicago CRED's work with individuals overcoming gang violence and addiction, demonstrates how holistic, community-embedded support can transform trajectories in ways that traditional deficit-oriented interventions cannot.

Nevertheless, the book has notable limitations. Most significantly, Kundu's "non-traditional narratives" framework, while compelling, remains under-theorized. What criteria distinguish "non-traditional" from "traditional" leadership narratives? The text suggests that non-traditional approaches challenge meritocracy and center dignity, but this capacious definition risks encompassing any equity-oriented practice without offering analytical precision. For instance, both

Arne Duncan's policy-level initiatives and Rodero's peer mentorship are presented as "non-traditional," yet these operate at fundamentally different scales and through different mechanisms. A more systematic taxonomy—perhaps distinguishing between positional and emergent leadership, or between institutional reform and community-based resistance—would strengthen the framework's utility for researchers seeking to build on Kundu's work.

From my perspective as an international scholar who has navigated educational systems in both West Africa and the United States, I find myself questioning the extent to which Kundu's framework travels across cultural contexts. The book is deeply situated within American educational politics, which is both a strength—given the specificity of challenges like Florida's restrictions on African American history—and a limitation. Berry and colleagues' (2006) acculturation framework suggests that concepts like "agency" and "capital" function differently for individuals whose reference points span multiple cultural systems. In many African educational contexts, the "communal agency" Kundu touches upon operates within kinship networks and collective responsibility structures that may not map neatly onto American notions of individual-plus-collective agency. While Kundu acknowledges that "community-based bonds are key to developing authentic social welfare" (p. 152), a more sustained engagement with how these dynamics function cross-culturally would position the book more effectively within global educational leadership scholarship.

Additionally, the book's narrative of resilience, while inspiring, risks romanticizing individual fortitude without fully grappling with structural constraints that cannot be overcome by agency and coalition alone. How does the book handle leaders who "fail" or are pushed out? Diane Ravitch's story—in which she sacrificed professional networks to challenge policies she once endorsed—gestures toward these costs, but most narratives conclude in triumph rather than examining the emotional labor, career derailment, or institutional retaliation that equity-oriented leaders frequently face. A more systematic treatment of these costs would offer a fuller picture of what transformative leadership demands and might better prepare readers for the realities of this work. As Santamaría and Santamaría (2016) argue, applied critical leadership requires acknowledging both possibilities and perils.

Despite these limitations, *Transforming Educational Leadership* makes a meaningful contribution that distinguishes it from existing texts in the field. Unlike Shields' (2010) work on transformative leadership, which remains primarily theoretical, or Goleman and colleagues' (2002) competency-focused approach, Kundu centers narrative and positionality in ways that honor practitioner knowledge. The book will be valuable for graduate students in educational leadership and higher education administration programs seeking case studies for reflective analysis, practicing administrators looking for frameworks to articulate their equity-oriented work, and researchers interested in narrative methodologies. Instructors might pair specific chapters with theoretical readings—Chapter 5 alongside Yosso's (2005) community cultural wealth framework, for instance—to prompt students' comparative analysis of how different scholars conceptualize assets in marginalized communities.

In the book's conclusion, Kundu poses a question that lingers: "Who will serve these students?" (p. 179). At a time marked by what Kundu describes as "intense and uncivilized cultural wars" over education (p. 55), this book offers not prescriptions but possibilities—concrete examples of leaders who have found ways to center equity amid institutional constraints. For those of us committed to this work, whether as emerging scholars, practicing administrators, or students navigating these systems ourselves, Kundu's narratives provide both inspiration and a reminder

that transformative leadership, while difficult, remains possible. The book reminds us that educational leadership is fundamentally about people—their stories, their struggles, and their capacity for transformation.

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Dennis S. Assiam is a doctoral student in higher education at Florida International University, where his research focuses on self-efficacy and persistence among Black international graduate students. A first-generation Black international scholar from Ghana, he has held student affairs roles at Canisius University, Brown University, Syracuse University, and Marshall University, with experience spanning teaching and research, multicultural programming, and residential life. His scholarly interests sit at the intersection of educational leadership, equity, and the experiences of underrepresented students in U.S. higher education. He can be reached at sagetafari@gmail.com (ORCID: 0009-0000-9865-2928).