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Layers of Data, Layers of Skills Measurement in the E-Government Reform

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This conceptual article investigates the rationales for the fascination with soft skills (social-emotional skills, responsibility, engagement, etc.), propelled by a large and diverse group of proponents, including international organizations—such as the Organisation for Economic Co-operation and Development (OECD) and the World Bank—that have a long-standing history with promoting hard skills, such as literacy and numeracy. It (i) outlines several reasons why global actors promote the development of soft skills, agentic teaching and learning, and social accountability; (ii) traces the evolution of social accountability—the regulatory mechanism behind the current E-Government or New Public Governance reform—by sequencing the global public administration reforms of the past five decades; and finally, (iii) examines the challenges of social accountability in today's divisive societies plagued by information pollution, anti-globalization sentiments, and distrust in government.

Keywords: soft-skills, agentic teaching and learning, social accountability, New Public Governance, education reform, citizen engagement, global governance, datafication

Toward Measurable Soft Skills

Known as hardliners who narrowly focus on building a human capital stock for the labor market (OECD) and enhancing economic productivity (World Bank), the two international organizations have become remarkably soft in their new approach to human capital.

Well-being and Prosperity for Future Generations

In 2011, the Ministries of Finance of OECD countries approved a new framework to expand the resources available today for the well-being of future generations (OECD, 2011, 2019). Thus, the OECD's metaphor of capital—investing today for returns tomorrow—is also present in this framework. It outlines four types of capital, which the OECD considers invaluable resources that need to be nurtured now to be accessible in the future: natural capital, economic capital, human capital, and social capital. A few years later, in 2018, the Ministries of Finance endorsed the Better Life Initiative. As with previous OECD initiatives, the Ministries of Finance often lead, followed by line ministries. The OECD's Economy of Well-Being emphasizes inclusive economic growth and advocates for measures of prosperity that extend beyond Gross Domestic Product (Nozal et al., 2019). This concept has been integrated into significant ministerial agreements, including the commitment from the Ministries of Education to align their school reforms with the OECD's education strategy, the 2030 Learning Compass (OECD, 2018a).

The World Bank has similarly expanded its narrow focus on numeracy and literacy to embrace a broader definition associated with foundational learning. Notably, citizenship engagement is not only a key element of OECD's 2030 Learning Compass, but it also plays a central role in the World Bank's recent initiatives, as seen in the Foundational Learning Compact.[1]

> Growing evidence suggests that, under the right conditions, meaningful forms of citizen engagement and social accountability (CESA) can result in better governance, citizen empowerment, more positive and constructive citizen-state relations, strengthened public service delivery, and, ultimately, enhanced development effectiveness and well-being. (World Bank, 2025)

The soft-skill-turn concerns not only what is supposed to be taught (foundational learning) but also how the sector is supposed to be governed (citizen engagement and social accountability). What remains the same is the role of international organizations and their use of global governance tools: the OECD and the World Bank continue to use datafication—composed of international standard-setting, benchmarking, and performance evaluation—followed by data-driven knowledge brokerage as their preferred governance tools (Steiner-Khamsi et al., 2024). The two tools combined—datafication with knowledge brokerage, also known as "soft governance by hard fact" (Niemann & Martens, 2018) or "governance by numbers 2.0" (Steiner-Khamsi et al., 2024)—in effect authorize international organizations to exert policy influence in the absence of coercion. International organizations gain legitimacy and make themselves heard by carrying out activities that require a transnational perspective, such as international comparisons or comparisons against global benchmarks (such as the SDGs).

Explanations and Speculations about the Discursive Shifts
After decades of a narrow economic outlook on education, speculation is widespread about why the World Bank suddenly promotes Citizen Engagement and Social Accountability (CESA) and why the OECD embraces soft skills such as taking responsibility, reconciling tensions and dilemmas, being transformative, and creating new value (OECD, 2018a, 2018b). Can the "biological and neuro-affective turn" in education be trusted, considering its backing by economists? What's next: projections on the social-emotional, environmental, and societal rates of return from education? Taking a step back, what happened to the unspoken division of labor in which the United Nations Educational, Scientific and Cultural Organization (UNESCO) positioned itself as The Idealist, the OECD as the Master of Persuasion, and the World Bank as the Master of Coercion (Elfert & Ydesen, 2024)? One would be hard-pressed to believe that the OECD and the World Bank somehow experienced an idealist humanist turn, slowly converging, even if only rhetorically, towards UNESCO's stance on education as a human right. Similarly, it has raised eyebrows that UNESCO jumped on the bandwagon of social-emotional learning (SEL) and now embraces a "whole brain" approach (Bryan, 2022). Clearly, more plausible explanations are needed here.

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[1] See https://www.worldbank.org/en/topic/citizen-engagement#1

Noticeably, most explanations reflect skepticism about the new course of action. The four most common explanations point to the changed historical context, the ever-expanding scope of datafication, the new funding networks and opportunities, and institutional legacies within the two international organizations.

First, one may wonder whether the pandemic, climate crises, divisive politics, cyberbullying, worldwide refugee streams, and a long list of other calamities have made the two international organizations realize that education should be more than merely equipping the labor market with skilled workers or augmenting the countries' economic productivity. According to this first line of argumentation, building resilience and committing to an ethics of care have gained prominence during these turbulent times. Arguably, the generational change at the helm of international organizations must also be factored in when considering the historical context. Well-being, work-life balance, and mindfulness are values that the millennials hold and propagate more than their predecessors from older generations.

Second, another group of scholars is intrigued by the ever-expanding scope of datafication, breaking into areas such as social-emotional learning and other soft skills that were, until recently, exempt from measurement (Lupton & Williamson, 2017; Williamson, 2019). Starting in the late 1980s, the OECD and the World Bank erected an enormous data infrastructure, knowledge depositories, and professional expertise that need to be fed and, in a quest for survival, must conquer new terrains that await to be quantified, measured, and monitored (Addey, 2022; Zapp, 2017). For them, the most fascinating aspect of the 2030 Learning Compass (OECD) or the Foundational Learning Compact (World Bank) is the obsession with data gathering, which has also started to penetrate subjects beyond the narrowly defined basic skills of numeracy and literacy. In other words, what we are experiencing with the Foundational Learning Compact (World Bank) and the Learning Compass 2030 (OECD) is simply a panoptical version of "Seeing like PISA" (Gorur, 2016), which has now also brought into focus early childhood education and secondary education, and therefore covers a broader array of measurable skills. Concretely, social-emotional learning resonates with early childhood education advocates, whereas cross-curricular competencies are associated with the "employability" of secondary school graduates in today's rapidly changing labor market. The expansion is unsurprising given the greater coverage radius, from preprimary to lower secondary school, propelled by the educational goal of the Sustainable Development Goals (SDGs), that is in SDG 4. This line of argumentation is in concert with Bryan's (2022) poignant observation that social-emotional learning is a "capacious term" that denotes a hodgepodge of loosely related skills, including all that is "non-cognitive," "human-centric," or even "life-effective" (p. 772). Bryan traces the ever-expansive, inflationary use of the term. She examines how the Chicago-based company CASEL, the oldest business in the SEL industry, kept expanding the term semantically and, by implication, their revenues over the last thirty years. Strikingly, the learning and testing feature of SEL (SDG 4.1) has entered a union with the substance of the sustainable, holistic development feature of SDG 4.7.

Said differently, we may highlight the performative nature of data infrastructure, data mining, and platforms in the digital era. On the one hand, these technologies or devices are the offspring of knowledge-based regulation, and on the other, they reproduce themselves by continuously adapting and expanding into new arenas. As a result, we expect to see a rise in data-driven management and organization. The sophisticated study by Bromley et al. (2023) corroborates this observation unambiguously. Applying topic modeling of 9,268 policy documents from 215 countries, they found a significant increase in student assessment reforms and data for reporting, monitoring, and evaluation.

Third, the turn towards soft skills reflects the entry of new influential global actors, notably UNICEF and the private sector. The broad alliance of bilateral donors (Australia, Canada, Finland, Germany, the UK, and the USA), multilateral donors (GPE, UNESCO, UNICEF), and philanthropies (Bill and Melinda Gates Foundation, Echidna Giving, Hewlett Foundation, Hilton Foundation, Lego Foundation, and Rockefeller Philanthropy) participating in and financially contributing to the World Bank's Foundational Learning Compact (FLC) has raised several red flags. Some of these partners were previously assembled under the Early Learning Partnership (ELP) program. Since 2022, the World Bank has administered the ELP program and utilized the funds for the Foundational Learning Compact. The compact invests in young children's physical, cognitive, linguistic, and socio-emotional development and targets the pre-primary age group (World Bank, 2024). FLC's commitment to early learning, social-emotional learning, and play-based learning may primarily be driven by the Bank's partners. The origin of the FLC is essential: the Foundational Learning Compact is the successor initiative to the World Bank's SABER (Systems Approach for Better Education Results) and the Early Learning Partnership (ELP) program. SABER lasted from 2013 to 2018, and the ELP trust fund was transferred to the World Bank a few years later. The public-private partnership and the multi-donor feature of the FLC may explain why the activities under this program differ significantly from the reform priorities typically financed by a World Bank loan. Thus, this third type of explanation is as follows: Driven by opportunity, the World Bank advanced into promoting soft skills, typically emphasized in early childhood education, due to the new funding sources. One would expect that the World Bank's support for social-emotional learning dissipates as soon as the broader alliance is dismantled and the financial support currently provided by bilateral donors and philanthropies is dried up. Similarly, one may argue that the World Bank has, despite the objectives of the Foundational Learning Compact, continued to focus narrowly on numeracy and literacy skills in primary education in its core business: lending.

Finally, the emphasis on soft skills arguably has existed all along. However, it has been buried and now resurfaces in a different shape and context due to saturation from international scale student assessments or PISA fatigue. The OECD's INES (Indicators of Education Systems Programme) has entertained proposals for measuring cross-curricular competencies (CCC), such as creative thinking, problem-solving, and mutual aid, since the early 1990s. Some CCCs, first formulated by Trier (1995), were adopted in the OECD's Definition and Selection of Key

Competencies project and later renamed 21st-century skills (Schleicher, 2017). Years later, several scholars have debunked the direct correlation between educational attainment and economic growth. Furthermore, public awareness is rising regarding the growing gap in wealth distribution. As mentioned, the call for moving "beyond GDP" (Gross Domestic Product) is increasingly heard, including at the OECD (OECD, 2019). The European Union, particularly Nordic countries, has been quite vocal in efforts to redefine well-being. Similarly, the Programme for International Student Assessment (PISA) may have lost momentum with its narrow focus on math, literacy, and science, and in recent rounds, it has included softer domains as minor assessments (creative thinking, financial literacy, global competence) to maintain the participation of countries that, for the past 25 years, have participated every three years in the evaluation and have seen little impact on their overall ranking. The four strands of argumentation are widespread and not mutually exclusive.

The Reactive Sequences of Public Administration Reforms

In this paper, I propose a fifth strand of argumentation that reflects a shift in the object of comparison and, consequently, the frame of reference. I suggest we stop comparing the rise of soft skills development with earlier policies of the OECD and the World Bank, notably, the well-documented structural adjustment policies and neoliberal education agendas of the past and instead examine what these two international organizations are actively promoting in the current public administration reform. The point made here is that education reform needs to be placed in the broader context of public administration reforms. We should not view education reform in isolation but rather acknowledge that key features of a reform represent broader reform agendas and are merely "translated" in ways that match the structures, idiosyncrasies, and language of the education sector. Said differently, the World Bank's emphasis on "citizenship engagement and social accountability" (CESA) and the OECD's focus on soft skills, as outlined in the 2030 Learning Compass, are only surprising if we use a narrow educational frame of reference. As I will demonstrate in this paper, social accountability and agentic learning align with e-government public administration reform, also known as New Public Governance (NPG). Both intergovernmental organizations (IGOs) adhere to NPG and support governments with policy advice and, in the case of the World Bank, funding to implement the reform. Like all public administration reforms, a specific role of the state is implied, signaling a departure from the Interventionist State—one that establishes and monitors standards and targets—to the Engaged State, which is intended to make data widely available and encourage civic participation. As will be shown later, there is a fine line between an engaged and hollow state that deregulates, promotes private sector takeover, and delegates regulation to citizens, or more specifically, to users and customers, in the form of social accountability.

The public administration reforms of recent decades, led by the Ministries of Finance, have influenced all sectors, including education. Furthermore, the policy sequence, or the chronological order in which these reforms occurred, impacted their substance: each reform emerged as a solution to problems that the previous one supposedly

could not resolve or, even worse, created. The term "reactive sequence" (Zürn, 2018, p. 89) aptly captures the causal chain of reforms that becomes evident when we closely examine the temporal order in which they occurred. There is a tendency to overstate the shortcomings of the latest reform solely to secure political support and mobilize financial resources for change. Viewing sequence as an analytical lens allows us to grasp how fundamental changes were justified at the time and how each reform distanced and differentiated itself from the goals of its predecessor. Investigations into the temporal order of events, or in our case, reforms, are closely linked to the scholarship in historical institutionalism (e.g., Abbott, 1983; Pierson, 2004).

There are different approaches to identifying reform waves in public administration (Wegrich, 2023). Given the political nature of reforms, this section is organized regarding the state's role in each reform. As Table 1 shows, the role of the state changed several times since the 1960s: from a strong state that managed social welfare (1960s/1970s) to a weak state that, in the wake of continuous deregulation, went dormant (1980s/1990s), to a reawakened evaluative state that encouraged private sector involvement under certain conditions (2000s), to a collaborative state that, voluntarily or involuntarily, engages with the public (2010s/2020s).

Table 1

The Sequence of Public Administration and Education Sector Reforms, 1960s - 2020s

Time period	Public administration reform			Education sector reform			All sectors		
	Name	Problems of Previous Reform	Solution/Promise	Reform goal	Problems of Previous Reform	Solution/Promise	Type of Regulation	Type of Accountability	Role of the State
1960s/70s	Traditional bureaucracy	Coupling of politics and administration	Rationalization Procedures Hierarchies	Equal opportunity	Reproduction of inequality Elite capture	Compensatory education	Inputs	State accountability	Welfare State
1980s/90s	New Public Management	Rigidity Inertia Monopoly	Privatization Customer orientation	Autonomy	High public expenditures	Autonomy and choice leading to efficiency and achievement gains	Outputs	Market accountability	Entrepreneurial State
2000s	Network Governance	Power dispersion	Public-private partnerships, whole-government approach	Quality	Inequity Unequal quality	Autonomy-with-accountability (SAWA)	Outcomes	Standards accountability	Interventionist State
2010s/20s	E-Governance (also known as New Public Governance)	Citizens reduced to customers Fragmentation	Collaboration Data sharing Re-governmentali-zation	Transparency	Datafication Focus on numeracy & literacy	Transparency Focus on foundational learning (including wellbeing)	Public opinion	Public accountability	Engaged State

Source: Adapted from Steiner-Khamsi (2025)

The ends and means of reform distinguish each from its predecessors. In other words, the reform goals (column 5) and types of regulation (column 8) vary with each reform. I have provided a more detailed explanation of the table elsewhere (Steiner-Khamsi, 2025). Therefore, I will only briefly comment on the type of accountability (column 9) pursued in the last four public administration reforms.

The Welfare State of the 1960s and 1970s

The research literature labels the type of state regulation during the era of the Welfare State as "traditional" (Goldfinch, 2023, p. 3), "bureaucratic-professional" (Maroy, 2012), or the "Weberian" model of public administration (Goldfinch, 2023, p. 3). Viewed sequentially, the ideal-type bureaucracy was trapped in an Iron Cage of Rationality, characterized by efficiency, rational calculation, and control intended to suspend the influence of interpersonal networks (Weber, 2019). "Good bureaucracies" separated these two spheres, insisted that administrative decisions must be rational and predictable, required civil servants to regard their work as a profession and undergo professional training, and established procedures to shield government officials from political interference or social pressure.

In the education sector, the 1960s and 1970s marked a pivotal era for compensatory education in advanced economies, during which the state allocated additional funds to help children from low socio-economic backgrounds enroll in and excel in school. In the US, the War on Poverty (1964) and the subsequent Head Start program, aimed at preschool children from low-income families, are key examples of these initiatives. Sensitivity to social inequality was also evident in the multicultural, anti-racist, and decolonization movements that gained momentum globally toward the end of this period. The social welfare state required a substantial apparatus to manage redistribution programs and ensure equal inputs and opportunities. Accountability was measured by compliance with the rules and regulations established by the state.

The Entrepreneurial State of the 1980s and 1990s

The frequently cited New Public Management (NPM) mantra—that the government should steer and not row—aimed to end the state monopoly over public services. The entrepreneurial state is designed to provide direction while stepping back from being the sole provider, encouraging business involvement in the public sector. Citizens should be treated like customers who, through their freedom of choice, help improve the quality of public services. They vote with their feet by simply switching providers if they are dissatisfied with a product or service; they "exit" (Hirschman, 1972). In the early years of managerial reform, before standards and accountability measures were established, choice, per capita financing, and vouchers were seen as means to reduce public expenditures while enhancing the quality of education. Milton Friedman's argument for cost savings through efficiency gains generated by market regulation was prominent. In the early, market-driven Miltonian vision of NPM, there was neither a need nor a role for government because the pressure to perform arose from supply and demand. Low-performing schools would lose customers, and due to per-capita financing, they would lose funding and ultimately close as parents enrolled their children in better-performing schools.

The Interventionist State in the 2000s

The early adopters of New Public Management reform (Australia, New Zealand, UK, US, Canada) overhauled the traditional hierarchical government structure, which consisted of a large central administration that directed the lower levels of government at the province and district levels. In education, the reform entailed shifting decision-making authority from the central to lower levels of government and establishing numerous semi-autonomous state-affiliated agencies. Dunleavy et al. (2005) show convincingly how the NPM reform wrecked the public administration in the pioneer country of NPM: New Zealand. By 1999, the country of 3.5 million people was left with over three hundred separate central agencies and forty-nine tiny ministries. Other repercussions were rampant privatization and an erosion of the quality of public services due to autonomous sub-national administrative units.

Strikingly, standardized testing to assess the quality of education was an afterthought of NPM and only emerged as the primary instrument of quality assurance in the 2000s. Acknowledging the sequence and the time lag between the two reform waves—the neoliberal push for market accountability in the 1980s and 1990s and the politically centrist (Third Way) belief in standards accountability in 2000—helps us to contextualize the rise of outcomes-based accountability, target-setting, and standardized testing around the millennium.

The Engaged State of the 2010s and 2020s

The concept of an Engaged State (Mattei, 2023) that listens to its constituents evokes numerous positive associations. As observed in a sequence, the state is only "engaging" if compared to the earlier roles of the state, particularly the interventionist, entrepreneurial, and welfare states. Years ago, during the entrepreneurial state's New Public Management era, the nation-state's power diminished significantly as it rescaled upwards, downwards, and outwards to transnational institutions, subnational entities, and non-state actors, respectively (Jessop, 2002). In many countries, the 21st-century state has a substantially reduced apparatus compared to half a century ago.

The New Public Governance reform (see Krogh & Triantafillou, 2024; Osborne, 2010) during this period closely relates to advancements in information and communications technology (ICT), the political influence of social media, and new forms of production, assetization, and capital accumulation within the digital economy (see Birch, 2020). A common thread among these ongoing public administration reforms is the expectation that data producers (citizens) should also act as data users and engage more than ever in the political process. The state is expected to connect with and listen to its citizens. This shift from an interventionist state to an engaged one signifies a transformation in its role, as it now perceives itself as transparent, socially accountable, and responsive to its citizens.

In today's era of the Engaged State, citizens are supposed to supervise the provision of public goods and services rather than relying on bureaucrats (as in the Welfare State) or the market (promoted during the Entrepreneurial State).

The Global Drivers of the New Public Governance Reform

As with the previous public administration reforms, the OECD and the World Bank have promoted and implemented the new version of "good governance" through policy papers, handbooks, checklists, and best practices. The OECD Good Practice Principles for Service Design and Delivery in the Digital Age (OECD, 2022) consist of nine principles arranged under the following three pillars:

> "Build accessible, ethical and equitable public services that prioritise user needs, rather than government needs"; "Deliver with impact, at scale, and with pace"; and "Be accountable and transparent in the design and delivery of public services to reinforce and strengthen the public trust" (OECD, 2022).

Similarly, in 2014, the World Bank Group presented its strategic framework for citizenship engagement on enhancing the demand-side accountability of public services (World Bank Group, 2014). A good case in point is the World Bank's GovTech Maturity Index (GTMI). It is a composite index that consists of four components (World Bank, 2022):

- **CGSI**: The Core Government Systems Index (17 indicators) captures the key aspects of a whole-of-government approach, including government cloud, interoperability framework, and other platforms.
- **PSDI**: The Public Service Delivery Index (9 indicators) measures the maturity of online public service portals, focusing on citizen-centric design and universal accessibility.
- **DCEI**: The Digital Citizen Engagement Index (6 indicators) measures aspects of public participation platforms, citizen feedback mechanisms, open data, and open government portals.

- **GTEI**: The GovTech Enablers Index (16 indicators) captures strategy, institutions, laws, and regulations, as well as digital skills and innovation policies and programs, to foster GovTech.

The OECD's 2030 Learning Compass has become an object of intense academic inquiry (Elfert & Ydesen, 2024; Karseth et al., 2022; Xiaomin & Auld, 2020; Yliniva et al., 2024) and does not need to be reiterated here. The compass metaphor is central to its conceptualization of teaching and learning. Schleicher (2019) presents the 2030 Learning Compass as "[a] new tool for navigating through a complex world". In the visualization of the compass, "student agency" and "co-agency with peers, teachers, parents, and communities" are recognized as crucial for moving the compass's needle in the right direction.

Layers of Data

Having advocated for studying "governance trajectories" (Capano et al. 2022), one may reflect on how the evolving public administration ecosystem has shaped norms, structures, and values within its immediate environment. These changes have directly influenced the policy goals and instruments used across all public

administration sectors, including education. Furthermore, I suggest stepping back to position these changes within the broader policy process. Building on Hood's (1983) inquiry into how policymakers determine which actions are necessary ("detectors") and what instruments they have available to implement them ("effectors"), we observe significant transformations in one of the key detectors: data and information. The shift towards social accountability has impacted the types of data and information employed for managing and financing the system.

In another publication (Steiner-Khamsi, 2025), I employed the same sequential analysis of public administration reforms, presented in Table 1, to trace how the objectives and objects of data-for-accountability purposes have evolved over time. I am broadly reiterating the main points at the risk of oversimplifying the findings. During the Welfare State period, inspectors collected data to evaluate compliance with input-related norms (such as student-teacher ratios and teacher qualification requirements) established by the state. The Entrepreneurial State drove decentralization, privatization, and the liberalization of service providers. New Public Management coincided with new procurement laws mandating that governments open the provision of public goods and services to the private sector. This necessitated the calculation and datafication of expected outcomes or deliverables. Contract management in the education sector involved detailing what constitutes good "pedagogical services" and developing indicators that allow the state to assess whether the outsourced provision of goods and services adhered to the contract. The Interventionist State, in turn, gained a reputation for "governance by numbers" by using data for performance measurement, target setting, and quality assurance accreditation. This era is characterized by results-based management, which translates into outcomes-based school reform in the education sector, manifested through the proliferation of standardized tests and other evaluation instruments. Finally, the most recent public administration reform encourages the use of data to foster collaboration across sectors, within sectors, and between the government and citizens. Pestoff (2021) correctly points out that the provision of public services (in contrast to the provision of public goods) requires user input and feedback. To some extent, co-production tends to occur by default, regardless. End users in the public sector (the citizens) or in education (parents and students) are expected to have access to various types of data, including performance data (such as student test scores), to hold public servants and, ultimately, the state apparatus accountable for public services.

It is important to remember that the objectives and uses of data have evolved over time. Policy designs have resulted in changes occurring in a layered manner (Capano, 2018); one form of data usage has not necessarily replaced previous forms. Depending on the political system and culture, data is still used to varying degrees for compliance, steering at a distance, or citizen engagement.

The role of technology in facilitating and accelerating New Public Governance and, with it, social accountability and agentic teaching and learning is not to be underestimated. As shown by Stark and Vanden Broeck (2024), algorithmic management makes it possible to count, classify, and reward/punish the very soul of

the students, transcending the previous, narrow focus on numeracy and literacy. Similarly, e-governance or digital governance is, by default, "predictive governance," as masterfully described by Hartong et al. (2024).

Throughout the four public administration reforms summarized above, data was no longer collected for direct compliance checks but rather for distant steering and, more recently, for inverting, at least rhetorically, the power relations between the government and citizens. Over time, the distance for steering increased significantly to the point where the new, data-driven social accountability measures challenged the state's authority to regulate the provision of public goods and services effectively. In sum, social accountability does for governance what agentic learning does for education: it shifts the responsibility of regulation from the government to the citizen or from the teacher to the learner. In its extreme form and projected into the distant future, it renders the government or the teacher superfluous. A dystopian scenario of governance without government (Rosenau, 1992) and learning without a teacher is worth deliberating.

The Wide Spectrum of Social Accountability Practices
Data and information play a key role in all policy process theories, as explained in greater detail elsewhere (see Steiner-Khamsi, 2025; Steiner-Khamsi et al., 2026). Just think how Internet technologies facilitate collective action, which, in turn, impacts what is perceived by whom as a problem, which universe of solutions is made publicly available and propelled, and how effortlessly individuals and groups may be mobilized for or against political coalitions. Margetts and Hood (2016) contend that governments are being challenged "by groups of citizens who have as their main weapon an ability to communicate and coordinate the resources of large numbers of people" (p. 1). The Internet technologies they refer to are mobile or web-based and include blogs or micro-blogs (Twitter, or X), social networking sites, content-sharing sites, social bookmarking sites, projects to produce online goods (e.g., Wikipedia), and virtual worlds for gaming or socializing.

Punctuated equilibrium theories identify periods of relative stability interrupted by bursts of reform activity. The necessity for policy action is not inherent but rather politically constructed: exogenous factors and changes must first be made meaningful and politically actionable by policy entrepreneurs and other intermediaries. The Multiple Streams Framework is a good case to illustrate how data and information permeate all three streams, notably for generating problem awareness, proposing policy solutions, and electing, voting, and keeping governments in power. Perl et al. (2018) convincingly show how the use of information is central in the Multiple Streams Framework:

> Each stream contains components of policy deliberations that originate independently from one another, but which can combine to transform policymaking at particular junctures. Within the problem stream, one finds the ideas and information that can focus public attention on and characterize

a specific problem as being worthy of government's attention. The policy stream contains the expertise of specialists, scientists, and pundits who present remedies and recommendations for addressing one or more public problems. And the political stream carries within it the claims of, and expectations about, governing authority that are generated by public opinion, the party organizations, and interest group efforts to gain or retain power in government. (p. 593)

As a result of the conjuncture of the three streams: "the resulting accumulation of ideas, interests, and information can either open or close a 'policy window' which moves problems onto or off of the formal agenda, and thus influences whether government will attend to them in policymaking" (Perl et al., 2018, p. 593).

The reliance on data and information is cause for concern in an era of "information pollution" (Malin & Lubienski, 2022), "post-truthiness" (Perl et al., 2018, p. 581) and democratic backsliding (Morais de Sá e Silva & Ávila Gomide, 2024). There is a need to adjust the multiple streams and factor in truthiness and the surplus of information when relying on information for policymaking. Internet technologies are not the only devices that turn the three streams into raging rivers. A host of other sources exist that governments or interest groups may activate at will to accelerate problem awareness and policy solutions and, somewhat more complexly, generate political support. The multiplicity of resources that nowadays flow into each of the three streams is noticeable to all with a keen attentiveness to global and transnational aspects of the policy process. For example, OECD's PISA couples the problem and policy streams and thus functions very much like a policy broker *par excellence* (Steiner-Khamsi et al., 2024), creates awareness about the below or above-average performance of 15-year-olds on international large-scale assessment and, at the same time provides policy advice on how to fix the system, if necessary.

Intergovernmental organizations are more than the sum of their member states. As Zürn (2018) convincingly shows, IOs have built their legitimacy over the last few decades on three normative principles: (i) a reference to common problems and goods, (ii) the individual rights and entitlements of non-state actors, and (iii) an international authority to enforce the implementation of the first two normative principles. More concretely, this authority aims to "identify, substantiate, and monitor norms and rules that foster the common good and entitlements of actors other than states" (Zürn, 2018, p. 9ff). However, current anti-globalization movements challenge the role of IOs as "teachers of [universal] norms" (Finnamore, 1993), oppose international cooperation, and foster distrust in government. Consequently, the ability of governments and international organizations to define common problems and safeguard public goods is severely curtailed.

The community participation or citizenship engagement that leftist scholars and politicians have advocated since the 1960s is opposed to how social accountability plays out in practice in the realm of the digital economy. Both Elon Musk's social media platform X and Mark Zuckerberg's technology conglomerate their fact-checking departments with a special version of social accountability: they

established rules on how users may contest or correct assertions made by others. Users are encouraged to produce "Community Notes." Supposedly, monitoring content becomes superfluous if users are given free access to produce and use knowledge.

As a testament to its popularity and relevance in understanding new social phenomena, policy transfer research has consistently broadened its units of analysis. It began with the examination of country-to-country transfers, global-to-local transfers (or vice versa), transfers between different levels of administration, early to late adopters (or vice versa), inter-ministerial transfers, and transfers from one domain (e.g., economics) to others (e.g., education). In contrast, investigating how, when, and why governments engage the tech sector and businesses to disrupt, innovate, or internationalize the public sector is still in its early stages (see Steiner-Khamsi, 2025, Chapter 3.1). This type of policy transfer—from the private to the public sector- will likely gain prominence. It remains to be seen and explored whether the X or Meta-type social accountability measure will be adopted in the public sector.

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Pedagogical Practices in Overcrowded Classrooms: Evidence from Education Stakeholders in Malawi

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This study investigates pedagogical practices for managing large classes in Malawi's primary education system, where overcrowded classrooms, driven by Free Primary Education and global education agendas, strain limited resources. Utilizing an exploratory research design, data were collected from six Teacher Training Colleges and nine public teaching practice schools across Malawi's six education divisions. Participants included teacher educators, student teachers, teachers, head teachers, and teaching practice coordinators. Qualitative and quantitative methods, including interviews, focus group discussions, questionnaires, and classroom observations, were employed to examine effective pedagogical strategies, challenges, and patterns in large class instruction. Findings indicate that group work is the primary strategy used, with group leaders acting as assistant teachers and behavior monitors. However, challenges such as limited space, insufficient learning materials, and time constraints hinder effective implementation. Heterogeneous grouping and peer teaching are common but limit engagement due to dominant learners and resource scarcity. Barriers such as space limitations, material shortages, and time pressures interact to constrain sound pedagogy, forcing teachers to prioritize assessment over instruction. The Initial Primary Teacher Education Curriculum lacks adequate focus on large class management, and systemic issues, including low remuneration and limited professional development, demotivate educators. These findings highlight the need for targeted interventions to support effective teaching in resource-constrained, overcrowded classrooms.

Keywords: overcrowded classes, LMIC, mixed methods, large class pedagogy

Introduction
Access to free primary education has been a global priority since the 1948 Universal Declaration of Human Rights (United Nations General Assembly, 1948). This commitment was reaffirmed in The Dakar Framework for Action (UNESCO, 2000), a global commitment adopted by 164 countries to achieve Education for All (EFA) by 2015 that established six key goals focused on expanding early childhood education, universal primary education, lifelong learning opportunities, adult literacy, gender parity, and improving educational quality. The right to education was also

established by the Sustainable Development Agenda (United Nations, 2015), formally known as the 2030 Agenda for Sustainable Development, which includes Sustainable Development Goal 4 (SDG 4), committing nations to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030 through ten specific targets that broaden and extend the unfinished EFA agenda. Consequently, many countries have significantly increased primary school enrollment (Earle et al., 2018). The rapid expansion of access has outpaced the provision of teachers and school infrastructure, leading to "access shock" in certain education systems (Avenstrup et al., 2004; Benbow et al., 2007). Malawi, as one example, experienced a 139% surge in enrollment as of 2024, straining an already overburdened education system (Avenstrup et al., 2004; World Bank, 2025). Accelerating population growth in Malawi and other low- and middle-income countries (LMICs) further exacerbates this challenge (Benbow et al., 2007).

For more than 20 years, Malawi's Ministry of Education (MoE) has continuously sought to improve access and educational quality through curricular reforms, provision of textbooks, increases in staffing, teacher recruitment, and teacher professional development that targets general pedagogy (Kadzamira & Rose, 2003). Despite these efforts, Malawi's context remains similar to other LMICs where pedagogical practices remain dated, not evidence-based, and fail to account for contextual realities such as large classes (Kazima et al., 2022; Tabulawa, 2013). Teaching in overcrowded classes[1] demands substantial planning, effective classroom management, adequate resources, ongoing support, systemic capacities that many LMICs lack (Jawitz, 2013; Mizrachi et al., 2010; Pasigna, 1997). Scholars have identified setting high academic and behavioral expectations, providing clear instruction, differentiating teaching, offering incentives for learning, routinizing procedures, and developing strong teacher-student relationships as characteristics of successful large-classroom management (Bain & Achilles, 1986). However, empirical evidence supporting these strategies in large classrooms, especially in LMICs, remains limited (Barnes-Story et al., 2025; Benbow et al., 2007).

While funding for school construction and teacher recruitment is critical to reduce class sizes, these solutions require time and substantial financial investments. Meanwhile, overcrowded classrooms persist in Malawi and other LMICs, where many children fail to develop foundational literacy and numeracy skills despite years of schooling (Abt Associates, 2021; UNESCO, 2015). Research on primary education in LMICs often focuses on access rather than evidence-based pedagogy (Chesterfield, 1997; UNESCO, 2015). The scarcity of empirical studies on effective teaching methods for large classes underscores the need for rigorous investigation to identify practices that enhance academic achievement in overcrowded primary classrooms. Moreover, empirical evidence of how Initial Primary Teacher Education (IPTE) Programs equip student teachers with pedagogical knowledge to combat the realities of large classrooms is scarce.

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[1] For example, the Malawian Ministry of Education (2020) prescribes class sizes of no more than 70 learners in a class, which is large, but the reality is a national average of 120 learners.

Present Research

Our research seeks to advance the understanding of effective, contextually relevant pedagogical practices for overcrowded classrooms in LMICs with the aim to inform pre-/in-service teacher education/training and curricular reforms targeting pedagogy. We employed an exploratory research design to investigate large class pedagogy (LCP) as taught in Malawi's IPTE programs and applied by student teachers and classroom teachers in teaching practice primary schools. Researchers collected qualitative data through key informant interviews, focus group discussions, and institutional surveys. We focused on teaching strategies, pedagogical methods, assessment practices, classroom management techniques, and challenges associated with large classes.

We situate our work within the second-generation Cultural-Historical Activity Theory (CHAT; as developed by Yrjö Engeström [2015]) and conceptualize classroom instruction as a systemic, mediated process embedded within social, cultural, and historical contexts. This framework models instruction as six inter-related components: subject (individual/agent engaged in the activity), object (goal), tools (mediating artifacts: physical, psychological, or symbolic instruments mediating the subject's interaction with the object), rules (policies/norms), community (network of stakeholders), and division of labor (allocation of tasks)—see Figure 1 below. These components interact dynamically, generating tensions and/or contradictions within the system. We reflect on these systemic components in our discussion.

Figure 1.

Classroom Instruction via Cultural-Historical Activity Theory Lens
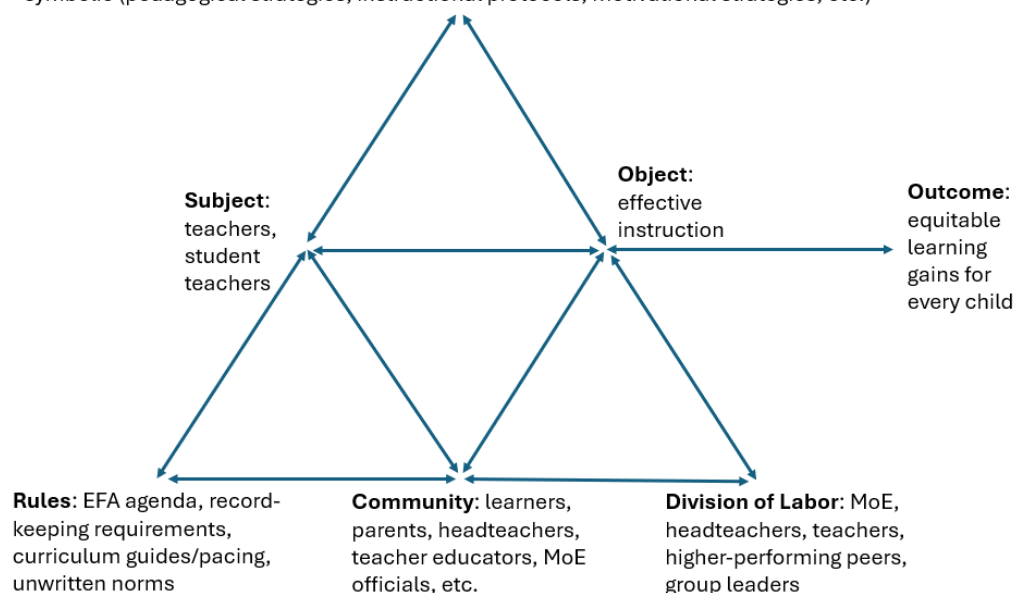
Our study is guided by the following overarching research questions:

1) What large class pedagogical practices do teacher educators, practicing teachers, and student teachers in Malawi consider to be most effective, and why?

2) What challenges do educators experience when trying to implement these practices in overcrowded classrooms?

Review of Existing Evidence

There is limited empirical research on effective pedagogical, feedback and assessment practices that work well in large classes (e.g., whole class instructional approaches [Adamu et al., 2022; Benbow et al., 2007] and cooperative learning approaches [Dayan et al., 2018; Verspoor, 2008]). The available evidence is mainly anecdotal, observational, or stakeholder perceptions. The evidence typically falls into a few categories: group work; active learning strategies, differentiated instruction and remediation, and classroom management (Adhikary, 2020; Akintunde & Adeyiga, 2023; Anindya & Anisa, 2020; Benbow et al., 2007; Nakabugo et al., 2008; Safura et al., 2023; Shamim, 2012; Syed et al., 2023; Ulfah et al., 2020). In large classes, group work may facilitate sharing limited teaching resources and instructional materials, build an environment of mutual support and continuity in learning, ease classroom management and teaching, encourage participation and interaction, facilitate peer support, and encourage group responsibility (Benbow et al., 2007; Mezrigui, 2015; Mokeddem-Tagrara, 2023; O'Sullivan, 2006; Osai et al., 2021; Pertiwi & Indriastuti, 2020; Wadesango, 2021). However, group work effectiveness is limited by space and time constraints, resources availability, and the needs of individual learners. Therefore, whole class, teacher-led instruction is common, where the teacher maintains control of the class and student learning is passive (Benbow et al., 2007; Kikechi et al., 2012; Marais, 2016; Opolot-Okurut et al., 2015).

Active learning strategies are also emphasized in the literature. Teachers employ a variety of strategies such as role play, think-pair-share, student debates, and writing activities during group work, pair work and individual seat work in in large classes (Altinyelken, 2010; Erlina et al., 2022; Haddad, 2015; Lloyd-Strovas, 2015; Nakabugo et al., 2008). Active learning strategies are essential for keeping students engaged in instructional content and enhancing classroom interaction.

Differentiating instruction is particularly challenging in overcrowded classrooms. Some teachers try assigning students to different tasks based on their skills levels (Akintunde & Adeyiga, 2023; Blatchford & Russell, 2019). Other teachers utilize the structured remediation lesson integrated into school timetables. Remediation involves ongoing efforts to recover lost learning through additional remediation lessons and specialized strategies with LMICs implementing diverse remediation models (UNESCO, 2020). Effective programs feature continuous assessment, monitoring, adjustments, and evidence-based approaches tailored to needs, particularly for students with reading difficulties (Richards-Tutor et al., 2016; Vaughn et al., 2006). Successful examples from LMICs include Ghana's after-school programs yielding literacy and numeracy gains in grades 1–3 (UNESCO, 2020), Kenya's targeted instruction for grade 3 English skills (USAID, 2023), and the Teaching at the Right Level (TARL) model, scaled across several countries with significant language and literacy improvements, especially for the lowest performers (Banerjee et al., 2016;

Duflo et al., 2011; Lipovsek et al., 2023). In Ghana, TARL-trained teachers grouped students by ability for one-hour daily sessions, boosting test scores (Banerjee et al., 2016). Additionally, community volunteers or college students, with minimal training and structured curricula, can effectively aid struggling learners (Jacob et al., 2016; Lindo et al., 2018).

Effective classroom management includes building a strong classroom community and managing student behavior, as these significantly influence learning outcomes (Hattie, 2009). In large classes, excessive time spent on task management or behavior control can hinder learning (Marais, 2016). Evidence suggests that teachers who build strong classroom communities use strategies such as knowing students' names, establishing rapport with students, and building trust and support (Botha, 2022; Haddad, 2015; Meylina, 2015; Subuhana, 2023). Behavior management strategies in large classes may include establishing classroom rules, behavior expectations and consequences for misbehavior (Benbow et al., 2007; Botha, 2022; Nakabugo et al., 2008; Safura et al., 2023), teacher movement to maintain close proximity to learners (Asodike & Onyeike, 2016; Botha, 2022; Ming & Qiang, 2017; Sudrajat, 2021), and positive discipline strategies such as incentives, rewards, and positive narration (Akintunde & Adeyiga, 2023; Asodike & Onyeike, 2016; Haddad, 2015; Nakabugo et al., 2008). Classroom routines such as using seating charts, taking attendance, and practicing classroom procedures can contribute to an orderly classroom (Ara & Hossain, 2016; Haddad, 2015; Khosa, 2022; Mokeddem-Tagrara, 2023). Despite the findings shared above, the available evidence is not based on empirical research examining the actual impact of suggested pedagogical practices on learning outcomes (see Barnes-Story et al., 2025 for a scoping review of large class pedagogy); therefore, limited conclusions can be drawn from these anecdotal and observational findings.

Our research contributes to the empirical understanding of current pedagogical practices in low-resource, overcrowded classrooms by examining the beliefs of Malawian education stakeholders. We also examine large class pedagogical practices taught in IPTE programs and student teachers and teacher educator beliefs. We identify promising practices and knowledge gaps to inform future education system interventions. Lastly, understanding the challenges that educators experience is crucial for shedding light on systemic issues impacting the success of intervention/training. Empirical evidence from this research can inform the design of training to improve teaching practices in overcrowded classrooms in LMICs.

The Context of Malawi

The United Nations has documented an annual growth rate of 2.6% for the population of primary school aged children across SSA over the past decade (United Nations Department of Economic and Social Affairs Population Division, 2024). In Malawi, this population was projected to pass 4.10 million in 2025, intensifying educational challenges and strains on the system. Despite government-funded efforts to increase teacher hiring, insufficient deployment has led to class sizes as large as

414, with a national average of 120 (Ministry of Education, 2020). High repetition rates (27% for boys, 26% for girls) and low primary school completion rates (36% for boys, 41% for girls) reflect systemic education issues (Ministry of Education, 2024a). Learning outcomes are among the lowest in the region, with only 4% of grade 2 and 11% of grade 4 students demonstrating proficient oral reading fluency in the local language (Abt Associates, 2021) and grade 4 students showing only emergent numeracy skills (Brombacher et al., 2015).

The Government of Malawi continues to be committed to improving the quality of education and reducing teacher workload through concerted efforts such as increasing the number of teachers and classrooms. We acknowledge that scaling up the educational resources in the country will take time and, in the meantime, students enrolled today deserve a high-quality education. Thus, current teachers need training and support to provide the best possible instruction to their students. The Malawi Teacher Competency Framework encourages teachers to understand the curriculum and adapt teaching and assessment methods for large classes, but it fails to provide specific guidance to help teachers accomplish these goals and does not address the class size issue. Furthermore, there is no evidence that IPTE programs adequately address the issue of instruction in overcrowded classes.

In Malawi, the early grades timetable allocates two teacher-led periods of remedial instruction each week, but without effective pedagogical training for large classes, teachers will be unable to use this time effectively. Teacher educators and student teachers should actively participate in research designed to identify strategies that optimize teaching in large classes (Reason & Bradbury, 2008). It is essential to reframe the narrative around large-classroom teaching (Valérien, 1991) and engage in rigorous research on effective LCP to achieve educational equity and address severe learning poverty across Malawi.

In this study, practicing teachers reported primary class sizes of 75 to 230 learners, averaging 109. The IPTE Programme Handbook recommends a maximum of 60 learners for student teachers (Florida State University, 2023), yet most reported classes over 90. Observed classes had enrollments of 62 to 150, but with up to 41% absenteeism, actual attendance ranged from 57 to 138.

Methods

Research Design
This study utilized an exploratory research design (Bridges, 2023) to examine LCP taught and used in Malawi during pre-service teacher preparation. We sought to establish the specific practices that both primary school student teachers and class teachers use in teaching practice schools (TPSs) as well as those taught by teacher educators at teacher training colleges (TTCs). Researchers conducted a total of 15 Key Informant Interviews (KIIs) and 18 Focus Group Discussions (FGDs), in addition to administering 9 surveys (one at all participating institutions). The FGDs gathered information about the use of teaching strategies, pedagogical methods, assessment

strategies, classroom management, and other challenges found in large classes. KIIs collected information on the understanding of large class teaching practices, assessment, and management practices—as well as administrative support provided for teachers and student teachers. Surveys collected demographic site-level data.

School and Class Selection

To avoid selection bias, we randomly sampled six TTCs in various types of locations representing the six education divisions in Malawi, along with one rural and/or one urban TPS attached to each TTC. The final sample included nine primary schools: six rural, one peri-urban, one urban, and one semi-urban. At each TTC, we engaged 6-8 teacher educators teaching a variety of disciplines in FGDs and conducted a KII with the Teaching Practice Coordinator. At each TPS, we conducted two FGDs (one with approximately six student teachers and another with 6-8 classroom teachers) and a KII with the headteacher. Additionally, we observed and recorded lessons in three classrooms across Standards 2 and 4 at each school. Due to space constraints, these analyses will be reported in a separate paper.

Participants

Participants from TTCs included teacher educators, teaching practice coordinators and student teachers. TTC participants were recruited based on the nomination by the Heads of Department (i.e., Department Chairs from the Education Department, Languages Department, Mathematics Department, and Professional Studies Department). Participants from the TPSs included headteachers and class teachers. Headteachers nominated teachers to participate based on their class size. Additionally, 27 teachers were selected for classroom observation.

Table 1.

Participant Engagement

Participant type	Number	Focal data collection tool(s)
Teacher educator	36	Focus group discussions (FGDs)
Teaching practice coordinator	6	Key informant interviews (KIIs)
Student teacher	54	Focus group discussions (FGDs)
Headteacher	10	Key informant interviews (KIIs), institutional survey
Class teacher	54	Focus group discussions (FGDs), selected classroom observations

Ethical Considerations

Prior to data collection, the research team obtained research approval from the Florida State University Institutional Review Board (IRB). Approval was submitted to the Malawi MoE to obtain permission to access educational institutions and to collect data from participants. We implemented an informed consent process

approved by the Florida State University IRB and the MoE. These boards ensured that participants would be fully informed of the research processes, were able to withdraw from or refuse participation in the research, and their data would be deidentified and protected.

Enumerator Training

Data collection was led by the second and third authors and supported by three Malawian researchers who were part of the Strengthening Teacher Education and Practice Activity—a collaboration funded through United States Agency for International Development (USAID)-Malawi. All researchers completed training on ethical research procedures and best practices for data collection, with opportunities to practice facilitating FGDs and KIIs.

Data Collection Process

We collected data in April 2024 over a duration of four weeks, collecting informed consent from all participants prior to administering any data collection tools. The KIIs and FGDs were conducted in English and Chichewa in quiet spaces and offices within the school.

Data Analysis

We used thematic analysis to identify LCP practices in Malawi and factors that inhibit effective practices (Miles et al., 2020). FGDs and KIIs were transcribed verbatim and coded using NVivo 14. We utilized a combination of deductive and inductive codes and developed themes through second-cycle analysis (Saldaña, 2021). Collaboratively, we completed coding and analysis, following guidelines from Richards and Hemphill (2018), with reflexive memo-writing and data source triangulation to enhance trustworthiness.

Findings

Pedagogical Practices Educators Believe are Effective for Large Classes

Educators in this study identified three key approaches for teaching large classes effectively: group work, remediation, and classroom management through peer monitoring.

Group Work

First, group work is the primary strategy mentioned by teachers, student teachers, and teacher educators to handle large classes, as it reduces teacher workload and, in their view, fosters learner participation and peer teaching. However, educators face challenges in facilitating group work effectively because of the large number of groups they must manage, leading to repetitive approaches and limiting opportunities for diverse activities to enhance learning.

Educators describe group work as their main strategy to teach large classes effectively, citing its ability to create a small-class atmosphere within a large setting. Teachers described facilitating group work by assigning group names, determining group size based on attendance and availability of materials (typically 5-10 learners

in a group but up to 20), designating group leaders to manage tasks, providing clear instructions, actively monitoring groups, and reorganizing groups periodically to avoid over-familiarity. They also noted that grouping learners and assigning group leaders also helps reduce problem behaviors through increased participation and leaders who distribute materials and keep their peers on-task. Groups can share materials, alleviating resource shortages, and teachers have less marking to complete by assessing group work rather than individual work.

Teachers and student teachers rely on group work but face many challenges that hinder its effectiveness. Instructional strategies taught at TTCs are often impractical due to large class sizes and limited classroom space at TPSs. Proficient learners may dominate tasks, sidelining struggling peers who disengage or disrupt. A headteacher cautioned that only capable learners benefit if groups are not carefully managed. Resource sharing remains difficult, with groups of 10–20 learners often sharing one book, limiting participation. Although educators regularly mentioned that groups ideally should not exceed eight learners, shortages of materials and time lead to larger groups. Overcrowded classrooms also restrict teacher movement, complicating group monitoring and enabling off-task behavior. Furthermore, many teachers find that the 35–40-minute lesson periods are insufficient to complete all the steps of group work including introductions, instructions or modelling, monitoring, and group presentations—especially because they may have up to 20 groups per class.

Teachers in this study exclusively use mixed-ability groups to leverage peer teaching, pairing "able" or "fast" learners with "less able" or "slow" ones. One teacher educator noted that "bright learners" act as "assistant teachers" in these groups, with group leaders—typically advanced learners—in charge of demonstrating concepts and supporting their peers academically, while managing tasks and behavior.

Remedial Lessons
Second, to meet the needs of learners in overcrowded classrooms, all primary school educators rely on remedial lessons, which are typically held 2–3 times weekly in government schools, but only once per week in double-shift schools. These sessions rely on re-teaching, peer teaching, and group work. The presence of the entire class during these lessons may limit the provision of targeted support. Educators emphasized remedial lessons as the primary method to support struggling learners in large classes, due to the difficulty of integrating individualized support, misconception correction, differentiation, or extra practice during regular lessons. Instead, a large portion of class time is prioritized for assessment and marking, and remedial sessions, scheduled one-to-three times weekly, are designated as the time to address knowledge gaps.
In the Malawian context, remedial lessons occur within the regular timetable and all learners attend, requiring teachers to plan activities for both enrichment and remediation. Educators in this study lacked a consistent approach to addressing struggling learners' needs during these periods. When asked about how they support struggling learners, Emmanuel, a primary school headteacher, observed,

> "For the lesson on a particular day, they have again a period of remediation, more especially on Mondays, Wednesdays, and Fridays, where they check those learners who were not doing well during lesson presentation. Because as they deliver their lessons, they even assess their learners whether they are following. To those who are finding some challenges, they do remediation activities."

Some teachers reteach challenging lessons at a slower pace or using alternative methods, while others organize differentiated groups for games or leveled activities, which are led by higher-performing learners. For instance, Mary, a student teacher, described grouping learners by specific difficulties: "…we divide those learners according to those things they have difficulties with [sic]. If a learner is finding difficulties in letter sounds, we will group the child with his or her friends who are having problems with letter sounds…" Occasionally, teachers provide direct instruction to small groups, but given large class sizes and high remedial needs, targeted support occurs infrequently, perhaps once every few weeks. Remedial periods are also used for completing individual assessments, which further limits time for instruction.

Effective remedial support includes explicit instruction, targeted feedback, small-group teaching, familiar language use, differentiated instruction, skill progression, practice opportunities, progress monitoring, and data-driven adjustments (Fletcher et al., 2011; Foorman et al., 2016; Spear-Swerling, 2015). In Malawi, a policy requiring all learners to attend remedial periods complicates differentiation, as teachers must address varied skill levels (UNESCO, 2020). Teachers in LMICs attempt skill-based grouping and progression, reassigning learners as they advance (Wawire et al., 2024). However, large class sizes hinder small-group instruction and feedback, with reliance on peer leaders for differentiated activities. Struggling learners receive infrequent direct teacher support due to high demand.

Some teachers in Malawi adopt innovative remediation strategies. One educator described collaborating with a partner teacher to provide small-group literacy instruction to struggling learners when non-core subjects were being taught. Another educator adjusted lesson activities to match the learners' skill levels, such as assigning syllables instead of paragraphs to struggling readers. District- and school-level solutions, like grouping learners across classes by specific needs, could enhance instructional effectiveness (Duflo et al., 2011; UNESCO, 2022). Employing trained paraprofessionals or community volunteers with structured curricula could also support small-group remediation (Jacob et al., 2016; Lindo et al., 2018; UNESCO, 2020; USAID, 2023).

Classroom Management Techniques
Third, nearly all educators across primary schools and TTCs identify classroom management as critical in overcrowded settings. Educators reported using classroom rules, consequences, counseling, seating plans, attention getters, proximity, positive narration, and encouragement to maintain focus and minimize disruptions, enabling more instructional time. However, due to the large number of learners, primary

school teachers systemically lean heavily on classroom peer monitoring to manage behavior. The following section will summarize these themes, elaborate on their implications, and explore potential evidence-based improvements for large-class pedagogy.

In half of the FGDs, educators described using several reactive and relational strategies for managing behavior in large classes, but also enlist select learners, called class leaders, to monitor and manage the behavior of their peers. For instance, teachers use attention getters like songs, dance, tone variation, storytelling, games, and handclapping to re-engage distracted learners. They also believe that knowing learners' names helps them to address off-task behavior effectively, as Ann, a primary school teacher noted, "…when one learner is misbehaving…the teacher just mentions that name" to regain focus.

Preventative classroom management strategies are used to curb disruptive behavior in overcrowded classrooms. Some educators co-create classroom rules with learners, which are linked to specific consequences like chores, standing during lessons, or demoting group leaders. Some teachers mentioned offering guidance, involving parents, or engaging discipline committees to address persistent issues. Many educators believe that seating plans, such as alternating genders or arranging rows with a central path, can promote attentiveness. For example, some educators also try to establish routines when transitioning to group work.

Teachers and student teachers strive to manage behavior through positive relationships, despite challenges connecting with individual learners in large classes. Standard 1 and 2 teachers who received training as part of the USAID-funded NextGen project explained that they greet learners at the door, fostering connection and improving attendance by creating a positive mood. Positive narration (praising specific desired behaviors) encourages others to follow suit. Luka, a teacher educator noted, "I praise [a learner] …and others start following." They use clapping sequences to celebrate correct answers, while encouraging learners for incorrect responses with phrases like "Thank you for trying."

Reliance on group leaders is prevalent. They provide academic support and behavior monitoring during group work. Class leaders, appointed or elected, assist with discipline when teachers are writing on the board or out of the room. However, class leaders face tensions between loyalty to teachers and policing peers, which can involve fear or violence, potentially harming both the class leaders and other students.

Challenges Implementing Large Classroom Strategies in Overcrowded Classrooms
Primary school teachers as well as teacher educators cited four key barriers to effective teaching in large classes. First, the scarcity of space, materials, and time produced by overcrowded classrooms, textbook shortages (often 20+ learners per book), and timetable pressures—limit effective teaching and increase behavior issues (Marais, 2016). Second, excessive assessment demands lead teachers to prioritize

marking over instruction, resulting in little time for assessment data to guide instruction. Third, the IPTE curriculum and in-service training lack targeted content on LCP, despite rising enrollments and policy requirements (Ministry of Education, 2024b). Finally, teacher frustration and demotivation, driven by low pay, delayed stipends, and limited pathways for professional growth hinder progress. Addressing these systemic challenges is critical for effective interventions.

Scarcity of Resources Interact to Amplify Challenges

Educators described how the space constraints, insufficient materials, and time pressures of overcrowded classrooms amplify each other to hinder teaching and learning. When asked about challenges that teachers face, Blessings, a primary school teacher observed, "The most challenge to teachers is inadequate resources, seconded by inadequate infrastructures." Furthermore, the wide range of learner needs in large classes are extremely challenging to meet and exacerbated by these resource scarcities.

Inadequate classroom space and classroom shortages in Malawi create significant barriers to effective teaching in large classes. Classroom shortages lead to double shifting, shortening school days and restricting remedial lessons to once a week. Overcrowding can create noisy classrooms, making it hard for learners to hear the teacher, and insufficient space and furniture makes it difficult to use active learning strategies. Insufficient toilets cause delays, further disrupting learning. For example, educators at one school reported having only eight toilets for over 2000 learners. Inside the classroom, teachers report that cramped conditions encourage copying and off-task behavior, while restricting teacher movement for behavior management, individualized support, or group monitoring.

Insufficient textbooks and teaching materials in Malawi's large classes hinder effective pedagogy. Reporting ratios as high as 20 learners per book, teachers resort to less effective methods, like excessive blackboard copying, reducing instructional time and engagement. Teacher-made materials help but creating them for large classes is time-intensive and costly—exacerbated by low pay, delayed stipends, and unsecured classrooms.

Time scarcity is a significant frustration for educators. Preparing materials, conducting assessments, and marking assignments for more than 100 learners takes substantial time. Group and pair work, while valuable, is also time intensive. Teachers described the difficulty of students to accomplish their work and 10–20 groups to report out within 35–40-minute lessons. Double shifting due to classroom shortages reduces the school day to 3.5 hours, further compressing instructional time. Yowasi, a primary school teacher, noted, "because sometimes we just teach without learners understanding because we are running out of time. So, we are against time." In response, many teachers regretfully described coping by prioritizing curriculum coverage over learning, focusing on select learners, or emphasizing assessments over instruction.

Assessment Requirements Overwhelm Teachers

The primary school teachers in this study consider the volume and frequency of required assessments unrealistic for large classes, describing overwhelming expectations from learners, parents, headteachers, and the government. Consequently, teachers and student teachers prioritize daily marking, continuous assessments, and end-of-unit/term testing over instructional time.

Primary school teachers face intense pressure from parents, learners, headteachers, and the Ministry of Education to prioritize frequent assessments and daily marking, expectations that have not changed since free primary education was introduced. This emphasis reduces instructional time, with teachers spending 10–15 minutes per 30–40-minute lesson correcting books. Oral assessments take up to a week to complete. Continuous assessment records are mandated, but stakeholders explained that teacher training focuses on record-keeping rather than using data to inform instruction.

Teachers adapt to the intense assessment demands by reducing question quality, relying on low-level recall or multiple-choice questions, and employing group assessments to save time and resources. Chifundo, a student teacher, noted "instead of twenty questions, I can just give five," due to class size. Group assessments simplify marking but lack research on their impact on primary-grade learning (Ackers & Hardman, 2001; Hoadley, 2024; Nappi, 2017). While some of these practices (such as group assessment) may be positive adaptations, they likely undermine the ultimate purposes of assessment. For example, time pressures lead some teachers to fill progress records without assessing all learners, corroding assessment validity. Thokozani, a teacher educator observed, "there's no way you can assess 147 learners each and every week."

IPTE is Not Contextualized for Class Sizes in Malawi

While education stakeholders in Malawi are cognizant that overcrowded classes are a persistent systemic issue since the introduction of free primary education, the findings of this study suggest that teacher PD and the IPTE curriculum do not adequately address best practices for teaching and managing large classes. Malawian educators report that PD, including district-level refresher courses, school-based continuous PD, teacher learning circles, and intervention-specific trainings, are inadequate. According to participants, systemic issues such as inconsistent PD opportunities, lack of funding, limited materials, and few skilled training personnel—combined with a PD culture that is more focused on financial incentives and arrangements than high-quality implementation—undermine teacher growth.

Educators Throughout the System are Demotivated

Educators at all levels in the system describe feeling undercompensated, unsupported, and unrecognized by the government and their superiors. As a result, they are less motivated to take on the extraordinary work required to teach large classes well. Several participants described teachers and teacher educators as "working under protest." They are overburdened with the demands of teaching and assessing such large classes while also being underpaid and having few opportunities to advance professionally or receive recognition for their work. Despite

these challenges, teachers expressed ongoing commitment to fulfilling their responsibilities, perhaps out of a sense of professional calling or concern for the learners in their care. However, these challenges take a toll on their motivation and impact learners in their classes.

Improving LCP in Malawi will require listening to the voices of these teachers and attending to the concerns that affect their professional satisfaction and motivation. Teachers, teacher educators, and student teachers in this study report that they are experiencing financial challenges due to low or delayed pay, stipends, and allowances, which affects their motivation. Student teachers struggle with basic needs due to delayed stipends, while teacher educators face financial strain from unpaid travel allowances to observe and evaluate student teacher performance. The flat salary structure offers minimal raises for teachers, even after years of service. Low pay and poor conditions reduce professional commitment, hindering teaching quality. Addressing these financial challenges is essential for improving LCP.

Beyond pay, teachers feel that their efforts are not recognized and rewarded. Mphatso, a primary school headteacher explained that teachers often lack promotions, saying, "You might see a teacher teaching for 10, 15 years without any promotion... So those things are demotivating the teachers." Participants in this study suggest that even simple acknowledgments like certificates could boost motivation, but resource shortages prevent this. Another headteacher, Dumisani, noted, "teacher motivation [would improve] …if they are given something as a reward for best practices, but inadequate resources hinder it." Teacher motivation is critical for effective LCP, as implementation quality depends on motivated educators and supportive conditions.

Discussion

Our research examined the pedagogical practices that education stakeholders in Malawi consider effective for managing large classes, as well as the key challenges they encounter when implementing these practices. Findings indicate that the strategies most frequently reported by participants—providing clear instructions, actively monitoring groups, assigning specific learner roles, and forming mixed-ability groups—are broadly aligned with established expert recommendations (Juanita Möller, 2021; Molina et al., 2018) and are commonly documented throughout sub-Saharan Africa (Altinyelken, 2012; Reda & Hagos, 2015; Kitsili & Murray, 2024). Teachers also employ proximity control—standing near disruptive learners without verbal intervention—as a non-disruptive behavior-management technique (Ulfah et al., 2020), although its effectiveness is often compromised in overcrowded classrooms with severely restricted space.

Despite the apparent appropriateness of these approaches, several persistent challenges undermine their impact. Over-reliance on peer teaching and fixed group leaders can overburden higher-ability students while denying critical support to those who need it most (Mitchell, 2023). Furthermore, learning outcomes are hampered by inadequate modelling of classroom routines, the absence of role

rotation within groups, physical space constraints, shortages of teaching and learning materials, and high rates of learner absenteeism.

Applying Engeström's (2015) second-generation Cultural-Historical Activity Theory (CHAT) helps explain why evidence-based practices struggle to take root and why learning outcomes remain low despite teachers' considerable efforts. In this framework, the subjects are primary-school teachers and student teachers, most of whom receive little or no specific preparation for teaching classes of 80–150+ learners. They rely on a narrow set of mediating tools—a single chalkboard, one textbook shared among 10–20 children, improvised group-work protocols, peer monitors, remedial scripts, and simplified assessment shortcuts—to pursue the immediate object of keeping an unmanageably large class functioning each day: delivering some curriculum, maintaining basic order, and fulfilling mandatory record-keeping. The intended outcome—equitable learning gains for every child—is systematically blocked and is unlikely to be achieved in the foreseeable future given ongoing population growth and universal-enrolment policies (e.g., Barnes-Story et al., 2025).

Instruction is tightly constrained by rules such as Free Primary Education (FPE) mandates that guarantee access without corresponding increases in teachers, classrooms, or materials, combined with heavy administrative requirements for daily marking and continuous assessment. The broader community includes learners, parents, headteachers, teacher training colleges, the MoE, and international donors pursuing SDG 4. The division of labor is heavily skewed: much of the actual teaching, behavior monitoring, and resource distribution is offloaded onto children themselves (group leaders and higher-achieving peers) while the Ministry imposes assessment demands that cannot realistically be met. This system produces a profound and enduring contradiction: the survival strategies that allow teachers to meet the daily object–making the overcrowded classroom day function–are the very same strategies that prevent the system from achieving its stated outcome of equitable learning for all. Peer delegation and assessment shortcuts enable short-term coping but deepen inequity and sustain learning poverty over time.

This contradiction also manifests in assessment and teacher development. Continuous assessment policies, intended to be formative, have become burdensome summative record-keeping exercises that consume instructional time without informing teaching (Barrett, 2007; Sayed & Kanjee, 2013). Similarly, the Initial Primary Teacher Education (IPTE) curriculum offers only generic guidance on group work and engagement, providing almost no context-specific preparation for multilingual, under-resourced, 100+-learner classrooms (Florida State University, 2023). Teacher educators and practitioners alike report that many recommended activities are physically impossible or ineffective under real conditions.

Teachers in Malawi and similar LMICs consistently rank resource and infrastructure deficits above pedagogical skill gaps as the primary barrier to quality (Schweisfurth, 2011; present study). Coping mechanisms—prioritizing curriculum coverage over depth, focusing on responsive learners, and shifting effort toward assessment

compliance—are rational responses within the current system but directly contribute to persistently low learning outcomes across the region (Bold et al., 2017; Lavy, 2015). Effective reform must therefore move beyond isolated training on "better group work" and target the structural contradictions identified in the CHAT analysis: aligning rules with realistic class sizes, redistributing labor through additional qualified adults rather than children, expanding usable tools (textbooks, space, planning time), and redesigning pre- and in-service preparation around empirically piloted large-class methods supported by sustained mentoring and coaching (Barnes-Story, 2025; Darling-Hammond, 2017; Piper et al., 2018). Without such systemic intervention, evidence-based large-class pedagogy will remain an aspiration rather than a classroom reality.

Conclusion
The overall goal of this research is to examine pedagogical practices that Malawian educators and preservice teachers perceive to be effective for overcrowded classrooms. We further examine challenges that educators face during implementation of instruction in large classes. The findings highlight that groupwork, ability grouping, remediation, and active learning strategies are viewed as crucial LCP, despite class size being a major hindrance to effective implementation. Teachers also indicate that they use a variety of management strategies including peer monitoring and class leaders. Preventative actions, reactive strategies, and positive relationships are perceived to be useful, though not often used. Limited space, insufficient resources, and time pressures interdependently constrain effective pedagogy, amplifying each other to limit instructional practices. Recommendations ignoring these interconnected barriers are unlikely to yield sustainable improvements in teaching or learning outcomes. However, addressing one barrier, such as by increasing learner books, could create positive ripple effects by reducing time spent on material preparation and classroom management, allowing teachers to focus on differentiated group work and individual support. Interventions should leverage these interconnections to prioritize solutions with the broadest impact on teaching and learning. Shanahan (2020) puts it simply and succinctly that "the only way to know if any instructional approach is effective is to try it out in classrooms and to measure its impact on student learning" (p. 242). Research has yet to determine what types of strategies or methods improve student outcomes within the real conditions teachers face in Malawi (small classrooms, many learners, few resources). Furthermore, any such recommendations need to account for fostering student learning in ways that draw on (rather than clash with) sociocultural norms of Malawian classrooms and society. Effective LCP has not yet been realized.

Research is critical for generating more effective evidence-based pedagogical practices that are geared toward collaborations with teachers and other stakeholders in the country to determine what enhancements could work within the context. This calls for researchers and educational stakeholders to create and test evidence-based models that include more explicit instruction, culturally appropriate learner-centered

teaching, the use of group and pair work and other active learning strategies, streamlined classroom routines, classroom management strategies, implicit and explicit feedback techniques, and strategies to promote teacher-student interactions in a culturally appropriate manner. These models can be designed and pilot tested with adequate training and coaching support for teachers in the classroom. One opportunity to improve LCP in Malawi is to better leverage partner teaching (co-teaching) among teachers who are assigned to the same class (a common situation in large classes at urban schools). Education stakeholders might consider increasing the capacity of teachers and administrators for effective co-teaching and establishing policy guidelines for co-teaching, monitoring and evaluation frameworks, and support for co-teachers. This could reduce teachers' reliance on class leaders and peer monitors.

Further research is needed to understand workload-efficient approaches to assessment in very large classes. Peer- and self-assessment could reduce marking demands, but learners frequently distrust peer grading, resulting in perceived bias (Akintunde & Adeyiga, 2023; Asodike & Onyeike, 2016). With clear rubrics, training, and teacher oversight, however, peer assessment has been shown to be both time-saving and pedagogically valuable (Harris & Brown, 2013). Current assessment demands, compounded by class size, create an environment largely unsupportive of Assessment for Learning (Clarke, 2011; Darling-Hammond & Wentworth, 2010). Policy responses should therefore include streamlined assessment frameworks, parent and learner sensitization to reduced marking frequency, and targeted professional development on using assessment data for differentiated instruction and remediation (Bold et al., 2017).

While this study is Malawi-specific, several implications are relevant to LMICs facing comparable constraints (e.g., overcrowded classes, limited materials, and short instructional periods). Primary schools in similar contexts should explore how evidence-based practices maximize the value of group/pair work and whole class instruction.

By establishing evidence-based, contextually relevant strategies for differentiated instruction, feedback, classroom management, and questioning to encourage high order thinking, administrators can promote teacher-student interactions that drive learning. In addition to core pedagogical content knowledge, teachers need to learn pedagogical knowledge that is contextualized for large classes as part of their pre-service and in-service teacher training. These trainings should also help teachers enhance the existing structures of remedial programs by focusing on best practices to deliver multi-tiered instruction, integrate positive classroom management, and discourage over-reliance on peer teaching/monitoring. Teachers need time to plan for instruction, and student teachers need to learn how to teach in classes with a limited number of learners.

Pre-service teacher education curriculum should be revised/updated to include teaching approaches for large classes in the context of LMICs. Teacher educators need to receive training in evidence-based methods for teaching in large classes and

opportunities to model these methods to mentor, class, and student teachers in demonstration or teaching practice schools (Koo et al., 2025). LCP should be prioritized on the list of critical topics for participatory action research, encouraging piloting/contextualizing evidence-based approaches and creating an evidence base for what works in LMICs.

Systemically, LMIC governments need to find a way to reduce class size by investing in the provision of classroom blocks and the hiring of teachers. Teaching and learning require increased access to learning materials. Stronger policies and resources, such as a framework and structured teacher's guide, a structure for remedial lessons, accompanying training for teachers can educate and empower teachers to be capable of meeting the needs of their many learners—particularly if the materials support differentiating instruction to sequence skill progression, utilizing assessment to inform instruction, and providing targeted support to struggling learners. These education systems must establish realistic assessment requirements and expectations for teachers and sensitize stakeholders on the purposes of assessment, assessment priorities, and the importance of using assessment data to inform instruction. Capacity building is needed for teachers and administrators on the core aspects of assessments—assessment *for* learning, assessment *of* learning, and assessment *as* learning—as well as techniques for assessments, types of assessment, and peer assessments that work well in large classes.

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Becoming a Knowing Person: How Women in a Dominican Batey Understand Literacy

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This qualitative study explores how Haitian-heritage adult women in a rural batey in the Dominican Republic understand and experience literacy. Drawing on one-on-one and group interviews with eight women enrolled in an adult literacy program, the research centers the voices of learners often marginalized in wider society. Through an inductive thematic analysis, the study reveals that participants view literacy not only as the ability to read and write, but as a form of empowerment closely tied to multilingualism, personal agency, and social participation. This study contributes to broader conversations about literacy as a social practice and the transformative potential of adult literacy education in contexts shaped by historical, structural, and protracted inequities.

Keywords: adult literacy, belonging, education in emergencies, Freirian pedagogy, human capability approach

Introduction
The ability to read and write is an empowering skill: a tool of agency and freedom. Literacy enables a unique engagement with personhood, fostering critical thinking and self-determining choices (Freire, 2018/1970). As argued in Amartya Sen and Martha Nussbaum's capabilities approach, literacy significantly curtails or empowers what people can do or be, and thus their freedom to pursue a dignified livelihood according to their values (Sen, 1999; Nussbaum, 1993; Maddox, 2008).

International organizations reference these literacy-related benefits as grounds for their designation as a fundamental human right (UNESCO, 2023). Despite such status, adult literacy learners are often overlooked in global education and development agendas (Robinson, 2005; Grotlüschen et al., 2025). The benefits of literacy for adults in particular are concrete and wide-reaching, such as increased personal confidence, communities' health outcomes, and their children's school attainment (DeWalt et al., 2004; Le Vine et al., 2011; Stromquist, 1997). These outcomes illustrate how the empirical evidence reflects the broader theoretical claims in the first paragraph: adult literacy strengthens individual agency and expands people's substantive capabilities in line with Freire and the capabilities approach. These outcomes demonstrate how the empirical evidence supports the broader theoretical claims discussed above: adult literacy can enhance individual agency and expand people's substantive capabilities. This is consistent with Freire's understanding of empowerment and with the capabilities approach.

Literacy's role as a tool for meaning-making and life-building becomes particularly salient in contexts where access to other foundational resources for well-being—such as stable legal status, economic opportunity, and public services—is severely restricted. Bateys in the Dominican Republic—former temporary settlements for

seasonal sugarcane workers that have since become permanent communities—face precisely these kinds of constraints (Childers, 2021; Zecca & Castel, 2020). In addition to a widespread lack of economic opportunity, the Haitian heritage of many residents of bateys places them in a situation of liminal legality—a condition in which their legal status is uncertain or only partially recognized—in the Dominican Republic, which often hinders participation in public education initiatives and the wider formal society (Childers, 2021; Shipley, 2015). Previous analyses reported that illiteracy in bateyes was nearly three times higher than the national rate (Riveros, 2014); more recent national and field reports confirm persistent, high levels of educational exclusion in bateyes, though up-to-date, disaggregated batey-level literacy statistics are not publicly available (UNESCO, 2023; Making Cents/USAID, 2023; UNDP, 2022).

Academic literature engaging with Dominican bateys is largely medicalized, focusing on health-related crises and interventions, with limited work considering the experiences of Dominico-Haitian adults in regard to literacy and literacy learning (Kreniske, 2019; Madrid, 2014). On the scale of programming, limited research is available regarding effective adult literacy programs compared to those of early reading (Comings & Soricone, 2007). This dearth is concerning, considering the research affirming the far-reaching benefits of adult literacy for individuals and communities (DeWalt et al., 2004; Le Vine et al., 2011; Stromquist, 1997). This paper draws from interviews with eight women to show how women who do not know how to read understand the possibilities of multilingual literacy. Based on these conversations, the paper looks at how these understandings might inform planning effective adult literacy programming for the community. This study recognizes that literacy exists on a continuum rather than as a simple literate/illiterate binary and, therefore, avoids the term *illiterate*. Instead, it uses individuals' self-assessed confidence in independently reading a text as an indicator of where they fall along that continuum. In the context of one batey in the Dominican Republic, this paper asks: How do adults who do not feel confident reading understand literacy?

Bateys in Context
Batey communities in the Dominican Republic are populated mostly by Haitians or Dominicans of Haitian descent, due to their historical origins as temporary camps for *braceros*, or sugar cane workers in English (Jansen, 2013). Over time, these temporary dwellings for migrant workers have become established social communities home to men, women, and children, and their own informal economy (Zecca Castel, 2020). Socially, bateys are "dynamic bicultural and transnational constellation[s]," where a mix of recently arrived Haitians, Haitians with decades of residing in the DominicanRepublic, and fourth-generation Dominican-born people of Haitian descent often live together (Jansen, 2021, p.119). Estimates suggest there are around 500 bateys in the Dominican Republic, typically surrounded by sugar cane fields and severed from access to most basic services (Zecca Castel, 2020). Bateys represent reserves of a valuable and cheap workforce well-suited for the interests of the Dominican economy (Zecca Castel, 2020).

Depending on the recency of their Haitian heritage, most batey residents use a continuum of Haitian Creole and Spanish: from predominantly Haitian Creole, with basic Spanish comprehension, to primarily Spanish-speaking, with some Creole comprehension skills (Jansen, 2013). Haitian Creole knowledge is often stigmatized outside of the batey as a marker of otherness, and even within the batey amongst some Dominican-born adults (Jansen, 2013). In bateys, it is common to refer to fluency in the Spanish language as speaking "*dominicano*" and, similarly, fluency in Haitian Creole as speaking "*haitiano*" (Zecca Castel, 2020). A language serves as a social marker to delineate who fits in the tightly defined categories of "Dominican" or "Haitian."

The turbulent construction–and accompanying racialization– of dominicanidad since the country's beginnings has been buttressed by fearful, and at times hateful, aversion to Haiti. The antagonistic relationship between the two sides of the island began from the start of Hispaniola's colonization, with the Spanish fearing the military prowess and more numerous populations of the French colonizers in Haiti (Wigginton & Middleton, 2019). In 1822, President Boyer of Haiti invaded the eastern side of the island one year after its independence from Spain and established a 22-year occupation of the territory (Sanders Gómez, 2018; Duany, 2009; Wigginton & Middleton, 2019). The Dominican Republic celebrates its Independence Day on February 27 to mark the end of the Haitian occupation, not the end of Spanish colonial rule (Wigginton & Middleton, 2019). Capitalizing on these historical tensions, the brutal dictatorship of Rafael Trujillo from 1930-1961 proliferated nationalistic, often racialized conceptions of Dominican identity (Lara, 2017). Although Trujillo himself was a light-skinned mulatto (his maternal grandmother was reportedly Haitian), he aggressively used state power to re-frame Dominican identity as essentially white and European and to marginalize or eliminate African-derived and Haitian-associated identities and influences (Paulino, 2016). His legacy contributes to widespread, enduring anti-Haitianism present in the Dominican Republic, which can surface as distancing from blackness in the Dominican social imaginary (Moya Pons, 2010; San Miguel, 2005). Even within bateys, negative judgments of perceived Haitianess commonly shape social structures (Jansen, 2021).

Transnational, yet integrated communities, bateys serve as a frontier space in the Dominican Republic's forging of national identity. The Dominican Republic's struggle to forge a national identity—and particularly to incorporate blackness into this conception—is well researched, and deeply rooted in Hispaniola's political history, the island shared today by the Dominican Republic and Haiti. Anti-Haitianism is often confounded and consistently intertwined with Anti-Black attitudes in this context, demonized in juxtaposition to the white, Hispanic, dominicanidad emblematic of the country (Lara, 2017; San Miguel, 2005; Moya Pons, 2010).

Law and Belonging

Contemporarily, these sentiments continue to be embodied politically in institutional discrimination against individuals of Haitian descent. A Constitutional Amendment in 2010 and a subsequent Supreme Court ruling in 2013 retroactively confiscates and actively denies Dominican citizenship to thousands of Dominican-born individuals of Haitian descent (Shipley, 2015). This ruling was rationalized by deeming individuals recruited by agencies of the Dominican state from Haiti in the 20th century to work in the sugar cane industry as "in-transit," in the Dominican Republic, negating any rights their children would have to remain in the Dominican Republic (Petrozziello, 2014). In October of 2024, Dominican President Luis Abinader announced a plan to deport 10,000 undocumented Haitians weekly, which in practice has also resulted in the detention of Dominican-born people of Haitian descent (Adames Alcántara & Coto, 2024). This announcement was made on the 87th anniversary of the Parsley Massacre, a brutal state-organized killing of Haitians and Dominicans of Haitian descent under dictator Rafael Trujillo (Movimiento Reconocido, 2024).

Literature on Adult Literacy

The multilingual, transnational composition of bateys in the Dominican Republic and their lack of access to the state as a guarantor of rights are relevant to understanding literacy for adults and effective adult literacy program design in this context. Because language practices in bateys span Haitian Creole and Spanish, research on multilingual adult literacy is also essential for understanding literacy acquisition and use in similarly multilingual environments. Studies on translanguaging and multilingual literacy among adult migrants demonstrate that adult learners often draw on full linguistic repertoires to make meaning, participate in learning, and exercise agency (García-Barroso, 2023; Wedin, 2024). Such research highlights that literacy development for multilingual adults is shaped not only by skill acquisition but also by navigating linguistic hierarchies, language stigma, and sociopolitical marginalization—dynamics that closely mirror those in the batey context.

The following empirical studies suggest that adult literacy programs provide more intrinsic than instrumental benefits to learners. Murphy-Graham traces the psychological, social, and economic benefits for Honduran women who completed the El Sistema de Aprendizaje Tutorial (SAT) literacy and numeracy program over a decade in four Garifuna villages through semi-structured interviews and observations (Murphy-Graham, 2008). While students felt personally empowered in social life, her longitudinal qualitative study revealed that structural inequalities in Honduran society still limited their socio-economic progress (Murphy-Graham, 2008). Similarly, Williamson and Boughton's qualitative study using in-depth interviews shows that Aboriginal adult participants in a literacy program in Brewarrina, Australia, developed increased self-control and confidence, with negligible impact on promoting community action as hypothesized (Williamson & Boughton, 2021). They argue that empowerment leading to increased capabilities does not come through literacy alone but requires examining and acting upon structural oppression (Williamson & Boughton, 2021).

Other case studies highlight numerous contextually relevant adult literacy curricula created and implemented throughout the Global South. Muhr examines cooperation between Global South countries in literacy program development through the ¡Yo, Sí Puedo! audio-visual methodology, originating in Cuba in the early 2000s and adopted by countries across Latin America, the Caribbean, Africa, and the USA (Muhr, 2015). Similarly, Laksono et al. propose a functional literacy program incorporating local wisdom in Indonesia's Jember District to further learning objectives (Laksono et al., 2018). A recent ethnographic analysis adds a longitudinal perspective, finding that former participants in a rural Ugandan adult literacy program selectively apply literacy in daily life when relevant to livelihoods or religious practice (Odele, 2018). Odele argues that adult literacy programs must be concretely rooted in students' social realities to maximize benefits after completion (Odele, 2018).

In addition to relevant curriculum and materials, research highlights the pivotal role of implementation in effective literacy programming. Abbot et al.'s study of a Rwandan NGO adult literacy program reports that learners wanted to become literate to read the Bible, gain confidence, manage finances, navigate mobile phones, interpret road signs, learn foreign languages, help children with homework, and avoid deception (Abbot et al., 2020). However, participants had low attendance because classes were held far from home, scheduled during work hours, and required travel that competed with caregiving and household responsibilities (Abbot et al., 2020). By contrast, Cortina and Sánchez analyze the implementation of the Programa de Alfabetización y Educación Básica de Adultos (PAEBA), sponsored by the Agencia Española de Cooperación Internacional (AECI), in Honduras, Nicaragua, El Salvador, and the Dominican Republic in the late 1990s (Cortina & Sánchez, 2007). PAEBA programs were designed around learners' needs: classes were held nearby, scheduled around work, and taught by trained educators (Cortina & Sánchez, 2007). Despite its success, illiteracy rates remain high, as host countries have not addressed underlying systemic issues such as poverty and limited access to better jobs (Cortina & Sánchez, 2007).

While Freirean pedagogy aims to address these structural inequalities, research suggests that its methodologies are difficult to operationalize. Bartlett, based on a twelve-month ethnographic study of Brazilian literacy NGOs (Bartlett, 2005), argues that what teachers understood as Freirean teaching was cultural relativism. Teachers placed too much emphasis on community knowledge and avoided challenging learners' ideas. They aimed to embody Freirean egalitarian dialogue as warm sociability, spending class time on small talk (Bartlett, 2005). Although this helped students overcome shame about illiteracy, surface-level conversation prevented deeper engagement with the social and political realities Freire intended literacy dialogue to address (Bartlett, 2005). Freire's pedagogy explicitly confronts structural inequalities by positioning learners as agents capable of analyzing and transforming oppressive conditions; however, as Bartlett's work shows, these aims can be undermined in practice when dialogue is simplified into affirmation rather than critical inquiry.

Research suggests the importance of contextually relevant curriculum, pedagogy, and implementation in empowering adult literacy programming (Abbot et al., 2020; Bartlett, 2005; Cortina & Sánchez, 2007; García-Barroso, 2023; Laksono et al., 2018; Muhr, 2015; Murphy-Graham, 2008; Odele, 2018; Wedin, 2024; Williamson & Boughton, 2021). Both theory-informed logic and empirical data indicate that such programming is more desired by students and more feasible for them to attend when classes are located within their communities, scheduled around work obligations, and accessible without significant travel or cost. However, as seen in the Rwandan and PAEBA examples, institutional limitations for sustainably delivering such programming remain a challenge. These theoretical underpinnings and empirical examples of adult literacy programming are relevant to understanding the experiences and attitudes toward literacy among adults in the batey.

Conceptual Framework

The following conceptual framework, illustrated below, helps illuminate how adult literacy may shape empowerment among women living in the batey context. Because this study examines how multilingual adult learners understand and experience literacy, it is important to situate these theories in relation to the structural constraints and limited capabilities that characterize batey life.

Figure 1. Conceptual Map
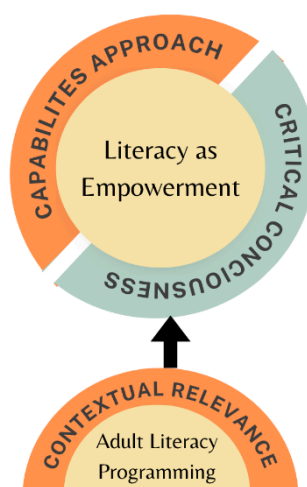
According to Sen and Nussbaum's Human Capabilities Approach (HCA), human flourishing entails enabling both positive and negative freedoms, allowing individuals to live fully dignified, meaningful lives (Sen, 1999; Nussbaum, 1993). HCA serves as an alternative to emphasize development as the expansion of what people is able to do and be (Maddox, 2008; Sen, 1999). Rather than relying on economic indicators, HCA centers development goals are based on human capabilities (Sen, 1999; Nussbaum, 2007). Nussbaum extends Sen's ideas into a more comprehensive theory of social justice, outlining ten central capabilities necessary for a life worthy of human dignity: life; bodily health; bodily integrity; senses,

imagination, and thought, emotions; practical reason; affiliation; other species; play; and control over one's environment (Nussbaum, 2007).

HCA emphasizes literacy as a foundational capability that enables access to many others (Maddox, 2008). Nussbaum argues literacy is intrinsically valuable because it allows individuals "to use the sense, to imagine, think and reason… in a truly human way" (2006, p. 76). Sen highlights its instrumental value in expanding agency (Maddox, 2008). However, as shown in previous studies, structural inequalities often limit the empowering potential of literacy education, despite its connection to human capabilities. Paulo Freire's Pedagogy of the Oppressed offers an educational framework to address these limitations. Freire seeks to enhance students' positive freedoms, which can catalyze broader negative freedoms through revolutionary action (Freire, 2018/1970). This process occurs through conscientização (a Brazilian Portuguese term for the development of critical consciousness), which reorients learners' affiliations and harnesses their imagination, senses, and thought into critical reasoning. Freire sees literacy as deeply tied to this process and essential to critical thought.

In adult literacy, Freire views teaching not just as skill acquisition but as a problematization of worldview: "humanizing the world by transforming it" (1970, p. 206). He criticizes the "digestive" model of education that feeds learners predetermined worldviews (1970, p. 207). Instead, he advocates for materials that value adult learners' lived knowledge and enable them to create texts expressing and refining their understanding of reality. Materials should reflect learners' thematic universe while inciting critical engagement with their social context (Freire, 2018/1970). Aligned with Freire's emphasis on contextual relevance, Nussbaum also stresses that the empowering impact of literacy must be locally grounded. While literacy is a central capability, its meaning and utility are embedded in diverse contexts (Maddox, 2008; Nussbaum, 1993, 2006). Through HCA, literacy can be conceived as empowerment—both intrinsically and instrumentally contributing to human flourishing. Freirean critical consciousness complements this by offering a pedagogy that equips learners to question and resist the structural forces limiting their capabilities. Together, these frameworks conceptualize an empowering literacy education: one in which critical thinking allows learners to identify and challenge societal constraints on their capabilities. This combined framework is particularly relevant for understanding how women in the batey perceive literacy, and what forms of literacy education best serve their needs. In a context where access to many human capabilities is structurally constrained, the HCA and Freirean critical pedagogy together suggest that literacy can be especially empowering. The discussion section will examine how these theoretical perspectives intersect with the lived experiences and views of women in the batey.

Methodology
This study employs qualitative methodology, including interviews and observations, to develop a case study in one batey in the Dominican Republic. This site was chosen

due to my ongoing work and residency in the community, as well as strong ties to both residents and a local organization.

A qualitative approach is appropriate, as it seeks to understand the nature and processes of human experience, values, and decision-making (Johnson & Christensen, 2019). While quantitative data—such as the population or illiteracy rate of the batey—would be useful, such data is unavailable and beyond the means of the researcher to collect. Semi-structured interviews served as the primary tool for data collection, allowing for personal connection and warmth. Based on the pilot study, this tool is culturally appropriate: informal, in-depth conversations are common. Illiteracy can be a sensitive topic, and individuals may be reluctant to self-identify (Abbot et al., 2020; Bartlett, 2005). These conversational interviews were designed to create a welcoming space for participants to discuss literacy. Semi-structured interviews also provided enough structure to guide discussion toward relevant themes while allowing participants to shape the conversation. Participants could speak in Spanish, Haitian Creole, or both. When feasible, interviews were recorded with consent and transcribed; otherwise, a memo was written immediately after.

Participants

A non-random snowball sample of 23 adults was drawn from the batey's population. The pilot phase consisted of 15 interviews and informed the development of a participatory, adult literacy program. The program is a community-led initiative that meets twice weekly for 90-minute sessions in the local church. Instruction occurs primarily in Haitian Creole, with supplementary Spanish vocabulary practice, reflecting participants' linguistic needs. The volunteer facilitator—who also served as my community assistant during interviews—is a young adult from the batey fluent in both languages. The curriculum draws on functional literacy principles, incorporating key word reading, practical vocabulary, and syllable-based writing practice. Haitian Creole is the first language of all eight women. All but one demonstrate at least basic Spanish speaking and comprehension skills, though confidence in Spanish varies and does not always match their communicative competence. All participants migrated from Haiti to the Dominican Republic between 1980 and 2000 and are currently between 40 and 63 years old. All eight identified as Christians; seven attend a Creole-speaking church in the batey at least weekly, and three attend three times a week. A table of participant characteristics follows.

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Table 1.

Participants' Background

Church attendance	Age	Year of Arrival in the Dominican Republic	Spanish Proficiency (conversation)*	Spanish Proficiency (expressed confidence)**
Yes	52	1974	Moderate	Moderate
Yes	40	1990s	Low	Low
Yes	60	1980s	Moderate	Low
Yes	62	1980s	High	Low
No	43	1997	High	High
Yes	54	1980s	High	Low
Yes	47	2001	High	High
Yes	56	1980s	None	None

Note. Church attendance threshold is defined as one or more times per week. * Indicates proficiency assessed based on interactions; ** indicates proficiency assessed based on participants' expressed confidence during interviews.

Analysis is also informed by conversations with three of the interviewed men—two husbands of women enrolled in the literacy program and one pastor of the Haitian Creole-speaking church. These conversations, conducted informally during both data-collection phases, offered additional insight into community expectations, gender roles, and attitudes toward literacy. In addition, I reference conversations with two young adults from the batey, both children of women in the literacy class, to contextualize intergenerational perspectives on literacy and schooling. Follow-up data collection included eight interviews conducted seven months later during the program's first two weeks. This phase included individual and two group interviews. While the same guide was used, discussions during group interviews often centered around literacy program homework. Snowball sampling was chosen for feasibility and to leverage pre-established rapport. By the follow-up phase, interest in the study had grown, increasing opportunities for participation.

Although the sample was not limited by gender, all individuals who identified themselves as uncomfortable or unable to read in any language were women. This pattern reflects well-documented gender disparities in literacy in the Caribbean and across the Global South (e.g., UNESCO, 2022; Stromquist, 2015). This study focuses on conversations with the eight women I interviewed in both phases, as multiple engagements allowed for a more complete understanding of their perspectives. Six of these eight women have consistently attended the literacy program from its launch until the time of the second interview (approximately nine months later).

Analysis of emic themes—that is, themes grounded in participants' own meanings, cultural understandings, and lived experience (Yanto & Pandin, 2023)—was informed by conversations with several of the interviewed men in the following analysis, two of whom are the husbands of women in the adult literacy program, and one of whom is a pastor at a Haitian-Creole speaking church. To complement

perspectives on community actor involvement, I also reference conversations with young adults from the batey, two of whom are children of women enrolled in the literacy class.

Positionality

My engagement with the batey community of the study is multifaceted and shapes the nature of this research as much as it shapes my identity. I hold that positionality is an iterative process, and thus describing it in a fixed, single paragraph conveys a dim reflection of reality at best. Here, I will explain the ties that shape and continually reshape me and my work.

I have spent time in this batey about twice a year for the last ten years, teaching full-time at an elementary school in the community for two of those ten years. As a Western-educated white American, my origins position me as a clear outsider in the batey. This dynamic is continually complexified as my relationships in the batey shape me. Through such connections, I have solidified my Spanish and Haitian Creole fluency, made lifelong friends, and married a Haitian-Dominican. These tensions of my identity provide access points to potential participants, facilitate the discussion of potentially controversial topics, and generally encourage a relative openness in engaging with the research at hand.

Ethical Considerations

The risks associated with participating in this study are similar to those encountered in conversations in daily life, and there are no direct benefits to participating in the study. When the literacy program began, participants from the pilot were given priority in registration.

Participants' names were not recorded with the data to ensure their privacy, and pseudonyms are used in this paper. While there is evidence that some participants prefer to be identified by name when participating in qualitative studies (Moosa, 2013), I decided to use pseudonyms to protect the identity of the batey. A young adult resident of the batey with a positive reputation in the community accompanied me to most interviews. His presence in interviews and fluency in Haitian Creole and Spanish allowed me to avoid potential misinterpretations in interviews. He signed a confidentiality agreement to ensure the privacy of interview data, and eventually became the volunteer teacher for the adult literacy program resulting from this study.

Data Analysis

I used interim analysis, as data was collected over two trips to the batey over 9 months. Interim analysis allowed for themes present in the initial interviews to guide subsequent data collection, and thus foster more comprehensive findings (Johnson & Christensen, 2019). Additionally, I used inductive methods to code the interview transcripts and memos with emic codes arising from the data. This method was chosen as it furthers the study's purpose to "prioritize and honor the participant's voice" by allowing their own words to categorize analysis (Saldaña, 2013, p.91). The initial emic code list included: Haitian Dominican Identity, Authority, Code-switching, Attitudes Towards Reading, Reasons for Not Reading, Biblical

Knowledge, and Family. I analyzed the data under codes via Microsoft Excel software in their original languages. These codes were further refined and reorganized to create the resulting list of Desires for Literacy, Literacy as a Continuum of Skills, Reading and Church, and Reading and Powers.

Limitations

This study is limited in that generalizing the findings to the entire community in this batey. Thus, the results of the study can provide inferences regarding the dispositions of the entire community regarding the object of the research questions, but cannot be considered systematically representative of the batey.

Findings

The following findings highlight how learners frame literacy as tied to becoming a knowing person, as well as to identity, community participation, and collaboration. This perspective was evident from the very first interactions at the program. At the orientation meeting for the adult literacy program, Marie walked in with a beaming smile and energetic step. She buzzed from chair to chair, asking others if they knew how to read. She eagerly raised her hand and stood up to answer nearly every question posed by the facilitator.

Marie's enthusiasm was not unusual: all interviewees expressed a strong desire to learn to read. Even two interviewees who were literate in Spanish—and husbands to two of the women learners—explained that they wanted to "learn to read more," signaling their broader interest in adult education and their engagement with literacy as a pathway to personal growth and community participation.

Learners also took the program very seriously. Some informed facilitators of anticipated absences months in advance due to medical procedures or family weddings, even without being asked. One learner requested homework to complete between the orientation and the first class.

When describing the literacy they wished to acquire, participants often framed it as the ability to "know something." In contrast, they described illiteracy in Haitian Creole as *anyen nan tet mwen*— "nothing in my head." One participant, Carmela, shared in Haitian Creole, "I have nothing in my head, I don't read." At the same time, participants eloquently explained deep insights on religion, community affairs, and socio-political realities in the Dominican Republic, clearly recognizing that they did have "something in their heads" despite not being literate. What, then, does it mean for them to "know something"? The following sections explore the centrality of the "knowing person" concept: literacy is not merely skill acquisition but a pathway to fuller understanding and social engagement.

Literacy Means Becoming a Knowing Person

Learners valued literacy primarily as a pathway to becoming knowledgeable, which outweighed their affinities for either of the languages prevalent in the batey (Haitian Creole or Spanish). This prioritization suspends the negotiation of belonging in the

Haitian vs. Dominican binary in identity negotiations in pursuit of a more potent mechanism of agency-expressing in becoming literate. In seeking to express the fullness of their personhood in society, literacy learners chose to defy the imposition of nationality categories as a means to engage in society and pursue reading as the most efficient tactic to contribute to their meaning-making activities.

The Haitian Creole–Spanish binary as a tool for identity sorting proves overly simplistic to capture how participants view their linguistic resources. Learners expressed nuanced understandings of prestige across their languages, perceiving literacy in any language as a means of becoming a knowing person. Still, participants valued their linguistic repertoires differently. Carmela explained that she lived for years in the Dominican Republic without needing Spanish:

> They brought me [here] to the middle of a bunch of Haitians.

Although she doubted she would ever "speak Dominican," she now uses Spanish often and switches fluidly between Haitian Creole and Spanish in interviews. Four other participants described similar experiences: one reported never using or understanding Spanish, while two understood it orally but relied on Spanish-influenced Haitian Creole words (e.g., *cebolla → ceboy*) when speaking with Spanish-dominant speakers. Five of the eight women preferred to learn to write in Haitian Creole, although all expressed at least some desire to learn to read in both languages. Two participants who were fluent in Spanish rejected Haitian Creole literacy entirely, saying they "don't like" the language. One participant explained:

> Because, just figure, I left Haiti. I am not in Haiti.

Others preferred Haitian Creole because it felt like "theirs." This diversity in language preference complicates the relationship between fluency, nationality, and identity. Despite these differences, participants agreed that becoming a knowing person required learning to read in some language. Several who preferred Spanish literacy still enrolled in Haitian Creole classes, likely because no accessible Spanish-language programs existed.

Some learners, like Nuna and Carmen, had attempted Dominican state-run literacy programs in Spanish but found them ineffective or inaccessible. Nuna reported that her assigned teacher stopped coming after two sessions, but asked her to continue signing his attendance sheets. Carmen dropped out of an overcrowded class that involved only copying sentences from a blackboard. Unlike most batey residents, both had the necessary identity documents to enroll. Many others lacked documentation and thus had no access to such programs. Under these constraints, learners prioritized literacy itself over language preference, enrolling in Haitian Creole programs as the available pathway to becoming a knowing person. The desire to become a knowing person suspends the implications of language prestige in pursuit of literacy skills. Literacy in any language is the gateway to becoming a knowing person.

Literacy as a Continuum of Knowing

Participants viewed literacy as existing along a continuum of cross-linguistic skills that conferred increasing prestige. While literacy in any language made one a knowing person, speaking Spanish was often seen as completing knowing. Farah, who did not understand or speak Spanish, connected Haitian Creole literacy to her aspiration to learn Spanish:

> I would love to continue [learning to read in Haitian Creole], and I would love to know Spanish. Speak Spanish. If you say "i," you have to say it completely.

For Farah, Spanish fluency represented a marker of becoming a fully knowing person. Learners often connected Haitian Creole and Spanish, treating them as complementary parts of one system of knowing.

During the first several sessions of the Haitian Creole adult literacy program, learners focused on learning three new letters (p, t, a), which were introduced with the key word patat, meaning sweet potato. Once they had decoded the word, reading it aloud, one learner interjected that the word is just like batata (the Spanish equivalent for patat). Throughout other lessons, learners drew additional connections to Spanish without labeling them as such, highlighting their understanding of a unified system of Haitian Creole and Spanish linguistic resources. While literacy in either language is the first step to becoming a "knowing person," facility of oral Spanish is also perceived as a component of this identity. Becoming a knowing person includes at least spoken competency in Spanish.

When asked in what language she wanted to learn how to read, one participant, Masiela, responded that she wanted to learn to read in English. Masiela does not speak English, and the batey hosts an extremely limited arena to use and interact with the English language. Yet, English holds a high level of linguistic prestige due to its role in granting footing in the modern globalized economy. Thus, literacy is tied to becoming a knowing person, and while literacy in any language assigns this status, speaking and reading in more prestigious languages complete "knowing." Mastery of more prestigious languages reinforces the status of becoming a knowing person.

Literacy as a Set of Skills to Engage in Community

For many participants, becoming a knowing person was deeply intertwined with Christianity. Literacy and biblical knowledge were often described as part of the same continuum. Marie, for instance, recalled being tutored in reading Psalms. She proudly recited Psalm 1 from memory while following along with her finger, then reflected:

> In the Bible, you can send me to whatever verses, I will find every place for you. But to read it…I don't have anything in my head. I know all of the verses, I will go find them all…but to stand and read it, I…I can't understand.

Here, memorization of scripture was equated with reading, but Marie still viewed herself as not fully a knowing person because she could not independently read the text. Helene similarly explained:

> A word, you know it's a path, right? It's a path, you have to read, read, read, and then follow it. You don't have to wait for the director to take the Bible for you…When you know how to read you start to read, read, read: this is good, this is bad.

For Helene, literacy granted moral agency, freeing her from dependence on church authorities and allowing her to become a knowing person through her own interpretations. In this way, reading is perceived as a means for increased agency for learners, in which they can rely on their own judgments regarding moral interpretations and meaning-making in their lives.

Becoming a knowing person through literacy allows learners to become more engaged in their community, as understanding during church events allows learners to negotiate their identities in other-facing activities (e.g., Bible studies). While learners cite Christianity as the arena for using literacy, at the same time, participants express frustration at how literacy is used as a filtering mechanism for engagement in church activities. Masiela explained:

> Everybody who knows, they come with their notebooks, and they see what is written on the board and they write it. But you, if you don't know? You will never be able to know…They never do a separate study with you, with people who don't know.

Literacy thus conferred status and access in the church, while illiteracy resulted in exclusion. Some learners requested church leaders to organize literacy support groups, but these efforts rarely materialized. Despite these frustrations, participants overwhelmingly envisioned their literacy use within religious contexts, particularly Bible study. For them, becoming a knowing person was inseparable from their Christian faith.

Literacy as a Collaborative Path to Becoming a Knowing Person
Learners also understood literacy as inherently collaborative, requiring help from others in order to become a knowing person. Many linked their inability to learn as children to a lack of support. Several women described experiences as restavek—child servants in other households—where they were denied schooling and sometimes food. Helene recalled trying to copy lessons from neighboring children in rare free moments.

As adults, participants continued to associate literacy with access to help, whether from teachers, institutions, or family. Nairobi, a 48-year-old participant, explained that she has always wanted to learn to read, and as a mother of young children, heard of a class at a local church. She never attended because she couldn't find "help" with her family responsibilities. Others cited similar experiences, with a lack of help in young adulthood, with responsibilities such as caretaking, church events, or farming activities preventing them from accepting help to acquire literacy via a teacher.

Institutional help was scarce. Dominican state literacy programs excluded many batey residents for lack of documentation, while Haitian government and church institutions offered few resources outside Haiti. While Haitian government agencies have developed and distributed adult literacy materials and programming, the Haitian state does not extend the fullness of its resources to Haitians in the Dominican Republic. Haiti's state-run Akademi Kreyòl Ayisyen has developed a free adult literacy curriculum in Haitian Creole, accessible free of charge to communities in Haiti. The Haitian Consulate near the research site in the Dominican Republic does not provide access to this book series. The Haitian-Creole-speaking churches of these learners similarly fail to provide literacy resources for women in the batey.

Yet learners sometimes received crucial support from family: Helene's ten-year-old son taught her to write her name, and Farah's son became the volunteer teacher for the literacy program piloted in this study. As they discuss their desires to learn to read in the future, the learner participants also cite help from God as an integral part of realizing their hopes. As one participant says:

> But, if I find help now, with God before me, I might be able to know.

For these learners, collaboration—whether from family, teachers, community, or God—was the hinge upon which literacy, and thus becoming a knowing person, depended.

Discussion

Capabilities are "the freedoms [people] enjoy to choose the lives that they have reason to value," and as seen in the understandings of literacy of the women in this study (Sen 1992, p. 81). Batey communities have limited access to both economic resources and social resources of the broader national society, hindering batey residents' exercise of these freedoms. The women from this study use the concept of becoming a knowing person to subvert these limitations and conceive one path to forging a livelihood according to their values through acquiring literacy. In this paradigm, the ability to read in the batey is conceived as a resource to exert agency to make meaningful choices, the freedom to forge a future meaningful to them.

One aspect of a future meaningful to the women of this study is becoming a knowing person. According to the participants, becoming a knowing person is first and foremost linguistic in nature: one must learn how to read. As learners navigate the path to literacy, they must prioritize which language to become literate in and thus define their positionality in relation to their languages. Rather than capitulate to stigmatization of Haitian Creole and the polar opposite categorizations of Dominican and Haitian identities, some women in this study use a multilingual conception of literacy to construct the idea of a knowing person. For them, literacy blurs the boundaries of the Haitian and Dominican binary. While the social and legal consequences of this binary disempower many batey residents, participants' conceptions of literacy seek to complexify this tension by "allowing [them] to manage and present their sense of self in complex and hyphenated ways, enabling

them to blur categories of 'insider' and 'outsider'" (Chopra et al, 2023, p.6; Alba, 2005).

The women of this study recognize the ability to think critically about social hierarchies and authority structures as a goal of literacy, particularly aiming to discern morality from biblical text as opposed to pastoral sermons. They also recognize the lack of opportunity–or "help"–which would enable them to pursue literacy as at least in part due to frustrating socio-systemic inequalities. In this way, these learners' "senses, imagination and thought" have resulted in critical judgments about the nature of their social worlds (Freire, 2018/1970). Freire (2018/1970) posits that literacy is the fundamental precursor to such critical reasoning, yet these women seem to have employed tools other than literacy to harness their critical thinking skills. However, they acknowledge their desire to critically reason in more contexts and recognize literacy as necessary to such a goal.

For an adult literacy intervention to be effective in this community, it must be adapted to three central elements of the thematic universe of the batey: multilingualism, the church, and community collaboration. The linguistic resources of adults in this batey in Haitian Creole and Spanish and their connotations play a part in constructing the goal of literacy, becoming a knowing person. The influence of the Christian church and the desire of participants to engage in its activities reflect the nature of some of the long-term uses of their literacy: critical reasoning regarding morality and establishing themselves as active members in the community. The understanding of acquiring literacy as a necessarily collaborative task affects the conception of pedagogy, class attendance, and teacher-student relationship dynamics, which must be considered in program design.

Relevance and Further Research
The findings from this study contribute to the academic literature on bateys in the Dominican Republic, which is limited in its exploration of the educational opportunities of women. By focusing specifically on women's literacy experiences, this study fills a critical gap in the literature, providing insight into how adult literacy programs can be designed to address both gender and structural inequities. In terms of programming, this study informs the development of contextually relevant adult literacy programming for bateys in the Dominican Republic, and lays a framework for understanding the perceived roles of literacy towards forging a meaningful future in other similarly marginalized communities. Specifically, this study also highlights the potential for literacy to act as a tool for empowerment, particularly for adults in conditions of extensive marginalization and insecurity, including socio-economic, legal, and systemic barriers to forging livelihoods. These findings suggest increased attention to issues of adult literacy is valuable for the field of Education in Emergencies (EiE), particularly for adults in settings of protracted crisis.

Additionally, this study contributes to the literature regarding understanding the role of literacy for adults from a learner-based perspective. Literacy is not only a skill, but in the case of the women in the batey of this study, it is an identity: a literate person is

a knowing person. While the participants could not read at the time of the interview, they shared critical conclusions regarding the nature of the authority structures of their churches, communities, and political environment. If literacy is conceived as an identity, to which "knowing" and critical thinking is connected, it can become an entangling barrier that underestimates and devalues the senses, imagination, and thought of the human spirit. While literacy enhances and refines such faculties, literacy as an identity could overemphasize literacy's potential to empower. Further research is needed regarding the implications of literacy as an identity in understanding agency, development, and adult literacy programming development, in order to understand the dangers and potential opportunities of this conception.

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Bridging Teacher and Student Success: Investigating Job Satisfaction and Self-Efficacy in Islamic and Non-Islamic Schools in Indonesia

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Although teacher job satisfaction and self-efficacy are widely recognised as important for student learning and well-being, little is known about how their effects differ across educational contexts. This study examines how these factors shape student outcomes in Indonesian Islamic (IS) and non-Islamic/general (NS) secondary schools. Using a two-stage stratified sampling method, data were collected from 1,319 students in 64 classrooms, and multigroup and multilevel path analysis (Mplus 8.10) was conducted to assess cross-level relationships. The findings show clear differences between school types. In NS, teacher job satisfaction (TCJOBS) directly predicted student achievement, whereas in IS, its effect operated indirectly through student motivation. Teacher self-efficacy (TCEFF) directly improved achievement in IS, but in NS, it influenced achievement indirectly through TCJOBS. Job status strongly predicted TCJOBS, with permanent teachers reporting higher satisfaction, and gender differences showed higher self-efficacy among female teachers. While TCJOBS and TCEFF were not directly linked to student well-being or anxiety, higher student well-being consistently enhanced achievement and reduced anxiety in both school systems. This study demonstrates how teacher-related factors operate differently across educational frameworks, offering important insights for targeted policy and professional development.

Keywords: Indonesia, Islamic and non-Islamic education, job satisfaction, self-efficacy, learning, wellbeing

Introduction
In the past decade, international research has highlighted the critical influence of teacher job-related attitudes, in shaping educational effectiveness. In particular, job satisfaction, described as an individual's overall evaluation of their job and sense of fulfilment (Locke, 1976), and self-efficacy, defined as one's belief in their ability to perform tasks and achieve goals (Bandura, 1997). Studies across general school contexts, including China, Australia, Finland, Canada, and Indonesia, collectively support this claim. The studies highlight that teachers who report high levels of job satisfaction and self-efficacy are not merely happier in their roles; they are demonstrably more effective at fostering environments that are beneficial to learning (Gu & Zhou, 2020; Wula et al., 2020; Hoque et al., 2023; Hajovsky et al., 2020; Muliati et al., 2022; Perera & John, 2020). The benefits of positive teacher attitudes extend beyond academic performance to encompass students' emotional and psychological well-being. Research demonstrates that satisfied and confident educators are more

effective at creating calm, supportive classroom environments that enhance both learning experiences and achievement (Bosica, 2022; Hettinger et al., 2023; Toropova et al., 2021; Wartenberg et al., 2023). This pattern is also evident in specific contexts such as Islamic education in Indonesia. In these settings, teachers with high levels of professional fulfilment and self-efficacy significantly reduce student anxiety and increase motivation to learn, thereby improving academic performance (Sabrina et al., 2023; Tanjung, 2021; Yulihardi et al., 2023). These findings affirm a universal understanding that fostering positive teacher attitudes is crucial for improving student outcomes across all learning contexts.

Furthermore, the Organisation for Economic Co-operation and Development (OECD, 2014), through the Teaching and Learning International Survey (TALIS), argues that the impact of teacher job satisfaction and self-efficacy on student outcomes is not uniform but varies across educational contexts and their cultural and systemic features. This variation is particularly evident in countries such as Indonesia, which have both general (non-Islamic) and Islamic schools (Sirozi, 2004; Stern & Smith, 2016). General schools focus on a standardised curriculum aimed at academic achievement, while Islamic schools embed religious values throughout the curriculum and school culture, including subjects such as Qur'anic studies, Islamic jurisprudence, and Arabic (Amzat, 2022; Kosim et al., 2023; Yafiz, Al-Muttar, et al., 2022). Religiosity in Islamic schools is a key contextual factor shaping teachers' professional attitudes (Bal & Kökalan, 2021; Marisa et al., 2024). The schools' religious ethos creates a distinctive climate that influences teachers' roles and pedagogical practices. This spiritually rich environment can enhance teachers' job satisfaction (Bal & Kökalan, 2021; Yafiz, Yousif Oudah Al-Muttar, et al., 2022) and self-efficacy (Marisa et al., 2024; Tehranian et al., 2025), which in turn shapes their teaching practices and interactions with students, ultimately impacting student outcomes.

Beyond school settings, employment conditions also shape teachers' professional attitudes (Song et al., 2020; Topchyan & Woehler, 2021). In Indonesia, many teachers, particularly those in private schools, work as *guru honorer* (non-permanent teachers) in privately run, non-profit institutions. These teachers often receive low salaries and lack the benefits available to permanent public-school teachers (Afkar et al., 2020; García & Han, 2022). Evidence from studies in Greece and Italy further supports this claim, showing that permanent teachers, who typically receive more stable salaries and better employment conditions, report higher job satisfaction and stronger self-efficacy, which enhance their confidence, professional commitment, and capacity to create effective learning environments (Capone & Petrillo, 2020; Glaveli et al., 2022). These conditions highlight the need to investigate and compare how job-related attitudes influence student outcomes in Indonesia's Islamic and general (non-Islamic) school systems. They also underscore the importance of examining how contextual factors, such as employment conditions teachers' shape job satisfaction and self-efficacy differently across these two educational settings, advancing existing research on teacher effectiveness and educational outcomes.

Thus, to address this gap, the current study formulates the following specific research questions:

1. How do teacher job satisfaction and self-efficacy in Islamic and non-Islamic (general) schools relate to student well-being, learning attitudes, and academic achievement?
2. How do contextual factors influence teachers' job satisfaction and self-efficacy in different educational settings? And what are the interrelationships among the variables?

Using a multigroup and multilevel path analysis to account for nested data and differences across groups (McArdle & Hamagami, 2013), this examines how teacher job satisfaction and self-efficacy influence student outcomes in Islamic and non-Islamic Indonesian schools. Specifically, it also investigates whether these teacher attitudes affect students' academic performance, learning experiences, and emotional well-being differently across the two school contexts. This study adopts several definitions to clarify the key constructs. Teacher professional attitudes refer to teachers' satisfaction with their roles and their confidence in their professional abilities, captured through measures of job satisfaction and self-efficacy. Student well-being is understood as students' emotional health within the school environment, reflected in high levels of happiness. Learning attitudes describe students' dispositions toward educational activities, including their intrinsic motivation to learn and their anxiety experienced in academic tasks. Finally, academic performance is defined as the measurable outcome of student learning, assessed through standardised tests in core subjects. The study's findings are expected to offer important insights into how teacher job-related attitudes influence students' experiences and achievement in both Islamic and non-Islamic schools. These insights will inform policy and practice, particularly in strengthening teacher support, professional development, and resource allocation, contributing to improved educational outcomes across Indonesia's diverse school contexts.

Indonesia's Islamic and General Schools: Differences and Teacher Challenges
Indonesia's education system is characterised by a dual structure of Islamic and general (non-Islamic) schooling, administered by two separate ministries (OECD/ADB, 2015). This arrangement stems from historical debates between Islamic and nationalist leaders over the role of education in meeting both national and spiritual needs (Sirozi, 2004). Islamic schools fall under the Ministry of Religious Affairs (MoRA), while General schools are overseen by the Ministry of Education and Culture (MoEC), with 16% of schools categorised as Islamic and 84% as general (non-Islamic). Despite this administrative divide, both systems follow the same national regulations, including curriculum standards, teacher quality requirements, and the academic calendar, to promote consistent and equitable educational quality across school types (Stern & Smith, 2016). However, notable disparities persist. General schools implement a national curriculum that prioritises academic subjects and includes only a single compulsory religious education component. In contrast,

Islamic schools integrate the national curriculum with extensive Islamic studies, such as Qur'anic studies, Fiqh, and Arabic, and, in the case of Madrasah and Pesantren, focus predominantly on religious instruction (Kosim et al., 2023).

Differences in teacher employment further reinforce inequities between the two school sectors. In Islamic schools, 81% of teachers are non-civil servants or non-permanent staff, leaving only 19% in secure public-sector positions, a pattern that limits salary stability, benefits, and long-term career prospects (ADB, 2014; Bahri et al., 2018; Muhajir, 2016). In contrast, general schools employ a substantially larger proportion of public-sector and permanent teachers who receive higher wages, more comprehensive employment benefits, and wider access to government-funded certification, professional development, and promotion pathways (Afkar et al., 2020; García & Han, 2022; Kusumawardhani, 2017; World Bank, 2019). These structural differences, combined with the strong role of religiosity in Islamic school governance (Amzat, 2022; Yafiz, Al-Muttar, et al., 2022), create uneven working conditions that influence teachers' job satisfaction, self-efficacy, and capacity to deliver high-quality instruction (Song et al., 2020; Topchyan & Woehler, 2021). Addressing these disparities is therefore critical for ensuring equitable learning opportunities and improving educational quality across all school contexts in Indonesia.

Literature Review

Concept of Teacher Job Satisfaction and Self-Efficacy
Educational research consistently shows that teachers' professional beliefs and attitudes play a central role in shaping effective teaching and learning (OECD, 2014; Locke, 1969; Zembylas & Papanastasiou, 2004; Hoque et al., 2023; Toropova et al., 2021; Bandura, 1991; Emiru & Gedifew, 2024; Li, 2023). According to the TALIS framework (OECD, 2014), these beliefs reflect teachers' emotional and behavioural orientations toward their work and their relationships with the schools as organisation, ultimately influencing pedagogical practices and student outcomes. Two key dimensions underpin these professional attitudes of job satisfaction and self-efficacy. Job satisfaction, grounded in Locke's (1969) definition and further elaborated by Zembylas and Papanastasiou (2004), refers to the positive emotional state teachers experience when they feel fulfilled and supported in their roles. High job satisfaction is strongly linked to enthusiasm, commitment, and teaching effectiveness, while dissatisfaction can undermine motivation and classroom quality (Hoque et al., 2023; Toropova et al., 2021). Self-efficacy, rooted in Bandura's (1991) theory, captures teachers' confidence in their ability to plan, implement, and influence student learning. Teachers with strong self-efficacy are more adaptable, innovative, and responsive to diverse learner needs, contributing to more engaging classroom environments (Emiru & Gedifew, 2024; Li, 2023). Importantly, self-efficacy develops over time through experience and professional support. Together, job satisfaction and self-efficacy form the foundation of teachers' professional attitudes, reinforcing each other and shaping both instructional quality and broader educational outcomes.

Teacher Job Satisfaction, Self-Efficacy and their Connections with Student Outcomes
Research consistently shows a strong relationship between teachers' job satisfaction, their sense of self-efficacy, and the quality of student outcomes. OECD (2014) highlights that satisfied and confident teachers are more effective in supporting students' academic and overall development across different educational contexts. Empirical evidence reinforces this connection. Gu and Zhou's (2020) quantitative study in China found a positive effect ($\beta = 12.55$, $p < 0.05$) of teacher job satisfaction on student achievement, indicating that teachers who feel valued and supported are more likely to create effective learning environments. International reviews by Hoque et al. (2023) further demonstrate that this pattern is consistent across countries such as Finland, Canada, and Australia, proving that teacher satisfaction is a globally influential factor in shaping learning outcomes. Research from Indonesia adds another dimension, with Wula et al. (2020) showing that high job satisfaction reduces teacher burnout, thereby sustaining effective and engaging classroom practices. Similarly, Wartenberg et al. (2023), in their meta-analysis, claim that teacher satisfaction enhances the emotional and cognitive climate of schools, with total effects ranging from 0.10 to 0.29, which, in turn, supports stronger student motivation and academic achievement. Collectively, these studies show that fostering teacher fulfilment is essential for enhancing teaching quality, promoting student success, and sustaining healthy educational systems.

Furthermore, teacher self-efficacy also plays a fundamental role in shaping educational outcomes, with extensive research demonstrating its positive influence on student success (Perera & John, 2020; Hajovsky et al., 2020; Muliati et al., 2022). A structural equation modelling study by Perera and John (2020) in Australia found a significant positive effect of teacher self-efficacy on student achievement ($\beta = 0.14$), indicating that teachers who feel confident in their instructional and classroom management abilities are better able to support student learning. This relationship is echoed in Hajovsky et al.'s (2020) cross-national research, which shows that higher teacher self-efficacy enhances instructional quality and fosters more supportive and motivating classroom environments. Relatedly, Muliati et al. (2022) reported comparable findings in Indonesia, demonstrating that the benefits of teacher self-efficacy extend across diverse cultural and educational contexts. Strengthening teacher self-efficacy improves instructional practices by enabling teachers to implement strategies more effectively. It also fosters richer, more engaging learning environments that support higher student achievement.

Research increasingly highlights the critical role of teacher job-related attitudes, particularly job satisfaction and self-efficacy, in shaping students' learning experiences, motivation, and well-being (Toropova et al., 2021; Wartenberg et al., 2023; Bandura, 1991; Bosica, 2022; Hettinger et al., 2023; Mojavezi & Tamiz, 2012; OECD, 2019; Eren, 2025). Teachers who are satisfied with their roles are more motivated and better able to create supportive, engaging classrooms that enhance student happiness, reduce anxiety, and foster learning engagement (Toropova et al., 2021; Wartenberg et al., 2023). Similarly, teachers with high self-efficacy, belief in their

ability to influence student learning (Bandura, 1991), tend to create positive, engaging, and supportive classrooms. They are more resilient, use varied instructional strategies, and show greater enthusiasm (Bosica, 2022; Hettinger et al., 2023; Mojavezi & Tamiz, 2012). These behaviours foster environments where students feel safe and supported, key elements of well-being (OECD, 2019). High self-efficacy also enables teachers to manage behaviour effectively and respond to individual needs, thereby reducing student anxiety and strengthening a sense of belonging (Eren, 2025). As a result, stronger teacher–student relationships emerge, providing students with the emotional security they need to thrive academically and socially. Together, job satisfaction and self-efficacy shape classroom climate and student engagement, demonstrating that these attitudes are essential not only for teachers' professional well-being and performance but also for fostering positive academic and emotional experiences for students.

Teacher Professional Attitudes and Contextual Factors
Despite earlier studies showing consistent positive links between teacher attitudes and student outcomes, OECD (2014) argues that these effects vary across different contexts. This claim is supported by Capone and Petrillo (2020) and Glaveli et al. (2022), who found clear differences in job satisfaction and efficacy beliefs between permanent and temporary teachers. Permanent teachers, who typically receive more stable salaries and better employment conditions, reported higher job satisfaction and stronger self-efficacy, suggesting that job security and stable employment contribute to greater confidence and professional commitment. Research also identifies gender differences, with female teachers reporting higher job satisfaction (Zakariya & Wardat, 2024) and self-efficacy (Sarfo et al., 2015) than male teachers.

School context also plays a crucial role in shaping teacher attitudes, particularly within Islamic schools, where the distinctive climate creates a unique academic environment. These schools integrate religious values into the curriculum and daily culture through Qur'anic studies, Islamic jurisprudence, and Arabic instruction (Amzat, 2022; Kosim et al., 2023; Yafiz et al., 2022). Such an environment, grounded in spiritual practices and a strong faith-based culture, can deepen teachers' sense of purpose, commitment, and professional identity, influencing both their job satisfaction (Bal & Kökalan, 2021; Yafiz et al., 2022) and self-efficacy (Marisa et al., 2024; Tehranian et al., 2025). However, the impact of a school's religious orientation on students operates indirectly, mediated through teachers' attitudes and the classroom climate (Tanjung, 2021; Yulihardi et al., 2023). In this way, the religious context shapes teachers' values and professional motivations, which subsequently influence their teaching practices and interactions with students, ultimately affecting student well-being and academic engagement.

Conceptual Framework
Figure 1 illustrates the Teacher Attitudes–Student Outcomes Framework, which was developed for this study through an extensive review of the theoretical and empirical literature. Relevant studies were systematically examined and synthesized to explain the links between teacher attitudes and student outcomes. Drawing on the TALIS

framework (OECD, 2014), and foundational theories of job satisfaction (Locke, 1969) and self-efficacy (Bandura, 1991), this analytical lens assumes that teacher job-related attitudes influence student well-being and learning outcomes through both direct and indirect pathways. Grounded in empirical research on teacher effectiveness, the framework also incorporates contextual perspectives to account for variations across different school settings.

In this study, the framework is applied to examine how these relationships may differ between Islamic and non-Islamic schools. Islamic schools embed religious values deeply into their institutional culture (Amzat, 2022; Kosim et al., 2023; Yafiz et al., 2022), shaping teachers' perceptions of their roles and potentially influencing their job satisfaction and self-efficacy. In contrast, non-Islamic schools operate within a secular system emphasising a standardised curriculum focused on academic achievement (Stern & Smith, 2016), suggesting that teacher attitudes may relate differently to student outcomes in these environments.

The framework specifies several hypothesised pathways. At the teacher level, demographic factors such as gender (Zakariya & Wardat, 2024; Sarfo et al., 2015) and employment status (Capone & Petrillo, 2020; Glaveli et al., 2022) serve as exogenous variables that may shape job satisfaction and self-efficacy, which, in turn, influence student well-being (Toropova et al., 2021; Eren, 2025), motivation, anxiety (Hajovsky et al., 2020; Muliati et al., 2022; Wula et al., 2020), and ultimately academic achievement (Perera & John, 2020; Gu & Zhou, 2020). At the student level, this study considers well-being domains (e.g., happiness), motivation, and anxiety as key predictors of performance. Student achievement is an endogenous variable shaped by both teacher- and student-level characteristics. Together, these assumptions form a coherent analytical structure that guides the study's hypotheses and informs the multilevel, multigroup analyses.

Figure 1
Conceptual Framework
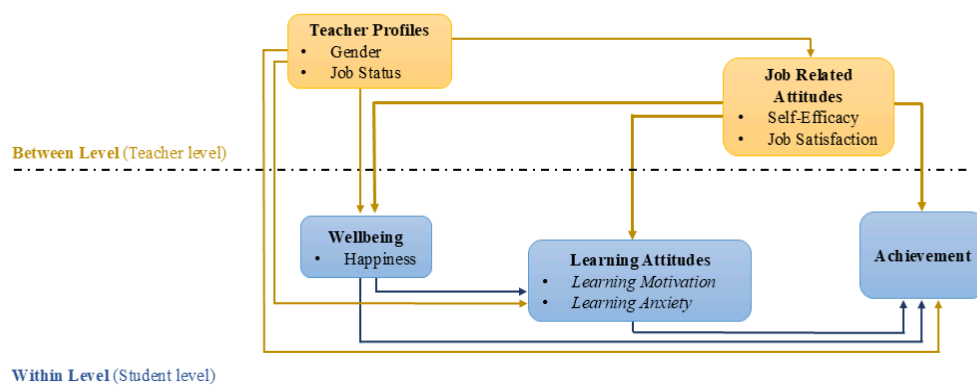
Methodology

Participants

The study population comprised all 84 secondary schools in Bone Regency, South Sulawesi, Indonesia, including 36 general (non-Islamic) and 48 Islamic (Madrasah) schools across 27 districts, with 152 English teachers and 16,021 students. This study used a two-stage stratified sampling design to ensure a representative sample (Mills & Gay, 2016). In Stage One, 12 districts were purposively selected to represent urban, suburban, and rural areas, followed by purposive selection of 30 schools based on accreditation, student population, and willingness to participate. This approach ensured a diverse sample that reflected the regency's educational landscape. In Stage Two, classrooms within each selected school were randomly sampled, yielding 64 classrooms with 64 teachers and 1,319 students, divided into the Islamic school group (30 teachers, 593 students) and the non-Islamic school group (34 teachers, 726 students). A 95% confidence level and a ±5% margin of error were targeted to ensure reliability. This multi-stage approach enhanced both the representativeness of the sample and the generalizability of the study's findings (Ross, 2005).

Data Collection, Measures, Validity and Reliability

This study employed a multi-method approach by combining survey questionnaires and standardised cognitive (achievement) tests to capture complementary perspectives on teacher and student outcomes (Creswell & Clark, 2017). At the teacher level, data were collected through an anonymous, self-administered questionnaire designed to assess teachers' job satisfaction, self-efficacy, and perceptions of their teaching practices. The questionnaire was developed based on prior validated instruments (e.g. OECD, 2014). At the student level, two data sources were used: a self-report questionnaire and a standardised achievement test. The student questionnaire, adapted from validated instruments (e.g., OECD, 2017, 2019; Hamouda, 2013), assessed psychological well-being and learning experiences. The English achievement test, adopted and developed from MoEC (2017), provided an objective measure of students' cognitive performance, enabling triangulation of subjective self-reports with quantifiable learning outcomes. Pilot testing of both instruments ensured robust and reliable measurement of the constructs.

The teacher questionnaire included two sections. The first, Teacher Profiles, collected demographic and job-related information, including gender (0 = Female, 1 = Male) and job status (0 = non-permanent, 1 = permanent/civil servant). The second section, Teacher Job-Related Attitudes, adapted from the TALIS survey (OECD, 2014), measured Job Satisfaction (α = .74) and Teaching Efficacy (α = .88). Job satisfaction was assessed using five items that evaluated teachers' overall satisfaction with their roles, benefits, and enjoyment of work. An example item is *"All in all, I am satisfied with my job."* Teaching self-efficacy was measured using seven items designed to capture teachers' confidence in lesson delivery, engaging students, and implementing effective teaching methods. For instance, one item states *"I am very confident in my capability to teach."*

The student questionnaire comprised three components. First, Student Wellbeing, such as Happiness (α = .78), was assessed using six items adapted from the OECD (2017). Second, Learning Attitudes included Motivation (α = .85; OECD, 2019) and Anxiety (α = .78; Hamouda, 2013). Student well-being was measured to capture students' positive emotional experiences and overall satisfaction within the school environment, including feelings of contentment, enjoyment, and comfort in learning settings. An example item is "I feel happy." Motivation was assessed using six items evaluating students' drive and willingness to engage in learning, such as "I am motivated to use my [English] knowledge and skills for my future jobs." Learning-related anxiety was measured with seven items designed to capture students' stress, worry, or nervousness in academic contexts, for example "I get nervous and confused when I don't understand the lesson." Third, Student Achievement, adapted from the MoEC (2017), was measured using a 20-item multiple-choice English test, with scores ranging from 0 to 100, with higher scores indicating greater proficiency.

All teacher and student attitudinal variables, teacher job satisfaction, self-efficacy, student happiness, learning motivation and anxiety, were measured on a four-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree) and transformed into Weighted Likelihood Estimates (WLE) via Rasch analysis to reduce scaling bias (Warm, 1989). Validity and reliability were confirmed using confirmatory factor analysis (CFA) and Rasch modelling. Factor loadings exceeded .40, and average variance extracted (AVE) surpassed .58 (Hair et al., 2014). Goodness-of-fit indices met standard criteria: $X^2/df \leq 3$ (Kline, 2015), CFI/TLI > .95 (Wang & Wang, 2019), RMSEA $\leq$ .08 (Bialosiewicz et al., 2013), and WRMR $\leq$ .10 (DiStefano et al., 2018). The achievement test demonstrated appropriate item fit (MNSQ = .97–1.0) and item discrimination > .20 (Bond & Fox, 2013). Composite/construct reliability (CR) exceeded .88, and item separation reliability (ISR) exceeded .90 for all scales. Detailed descriptions of the items, scales, and validity and reliability results are presented in Appendix 1.

However, this study has several limitations. First, its cross-sectional design precludes the establishment of causal relationships. To address this, we employed multilevel path analysis, which allows for modeling complex relationships within and between data levels (Ryu, 2015); nevertheless, longitudinal studies are needed to confirm causal directions over time. Second, the data were collected from a single regency in Indonesia, which may limit generalizability. We mitigated this by including both Islamic (IS) and non-Islamic (NS) schools using a multi-stratified sampling design to capture contextual variation (Mills & Gay, 2016). Finally, the study relied on self-report measures for teacher attitudes and student well-being, which may be influenced by social desirability bias. To minimise this effect, we assured participants of anonymity, used validated instruments with established reliability, and supplemented student outcomes with objective achievement test scores to provide a more robust measure of academic performance (Creswell & Clark, 2017).

Multigroup and Multilevel Path Analysis

Multigroup and multilevel path analysis was conducted using Mplus 8.10 (Muthén & Muthén, 1998-2017) to examine the complex relationships among variables across comparative educational groups. This approach integrates principles of multiple regression, enabling the assessment of both direct and indirect effects across hierarchical levels and groups (Ryu, 2015). Teacher data were disaggregated to the student level using a teacher identifier (TCID), allowing the effects of teacher-related factors on student outcomes to be explored. The dataset was organised by school system (0 = Non-Islamic/NS; 1 = Islamic/IS) and stratified into 24 clusters in line with a two-stage sampling design. Teacher variables, including gender, job status, job satisfaction and self-efficacy, were treated as between-level (Level 2) predictors, while student-level variables, such as happiness, motivation, anxiety, and academic achievement, were considered within-level (Level 1) predictors. Maximum likelihood (ML) estimation was employed to estimate parameters, assuming normality and maximising the likelihood of the observed data given the model (Oort & Jak, 2016). This method effectively handles hierarchical, multigroup data.

The analysis proceeded in two stages of model identification and model evaluation. Model identification focused on confirming the hypothesised relationships within the conceptual framework. Model evaluation assessed fit using standardised coefficients (β) for direct, indirect, and total effects, with significance set at $p < .05$. Goodness-of-fit indices included the chi-square to degrees of freedom ratio ($\chi^2/d.f.$), comparative fit index (CFI), Tucker–Lewis index (TLI), root mean square error of approximation (RMSEA), and standardised root mean square residual (SRMR), with thresholds guided by Hair et al. (2014). Models that did not meet fit criteria were adjusted or, if necessary, revised based on theoretical considerations. The findings emphasised significant relationships among predictors, providing robust insights into teacher-student interactions across different educational systems.

Findings

Descriptive Statistics

Table 1 presents the descriptive statistics summarising the variables used (Pallant, 2020), including teacher-level (between-level) and student-level (within-level) measures across Islamic and non-Islamic schools. At the teacher level, job satisfaction was higher in non-Islamic schools ($M = 1.42$, $SD = 1.61$) than in Islamic schools ($M = 1.11$, $SD = 1.78$). Similarly, teacher self-efficacy was higher in non-Islamic schools ($M = 1.85$, SD = 2.37) than in Islamic schools ($M = 1.17$, $SD = 2.97$). At the student level, happiness was slightly higher in non-Islamic schools ($M = 2.00$, $SD = 1.44$) than in Islamic schools ($M = 1.89$, $SD = 1.47$), whereas learning anxiety was greater among Islamic students (M = 1.82, SD = 1.44) than non-Islamic students ($M = 1.59$, $SD = 1.52$). Learning motivation was comparable across groups, with non-Islamic students reporting $M = 2.67$ (SD = 1.49) and Islamic students reporting $M = 2.64$ ($SD = 1.39$). For academic achievement, Islamic students achieved a higher mean score ($M = 42.39$, $SD = 13.39$) than non-Islamic students ($M = 38.79$, $SD = 16.69$). Skewness

values ranged from -0.90 to 1.25 and kurtosis values from -0.42 to 0.32, all within acceptable limits (±2 for skewness and ±7 for kurtosis), indicating that the data distributions were normally distributed and suitable for further analysis (Hair et al., 2014).

Table 1

Descriptive Statistics Across Groups

Variable		Non-Islamic (NS, n=726)			Islamic (IS, n=593)		
		Mean (SD	Skewness (S.E.)	Kurtosis (SE)	Mean (SD	Skewness (S.E.)	Kurtosis (SE)
Between Level (Teacher Level)							
Teacher Job Satisfaction	TCJOBS	1.42 (1.61)	0.43 (0.01)	-0.90 (0.18)	1.11 (1.78)	0.43 (0.10)	-0.79 (0.20)
Teacher Efficacy	TCEFF	1.85 (2.37)	0.37 (0.01)	-0.87 (0.18)	1.17 (2.97)	-0.24 (0.10)	-0.42 (0.20)
Within Level (Student Level)							
Wellbeing: happiness	HAPPY	2.00 (1.44)	-0.25 (0.09)	-0.54 (0.18)	1.89 (1.47)	-0.17 (0.10)	-0.42 (0.20)
Learning Anxiety	ANXIE	1.59 (1.52)	0.25 (0.09)	1.25 (0.18)	1.82 (1.44)	-0.21 (0.10)	1.20 (0.20)
Learning Motivation	MOTIVE	2.67 (1.49)	-0.06 (0.09)	-0.09 (0.18)	2.64 (1.39)	-0.11 (0.10)	-0.25 (0.20)
Student Achievement	ACV	38.79 (16.69)	0.56 (0.09)	-0.32 (0.18)	42.39 (13.98)	0.32 (0.10)	0.23 (0.20)

Average score between level, n =64 (TCJOBS, M=1.22, SD=1.66; TCEFF, M=1.45, SD=2.74); within level, n= 1319 (HAPPY, M=1.95, SD=1.45; ANXIE, M=1.69, SD=1.49; MOTIVE, M=2.66, SD=1.45, SCV=40.41, SD=15.63).

Multigroup and Multilevel Path Analysis

Table 2

Results of Multigroup and Multilevel Path Analysis Across Groups

Variable		NS Group				IS Group			
		Standardise		Unstandardised		Standardise		Unstandardised	
Dependent	Independent	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.
Within Level									
Student Achievement (ACV)	Learning Motivation (MOTIVE)	0.17	0.03	1.88	0.31	0.12	0.03	1.22	0.31
	Learning Anxiety (ANXIE)	-0.37	0.02	-4.08	0.31	-0.63	0.03	-6.11	0.46
	Happiness (HAPPY)	0.43	0.02	4.93	0.27	0.25	0.03	2.35	0.27
Learning Anxiety (ANXIE)	Happiness (HAPPY)	-0.6	0.02	-0.64	0.04	-0.09	0.05	-0.09	0.05
Learning Motivation (MOTIVE)	Happiness (HAPPY)	0.36	0.04	0.37	0.04	NS	NS	NS	NS
Between Level									
Student Achievement (ACV)	Job Satisfaction (TCJOBS)	0.56	0.17	3.38	1.05	NS	NS	NS	NS
	Job Status (TCJBSTAT)	0.34	0.14	6.72	3.16	NS	NS	NS	NS
	Teacher Efficacy (TCEFF)	NS	NS	NS	NS	0.32	0.15	0.8	0.29
Learning Motivation (MOTIVE)	Job Satisfaction (TCJOBS)	NS	NS	NS	NS	0.38	0.12	0.13	0.04
	Teacher Gender (TCGENDER)	NS	NS	NS	NS	-0.36	0.09	-0.44	0.11
Teacher Job Satisfaction (TCJOBS)	Teacher Efficacy (TCEFF)	0.48	0.17	0.32	0.11	NS	NS	NS	NS
	Teacher Gender (TCGENDER)	-0.25	0.13	-0.79	0.46	NS	NS	NS	NS
	Job Status (TCJBSTAT)	0.02	0.01	0.05	0.01	0.01	0.01	0.05	0.01
Teacher Efficacy (TCEFF)	Teacher Gender (TCGENDER)	-0.47	0.13	-2.26	0.63	-0.44	0.14	-2.78	1.06

GOF: X2/df =54.87/24, CFI= 0.98, TLI = 0.96, RMSEA = 0.04, SRMR = 0.02, NS= Not Significant

As shown in Table 2, the final multigroup and multilevel model meets accepted goodness-of-fit criteria, with χ^2/d.f. = 54.9/24, CFI = .98, TLI = .96, RMSEA = .04, and SRMR = .02, which, according to Hair et al. (2014), indicate that the model adequately represents the data. Figure 2 further illustrates the relationships between teacher job-related attitudes and student outcomes in Islamic (IS) and non-Islamic (NS) schools. In the figure, arrows indicate the direction of predicted relationships, with red estimates representing NS schools and blue estimates representing IS schools. Notably, while this predictive pattern holds in both school types, the strength of these relationships is somewhat stronger in NS schools, as discussed in the following section.

Effects of Teacher Job Satisfaction on Student Achievement Across Groups

Teacher job satisfaction demonstrated distinct effects on student achievement across the two school contexts. As shown in Figure 2, in non-Islamic (NS) schools, job satisfaction directly predicted student achievement (β = 0.56, *S.E.* = 0.17; unstandardised = 3.38, *S.E.* = 1.05), indicating that higher teacher satisfaction strongly enhances students' academic performance. Job status also positively influenced achievement in NS schools (β = 0.34, *S.E.* = 0.14; unstandardised = 6.72, *S.E.* = 3.16), highlighting the advantages of permanent employment. In contrast, in Islamic schools (IS), job satisfaction did not directly impact academic achievement. Instead, its effect was mediated through student motivation: higher teacher satisfaction increased motivation (β = 0.38, *S.E.* = 0.12; unstandardised β = 0.13, *S.E.* = 0.04), which, in turn, positively influenced achievement.

### Effects of Teacher Self-Efficacy on Student Achievement Across Groups

Teacher self-efficacy showed differential impacts across the two school types. Figure 2 shows that in NS schools, self-efficacy did not significantly predict student achievement, but it did positively influence job satisfaction (β = 0.48), suggesting an indirect pathway to student outcomes. In IS schools, self-efficacy directly contributed to student achievement through its positive effect on job satisfaction (β = 0.32) and indirectly via enhanced student motivation. Gender also affected self-efficacy in IS schools, with female teachers exhibiting higher efficacy (β = -0.44).

Effects of Teacher Job Satisfaction and Self-Efficacy on Student Well-Being across Groups

Teacher job satisfaction and efficacy did not directly predict well-being or anxiety in either NS or IS schools (see Figure 2). However, student happiness positively influenced achievement (NS: β = 0.43; IS: β = 0.25), while learning anxiety negatively affected achievement (NS: β = -0.37; IS: β = -0.63), highlighting the critical role of students' psychological states. Teacher job satisfaction indirectly enhanced student well-being in IS schools by fostering motivation, thereby supporting academic performance and reducing anxiety.

Figure 2

Multigroup and Multilevel Path
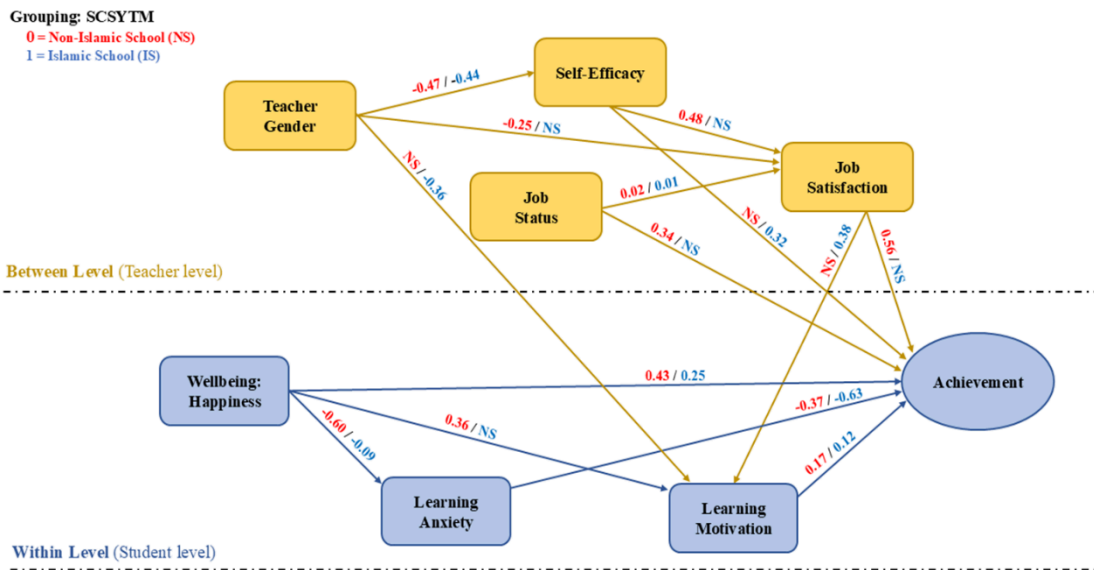
Discussion

This research provides a novel insight into how teacher job satisfaction and self-efficacy affect student outcomes by comparing Islamic and non-Islamic schools in Indonesia, a context that has not been explored in previous research. Using multigroup and multilevel path analysis, the study demonstrates that the links between teacher attitudes and student achievement are context-dependent rather than universal. These findings are particularly valuable for educational systems where different types of schools coexist, as they highlight the importance of considering school context when examining teacher effectiveness. By revealing context-specific pathways, these findings challenge the assumption (OECD, 2014) of a uniform relationship and provide clear evidence for it, offering practical implications for policymakers and educators in diverse educational settings.

This study revealed that the influence of teacher job satisfaction and self-efficacy on student achievement operates through context-dependent pathways. Notably, a key novel finding of this research is the identification of distinct pathways through which teacher job satisfaction and self-efficacy influence student achievement in Islamic versus non-Islamic schools. In the non-Islamic school context, the study observed a strong, positive relationship between teacher job satisfaction and student academic achievement. This finding supports the hypothesis, and is consistent with international research indicating that higher teacher job satisfaction enhances teaching effectiveness, which subsequently improves student performance (Hoque et al., 2023; Wartenberg et al., 2023). Importantly, confirming this pathway within the non-Islamic Indonesian educational framework strengthens the generalizability of the pattern, providing evidence that the link between teacher satisfaction and student outcomes holds across different cultural and institutional contexts. By establishing this baseline, the study increases confidence in the validity of these relationships and

highlights the relevance of context-specific pathways for understanding teacher effectiveness in diverse educational settings.

In contrast to the hypothesis (Perera & John, 2020), this direct link was not observed in Islamic schools. Instead, the study revealed an indirect pathway in which teacher job satisfaction contributes to student achievement by first enhancing student motivation. In the faith-based environment of Islamic schools, a teacher's professional fulfilment may not directly translate into improved academic outcomes. Instead, it fosters an atmosphere of inspiration and purpose that motivates students to engage more deeply with their learning (Bal & Kökalan, 2021; Yafiz, Yousif Oudah Al-Muttar, et al., 2022). This finding is particularly significant as it points to the unique role of intrinsic motivation within religious educational settings, a mechanism that has been underexplored in comparative research. The spiritual and moral ethos of Islamic schools may foster an environment where satisfied teachers can connect with students on a values-based level. This connection helps foster students' intrinsic motivation and drive to succeed (Tanjung, 2021; Yulihardi et al., 2023).

Equally novel are the distinct effects of teacher self-efficacy across school types. In Islamic schools, self-efficacy directly boosts student achievement, indicating that confident teachers can translate their capability into effective instructional practices that benefit students. This finding supports the hypothesis and is consistent with studies demonstrating a strong link between teacher self-efficacy and student success in similar contexts (Sabrina et al., 2023). Conversely, in non-Islamic schools, the effect of teacher self-efficacy on student achievement was entirely mediated by job satisfaction. In the general school system, a teacher's confidence mainly supports student success by increasing their own job satisfaction. This finding heightened satisfaction, which, in turn, led to more effective teaching and better student outcomes (OECD, 2014). This mediated relationship in non-Islamic schools, in contrast to the direct effect in Islamic schools, is a key original contribution of this study. This gap highlights that the institutional and cultural environment fundamentally shapes the psychological mechanisms of teacher effectiveness.

One of the most surprising findings of this study is the absence of a significant direct or indirect relationship between teacher job satisfaction or self-efficacy and student happiness or learning anxiety in both school systems. This result challenges the prevailing literature, which often assumes that positive teacher attitudes directly and indirectly enhance student psychological outcomes (Bosica, 2022; Eren et al., 2025; Hettinger et al., 2023; Toropova et al., 2021). Traditionally, it is believed that satisfied and confident teachers foster supportive and low-stress classroom environments, thereby promoting student well-being. This study's null finding suggests that the relationship between teacher attitudes and student psychological outcomes is more complex than previously assumed. Other unmeasured factors, such as peer relationships, school-wide support policies, parental involvement, or broader socio-economic pressures, may play a stronger role in shaping student well-being (OECD, 2014, 2017, 2019). While teachers remain central to academic learning, these

findings indicate that a broader ecosystem of influences likely governs students' psychological and emotional experiences at school.

Furthermore, the analysis also reinforces the critical role of structural factors within the Indonesian education system. Consistent with previous research (Capone & Petrillo, 2020; Glaveli et al., 2022), job status emerged as a significant predictor of teacher job satisfaction in both Islamic and non-Islamic schools. The fact that permanent teachers report higher satisfaction highlights the profound impact of job security and stability on teacher morale. This finding is particularly salient for the Islamic school sector, where a staggering 81% of teachers are non-permanent staff (ADB, 2014). This structural inequity likely contributes to the lower average job satisfaction observed in Islamic schools and underscores a major policy challenge for the Ministry of Religious Affairs.

Additionally, the study identified consistent gender differences, with female teachers reporting significantly higher self-efficacy in both school contexts. This finding aligns with some existing research (Sarfo et al., 2015) but is novel in its confirmation across both secular and religious educational systems in Indonesia, suggesting that this gender effect is robust to cultural and institutional variations. The higher job satisfaction among female teachers in non-Islamic schools further adds to the complexity of how gender intersects with professional attitudes. These findings call for gender-sensitive professional development programs and support systems to ensure all teachers, regardless of gender, are empowered to thrive.

Conclusion

This study advances the field of comparative and international education and educational psychology by providing a rare comparative analysis of teacher job satisfaction and self-efficacy within Indonesia's dual education system, a context that has been largely unexplored. By employing a robust multigroup, multilevel methodology, this study uncovered novel, context-specific mechanisms through which teacher attitudes shape student achievement. The central contribution of this research lies in its departure from a one-size-fits-all model of teacher effectiveness. The findings demonstrate conclusively that the pathways from teacher satisfaction and efficacy to student success are not universal. They are fundamentally shaped by the distinct cultural and institutional climates of Islamic and non-Islamic schools.

This empirical research revealed distinct pathways linking teacher attitudes to student achievement. In non-Islamic schools, job satisfaction directly predicted achievement, whereas in Islamic schools, motivation mediated this relationship. Similarly, teacher self-efficacy directly influenced achievement in Islamic schools, while in non-Islamic schools, its effect was mediated by satisfaction, challenging existing theoretical frameworks and emphasising the need for context-sensitive research. Furthermore, the unexpected finding that teacher attitudes do not directly influence student well-being opens critical new questions for the field. This result suggests that the drivers of students' psychological health are more complex and distributed than previously understood.

The theoretical implications of this study are significant. It extends social-cognitive and self-determination theories by illustrating how the school's socio-cultural context can alter the psychological mechanisms underlying teacher effectiveness. The findings call for refining models, such as the TALIS framework, to incorporate greater sensitivity to institutional and cultural variables. Future research should move beyond asking if teacher attitudes matter and instead focuses on how, where, and why they matter, exploring the specific mediating and moderating factors at play in diverse educational settings.

From a policy perspective, this research offers clear and actionable insights for both the Ministry of Education and Culture (MoEC) and the Ministry of Religious Affairs (MoRA) in Indonesia. The strong link between job status and teacher satisfaction across both systems underscores the pressing need to address the structural precarity faced by non-permanent teachers. Improving job security, offering competitive salaries, and expanding access to professional development are critical levers for enhancing teacher satisfaction and, consequently, student achievement. Moreover, the findings advocate for tailored, context-aware professional development. In non-Islamic schools, programs should focus on bolstering job satisfaction as a key mediator of efficacy. In Islamic schools, professional development should aim to enhance teachers' ability to inspire student motivation and directly build their self-efficacy. The consistent gender gap in self-efficacy also calls for targeted, gender-sensitive support to ensure all teachers are empowered to succeed.

Therefore, future research should adopt longitudinal designs to examine how the relationships between teacher attitudes and student outcomes evolve over time. Replicating these findings in more diverse contexts would further enhance their generalizability across different regions and school types. Moreover, future studies should investigate factors that may explain the absence of a direct link between teacher attitudes and student well-being. This unexpected result contributes to the literature by challenging established theoretical assumptions and underscores the need to examine the multiple determinants of student emotional health. In particular, exploring the roles of peer culture, school climate, and parental involvement could provide a more comprehensive understanding of the ecosystem that supports students' psychological well-being and academic success.

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Appendix 1

Results of Confirmatory Factor Analysis (Questionnaire)

Item	Description	Factor Loading	AVE	CR	GOF
	Job Satisfaction (TCJOBS)				
TCJOBS1	The advantages of being a teacher are clear.	0.67	0.68	0.88	$X^2/df = 4.7/4$
TCJOBS2	I do not regret that I decided to become a teacher.	0.73			CFI = 0.99
TCJOBS3	I enjoy working at this school.	0.91			TLI = 0.99
TCJOBS4	I would recommend my school as a good place to work.	0.67			RMSEA = 0.05
TCJOBS5	All in all, I am satisfied with my job.	0.43			WRMR = 0.31
	Teacher Efficacy (TCEFF)				
TCEFF1	I am very confident in my capability to teach.	0.78	0.85	0.97	$X^2/df = 17.9/14$
TCEFF2	I provide individual support for advanced students.	0.75			CFI = 0.99
TCEFF3	I tell students how they are performing in my course.	0.89			TLI = 0.99
TCEFF4	I give students feedback on their strengths in my course.	0.90			RMSEA = 0.06
TCEFF5	I tell students in which areas they can still improve.	0.69			WRMR = 0.56
TCEFF6	I tell students how they can improve their performance.	0.97			
TCEFF7	I advise students on how to reach their learning goals.	0.97			
	Student Wellbeing: Happiness (HAPPY)				
HAPPY1	I feel happy.	0.34	0.58	0.91	$X^2/df = 7.4/4$
HAPPY2	I have a lot of fun.	0.33			CFI = 0.99
HAPPY3	I love life.	0.80			TLI = 0.99
HAPPY4	I am a cheerful person.	0.81			RMSEA = 0.03
HAPPY5	I feel I am satisfied with my life.	0.59			WRMR = 0.40
HAPPY6	I find most things amusing.	0.59			
	Student Learning Anxiety (ANXIE)				
ANXIE1	I am nervous when I learn English lessons and I am not familiar with the topic.	0.68	0.74	0.94	$X^2/df = 37.9/11$
ANXIE2	During English lesson, I get nervous and confused when I don't understand the lesson.	0.73			CFI = 0.99
ANXIE3	I get annoyed when I come across words that I don't understand while learning English.	0.76			TLI = 0.99
ANXIE4	I get nervous if a listening passage is read only once during listening tests.	0.68			RMSEA = 0.04
ANXIE5	I feel uncomfortable in class when learning English.	0.81			WRMR = 0.62
ANXIE6	It is hard to concentrate on what the words mean in English passages unless I know them well.	0.77			
ANXIE7	In English tests, I get worried when I do have not enough time to think.	0.74			

Item	Description	Factor Loading	AVE	CR	GOF
	Student Learning Motivation (MOTIVE)				
		0.71	0.77	0.94	$X^2/df = 19.6/6$
MOTIVE1	*English lessons are important.*	0.82			CFI = 0.99
MOTIVE2	*The English skill practice in this class helped to improve language skills.*	0.84			TLI = 0.99
MOTIVE3	*With English skills, I will be able to speak with foreign.*	0.66			RMSEA = 0.04
MOTIVE4	*English skills help me think critically.*	0.80			WRMR = 0.50
MOTIVE5	*I will be able to use my English skills when travelling.*	0.77			
MOTIVE6	*I will be able to use my English skills for my future jobs.*				

The Case of Escola Eleva and the *Janelas Abertas* Scholarship Program: De/reterritorializing Elite Notions of a Brazilian International School

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This empirical case study considers the experience of scholarship students participating in the Janelas Abertas program from 2017 to 2022 at Escola Eleva, an elite international school in Rio de Janeiro. Using ethnographically-inspired methods and an assemblage theory framework, the study challenges dominant narratives about elite schooling by analyzing how racially and socioeconomically diverse scholarship students both shaped and were shaped by the school community. Narrative interviews with scholarship recipients reveal interconnected individual and collective transformation organized around three themes: confronting racism, fostering economic solidarity, and (re)affirming identities. The findings show that the students were integral to an assemblage that de/reterritorialized traditional notions of an elite school. This case contributes to research on racial and socioeconomic diversity in private international schools by offering a Brazilian example in which scholarship students were not passive markers of diversity but were conscious of the political and social significance of their belonging to the school.

Keywords: assemblage theory, educational inequality, elite schooling, scholarship programs, de/reterritorialization, belonging, Brazil

> *I thought it was all a great utopia, but I was going to bet on it. Why?*
> *Elite education and racial relations do not combine.*
> *But it was a utopia, and I thought, let's see what happens.*
>
> - Raquel[1], mother of a *Janelas Abertas* scholarship recipient

> *It's not just about excellence rising to the top, especially in Brazil. It's a much more closed world. And a racist world. There's so few of you, you need an advocate. You need somebody who's going to open that door. And then you need to kick it open for a few more people.*
>
> - Cameron, Escola Eleva teacher

Introduction

When she was hired to teach High School History at Escola Eleva in 2017, Camila's job offer arrived with a bold proposal: "Let's Change Brazil Together![2]" Education has been recognized as a powerful tool to combat high levels of racial and socioeconomic inequality in Brazil, as evidenced by a persistently low-ranking GINI Coefficient and a clear race-based income gap (OECD, 2021). This empirical study

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[1] All names of students, teachers, and parents have been replaced with pseudonyms. The names of publicly known figures remain unchanged.
[2] Original: "*Vamos mudar o Brasil juntos!*" All translations my own.

examines the impact of the *Janelas Abertas*[3] scholarship program, which has addressed Brazil's educational inequality by providing robust access to *Escola Eleva*, an elite private K-12 international school in Rio de Janeiro. The Janelas Abertas program was conceived with the brand-new Escola Eleva serving 25 students when the school was founded in 2017 to 110 students in 2022, and institutional data of socioeconomic and racial indicators demonstrate a positive correlation in serving more families earning near minimum wage and an increase from 45% to 63% of scholarship students self-identifying as Black over the same period (Janelas Abertas, 2022, p. 12). The scholarship provides students with full tuition through high school graduation, school lunches, uniforms, after-school activities, a yearly school trip, snack money, and a laptop for the duration of each recipient's studies. In 2022, Escola Eleva was sold to British owners, and Janelas Abertas was immediately suspended, raising questions about the school's commitment to a distinctly Brazilian identity, including socioeconomic and racial diversity. While the school's new owners continue to honor previously awarded scholarships, they have suspended the recruitment of new recipients.

Across Brazil, but especially in Rio de Janeiro, private schooling has historically served the white elite, and over the last few decades, the Brazilian middle and upper classes have increasingly invested in bilingual education and international education models (Aguiar & Nogueira, 2012; Windle, 2022; Windle & Nogueira, 2015). This has driven a wedge in a society rife with social inequality—the rich acquire more social and cultural capital through elite private schooling, while the poor are left to navigate the public school system or lower-tiered, lower-quality private schools. Escola Eleva serves as an example of a private international school trying to disrupt the status quo by prioritizing racial and socioeconomic diversity in a shifting educational landscape in Brazil. Through narrative interviews, this study makes meaning of the Janelas Abertas scholarship student experience to highlight the urgent need to provide more, not less, material support to contest educational inequality at the school level.

Guided by the research question—*How did the Janelas Abertas scholarship affect the lives of the students who received it?*—The study assumes a direct financial impact on students and their families and considers more nuanced ways that the scholarship impacted not only recipients, but the broader school community. Applying an assemblage theory framework (Deleuze & Guattari, 1987), the study concludes that the Janelas Abertas scholarship program enabled the de/reterritorialization of an elite Brazilian international school; students who otherwise would not have studied together did. The findings show that the Janelas Abertas scholarship created space for difficult conversations confronting racism, fostered opportunities for economic solidarity, and shaped scholarship students' perceptions of themselves and others.

I trace how teachers like Camila believed in changing Brazil, parents like Raquel "took a bet" on the school, teachers like Cameron supported students in understanding their blackness in a majority-white space, and the students

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[3] Portuguese for "Open Windows."

themselves vocalize a sense of situated belonging to the school that is rightfully theirs. This study addresses a gap in the literature on diversity and inclusion in elite schools, specifically from the student perspective, examining not only what it means to be included but also what it means to belong and how belonging is a shared relational experience. The Janelas Abertas case serves as an important example of how robust scholarship programs can affect not only recipients but also educators, parents, and tuition-paying students in imagining new ways of doing elite education in Brazil.

Literature Review

One factor in conducting this study is to address a gap in the literature regarding scholarship programs in private international schools, especially outside the US. Academic research on elite schools, drawing from key examples in the US, shows that educational institutions reproduce social hierarchies and a myth of meritocracy, even when adopting the language of diversity and inclusion (French, 2018; Gaztambide-Fernández, 2009; Khan, 2011; Pollock, 2005). In Brazil, educational inequality is shaped by a distinct historical, racial, and policy context that includes a precedent for identifying and critiquing social closure (Almeida, 2015; Windle, 2022). Considering both bodies of literature—the exclusivity of elite institutions, broadly, and the situated context of private schooling in Brazil, specifically—highlights how Janelas Abertas responds to challenges elite schools face when prioritizing diversity and to a shifting Brazilian educational landscape conducive to change.

Educational Inequality and Elite Institutions

Bourdieu and Passeron's (1977) framework of social and cultural capital explains why some students appear to succeed, as their inherited advantages are deemed individual merit. This, combined with economic capital and whiteness, secured through a racialized colonial social hierarchy, is identified in the literature as the main consistencies of what it means to be elite (Gaztambide-Fernández & Angod, 2019; van Zanten et al., 2015). Recent ethnographic accounts of elite schooling in the US have revealed that the social power that excludes others is a commonality across elite schools (Gaztambide-Fernández, 2009; Khan, 2011). Khan's (2011) ethnography, *Privilege*, traces how a prestigious US boarding school became increasingly racially diverse, contributing to a belief that students attended a "multicultural" school, obscuring inequality as a structural problem while reinforcing elite privilege and claims to meritocracy. Gaztambide-Fernández's (2009) *The Best of the Best* provides an even narrower ethnographic account of how diversity worked in another elite North American boarding school. The author found that inclusion did not equate to belonging. To the contrary, Gaztambide-Fernández and Angod (2019) warn that in the rare instance of non-white students gaining access to an elite institution, they have two options: "remain pinned in space and time," embodying an essentialized identity, or "unhinge themselves" and "invest in the production of (honorary) whiteness" (p. 737).

Van Zanten et al.'s (2015) edited volume, *World Yearbook of Education 2015: Elites, Privilege and Excellence*, considers how race, class, and social and cultural capital

represent "shifting strategies" that work together to reproduce elite status. Across the literature, the authors agree that diversity and inclusion initiatives in elite schools can contribute to cosmopolitanism that further enriches the cultural capital of the elite (Gaztambide-Fernández, 2009; Khan, 2011; van Zanten et al., 2015). These discussions foreground a broad understanding of some challenges in advocating for diversity in historically exclusionary elite institutions in the US. Turning to Brazil, I will consider the particularities of the localized context to situate Escola Eleva and the Janelas Abertas program.

Social Closure and Opening in Brazilian Schools

Brazilian schooling has been characterized by "social closure," with unequal access to the best public federal universities, which are also free and awarded through competitive admissions exams, and the quality of students' K-12 schooling is a strong factor in exam performance (Almeida, 2015). While federal universities administer an extremely limited number of highly sought-after feeder public K-12 schools, more widespread public schooling is administered at the municipal level, and private schools account for a third sector (Windle, 2022). Comparing the two most common options, Windle (2022) concludes that "municipal schools represent the most racialized, dehumanised and exploited sector of a society founded on slavery, while private schools carry the legacy of colonial Whiteness and privilege" (p. 103). The study establishes a center-periphery dynamic showing that private schooling in Rio de Janeiro is "historically white and socially elite" (Windle, 2022, p. 97). This dynamic remains true today.

In the last two decades, Brazilian K-12 private schools have further differentiated themselves through increased internationalization of secondary schooling, offering Brazilian elite students the possibility to apply to universities abroad (Aguiar & Nogueira, 2012). While this responds to global trends, it also reflects the implementation of a successful affirmative action policy that makes it harder for Brazil's elite to secure access to federal universities (Windle, 2022, p. 94). Enacted in 2012, the policy allocates half of the total spots at each federal university for public school students, which must be awarded to Black and Native Brazilians in proportion to their percentage in the state where the university is located (Almeida, 2015, p. 74). In 2018, Brazilian public universities celebrated a milestone: for the first time in Brazil's history, Black students became the majority, comprising 50.3% of enrolled students (OECD, 2021). This data shows that Brazil's affirmative action policy is closing the gap between the representation of racial groups at public universities and the roughly 55% of Brazil's population that identifies as Black (OECD, 2021). This shift challenges the racialized center-periphery dynamic, contributes to ongoing dialogue exposing centuries of structural racism, and discredits the myth that Brazil is a racial democracy (Almeida, 2015; Windle, 2022).

The Janelas Abertas case study is situated locally in Brazil within the national backdrop that the literature describes, at once recognizing exclusionary practices of elite schools (Aguiar & Nogueira, 2012; Windle, 2022) and considering a precedent for critiquing social closure (Almeida, 2015). While racialization in Brazil and the US differ in important ways that go beyond the scope of this study, the literature also

shows that advocating for racial diversity in elite schools risks foregoing non-white students' sense of belonging in these historically white spaces (Gaztambide-Fernández, 2009; Gaztambide-Fernández & Angod, 2019). This study considers the extent to which Janelas Abertas students feel included at Escola Eleva and how this case might provide a counterexample given its particular context.

Theoretical Framework

The theoretical framework for this study draws on Deleuze and Guattari's (1987) assemblage theory to capture the nuance of the scholarship student experience at Escola Eleva beyond individual financial benefit. Assemblage theory is a poststructural framework that describes how heterogeneous elements, both human and nonhuman, combine to form a new whole—in constant evolution, in a process of becoming something other than the parts (Deleuze & Guattari, 1987). Assemblage theory shares Foucault's (1978) notion of power as diffuse and relational. This matters in conceptualizing deterritorialization, the unsettling of that which has been static or stable, and reterritorialization, a remaking or settling of a new way of being (Deleuze & Guattari, 1987). Considering the actors—the teachers, parents, school leadership, the scholarship recipients, as well as tuition-paying students—the material support of the scholarship itself, and the specific time and place of this study, assemblage theory makes it possible to analyze the ways the scholarship program de/reterritorialized notions of an elite school.

Assemblage theory centers on the affectability of relational encounters and experiences, providing a lens to observe subtle changes beyond what might be expected from studying the impact of a scholarship program, such as how students' understanding of themselves and others transformed over time. According to DeLanda (2006), it is impossible to predict "in what way a given entity may affect or be affected by innumerable other entities" (p. 2). Assemblage theory provides a lens for understanding how all subjects are both affecting and affectable. This responds to Ferreira da Silva's (2007) critique of the mind/body or interior/exterior dichotomy as a fallacy, linking white European subjects to interiority and racialized "others" to exteriority, negating a shared human experience (p. 5). Considering this framework, I will analyze how the scholarship students' narratives reveal a sense of situated belonging, rather than passive markers of diversity.

Methodology

Research Design

This study employs ethnographically-inspired methods based on two principles: patchwork ethnography and the ethnographic hunch. Pink's (2021) ethnographic hunch is an approach based on a researcher's sensibility to discover and follow an emergent thread toward deeper understanding. The hunch "signifies an openness to knowing, feeling, and thinking differently through our contact with other people's worlds" (Pink, 2021, p. 33). My ethnographic hunch appeared in 2022, in my sixth year of working at Escola Eleva as an English teacher. I believed that Janelas Abertas

was what made our school unique, and I struggled to understand why it was suspended under new school ownership.

I followed this thread in a graduate program in Comparative and International Education, moving away from wondering why it was suspended to being curious about what was achieved. This led to patchwork fieldwork. Günel and Watanabe's (2024) patchwork ethnography is an inclusive method, drawing on familiar sites and pre-existing relationships while maintaining "long-term commitments, language proficiency, contextual knowledge, and slow thinking that characterize so-called traditional fieldwork" (p. 133). I returned to Rio de Janeiro during school breaks, conducting intermittent fieldwork, having informal conversations, and conducting formal interviews with former colleagues and students about their experiences with Janelas Abertas. I iteratively returned to the hunch, allowing the data to speak for itself, and also through theory (Pink, 2021).

The findings are presented as narrative vignettes in which participants explain their experience for themselves, "taking the point of view of the other" (Becker, 1996, p. 58). I consulted primary sources on the school to further contextualize this case study and add depth to the narratives, drawing on my prior knowledge of some of the students interviewed, including classroom artefacts and participant observation.

Sampling and Participants
Research participants were chosen nonrandomly through convenience and purposive sampling. The sample consisted of 18 participants: 10 scholarship recipients, 4 mothers, 3 former colleagues who are current teachers, and 1 school director. I selected research participants who represent a sampling of current and former students to consider what it means to be a Janelas Abertas scholarship recipient, both during and after the experience, considering how proximity and distance might affect student perspectives. Six students graduated within the last one to four years, while the four current students were in their sophomore or junior year at the time the study was conducted. I chose to focus on older students because of my personal connection to them and a bias toward their cognitive ability to reflect on their experiences, including topics such as identity and belonging.

The explicit focus on racial dynamics was not intentional from the start but emerged as a central theme to explore further. Cameron, who was featured in a guide quote, is a Black Canadian teacher who has lived in Brazil for over a decade. The other teachers and the school director are white Brazilians. Of the ten students interviewed, eight identify as Black, while two identify as white. For the purpose of this study, I include the stories of Sara, Carolina, Ana, Daniel, Luiza, and Roberta, all of whom self-identify as Black, as do all the scholarship recipient mothers.

Data Collection
Participant interviews generally lasted an hour and followed a semi-structured narrative arc. I asked students to describe their lives before attending Escola Eleva, to reflect on their impressions upon arriving at the school, and whether the scholarship had impacted their lives. In every instance, the interlocutor affirmed that it had,

allowing each of them to elaborate on the variety of ways the scholarship made a difference. My interviews with teachers were both informal and formal, reflecting an iterative data-gathering process. I conducted most interviews in person in Rio de Janeiro in August 2024, and a few additional interviews over Zoom in the months that followed. Additional data were gathered by reviewing classroom artefacts from students I previously taught and consulting primary sources on the institutional websites of Escola Eleva and Janelas Abertas. Data saturation was reached when data collection did not produce new insights or patterns (Creswell, 2013). I conducted interviews in both English and Portuguese, as determined by participants' preference.

Data Analysis

I transcribed and analyzed the interviews, indexing for common themes through an iterative process (Creswell, 2013). I analyzed across the data, looking for patterns and connections between the students' stories to make sense of both their individual experiences and a shared collective narrative, relying on participants' views to construct a reality grounded in their experiences (Creswell, 2013). Finally, I followed my ethnographic hunch, remaining open to new insights produced in putting the data "in dialogue with theory" (Pink, 2021, p. 32). Thinking with theory (Jackson & Mazzei, 2011), I made meaning of the relational nature of the students' stories and the interconnectedness I observed in their narratives.

Positionality

Having taught English at Escola Eleva from 2017 to 2022, I approach this research with an emic *insider* perspective that reflects my prior relationship with several research participants and informs my understanding of the research site and my analysis. While I was previously an active part of the school community, nearly two years passed between my departure as a teacher and my return as a researcher for formal fieldwork. In conducting this research, I practiced reflexivity, employing critical sensitivity to my active role in shaping this study (Creswell, 2013). My familiarity with the research site afforded both trust with research participants and a deeper contextual understanding of the school. I remain attentive to how my positionality may have shaped participants' engagement and mitigated biases by deliberately questioning my assumptions to ensure the integrity of the study and seeking insights from other teachers and participants whom I did not previously teach.

Ethics

I obtained Institutional Review Board approval from Teachers College, Columbia University, to conduct this study. All participants were informed of the purpose of the research and the voluntary nature of participating. I obtained written informed consent from all research participants, including parental consent and student assent for minors. All participants consented to audio recording our conversations.

Limitations

One limitation of the study is its narrow focus on Escola Eleva, which does not reflect the reality of all private Brazilian international schools. The case study findings are context-bound and not generalizable.

Findings

In late 2024, I sat with Raquel, the mother of a scholarship recipient, at a café on a busy street in Copacabana to understand how she became involved in Escola Eleva. She received an invitation to learn about Escola Eleva before the school opened. Raquel had learned about the school in a popular weekly magazine a few weeks prior. As she read the cover story, titled "Lemann's School," referring to one of Brazil's richest businessmen and Escola Eleva's main financial backer, Jorge Paulo Lemann (Cerqueira, 2016). Raquel had thought to herself, "another school for them, everything for them, for the Carioca[4] bourgeoisie." To her surprise, she went to the meeting and found herself in the home of a famous Brazilian actress, surrounded by other Brazilian celebrities who were debating the direction the school would take. What all the parents at the meeting had in common was that their children were all Black. They envisioned a school that combined racial and socioeconomic diversity, and wanted Raquel to be part of it, too. They asked her to consider applying for a Janelas Abertas scholarship to enroll her daughter at the school, understanding she could not afford the tuition. She told me she was skeptical but ultimately decided to give it a shot to "see what happens."

The scholarship granting access to Escola Eleva was regarded as one of the best in the country, confirmed by teachers like Cameron, who previously worked at the American School in Brasilia. There, he explained, "most of our students of color were the children of the cleaners, the cooks, the security guards." Escola Eleva's Director, Amaral Cunha, had worked at the American School in São Paulo, where he told me the scholarship program was small and not geared toward diversity and inclusion like the Janelas Abertas one. Cunha and other members of the school leadership were at the meeting with Raquel, and they were consciously thinking about how to make a difference with their new school. Cunha told me, "The fact that we are in a private school in Brazil, we are already part of a bubble, so I saw the [Janelas Abertas] program as one way of somehow breaking a little bit this bubble." Given the national backdrop of affirmative action (Almeida, 2015), the celebrities invested in creating a school for their Black children, Lemann's financial backing, and the courage of parents like Raquel to try something new, Escola Eleva was in a strong position to make a difference, at least at its own school.

I analyze the scholarship student experience in the context I have outlined, bringing into conversation the shared vision of those who believed in Escola Eleva's ability to challenge the status quo of Brazilian international schools that predominantly serve the white elite. Joined in a desire to support scholarship students' ability to study at the school through the material support of the scholarship, the members of the school community constitute a de/reterritorializing assemblage that resulted in unforeseen

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[4] Residents of Rio de Janeiro.

outcomes. The findings have been organized thematically, highlighting some of the major outcomes from the scholarship students' stories. Across the board, the students acknowledged a direct financial benefit, alleviating tensions like having to provide lunch at home or buy a computer, which were included in the scholarship; therefore, it has been excluded from the findings. Instead, I focus on the indirect *affect*—defined by feelings, emotions, and an "immanent social force" (Dernikos et al., 2020, p. 16), that resulted in the interactions between scholarship students and others: confronting racism, fostering opportunities for organic economic solidarity, and (re)affirming identit(ies). A common thread in all the stories is that students turned toward, rather than away from, who they are.

Confronting racism

Sara told me, "I was determined to join that school," and she eventually did after two year-long rounds of applying for a scholarship. At the time, Sara's family was living in Rocinha, the largest favela in Rio de Janeiro, which is often associated with violence and precarity. Sara's mother was aware that her daughter might face challenges studying in a school where she would be a minority and prepared her for bullying, telling her, "Don't ever lower your head because you are a scholarship recipient. If anything happens, you don't have to submit to anything. You come to me, and we will solve it." Sara's mom wanted her to study at Escola Eleva, believing the experience would open new opportunities, but knew that moving from a public to an elite private school might also come with challenges.

Upon entering the school, Sara made friends and quickly became well-integrated, but her experience included difficult and new scenarios. Sara attended a birthday party, which prompted a student who was not invited to lash out. The other student, who was white and paid tuition, sent a message to the birthday girl, cursing Sara for being Black and poor. Sara called her mom and notified the middle school principal. Even though the incident had occurred outside school, he treated it as a school matter, defending Sara and calling in the mother of the other student to discuss what had happened. The principal's actions went beyond simply fulfilling his role; he was moved by what happened and determined to show Sara his institutional and personal support.

Sara knew she belonged at the school, but she had also learned from other students in a process of negotiating their identities and belonging in an unfamiliar elite space. She was close to Carolina, another scholarship student from the same grade who was also Black. One day, a classmate sent a photo to the class's WhatsApp group of African children with a racist message. Sara "knew it was wrong," but didn't know exactly why. Carolina immediately replied, calling out the behavior, and Sara attributes her quick response to a desire to "go deeper" in understanding her own identity. Before entering the school, Sara rarely reflected on her blackness. At Escola Eleva, she came to understand her race affectively, feeling it as core to her identity and a source of pride. The relationship between Sara and Carolina, beyond representing solidarity, signifies a united front against social closure—in this case, the discomfort and disrespect of a racist comment—that elite students have been entitled to.

Earlier that same year, Carolina had organized a series of workshops on racial literacy that she held during study hall once a week. She had found a close ally in one of the few Black teachers at the school, a teaching assistant named Pedro, who helped her organize the workshop to discuss issues of race and racism. She told me of taking on this task, "When you're a scholarship recipient, life demands more maturity because your reality doesn't hide reality, you know?" Camila, a high school History teacher, told me that Carolina often asks to sit in her empty classroom, finding solace in her teacher's company. Camila, though white and middle-class, is not from the south zone neighborhood where the school is located, and she previously taught in public schools. Both Pedro and Camila sensed Carolina's need for companionship and acted in ways to let her know her presence at the school mattered and that she was not alone.

For a persuasive writing assignment in 2022, Carolina delivered a speech about the importance of the Janelas Abertas program, which was already under threat. She shared the story of how her mother and sister had accessed higher education via affirmative action and how it had changed their lives. Carolina called upon her classmates to reflect on how they all benefitted from Janelas Abertas, saying, "Scholarship students need the private school, it's true, but the private school also needs the scholarship students." Carolina's vocal belonging to the school shows the ways she connected to others through a shared understanding of what it means to engage with "reality."

These examples from Sara and Carolina reveal how a minority of fellow students disagreed with the inclusion of scholarship students, standing outside of the assemblage that believed in making Escola Eleva a racially and socioeconomically diverse school. Sara and Carolina's steadfast understanding of their belonging to the school allowed others to plug into deterritorialization, challenging notions of elite schools as exclusionary spaces. The incidents in this section highlighted Sara and Carolina's processes of becoming through understanding their belonging at the school, while also fostering dialogue around and denouncing racist acts.

Economic Solidarity

The scholarship affords students comfortable access to the school, but it does not grant recipients the same lifestyle outside of school. Ana, who now studies law, was a high school junior in 2019 and wanted to attend a two-week summer exchange program, a common experience for Escola Eleva students. She applied to a program at Cambridge, was accepted, and earned a scholarship, but it only covered 60% of the cost. The school's college counselor encouraged her to create an online fundraising page after she explained she could not afford the remaining cost. Ana told me that the Escola Eleva community enthusiastically helped her raise the money for the summer program. She was surprised by the outpouring of support, especially from people she did not know, like a mother she had never met who bought her flight with miles. She had already met her fundraising goal when she received a text message from two famous Black actors who were parents at the school. Despite never meeting, they told Ana, "We want to be part of it." They donated £1,000, giving Ana an extra cushion, something her classmates would likely have to cover unexpected

costs abroad. The school counselor's quick thinking and the school community's enthusiastic support in this example are indicative of how diverse school actors united in their desire to support the Janelas Abertas scholarship students' belonging, including extending material support beyond the scholarship. This signifies a flexible and adaptable assemblage that remakes itself and the school as opportunities arise.

Examples of other organic forms of economic solidarity from the school community emerged in my interviews. Daniel worried he would have trouble making friends when he joined Escola Eleva in the sixth grade. He was also from Rocinha, like Sara, and had difficulty telling his classmates where he was from. He told me that changed with time, "I lost this fear of not telling people where I came from. Rocinha is a really good favela, it's like the biggest favela in Latin America." That year, Daniel established a solid group of friends who collectively surprised him with a PlayStation at the end of the sixth grade. Daniel told me he had spent time playing PlayStation at their homes, but the gesture was a way for him to be included in his own home. It gave him the chance to socialize with his classmates outside of school, just like they do. This example shows how bonding through shared play was also bolstered by going beyond the scholarship. Both Ana and Daniel's experiences were only possible given the access they gained to the school through the scholarship-school community assemblage's movement and adaptability to the unforeseen, contributing to the shared understanding of what it means to find organic, localized solutions to social inequality.

(Re)affirming identit(ies)

I met with Luiza over Zoom to discuss her experience at the school. Now graduated, she told me that she had been afraid to be seen as "the girl who had a scholarship," saying, "I didn't want that to define me." When the scholarship program was suspended, Luiza had one year left before graduating. She was angry that a foreign education group had suspended the program, stressing, "Janelas Abertas exists because there is a social and political context in Brazil where things need to be done to make our environment equal." She realized she had been taking the wrong approach in hiding her scholarship status, recognizing "how political that was" and "how important it was for people to know." Luiza decided to befriend some younger scholarship students and placed newfound value on her scholarship. Her feeling of anger led her to action, and her shift in thinking shows an internal process of recognizing herself as a scholarship student and recognizing the importance of the scholarship program for the entire school.

Roberta was one of Luiza's younger friends who also recognized the significance of her presence at the school. She had come to Escola Eleva as a sophomore in 2022, the last year the scholarships were granted, after spending two years without classes because her public school did not provide distance learning during the pandemic. At the time, Roberta's dream was to "get out of Brazil" and study engineering in the US. She thought Escola Eleva would prepare her for that, but to her surprise, she realized there were other possibilities she had not considered before studying there. Through a friendship with a classmate who planned to study cinema, Roberta realized that cinema was also her passion. She knew her reality was far different from her friend,

the son of two actors, but he was insistent, telling her, "It's unacceptable for a person like you not to go into cinema," and bargaining, "I have the means and you have the ideas." Roberta came to terms with the fact that perhaps her earlier dream of studying in the US was not what she truly wanted, and she found value in staying close to her family and Brazil's rich cinematic tradition, which she had always loved.

Roberta told me about another white male classmate, whom she considers her best friend. She explained, "The thing that makes us friends with each other is being so different," repeating for emphasis, "so different." For Roberta, money had been a big problem in her life, but she never felt a lack of love, the exact opposite of her friend's reality. She reflected on the lesson she learned, telling me, "It's ignorant to think that poor people are all the same and it's ignorant to think that rich people are all the same." Roberta affirmed her ability to learn from those drastically different from her and acknowledged that they had much to learn from her as well. Roberta's mother reflected on her daughter's upcoming graduation, saying Roberta's presence at Escola Eleva was "moving people to think differently, to understand differently." She was reminded of a quote often attributed to Angela Davis that says, "When Black women win victories, it's a boost for virtually every segment of society." She was proud of Roberta's becoming while at Eleva and the way she impacted others.

Not only did Roberta and Luiza find solidarity with one another, but they also learned about themselves from and with other non-scholarship students, a process that others noticed and recognized as unique to that space and time. This had material impacts, changing Luiza's orientation toward her identity as a scholarship student and Roberta's trajectory post-Eleva. It also affected the students' understanding of inequality in Brazil and differences across race and class.

Discussion

The findings show how the students' narratives reveal the ways they were part of a de/reterritorializing assemblage that challenged traditional notions of elite schools as exclusionary spaces. The students' situated belonging, found in themselves and through the support of classmates, teachers, and family, required the school to respond in a variety of unpredictable material and immaterial ways. In answering the research question—*How did the Janelas Abertas scholarship affect the lives of the students who received it?*—The findings tell both individual and collective stories, rooted in the lived experiences of the scholarship students. I have shown how the de/reterritorializing assemblage (Deleuze & Guattari, 1987) actively unsettled and resettled ways of doing elite schooling through confronting racism, fostering economic solidarity, and reaffirming students' identities. These analytical categories created space for critically understanding how Janelas Abertas shaped individual subjectivity and the shared experience of Escola Eleva from 2017 to 2022.

The findings showed instances of tuition-paying students, elite parents, or teachers supporting the scholarship students, not based on claims to meritocracy or reproducing privilege (Gaztambide-Fernández, 2009; Khan, 2011), but based on a desire to make the Janelas Abertas program work not only for the students it served

during a specific time, but for themselves, too. Furthermore, the student narratives showed the ways they understood their importance to the school through conscious declarations and unconscious feelings and perceptions they felt in their interactions with others and themselves. This showed the ways the students were neither passive markers of diversity nor non-white tokens (Gaztambide-Fernández & Angod, 2019). Throughout the findings, the school community's affectability—the potential to be moved by that which occurs beyond oneself and pertaining to exteriority (DeLanda, 2006; Ferreira da Silva, 2007)—was on display, showing that it was not just the scholarship students who were impacted, but also their classmates, teachers, and families. This is an important critique of Enlightenment-based thinking at the core of difference and *othering* (Wynter, 2003). The study highlighted a shared human experience from the students' perspective.

This study adds the case of Escola Eleva and the Janela Abertas scholarship program to the literature on internal dynamics of international elite schools, offering a counterexample to ways of doing elite education, grounded in a desire to combat racial and social inequality at the school level. It also addresses a gap in ethnographic accounts of a private school in Rio de Janeiro and student perspectives on diversity in elite contexts. Integral to the findings and the ethnographic method was deeply contextualizing the school's founding in a shifting educational landscape in Brazil (Günel & Watanabe, 2024), challenging a racialized center-periphery dynamic (Windle, 2022), contributing to ongoing dialogue exposing centuries of structural racism, and discrediting the myth that Brazil is a racial democracy (Almeida, 2015). Further research on scholarship programs that prioritize socioeconomic and racial diversity in elite schools is necessary, particularly in non-US contexts, to understand how specific local histories and education policies shape scholarship students' experiences.

Conclusion

This study challenges dominant narratives about elite schooling by analyzing how racially and socioeconomically diverse scholarship students both shaped and were shaped by the Escola Eleva school community. Applying an assemblage theory (Deleuze & Guattari, 1987) framework, I analyzed how the scholarship students were not the only ones affected by the Janelas Abertas program. Instead, the findings highlight the ways parents, teachers, and students exercised relational power (Foucault, 1978) to de/reterritorialize the meaning of their school as one committed to diversity, enacted through the material support of a robust scholarship that served over 100 students between 2017 and 2022.

This study is important for the field of international education to understand the adaptability of K-12 international schools to meet the needs of their localized contexts and realities. A key takeaway from this study is the urgent need to dedicate more resources to support the robust inclusion of scholarship students, such as those featured in this study, who shaped the school's identity while also affirming their own. Efforts are also necessary to promote diversity not only in student bodies but in teaching staff and school leadership. Finally, equipping and funding public schools to

attract students away from private schools is also an important pathway for imagining a future that does not depend on the de/reterritorialization of elite schools, but equitable and accessible schooling for all.

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Elaborating Policy Pervasion: Personal and Organizational Immigration Policy Impacts

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The term policy pervasion describes the influence of visa and study permit policies on the lives of international students, based on findings for students studying in Australia, Canada, and the United States. This conceptual article works to elaborate and expand on the concept of policy pervasion in two complementary ways. The first section explores the manifestation of policy pervasion in different national contexts and draws on news, literature, and the author's own international student support experiences to refine the concept of policy pervasion as a crucial component of the international student experience globally. The second section introduces the idea of "organizational policy pervasion," wherein the activities, processes, or decisions of higher education institutions are impacted by policy pervasion considerations. From there, the article proposes a tool for guiding or instigating responses that constitute a caring, productive, and student-centered organizational policy pervasion. The article concludes with an outline of potentially fruitful future research paths related to (organizational) policy pervasion, as well as clarification of the theoretical and practical utility of both forms of policy pervasion.

Keywords: international higher education; international students; policy pervasion; visa policy

Introduction

Though by no means limited to the United States, the impacts of immigration policy on international students have become increasingly spotlighted with the slew of actions by the second Trump administration that target non-immigrant international students. In the U.S. context, the deeply personal impact of immigration policy on international students

> is taking on a grim tenor as stark new sources of uncertainty appear with dizzying speed for international students… Sources of concern… include: stories about nonimmigrants being denied entry into the country, threats to colleges' eligibility to enroll international students…, highly publicized arrests of international students, visa revocations…, new targeting of the Optional Practical Training program…. and unwarranted terminations of students' immigration status. (Crumley-Effinger, 2025).

Both in light of these drastic changes in the United States as well as the challenges posed by political and social events in other host countries, it is perhaps no surprise that the personal, professional, and academic lives of international students continue to draw significant interest in both scholarly and journalistic circles. Past, in-process, and pending or future changes to student visa and study permit policies (more generally referred to as international student mobility and migration [ISM] policies) in a number of traditional host countries have highlighted how personal these

policies can be to international students, as well as the broader local national communities in which they study (Castiello-Gutiérrez & Whatley, 2025; ICEF Monitor, 2025; Porter, 2025).

This study contributes to the discussion of self-disclosed impacts of ISM policy on international students. Based on empirical findings from a comparative study of international students studying in Australia, Canada, and the United States, Crumley-Effinger (2024a) outlined the concept of *policy pervasion* as "the pervasive influence of ISM (or visa and study permit) policies on the lives of international students" (p. 91). That study described how visa and study permit policies framed and influenced many students' personal, academic, and professional decisions and experiences, including impacting personal relationships, swaying perspectives on their chosen courses and academic fields, creating opportunities and barriers to their pre- and post-graduation employment, and more (Crumley-Effinger, 2024a).

The present study expands on the concept of policy pervasion to clarify its contours and to enhance its accessibility and practical application for ISM scholars and practitioners. It does this in two complementary ways: First, with an illustration of the manifestation of policy pervasion in different national contexts, drawing on news, literature, and the author's own international student support experiences to refine the concept of policy pervasion as a crucial component of the international student experience globally, through the embodiment, in international students, of national- or regional-level ISM policy. Second, the article introduces the idea of *organizational policy pervasion* (OPP), wherein the activities, processes, or decisions of higher education institutions may be impacted by consideration of the policy pervasion experienced by future, current, or past enrolled international students. Finally, the discussion section provides an introductory framework for institutional responses to policy pervasion and explores prospective research and theoretical exploration of both individual student and organizational policy pervasion.

Policy Pervasion
As introduced above, policy pervasion "sheds light on the institutionalized influence of visa policies on the international student experience and indicates how visa policies impact students in a variety of ways" (Crumley-Effinger, 2024a, p. 91). In short, policy pervasion succinctly describes "the power of policies to exert a controlling influence" on international students (Crumley-Effinger, 2024a, p. 91) and lends new insights to what Robertson (2013) describes as the "intersection of the realms of the personal and the political" (p. 88). Examples of this policy pervasion come through in students' recounting of how visa and study permit policies impacted their academics, their employment activities, and their personal lives (Crumley-Effinger, 2024a), policy pervasion in students' decisions to participate in political demonstrations and protests (Crumley-Effinger, 2024b), and students' perceptions of how the cultural political economy of their host country impacted their immigration experiences while studying (Crumley-Effinger, in press).

Like many international student advisers in the United States, my day-to-day work

often centers on supporting international students as they navigate policy pervasion. Policy pervasion crops up often as my students regularly recount how their decisions and actions are shaped by student visa regulations. For example, some of my advisees have described choosing majors based on immigration benefits afforded to programs designated by the Department of Homeland Security as Science, Technology, Engineering, and Mathematics (STEM) degrees, despite desiring to study something else. Others have expressed pain over decisions to forego visiting terminally ill family members abroad due to immigration benefit processing wait times and the resultant travel limitations. Many of my advisees have struggled with immigration-related enrollment requirements that do not provide options for decreases in the face of personal challenges that arise. Finally, some advisees have agonized over the unknown repercussions of choosing to fail a course and the subsequent impacts on their grade point average (GPA), instead of dropping the course, since dropping would bring them below the enrollment requirement. These are just a few examples of the many ways that international students in the U.S. have described policy pervasion in their lives.

Policy Pervasion Around the World

There are numerous examples of the international student mobility literature touching on the policy pervasion faced by international students, with example studies below selected based on manifestations of policy pervasion in their findings. Siczek (2024) explained that "visa issues were invoked across multiple interviews" (p. 42), posing various challenges to participants in a longitudinal study in the United States. Lynch et al. (2023) describe varying levels of "visa anxiety" and precarity as a result of changing visa policies during the COVID-19 pandemic (p. 4). In Canada, international students during the pandemic were also faced with a changing policy environment, with benefit eligibility changing as distance education became the norm for health reasons (Brunner, 2024). Looking at the case of international students in Norway, Beaumont and Glaab (2023) contend that the "EU's migration regime produces precarity and insecurity" (p. 2). This prompts students to create "strategies for navigating the system" and to exert energies, such as the "persistent labour and self-management" required to maintain one's status (p. 3).

In a comparative study of international student experiences in the United Kingdom and Japan, Brotherhood (2023) described students' appreciation for work opportunities afforded by ISM policies. However, specifically in the case of the UK, "participants felt that… the regulatory restrictions placed on their work hours… emerged as significant barriers in securing [work] experiences" (Brotherhood, 2023, p. 45). Similarly reflecting the connection between higher education and employment while on student visas, a study from Finland examined how student permit renewal processes limited international students' ability to travel outside of the country (Maury, 2022). Additionally,

> A large number of student-migrants find work in the low-paid sector to cover their daily life expenses and to collect the resources to renew the student permit, which demonstrates the way in which their student status shapes the

student-migrants' occupation and moulds their lives into sequences of precarious one-year projects. (Maury, 2022, p. 111).

One study from Malaysia looked at the unique experiences of Syrian international students who experienced visa-related challenges that ultimately led to their withdrawal from academic programs (Sulong & Othman, 2024). Facing a "'chaotic' visa renewal process" (Sulong & Othman, 2024, p. 402), students were often bounced between many different institutional and government offices, taking time away from their studies, where itself, missing classes to deal with these processes put their visa approval at risk. Risk to one's visa can stand out as a crucial concern for some international students, for example in the case of international students studying in Australia, Canada, and the United States who may police their involvement in demonstrations for fear of the impact on their status (Crumley-Effinger, 2024b; 2025), or even hesitancy on the part of international student victims of sexual assault in the U.S. "for fear that rocking the boat in any way could jeopardize their student-visa status" (Fischer, 2022).

In South Africa, international students highlighted ambiguity and confusion with visa application processes as influences on their experiences of starting or continuing their studies (Lee et al., 2018). This uncertainty caused concern and perhaps regret from some students, as "several indicated in hindsight that they were not sure if their efforts were worthwhile as they had not anticipated the emotional stress and financial costs in securing their study visas, suggesting they might have simply decided to study elsewhere" (Lee et al., 2018, p. 1989). In a systematic review of literature of ISM, Gutema et al. (2024) noted that the ease or challenge of obtaining a student visa impacted students' study abroad decisions, as did the ease or difficulty of getting work authorization during one's studies. The same study notes that divergence of the ISM policy reality on the ground in the host country from the student's perception of the policy impacted students' experiences (Gutema et al., 2024).

These examples from around the world indicate that the concept of policy pervasion obtains beyond Australia, Canada, and the United States, which were the host countries included in the article outlining the concept (Crumley-Effinger, 2024a). The conclusion to this article outlines avenues for prospective, fruitful research into the varied contours of policy pervasion in many host countries around the world. Before turning to explication of the connected concept of organizational policy pervasion, the following section seeks to refine the concept of policy pervasion and to provide a succinct definition.

Refining Policy Pervasion

This section draws on the literature and examples described above, as well as the author's prior studies and their own professional experience working with international students, to refine the concept of policy pervasion, including provision of a succinct definition. International student mobility and migration (ISM) policies include the host country rules, regulations, and practices that pertain to international student transnational mobility and rules for conduct within the host country. This is

the "combination of (i) regulatory arrangements prescribing border ingress to study and (ii) in-country regulations for the duration of the degree program studies" (Crumley-Effinger, 2024a, p. 79). The case of the application form for U.S. visas, described below, indicates why it is prudent to expand the description of ISM policy to also include rules for those who have not yet entered the host country. As such, ISM policies in the context of this study, and as they relate to policy pervasion, concern rules, regulations and practices for (i) visa or study permit *issuance*, (ii) *ingress* into the country, and (iii) host country *inhabitance* (see Hammar, 1985; Van Puymbroeck, 2016; Grimm & Day, 2022).

ISM policies can be wide-ranging, and likely will not always be student-specific, even if they do impact international students. For example, when applying for the most common student-specific visa (called an F-1 nonimmigrant visa after its location in the U.S. Code of Federal Regulations) to study in the United States, prospective students will complete a Form DS-160, which is a generic application form used to apply for a number of visas, not only for students. The DS-160 requires individuals to answer a number of questions, including about terrorist activities, providing social media account handles, and more. Students' decisions about whether and how to respond to these questions may constitute an impact on them, indicating a pre-enrollment form of policy pervasion. For example, students' social media handles must now be made public for the visa application process, opening up previously private activity to unknown entities; alternatively, students may experience stress about content on their accounts, with unknowns about how that content will be viewed or whether it will factor into visa approval decisions.

The example of the pre-enrollment policy pervasion when students complete the DS-160 for a U.S. visa highlights the fact that policy pervasion need not be time-bound to the period of enrollment, nor location-bound to the student's presence in the host country. The impacts of policy pervasion may be felt before, during, and after the enrollment period, and may similarly impact students' experiences and decision-making while both inside and outside of the host country. Further examples can help clarify this point about the relevance of pre-arrival policy pervasion: In light of the social media vetting measures recently introduced for U.S. visa applicants (Department of State, 2025), students who plan in the *future* to study in the United States may take into account visa issuance restrictions and processes when making decisions about what to post on their social media *now*. Neto et al. (2024), in the context of a study of Erasmus Mundus students seeking to study in Europe, explained

> Recurring issues such as appointment delays, accommodation confirmation, inconsistent visa guidelines, and financial strains, particularly for self-funded students, emerged as considerable obstacles. These challenges sometimes disrupt study schedules and impose unforeseen costs, affecting students' academic and extra-academic experiences. (p. 9)

Based on Crumley-Effinger's (2024a; 2024b; in press) empirical studies and consideration of the topic here, policy pervasion can be succinctly defined as *the direct or indirect impacts of ISM policy on the lives and experiences of international students,*

as well as on their actions and decisions, as mediated by their knowledge and perceptions of ISM policy. This could include, but should not be limited to, impacts on their academics, employment, personal life, and political involvement in the host country. Figure 1 diagrams this description of policy pervasion. Indirect impacts could include, for example, (i) HEI interactions with ISM regs and student supports, or (ii) employer or general public knowledge of ISM regs and their resultant treatment and perspectives of, or discourses around, international students.

Figure 1

Diagram of Policy Pervasion
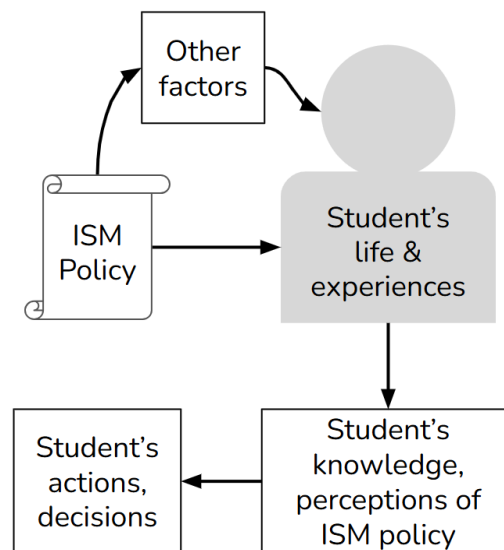
Note. Arrows indicate directions of influence; for example, the line from "ISM Policy" to "Students' life and experiences" illustrates the influence of ISM policy on the student. Rectangular boxes represent tangible and intangible concepts, while the other shapes represent the labeled item.

Policy pervasion is an inherently personal matter, focusing on the experiences of individual students, including how their actions and decisions will be impacted by what they do and do not know about immigration policies associated with their status, as well as their perceptions of the ISM policy environment. Looking specifically at international student self-policing of political involvement and demonstration activity, Crumley-Effinger (2024b) noted that some of the students' decisions were based on their "perceptions of their legal precarity due to the visa regulations, even if they were unable to point to specific policies that may hamper or result in detrimental responses to their political activism or protests" (Crumley-Effinger, 2024b, p. 213). This emphasizes the importance of student knowledge of local immigration policy and how it impacts them, but also points to the role of interpretations of ISM policy. Thus, student' knowledge and interpretation of ISM policy information may be informed by host institution support infrastructures, conventional and social media, word of mouth, contemporary immigration discourses, and more.

Authority, agency, and access are prominent in the idea of policy pervasion. That is, the power inherent in the authority of ISM policy to impose boundaries on, or avenues for, student activities and decisions (see Brunner, 2022; Crumley-Effinger, 2023; Brunner & Tao, 2024; Crumley-Effinger, 2024a). Agency in the sense of students' personal choices to take actions or make decisions within the power structure of the ISM policy environment in which they have decided to enroll. As well as students' agency to make decisions in the first place about their association with the host nation's ISM policies (see Greenfield, 2025). Agency here could also relate to students' decisions about adherence, or not, to the rules and regulations outlined by local ISM policies, and resultant impacts on them stemming from those decisions. And finally, access refers to the decision made by the students to acquiesce to the power of ISM policies—and the potential ISM policy impacts—in order to physically gain access to the country after deciding to study there.

Importantly, ISM policy pervasion is not about the size or magnitude of these impacts on students; it is simply about the existence of such impacts. Furthermore, while Crumley-Effinger (2024a) referred specifically to policy pervasion in the areas of academics, employment, and personal life, the boundaries between these different areas can naturally be fuzzy or indistinct. Policy pervasion impacting a student's academics can have a knock-on effect on their professional life, just as ISM policy impacts on the personal life can have a knock-on effect on the academic life, et cetera. To be clear, policy pervasion goes beyond the black and white of the policy determinations of what is and is not allowed, or who is or is not eligible for a benefit, and so on. Policy pervasion describes the personal impacts— perhaps beyond the intended effects—of these policies on the student.

Finally, it is crucial to recognize that policy pervasion does not only refer to challenges posed by local ISM policy; it also refers to opportunities created. Despite the challenges that can arise as a result of ISM policy, these policies facilitate educational opportunities, some life-changing, giving students access to new countries and cultures, permitting in-country study and life and work opportunities that are presumably different from what they might access at home. Policy pervasion points to the impacts of visa policy on international students, both good and bad, and everything in between.

Organizational Policy Pervasion

Higher education institutions (HEIs) are often tasked with supporting their international students in a number of ways, including connecting them to local communities (Thomson & Esses, 2016; Ammigan et al., 2022), familiarizing them with academic customs (Cho et al., 2021; Sheng et al., 2022), providing language support (Auschner & Jiang, 2025), generally assisting with adaptation to the local environment (Monicah, 2024), and more. Host institutions are also often tasked with immigration support to ensure that their students are eligible, according to relevant local immigration and ISM policies, to conduct their studies (Briggs & Ammigan, 2017). As such, HEIs may be especially cognizant of, and sensitive to, ISM policies and the impacts of those policies on their students. It is in light of this institutional

duty and work, when associated with individual student policy pervasion, that led to the development of the new concept of *organizational policy pervasion* (OPP), which is explored in the following section.

Examples from the U.S. Context

A COVID-era policy adjustment by the federal government provides a valuable illustration of how institutions may choose to respond to immigration policies impacting their students. In July 2020, policy guidance clarified that while international students could take advantage of COVID-specific relaxation of the limits to the number of online courses they could take, these students would be required to take at least one in-person course in the Fall 2020 term (Immigration and Customs Enforcement, 2020; Crumley-Effinger, 2021). Prior to this announcement, many institutions were planning to continue with online-only study, after having moved online during the initial COVID-19 outbreak in Spring 2020. However, this new guidance immediately prompted institutions to scramble for creative solutions in order to provide sufficient course offerings to enroll all continuing international students in at least one in-person course (see Whitford, 2020). Some of the institutions with which I was connected at this time made serious efforts to introduce new courses and make curricular adjustments to respond to this new policy barrier faced by students. Ultimately, the policy was rescinded, presumably due to the fierce pushback from institutions across the country.

A second scenario relates to specific benefits afforded to a subset of international students based on their program of study. Students in F-1 visa status who complete higher education degrees are usually eligible to apply for up to 12 months of post-graduation work authorization, called Optional Practical Training (OPT) (Department of Homeland Security, 2025a). However, federal policy provides a special allowance for students who complete degrees in STEM-designated fields: unlike those in non-STEM-designated fields, these students are eligible to apply for an additional 24 months of STEM-OPT, for a total of 36 months of post-graduation work authorization in the U.S. associated with their F-1 visa status (Department of Homeland Security, 2025b). For students who are interested in gaining work experience in the United States, this can be a powerful incentive to pursue STEM-designated degrees or to select programs that have degrees of interest coded as STEM-designated.

Because having STEM-designated programs may be attractive to some international students as they consider how they will be impacted by immigration policies that benefit those completing degrees in these specific programs, some HEIs may take actions to change or align their programs with STEM-designated CIP codes (used by the Department of Education to classify academic program areas; see Department of Homeland Security, 2025c). This can mean not only actions to redesignate programs, but also efforts to advertise the STEM-designation as a selling point to prospective students or as an equity effort (Rashid, 2023). Some of the HEIs I have worked for have taken STEM designations quite seriously, including efforts to change CIP codes, advocacy for inclusion of new CIP codes on the Department of Homeland Security's

STEM designation list, and navigating challenges posed by prospective students' interest in enrolling in STEM-designated programs.

Defining Organizational Policy Pervasion

The preceding are just a few examples of activities that may be taken by HEIs in response to immigration policy impacts on students that may constitute an adjusted form of policy pervasion, wherein HEIs respond to the reality of individual policy pervasion by implementing organizational adjustments to better serve their students. OPP is thus a second-level form of policy pervasion, and may therefore be defined as *organizational activities undertaken to respond to policy pervasion at the individual student level*. It is a phenomenon one step removed from, though responding to the realities of, the individuals beholden to the visa and study permit policies. OPP responses may be designed to mitigate limitations posed, or to capitalize on opportunities created, by the (student-level) policy pervasion.

It is valuable here to clarify that HEI activities resulting from policy-imposed immigration requirements for the institutions themselves would not be considered OPP. For example, the international student attendance tracking and Home Office reporting requirement for host institutions in the United Kingdom is an example of an immigration requirement for HEIs specifically (University of Reading, n.d.), and thus not an example of OPP. Instead, organizational policy pervasion entails HEI activities as responses to the policy pervasion experienced by the students themselves. As another example, some institutions in the United States might adjust their international student worker hiring timelines and practices to account for the fact that international students' eligibility for a Social Security Number (SSN)—required for employment in the United States—may be delayed by immigration reporting requirements. Because the institution is responding to a limitation faced by the student, as imposed by immigration considerations, this would be an example of OPP. In such a case, the institutional response may constitute an equity-driven effort to mitigate challenges for international students who might be otherwise disadvantaged in relation to their domestic peers when it comes to applying for on-campus jobs.

Discussion & Future Research

Policy pervasion is useful for succinctly describing a concept that is crucial for policymakers, HEI administrators, and the general public to understand. It highlights the personal nature of student immigration policies, the personal impacts of immigration politics in the host country, and can shed light on the ways that these policies impact not only the students, but also their decisions about the countries in which they will undertake their studies. Current actions by the U.S. government are shining examples of the ways that immigration policy can impact students (Crumley-Effinger, 2025; Fischer, 2025), and have elicited subsequent actions by other nations to try to entice prospective students to their shores (Davidson, 2025; Kakuchi, 2025).

Organizational policy pervasion is crucial for understanding how HEIs do and do not respond to the policy pervasion experienced by enrolled/ing international students. By what means, and with what level of commitment, do institutions take action to help their international students to take advantage of opportunities afforded by student visa or study permit policies? And, alternatively, to what degree are these institutions prepared and committed to taking the initiative to support international students with understanding and negotiating obstacles or limitations posed by these policies? Have institutions codified avenues for proposing and taking action on areas in which they are failing to make adjustments, considering the challenging policy pervasion faced by their students?

OPP may be a concept of particular value in the study and practice of comprehensive internationalization—a topic of great importance in the field of international education—as it highlights the importance of acknowledging policy pervasion at the student level to incite consideration of the ways in which organizational responses can mitigate the impacts of, or enhance the opportunities afforded by, ISM policy in the host country. This might entail consideration of new or adjusted curricular offerings, administrative and bureaucratic processes, financial expectations, and more.

Element Audit Tool

In this article I have argued that the concept of policy pervasion is useful for communication of the international student experience, and for conducting research related to these students. When combined with the concept of organizational policy pervasion, it holds practical promise as it relates to services for international students, such as through the facilitation of audits of institutional policies, programs, and processes to identify areas in which the college or university can respond to policy pervasion experienced by international students.

A review of relevant research and incorporation of professional knowledge about policy pervasion for students in the particular host country is invaluable for understanding how students at any given institution might be impacted by local ISM policy. This knowledge, then, could serve as a valuable starting point for determining what organizational response efforts might benefit students. However, considering institutional particularities within countries, context is important. It is therefore crucial to determine how particular institutional policies, programs, and processes (i.e., elements) interact with local ISM policy and impact students' policy pervasion experiences. An institution-specific element audit tool could serve as a framework to pointedly "interrogate" institutional elements to identify potential ways in which any given element might play a role in mitigating challenges or amplifying opportunities vis-a-vis policy pervasion. Thus, such a tool has the potential to make knowledge of individual policy pervasion actionable to drive productive OPP to better serve students.

An element audit tool could facilitate these interrogations with ideas derived from the literature on policy pervasion and from the expertise of international educators at the institution (and elsewhere) to guide users in methodical consideration of various

areas of policy pervasion experienced by students at the institution in order to identify and subsequently respond to any given element's capacity to impose or remove barriers associated with the visa or study permit impacts on students. This could vary from general to specific, cover a range of potential policy pervasion areas, and might be thematically grouped in order to facilitate element interrogation for any specific policy pervasion instances that have been identified as salient at a given higher education organization. This could entail a recursive process whereby educators identify local instances of policy pervasion, seek to understand how institutional policies, programs, and processes (elements) do and do not interact with those instances, and then use international student, student affairs, and other literatures, as well as the professional expertise of the educators, to explore opportunities for mitigating or capitalizing responses. The proposed element audit concept is visualized in Figure 2 below.

Figure 2

Visualization of the Element Audit Tool concept
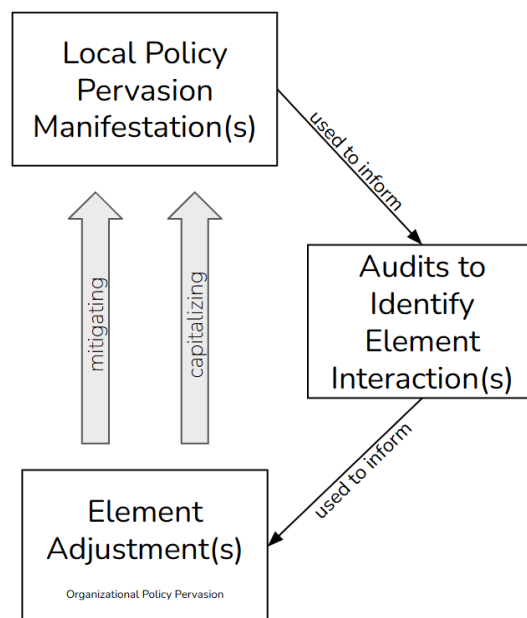
Note. Rectangular boxes represent concepts and actions, described by their labels. The slim black arrows indicate directions of use of information. The gray arrows indicate actions by institutions to mitigate, or capitalize on, ISM policy pervasion at the institution.

In short, the element audit tool is envisioned as a mechanism to enhance equity for international students through pointed and methodical self-executed audits of institutional or departmental policies, processes, and programs (elements). The element audit has the potential to be a flexible, open-source tool for incorporating the knowledge and contributions of diverse and varied higher education administrators and literature, focusing on potential institutional responses to policy pervasion experienced by students at the school. Furthermore, the tool will ideally be updated in order to remain reactive to changes to local ISM policy, student

populations, institutional approaches to supporting students, and more.

Future Research

In this study, I have outlined some of the ways that policy pervasion obtains in different countries around the world, though an empirical study is needed to understand how this policy pervasion is similar to or diverges from that which was explored in Australia, Canada, and the United States (Crumley-Effinger, 2024a). Drilling down to the personal experiences of international students in countries around the world will likely identify new areas in which the student experience is impacted by potentially vastly different ISM policies. This should also include investigating the ways that international students gain knowledge of local ISM policies relevant to their status, as well as how they develop their perceptions of what is or is not permitted and expected of, or risky to, them. It is also critical that such future studies focus on a variety of countries that do and do not host large numbers of international students. Additionally, it is prudent to consider ISM policy at the regional level (including intersections with local and national policy within the region) in studies of policy pervasion; a natural example of this would be the confluence of national and European Union ISM policy and the resultant effects on international students.

Empirical and conceptual study of the triplet ideas of authority, agency, and access as they relate to policy pervasion will likely be significant for the continued development and expansion of the utility of policy pervasion, as will comparative, theoretical exploration of the concept to critically consider how it connects with relevant theories in the field. Finally, this article suggests, using examples, that organizational policy pervasion is both present at institutions and a concept that could fruitfully assist with the identification of prospective institutional adjustments to support international students. Empirical studies of the contours of organizational policy pervasion and the utility of the proposed element audit tools are an important next step in the development of this concept.

Conclusion

Understanding and acknowledging policy pervasion is crucial in the fields of international education and international student services because it succinctly describes the intuitive idea that immigration policies can impact students intimately, in different parts of their lives before, during, and after enrollment. Navigating policy pervasion is an everyday reality for many international students around the world, just as it can be a background or explicitly foregrounded reality for the many professionals supporting international students.

In this article, I have illustrated the applicability of the concept of policy pervasion in different national contexts, which contributed to the elaboration of the definition of policy pervasion as expressing the direct or indirect impacts of ISM policy on the lives and experiences of international students, as well as on their actions and decisions, as mediated by their knowledge and perceptions of ISM policy. This

article, as well as its precursors and prospective future empirical and conceptual research projects, have the potential to set the stage for the development of a *theory of policy pervasion* to enhance its capacity to benefit the field of comparative and international education, by informing both international student-facing practice and studies with international students around the world. A full theory of policy pervasion, derived from current and future research to wrestle with the concept's strengths and weaknesses, could equip researchers to enhance the study of policy pervasion manifestations in local contexts, just as it equips practitioners and policymakers to better understand and respond to the policy pervasion experienced by their international students.

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The Role of Climate Change Education in ESD for 2030: Selective Adaptation of a Global Script

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This paper examines the role of Climate Change Education (CCE) within UNESCO's Education for Sustainable Development (ESD for 2030) framework, focusing on its selective adoption in the UNESCO Associated Schools Network (ASPnet) in Brazil and Germany. Drawing on the concept of global scripts, the study analyzes school websites (N=514) alongside four in-depth case studies to explore how schools integrate learning about climate and environmental sustainability. The findings reveal that while ESD's broad and flexible framing allows for widespread diffusion, CCE remains unevenly integrated. In Germany, UNESCO schools are predominantly public and often emphasize sustainability and international aid projects. In Brazil, private schools play a larger role, and the analyzed websites show a stronger emphasis on socioemotional learning and bilingual education, reflecting the different types of schools represented in the two national samples. The paper demonstrates that although ASPnet holds potential to act as an innovative space for CCE, CCE has yet to become a clear priority in the network.

Keywords: climate change education, education for sustainable development, UNESCO Associated Schools, ESD for 2030, global scripts, policy diffusion

Introduction

In the field of global education policy, Climate Change Education (CCE) and Education for Sustainable Development (ESD) represent two conceptually distinct global scripts. Global scripts are defined as widely institutionalized policy models and normative frameworks that shape what is seen as legitimate and desirable globally (Meyer et al., 1997) and are often selectively adopted in local contexts (Steiner-Khamsi, 2016). While CCE focuses on enhancing climate action and awareness (MECCE, n.d.), ESD promotes a broader concept of sustainability, which encompasses not only environmental issues but also economic, social, and cultural dimensions (UNESCO, 2020).

Existing scholarship highlights both an empirical and a conceptual gap in understanding the relationship between these two scripts. The United Nations Educational, Scientific and Cultural Organization (UNESCO) represents the central international agency promoting ESD, as part of its 17 Sustainable Development Goals that aim to achieve a more sustainable future for all by 2030 (UNESCO, n.d.-a). Although UNESCO positions CCE as a key component of ESD, CCE is not yet an established part of ESD (Mochizuki & Bryan, 2015). Further, there is a lack of empirical evidence on whether ESD actually contributes to environmental sustainability (Rappleye et al., 2024). At the same time, ESD's alignment with modernization and development ideologies contradicts its transformative aspirations (Komatsu & Rappleye, 2018; Klees, 2024).

As the global network of schools promoting UNESCO's values through education, the UNESCO Associated Schools Network (ASPnet) plays a central role in promoting ESD (UNESCO, 2025). Despite this, empirical research on how schools in the network implement ESD remains scarce. This study addresses this gap by tracing the diffusion of the *Towards achieving the Sustainable Development Goals (ESD for 2030)* framework and evaluating its contribution to CCE in the case of UNESCO Associated Schools in Brazil and Germany.

Brazil and Germany are compelling cases for comparison because both have a strong tradition of UNESCO Associated Schools and are federal systems that differ substantially in their degree of centralization. Although education in Brazil is federally organized, the national Ministry of Education has significant influence nationwide by, for example, defining minimum curricular expectations through the *Base Nacional Comum Curricular* (BNCC) (Fistarol et al., 2024). In Germany, each state has its own Ministry of Education with primary authority over curricula (Fistarol et al., 2024). It is also noteworthy that both Brazil and Germany have played significant roles in global climate governance. Brazil hosted the Rio Earth Summits (1992, 2012), and two UNESCO World Conferences on ESD were held in Germany (2009, 2021).

Analyzing UNESCO Associated Schools in these two countries allows us to examine how the global script of ESD varies in its adaptation and implementation across different political and cultural contexts. This paper thus examines the following two research questions: (1) *How do UNESCO Associated Schools in Brazil and Germany selectively adopt the ESD for 2030 framework?* (2) *To what extent does the selective adoption of the ESD for 2030 framework in UNESCO Associated Schools in Brazil and Germany include CCE?* To address these questions, this study draws on an exploratory comparative content analysis of 514 school websites and four illustrative case studies that show distinct patterns of ESD implementation across the two countries. While based on the idea of global scripts from World Society Theory (Meyer et al., 1997), the analysis is informed by a conceptual framework that brings together recent critical voices on ESD's role in adapting education to the climate crisis with policy diffusion and reception theory.

Conceptual Framework
This section gives an overview of recent critical voices on the potential of ESD for climate change adaptation before situating ESD in the context of policy diffusion and reception theory. Rappleye et al. (2024) highlight the need to collect more evidence of whether ESD leads to increased sustainability. They further argue that the learner-centric approaches at the heart of ESD might be part of the problem and advocate for a different cultural approach within ESD. In line with this argument, Komatsu and Rappleye (2018) problematize the reliance of ESD on policy instruments inherited from the neoliberal era (Steiner-Khamsi, 2025), such as current efforts of building scales that measure progress towards sustainability. Instead, they emphasize the importance of reclaiming forgotten knowledge and ways of connecting to nature, underscoring that international organizations are uniquely positioned to promote the exchange of information around already existing

sustainable non-Western practices (Komatsu and Rappleye, 2018). In contrast, Mochizuki and Bryan (2015) emphasize the importance of including CCE in ESD as Climate Change Education for Sustainable Development (CCESD). They argue that the holistic character of ESD supports CCE in going beyond scientific knowledge, enabling an interdisciplinary and systems approach that does justice to the complexity of climate change.

Closely linked to the legacies of colonial exploitation, climate change disproportionally burdens the Global South, despite its "minimal contribution to global emissions" (Gürçam, 2025, p. 19). However, as Duvvuri (2025) points out, the ESD for 2030 framework pays little to no attention to systemic issues and fails to "acknowledge systems of dehumanisation and exploitation" (p. 217) by not mentioning racism or colonialism. Similarly, Klees (2024) argues that system change away from patriarchal racial neoliberal capitalism is the only way to achieve the SDGs, emphasizing that "despite all the rhetoric, it has been business as usual" (p. 2). Precisely because of the ambiguous nature of ESD, it is crucial to examine whether the ESD for 2030 framework has so far contributed to greater climate change education. Not only is it a currently very influential framework in global education policy, but the education sector also "remains underutilized as a strategic resource to mitigate and adapt to climate change" (Mochizuki & Bryan, 2015).

According to Steiner-Khamsi (2025), diffusion refers to the spread of a policy across contexts regardless of whether it is effective, whether its content changes during the process, or whether it becomes institutionalized. It is striking that the ESD for 2030 framework includes a "reform package inherited from the neoliberal era" (Steiner-Khamsi, 2025, p. 15), namely performance-based regulation tools and accountability measures, in this case, the SDG indicators and targets (UNESCO, n.d.-a). On the one hand, performance-based governance tools make ESD easily adoptable for states accustomed to working with indicators. On the other hand, they centralize power at both the national and global levels where they are administered (Savage et al., 2021). In this way, performance-based assessments strengthen UNESCO's power and reproduce hierarchies among member states. UNESCO, in this case, is the organization that speaks "on behalf of the 'global'" (Steiner-Khamsi, 2025, p. 25) about what ESD means and what it should look like. Although UNESCO's language suggests inclusivity, ESD, like most global initiatives, remains characterized by clear power structures. As Steiner-Khamsi (2025) points out, the choice of policy instrument is deeply political. Cuban's (1998) perspective on school reforms and changes provides an important differentiation on the critique that the ESD for 2030 framework consists of more policy rhetoric than actual action. The author emphasizes that not only do reforms change schools, but also "schools change reforms" (p. 453). This perspective complements the theories of policy diffusion and reception by highlighting how, even when official policy reforms are lacking, policy rhetoric can nonetheless be consequential.

Taken together, these perspectives show that ESD for 2030 represents an ambiguous and politically contested global script. While it aims towards transformative learning in theory, it is unclear to what extent this promise is kept in practice. At the same

time, schools also play an active role in interpreting and reshaping the implementation of global agendas such as ESD for 2030, highlighting the importance of examining how ESD is locally adapted within different educational and cultural contexts.

Background

The concept of Education for Sustainable Development emerged at the United Nations Conference on Environment and Development 1992 in Rio de Janeiro, where it was first mentioned in the conference's concluding document, Agenda 21. It represents a shift in the discourse on education and sustainability, which was previously dominated by the Environmental Education movement (Pizmony-Levy, 2011). UNESCO has been the leading agency for Education for Sustainable Development since 2002 (UNESCO, 2020). The *Education for Sustainable Development: Towards achieving the Sustainable Development Goals (ESD for 2030)* framework was approved in 2019 at the 40th UNESCO General Conference and launched globally in 2021 at the UNESCO World Conference on Education for Sustainable Development in Berlin. At first glance, ESD seems promising for climate action. After all, it acknowledges the importance of education for environmental sustainability. On its website, UNESCO emphasizes "We urgently need to take action", and "We must learn to live for our planet!" (UNESCO, n.d.-a).

The ESD for 2030 framework further aligns with the goals of the Agenda 2030, which was adopted in 2015 alongside the 17 Sustainable Development Goals. While the broader Agenda 2030 promotes the implementation of all SDG 4 targets, ESD for 2030 focuses on SDG 4.7 (UNESCO, 2020). The goal of ESD for 2030 is to mobilize action towards the SDG 4.7 target that focuses on promoting 'Global Citizenship Education' and Education for Sustainable Development (UNESCO, 2020). UNESCO's understanding of Education for Sustainable Development is characterized by a whole-system and skill-focused approach that aims to prepare students for contributing to a more sustainable future. A central part of ESD for 2030 is the monitoring and evaluation of countries' progress towards SDG 4.7, conducted both through global and regional monitoring by the UNESCO Institute of Statistics and through country-driven Voluntary National Reviews (UNESCO, 2020).

Environmental sustainability is one of the planetary challenges UNESCO aims to address with its ESD for 2030 framework (UNESCO, n.d.-a.). In this context, CCE has become a higher priority for UNESCO in recent years, particularly in the context of its Greening Education Partnership launched in 2022. This partnership addresses climate change through a whole-system approach within the broader ESD agenda (UNESCO, n.d.-b). In this context, UNESCO published two guiding frameworks in 2024: the Green School Quality Standard (GSQS) and the Greening Curriculum Guidance. While the GSQS aims to transform "at least 50% of schools in each country into green schools by 2030" (UNESCO, 2024b), the Greening Curriculum Guidance represents its technical counterpart, outlining learning outcomes for integrating climate and sustainability in education curricula (UNESCO, 2024c). This shows that UNESCO focuses on the promotion of CCE through initiatives that

operate within the broader global script of ESD for 2030, framing CCE as a "key component" (UNESCO, n.d.-b) of ESD. In addition to examining regional variations in the framework, this study also aims to clarify the relationship between ESD and CCE, especially in light of UNESCO's recently launched Greening Education Partnership (UNESCO, 2024a).

The Process of Becoming a UNESCO Associated School

Globally, almost 10,000 educational institutions, mostly schools, are part of ASPnet. The network has existed for 71 years and now includes 181 national networks. It represents one of the oldest and largest school networks worldwide (UNESCO, 2025) and explicitly aims to provide "transformative education" (p. 5). To this end, it focuses on three thematic areas: Peace Through Global Citizenship Education (GCED), Education for Sustainable Development (ESD), and Intercultural Learning and the Appreciation of Cultural Diversity and Heritage. Schools must choose at least one of those three as their focal area (UNESCO, 2025). As a field closely related to ESD, CCE would fall under the second thematic area.

To become a UNESCO Associated School, institutions must go through an approval process. Although the steps vary slightly from country to country, the process generally involves an initial approval by the national coordinator, followed by a second approval by the International Coordinator of ASPnet (UNESCO, 2021). Once a school receives the status of a UNESCO Associated School, it remains part of the network for between three and six years (depending on the country before undergoing a re-evaluation process (UNESCO, 2021). To qualify for an ASPnet membership, schools are expected to commit to UNESCO's values and clarify how they integrate these values into their daily school life. Being a UNESCO Associated School also includes a system of accountability: schools are expected to submit an annual work plan as well as an annual report to their respective National Coordinators (UNESCO, 2021, p. 7).

In Germany, the approval process for becoming a UNESCO Associated School further consists of three steps. First, schools become interested, then collaborate, and, finally, are recognized. Before being able to move up a step, schools have to participate actively for at least two years on each step. Thus, it takes six years in total to become a recognized UNESCO Associated School, a process that aims to support schools' development towards aligning their communities with the goals of UNESCO (Netzwerk der UNESCO-Projektschulen in Deutschland, 2020). In Brazil, in contrast, becoming a UNESCO Associated School usually takes about two years (PEA UNESCO Santa Catarina, n.d.). The different processes for schools to join ASPnet are a first indicator of the variety in the reception of the ESD global script in the context of national UNESCO Associated Schools Networks. The following section examines whether, and how, this variation is also reflected in practices inspired by ESD.

Methods
Data Collection

To examine the selective adoption of the ESD for 2030 framework at UNESCO Associated Schools in Brazil and Germany, the analysis follows a two-step approach. First, I conduct a systematic review (Stansfield et al., 2016) of the content provided on 514 official school websites from UNESCO Associated Schools[1] in Brazil and Germany. Second, I use qualitative website content analysis (Mayring, 2014) to analyze four exemplary UNESCO Associated Schools–one established and one recent–in both countries. This two-step methodological approach aims to capture both broader trends across a large sample and detailed insights into the four illustrative cases.

For the systematic website content review (Stansfield et al., 2016), I gathered all associated schools available on the countries' official UNESCO ASPnet websites (PEA UNESCO Brazil, n.d., Deutsche UNESCO-Kommission, n.d.), in an Excel table. In the case of Brazil, the final Excel list consisted of 551, and in the case of Germany, of 223 UNESCO Associated Schools. My fluency in Portuguese and German allowed me to code all websites in their original languages to ensure that no information was lost in translation.

For the case study using qualitative website content analysis (Mayring, 2014), I selected four schools based on the time point of their accreditation as UNESCO Associated Schools to capture both established and recent cases. Because data on the date of accreditation was needed, the case study sample focuses on schools that explicitly mention their UNESCO membership online. For both Brazil and Germany, I chose the established school based on the earliest found accreditation date. Further, I purposively selected the recent UNESCO Associated Schools to exemplify the patterns that had emerged from the preceding systematic website content review. The theoretical framework of World Society Theory (Meyer et al., 1997) sharpened the focus of the coding process. In particular, I placed attention on identifying practices inspired by the global script of CCE and differentiating them from broader ESD-related practices.

Analytical Approach

I used school websites as a proxy for school practice because, as schools' official online representations, they reflect what schools intentionally choose to communicate about their activities and priorities (DiMartino & Jessen, 2018). In this context, searching institutional websites has been recognized as a reliable approach to accessing information not captured in bibliographic databases (Stansfield et al., 2016). For the case study, I chose the approach of qualitative content analysis that is well established within social sciences (Mayring, 2014).

I coded school websites manually using a structured coding sheet in Excel. To preserve the systematic procedure of content analysis (Mayring, 2014), I decided on the following deductive categories as part of my analysis: existence of a school website, federal state or region, type of administration (public or private), religious affiliation, alternative pedagogical concept, involvement in aid programs,

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[1] A small number of the organizations that are part of ASPnet are not schools. For the sake of readability and because of the small number of cases, the word *schools* is used throughout the paper.

identification as a UNESCO school, and explicit references to climate and sustainability (see Table A1 in the Appendix).

As part of the deductive analysis, I searched keywords manually on the websites and included terms such as "climate change," "sustainability," "environmental protection," and "environmental awareness," reflecting common terminology in climate change education. I further combined deductive categories with inductive analysis (Mayring, 2014) by observing recurrent patterns related to climate and sustainability integration. In this context, I developed the seven levels of CCE integration through an iterative process during coding (Mayring, 2014), identifying similar practices across schools. They represent the different dimensions of implementation of the global script of CCE (Meyer et al., 1997) at the school level.

I coded widely recognized alternative pedagogical models (e.g., Montessori, Waldorf, and special education) as schools with an alternative concept. Based on a notable cross-country difference in schools' engagement in international aid initiatives, I also included the presence of aid programs as a category. I excluded social media accounts from the analysis as including them would have required the development of different analytical criteria, which was beyond the scope of this study.

After the pilot testing of the system of categories, I revised the category system and the coding rules before continuing with the analysis. To further strengthen reliability, I revisited unclear cases and compared them with similar cases with the help of a coding memo to ensure consistency in the interpretation of categories across the dataset (Mayring, 2014).

Limitations

While this analysis does not capture implementation, it sheds light on how UNESCO Associated Schools integrate ESD for 2030 at the school level. Looking at the actual implementation would have required a more in-depth focus through ethnography or interviews. Examining website data, on the other hand, can give insight into the broader trends in the reception of ESD at UNESCO Associated Schools across Brazil and Germany. The analysis focused exclusively on ESD as the second focal area of ASPnet schools. The exclusion of 260, mostly public, Brazilian UNESCO Associated Schools due to nonexistent websites represents a further limitation, as it restricts the analysis to primarily private Brazilian ASPnet schools. As private schools generally have more financial resources to maintain a website and present their activities online in comparison to public schools (DiMartino & Jessen, 2018), this could further influence the patterns identified in this analysis.

For the case study, including the accreditation date as a case selection criterion introduces a potential selection bias, as schools that publicly highlight their UNESCO status may be more engaged with UNESCO activities than schools that do not publicly highlight their membership. While complete representability cannot be guaranteed, the four chosen cases do meaningfully exemplify the distinct national patterns identified in the large-N analysis.

Results

Distribution of Public and Private Schooling
The analysis of the websites shows differences between the distribution of public and private schooling in the context of UNESCO Associated Schools in Brazil and Germany. In Brazil, 59% (N=325) of the UNESCO Associated Schools listed online are private and 41% (N=224) are public. Almost half of the Brazilian ASPnet schools (47%), mostly public, do not have their own websites. Of 551 total schools, 260 were excluded from the analysis due to nonexistent websites. Regarding the school's website presence, a large discrepancy between public and private UNESCO Associated Schools in Brazil can be observed: While 87% of Brazilian private schools that are associated with UNESCO have their own websites, only 4.5% of Brazilian public schools that are part of ASPnet have a website presence. As a consequence, the further results of this analysis mainly reflect private UNESCO Associated Schools in Brazil, which is important to consider when interpreting cross-country differences in ESD implementation. In contrast, 92% of German UNESCO Associated Schools are public, and there were webpages available for all of them.

Geographical Distribution and School Characteristics in Brazil and Germany
As shown in the two official maps (Rede PEA-UNESCO, 2024; Deutsche UNESCO-Kommission, n.d.) in Figure 1, UNESCO Associated Schools are fairly evenly distributed across Germany relative to the country's size and population. In Brazil, however, they are concentrated in the more socioeconomically advantaged and urbanized Southeast coastal region, reflecting existing national inequalities (OECD, 2021). This difference may also be related to the countries' contrasting sizes: Brazil's land area is about 24 times larger than Germany's (World Bank, 2023). In Brazil, the states with the largest numbers of UNESCO Associated Schools are São Paulo (191), Rio de Janeiro (74), and Pernambuco (55). In this dataset, Pernambuco illustrates the disparity between public and private schools in terms of website visibility. Out of the 55 UNESCO Associated Schools in Pernambuco, websites could be identified for only four schools, all of which were private. The high number of UNESCO-Associated Schools in Pernambuco in this dataset is noteworthy, since the state is located outside more socioeconomically advantaged regions (e.g., São Paulo and Rio de Janeiro in the Southeast) in Brazil's poorer Northeast (OECD, 2021).

Figure 1: Distribution of UNESCO Associated Schools in Brazil and Germany
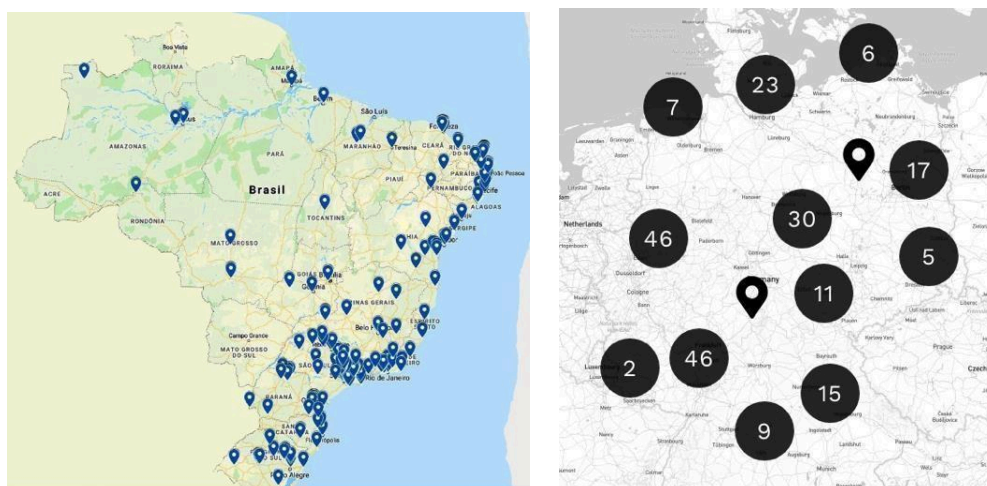
Source: Rede PEA-UNESCO (2024); Deutsche UNESCO-Kommission (n.d.)

In both countries, only a minority of UNESCO Associated Schools are religious (15% in Brazil, 3.6% Germany) or follow an alternative pedagogical concept (4.1% in Brazil, 1.8% in Germany). This is surprising since one could assume that schools with alternative concepts might be particularly interested in engaging with UNESCO's idea of transformative education. Interestingly, UNESCO is mentioned much more frequently on the websites of German (216 of 223) than Brazilian (176 of 294) ASPnet schools.

Involvement in International Aid Projects

A notable pattern is also that 55% of German UNESCO Associated Schools are involved in aid projects, some local but most of them international, a practice whose importance is emphasized in German ASPnet quality guidelines (Netzwerk der UNESCO-Projektschulen in Deutschland, 2020). The most common recipient countries appear to be Tanzania, Senegal, Rwanda, and Nepal. In contrast, in Brazil, only 9% of UNESCO Associated Schools mention aid programs on their websites, and if they do, it always involves national aid or donations in Brazil. These patterns also highlight broader priorities within ASPnet, which become clear when examining how schools position themselves within UNESCO's three thematic areas.

The Relevance of ESD Within ASPnet's Three Thematic Areas

The most central aspect for UNESCO schools, particularly in Brazil, but also noticeable in Germany, is peacekeeping through intercultural exchange. This aligns with UNESCO's history of being created in 1945, immediately after World War II, to promote peace and prevent future wars (UNESCO, 2020). Overall, this analysis shows that among ASPnet's three thematic areas, area 2 (ESD) seems to be the least relevant.

Patterns of CCE Integration Across UNESCO Associated Schools in Brazil and Germany

What stands out in both countries is that the presence of climate and environmental education initiatives on schools' websites varies significantly. It ranges from not being mentioned at all to being mentioned superficially in the context of single activities to being addressed at a whole school level. In comparison, UNESCO Associated Schools in Germany mention climate and/or sustainability much more frequently (89%) than Brazilian schools (51%). In contrast, Brazilian UNESCO Associated Schools have a stronger focus on the topics of socioemotional learning and bilingual education. Those differences are possible since UNESCO Associated Schools are, although encouraged to incorporate several, only required to incorporate at least one of UNESCO's focal areas (UNESCO, 2025).

It is noteworthy that in both Brazil and Germany, the integration of CCE at the curricular level is limited, at least based on what is presented on the analyzed schools' websites. This clearly shows that being a UNESCO Associated School does not necessarily involve the prioritization of CCE. What UNESCO Associated Schools share are their values, such as respect for diversity, democracy, and international solidarity (UNESCO, 2021). In terms of ESD-related actions, on the other hand, there is a high variety. Based on the analysis, I identified seven distinct levels of CCE integration, which are summarized below (and defined in detail in Table B1 of the Appendix):

Levels of Integration of CCE
1. Curricular: integration across subjects or dedicated new subjects
2. Extracurricular: working groups and clubs (e.g., sustainability, UNESCO)
3. Organizational: school-wide practices such as gardens, energy-saving, recycling
4. Civic-political: climate parliament, student cooperative, and representation
5. Community: partnerships with local farms, NGOs, environmental organizations
6. Governance: mission statements, accreditation programs such as Eco-Schools
7. Special Initiatives: UNESCO Project Days, climate breakfast, clean-up day

The selective adaptation of the ESD script becomes visible in which levels schools choose to emphasize. Therefore, examining the variety of different ways of integrating climate and sustainability into schools more closely can provide crucial insights into the varied integration of the ESD script. To illustrate how these different levels of integration manifest in practice, the following case studies of four UNESCO Associated Schools in Brazil and Germany highlight concrete examples of how climate and sustainability are embedded into school structures. These levels demonstrate how schools selectively adapt different elements of the ESD for the 2030 global script, reflecting both the flexibility of global scripts and the dynamics of policy diffusion and reception.

Case Analysis of Four Exemplary UNESCO Associated Schools in Brazil and Germany

The in-depth analysis of four UNESCO Associated Schools in Brazil (Colégio Magno/Mágico de Oz, Julio Verne Centro de Estudos) and Germany (Helene Lange Gymnasium, Gutenberg Gymnasium) illustrates and deepens the patterns identified in the broader website analysis, especially regarding the ways that climate and sustainability are embedded into school structures. While all four schools address CCE, they differ in what aspects they emphasize.

Colégio Magno/Mágico de Oz (Brazil, São Paulo, SP, ASPnet since the 1990s) can be seen as a pioneer model for a sustainable school at an organizational level. Its initiatives range from solar panels to its own biogas production to organic gardens and composting. One of its school units produces 100% of its electricity from solar panels, making Magno a rare case of an energy self-sufficient school. It highlights a holistic vision of learning covering academic, social, ethical, and aesthetic dimensions. Further, it sends student representatives from the school's climate conference working group regularly to the Conference of the Parties (COP) conferences, which, according to its website, is the only Brazilian school to do so. Alongside this organizational commitment, it also involves students in extensive environmental projects such as monitoring the water quality of a nearby river.

In contrast, Julio Verne Centro de Estudos (Brazil, Diadema, SP, ASPnet since 2017) stands out through its strong cultural focus, offering an exceptionally high variety of different cultural activities which culminate in an annual performance that follows a theme related to the SDGs. It addresses climate and sustainability themes mainly in the context of its community-oriented educational city project initiated in 2014, which includes tree planting, street clean-ups, and a sustainable clothing market organized by parents in the school's neighborhood.

Helene-Lange-Gymnasium (Germany, Hamburg, ASPnet since 1954) illustrates the case of an established ASPnet school. As Germany's oldest UNESCO school, it has been part of the network for 70 years and shows a particularly high level of institutionalization of sustainability. Since 2012, the bilingual school has also been certified as a climate school, a status sustained through the work of its UNESCO climate working group, which organizes project days, tree-planting actions, and other school-wide climate initiatives. The institutionalization of UNESCO is also illustrated by the student representatives' meetings, which consist of two UNESCO representatives from each class, ensuring that the values of UNESCO are actively embedded across the student body. Further, the school offers UNESCO as an elective subject in grade 9 and cooperates with over 210 other German UNESCO schools.

Gutenberg-Gymnasium (Germany, Bergheim, Nordrhein-Westfalen, ASPnet since 2017, recognized since 2021) represents the profile of a more recent ASPnet member that has a strong culture of institutionalizing UNESCO's values through different thematic working groups. These include a *Green Team*, an Erasmus+, and a human rights working group, as well as a teachers-led school development team guided by the values of UNESCO. Further, the school explicitly references Agenda 2030

through its "GuGy Goes Green 2030" campaign, which frames sustainability as a priority for its long-term development. It cooperates on sustainability both with partner schools from Europe, financed by Erasmus+[2], as well as with local environmental NGOs, municipal actors, and climate institutes.

Taken together, these case studies provide insights not only into the contrast in ESD for 2030 between Brazil and Germany but also into the trajectories of older versus newer UNESCO schools. In Brazil, Magno emphasizes the organizational level, complemented by civic/political and extracurricular initiatives, while Julio Verne focuses primarily on the community level. In Germany, Helene Lange integrates the curricular, extracurricular, civic/political, and organizational levels, whereas Gutenberg emphasizes the extracurricular level, complemented by governance, organizational, and community dimensions. Interestingly, the newer schools in both contexts (Julio Verne and Gutenberg) show more explicit references to the SDGs and Agenda 2030, suggesting that recent members of ASPnet are more likely to frame their activities in line with global agendas. The two German schools share common practices such as institutionalizing sustainability through working groups and maintaining school partnerships. The two Brazilian schools, on the other hand, focus on sustainability at an organizational and community level alongside a stronger focus on bilingual learning and cultural projects. This diversity highlights the flexibility of UNESCO's ESD for 2030 framework, as summarized below in Table 1. While it can be adapted to different institutional needs, it also results in CCE remaining unevenly prioritized within ASPnet.

Table 1.
ESD 2030 in UNESCO Associated Schools in Brazil vs. Germany

Dimension	Brazil	Germany
Process of becoming an ASPnet school	2 years	6 years (multi-stage process)
Framework	Four pillars of education as defined in UNESCO's *Learning: The Treasure Within* report (Delors, 1996)	Six pillars of education as defined in the national Six Pillars Framework (Netzwerk der UNESCO-Projektschulen in Deutschland, 2020)
Implementation of ESD	Emphasis on socioemotional learning and bilingual education	Emphasis on climate/sustainability and international aid cooperation
Predominant Level of Integration of CCE	Organizational, community, and extracurricular; implemented through community and cultural projects	Extracurricular, organizational, special initiatives; institutionalized through working groups and school partnerships

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[2] Erasmus+ is the EU's programme to support education, training, youth and sport in Europe (European Commission, n.d.).

Dimension	Brazil	Germany
Curricular Integration of CCE	Limited; mostly project-based	Limited, mostly in elective subjects

Discussion

The analysis of UNESCO Associated Schools in Brazil and Germany clearly demonstrates that ESD is a very broad concept that can, but does not have to include CCE. On the one hand, the broadness of ESD as a global script allows its selective adoption as described by Steiner-Khamsi (2025), which is probably one of the reasons why the concept was able to spread worldwide. On the other hand, this "pick what you want" approach results in a lack of accountability for CCE and the risk of ESD being used performatively as a way to gain legitimacy through aligning with the global script (Steiner-Khamsi, 2025). This loose but non-committal relationship between ESD and CCE explains how ESD may have become a global phenomenon (UNESCO, 2020), and at the same time, there is still a widespread lack of CCE (UNESCO, 2024b). These findings further align with Cuban's (1998) argument that schools change reforms as the interpretation of the ESD for 2030 framework is highly shaped by different school-level practices.

The different proportions of private schools between the two countries reflect the different roles of private schooling in their education systems: In Brazil, historically, there have been significantly more private than public UNESCO Associated schools (PEA UNESCO 2017) even though in recent years, National Coordinators made significant efforts to include more Brazilian public schools in ASPnet (PEA UNESCO 2017, p. 20). Further, in Brazil, around 20% of schools are private (Education International, 2024). Parents choose private schools as they provide a greater number of resources and opportunities (Nascimento et al., 2022) or as an investment in social mobility (Costa Filho & Rocha, 2020). In Germany, while private schooling has increased, it accounts for only around 9% of all schools (Autorengruppe Bildungsberichterstattung, 2024, p. 58).

In this website-based sample, the distinct showcase of climate and sustainability initiatives in Brazil compared to Germany could be related to socioeconomic and cultural factors. Because the Brazilian sample of the content analysis consists predominantly of private schools, their websites can be seen as a reflection of market-oriented priorities. Even though Brazil has a longstanding tradition of environmental activism (Alonso et al., 2010), CCE may compete with other priorities that might be perceived as more attractive to families investing in private education. Brazil is characterized by multiple cultural identities, shaped by its colonial history (Bosi, 1992), and influenced by, among others, different Indigenous and African cultures (da Silva Araujo, 2024). The colonial legacies still present in the country (Bosi, 1992) might explain why the school websites analyzed largely reflect a standardized and uniform model of modern schooling. In Germany, by contrast, the UNESCO Associated Schools in the sample represent predominantly public schools following education norms and values that have been shaped by a national tradition of Environmental Education (Bolscho & Hauenschild, 2006). These sample

differences and distinct contexts may help explain why, in the studied sample, German UNESCO schools more frequently integrate sustainability and climate-related activities.

For most schools in both countries that address CCE across the seven different levels of integration identified, it remains a superficial engagement, thus representing a case of "discursive borrowing" (Steiner-Khamsi, 2025, p. 19). This can also be seen in the global Eco-Schools network, which follows UNESCO's ESD for 2030 framework (Foundation for Environmental Education, n.d). A baseline study from Mongolia (Pizmony et al., 2014) showed no significant differences between Eco-schools and regular schools "in terms of greater sensitivity towards social, cultural or economic inequalities" (p. 15), with the difference mostly lying in environmental-themed after-school activities. This demonstrates how the effects of CCE remain limited when only addressed superficially.

Beyond school-level practices, this lack of prioritization of CCE is also visible at the policy level. The Green School Quality Standard, published in 2024, is not included in the UNESCO Associated School Networks' most recent strategic document. This document provides a comprehensive collection of ideas on how to integrate climate and sustainability in schools and explicitly states that its target group is school accreditation programs such as ASPnet. However, the UNESCO Associated Schools Network Strategic Framework for Action, published in 2025 (UNESCO, 2025), does not mention the Green School Quality Standard even once. This is surprising given the fact that the Greening Education Partnership already encouraged ASPnet member schools to become Green Schools in 2024, closely after the publication of the Green School Quality Standard (UNESCO & Greening Education Partnership, 2024). Not including the Greening Schools Quality Standard at the center of ASPnet's mission statement thus represents a missed opportunity for UNESCO to prioritize Climate Change Education.

In the context of the analysis of UNESCO Associated Schools in Brazil and Germany, some CCE initiatives stood out by going beyond superficial engagement. For example, one school offered an eco-profile class for high school students that combines the subjects of ecology and economics. Others encouraged the creation of a student-led school-cooperative on environmental protection or engaged in collaboration on sustainability initiatives with their wider communities. It is striking that none of the analyzed schools appeared to challenge the underlying ideology of the modern educational paradigm (Rappleye et al., 2024).

Instead, the analysis of UNESCO Associated Schools in Brazil and Germany demonstrates that the selective adoption of ESD in schools from both countries across the network largely remains within the frame of a highly individualistic learner-centric pedagogy, strongly influenced by the current dominant form of schooling (Rappleye et al., 2024). The UNESCO Associated Schools Network could strengthen its commitment to sustainability by opening up to educational approaches that diverge from the 'modern Western' model of education shaped by standardization and the idea of rational 'progress'. This could include, for example,

promoting practices of relationality (Duvvuri, 2025) and interdependence, as well as learning about sustainability approaches grounded in different cultural frameworks (Rappleye et al., 2024). Such increased cultural openness and reflectivity might also allow the network to engage more critically with how the ESD for 2030 framework is shaped by Western modern schooling traditions, and to reflect on ESD's complicity in reproducing colonial legacies, as pointed out by critical scholarship on ESD (Duvvuri, 2025; Klees, 2024).

This paper highlights patterns in the UNESCO Associated Schools network and raises questions for further research, rather than providing definitive conclusions on the integration of CCE within ESD for 2030. Overall, the findings reveal both the limits and the potential of the UNESCO Associated Schools network in promoting CCE that contributes meaningfully to increasing environmental sustainability.

Conclusion
This study analyzes how UNESCO Associated Schools selectively adopt ESD, and to what extent this adoption includes CCE, raising questions about the capacity of the ESD for 2030 framework to promote CCE. In line with the theory of selective adoption, the adoption of ESD varies significantly between Brazil and Germany. I find that in Brazil, private schools play a significant role, and there is a focus on socioemotional learning and bilingual education. In contrast, German UNESCO Associated Schools are usually public, more frequently address climate and sustainability on their websites, and prioritize international aid projects. These findings reflect wider differences in the significance of private schooling between the two countries as well as the market-driven nature of the private education sector. The analysis also suggests that the implementation of ESD for 2030, as represented on schools' websites, is predominantly culturally homogeneous and aligned with Western models of schooling.

It is striking how much schools across both countries differ in terms of whether their selective adoption of ESD includes CCE. In this context, I identify seven different levels of CCE integration, ranging from the curricular and extracurricular level over organizational, civic-political, and community levels to the levels of governance and special initiatives. Further, even at those distinct levels, the depth of integration of CCE varies.

Together, these findings demonstrate that, while UNESCO Associated schools have to align with UNESCO's values, they do not necessarily need to prioritize climate change education and environmental sustainability. Thus, the findings illustrate the broadness of ESD for the 2030s' understanding of sustainability. While there has been increased attention to CCE in the context of UNESCO's Greening Education Partnership, those Greening Education efforts are not yet being reflected in ASPnet, representing a missed opportunity to prioritize CCE in the network.

As one of the first comparative content analyses of Climate Change Education in the context of the UNESCO Associated Schools Network, this study raises several

questions to be explored in future research: How can UNESCO strengthen the role of its Associated Schools Network in promoting CCE? How can the ASPnet learn from other school networks, as well as from different cultural approaches to sustainability? And to what extent do the changes introduced by CCE actually lead to increased environmental awareness and sustainability? Future research could examine those questions using methods such as ethnography and interviews to capture what the implementation of CCE looks like in practice. This would complement the existing theoretical contributions of the relationship between ESD and CCE, highlighting the impacts at the community level.

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Appendix A

Table A1

Structure of Coding Sheet Used for Large-N Website Analysis

School name	Website	State	Administration (public/private)	Religious affiliation	Alternative educational concept	Aid program	Mentions UNESCO	Mentions climate/ sustainability
				Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

Note. This table illustrates the structure of the coding sheet. The full dataset includes 774 schools (551 in Brazil and 223 in Germany) and is available upon request.

Appendix B

Table B1

Definitions of the Seven Levels of Integration of Climate Change Education (CCE)

Level	Description	Illustrative example
1. Curricular	Integration of climate change into existing subjects or the creation of new subjects on climate change.	Elective subject on the economy and sustainability
2. Extracurricular	Integration of climate change into extracurricular activities.	Sustainability and climate-related working groups, extracurricular projects
3. Organizational	Integration of climate change into school-wide practices.	School gardens, own honey production
4. Civic-political	Integration of climate change into the school's political structures.	Student councils on climate change
5. Community	Integration of climate change into projects and initiatives that extend into the wider communities of the schools.	Cleaning up the neighborhood
6. Governance	Integration of climate change in the school's mission or vision statement, or active engagement of school leadership in efforts to make the school more sustainable.	School development team consisting of teachers that follows UNESCO pillars with a focus on sustainability
7. Special Initiatives	Integration of climate change into special initiatives that only take place occasionally.	UNESCO project days.