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Article

The role of online PD in enhancing Ecuadorian teachers' knowledge of SEL in K-12 classrooms

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Abstract

Social emotional learning (SEL) has gained prominence in Latin America as a crucial component in holistic student development within increasingly pluralistic societies to support students' academic performance and well-being. This qualitative case study investigated the role of a three-week online professional development (PD) course in enhancing Ecuadorian K-12 teachers' understanding of SEL concepts and integration in culturally diverse classrooms. Data was collected from participants' tasks submitted immediately before starting the course (n=52), at the end of week 2 (n=35), and at the end of the course (n=30). Data were analyzed using thematic analysis (Braun & Clarke, 2006). The findings reveal significant improvements in teachers' understanding of SEL over time as teachers' SEL definitions expand from a basic focus on emotional regulation to a comprehensive view that incorporates social, cognitive, and behavioral aspects and their positive long-term impact on students' lives. However, four major challenges identified in their SEL implementation related to student behavior and engagement, teacher preparedness to address learners' needs, and the role of external socio-cultural factors on SEL implementation. This study highlights the need for PD opportunities to effectively embed SEL within intercultural and diverse educational contexts, offering insights for curriculum development and SEL strategies in multicultural educational settings. The study recommends integrating SEL into PD initiatives tailored for diverse contexts to promote inclusive education This research study offers insights into addressing pluralism, student success, and the creation of positive classroom environments in multicultural contexts.

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Social emotional learning; professional development; diverse contexts; multicultural education; international education

Introduction

Social emotional learning (SEL) has recently emerged as a critical component for fostering holistic student development in Latin America (Lumpkin, 2023; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2021). SEL encompasses a range of competencies that contribute significantly to students' academic and personal success (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2025; Durlak, 2015).

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Research highlights that the integration of SEL into the classroom improves students' emotional and social skills, enhances academic performance, and reduces behavioral issues (Kendziora & Yoder, 2017; Ramirez et al., 2021). Increasing levels of migration, health and climate related emergencies, low economic growth in the region, and the impact of the COVID-19 pandemic exacerbated the need for educational initiatives that help students develop the skills needed to thrive in constantly changing pluralistic societies (Casma, 2015; La Hora, 2023; United Nations Children's Fund [UNICEF], n.d.). Aligned with international efforts that emphasise the importance of emotional support in education, the Ministry of Education in Ecuador included the promotion of social and emotional competencies (SECs) within the K-12 curriculum to create educational environments that prioritise academic learning and the social and emotional well-being of students (Registro Oficial, 2023). However, as the emphasis on SEL grows, Ecuadorian teachers have expressed the need for professional development (PD) opportunities that equip them with the knowledge and skills to implement SEL effectively (Burgin et al., 2021).

Online PD has emerged as a promising approach to meet this need, offering flexibility and accessibility for educators seeking to deepen their understanding of SEL (Bragg et al., 2021; Papadakis et al., 2023). Training opportunities designed to provide teachers with theoretical insights and practical tools to integrate SEL into their teaching practices are crucial for maximising the benefits of SEL for students (Wilde, 2023). Given the Ecuadorian national efforts and the growing demand for SEL integration, this study explores how a three-week online PD course supports Ecuadorian K-12 teachers in enhancing their understanding and implementation of SEL within diverse classrooms. Through a qualitative analysis of teachers' reflection journals, this research provides insight into how online learning environments can foster meaningful professional growth and enhance SEL integration into instruction. Specifically, this study aims to: (1) examine how teacher participation in an SEL PD course contributes to their understanding of SEL concepts and strategies; (2) explore how the course influences their instructional practices; and (3) identify the challenges teachers face in implementing SEL strategies. These findings contribute to the global discourse on teacher training and PD design for educational equity in multicultural contexts.

SEL in K-12 Education

SEL is a comprehensive framework that encompasses essential SECs and fosters life skills that enhance K-12 students' academic performance, emotional well-being, and social interactions (Durlak, 2015; Kendziora & Yoder, 2017). According to the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2025), SEL is defined as the process through which individuals acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

As educators increasingly recognise the importance of educating the whole child, SEL continues to gain prominence as a key component of comprehensive K-12 education reform efforts (Mels, 2023; Schonert-Reichl, 2017). Research indicates that students who participate in SEL programs exhibit improved academic performance, better emotional regulation, increased prosocial behaviors, and reduced behavioral problems (Bryan, 2022; Durlak, 2015). The integration of SEL into K-12 instruction fosters a safe, inclusive, and engaging learning

atmosphere conducive to academic and personal growth. SEL instruction leads to significant improvements in students' attitudes towards school, social behaviors, and stress management, all of which are critical for their overall development and success (Yoder & Gurke, 2017).

Efforts for SEL Integration in Ecuador

SEL has been recently included in the Ecuadorian curriculum to enhance empathy, understanding, and inclusivity among Ecuadorian students from various cultural, racial, and socio-economic backgrounds (Registro Oficial, 2023). Ecuador's rich cultural and linguistic diversity is evident through the many languages spoken across the nation, including Castilian spoken by 98.6% of Ecuadorians and 14 indigenous languages, such as Quechua, Shuar, and Waorani (International Work Group for Indigenous Affairs [IWGIA], 2023). The reported country's population consists of 77.5% mestizos (mixed Amerindian and white), 7.7% Amerindian, 7.7% Montubio, 4.8% Afroecuadorian, 2.2% White, and 0.1% others (Instituto Nacional de Estadísticas y Censos [INEC], 2022). The cultural diversity is also observed in the influx of approximately 871,000 immigrants due to ongoing corruption, crime and political violence in the region (Jokisch, 2023).

Recognising the critical role that enhancing the development of students' SECs play in overall student development, the Ecuadorian government recently integrated SEL into its national education strategies (La Hora, 2023). This shift is part of a broader effort to address the challenges exacerbated by the COVID-19 pandemic, which highlighted the need for comprehensive instructional approaches that address mental health and well-being (Ares et al., 2021; Burgin et al., 2021; Caarls et al., 2021; CASEL, 2025; Mels, 2023; Middleton, 2020). Recent international forums and strategic plans underscore the necessity of integrating SEL into the educational framework to promote equity and inclusive education, particularly in post-pandemic recovery efforts (UNESCO, 2021; UNICEF, n.d.). Studies across Latin America documented how COVID-19 disrupted learning environments, widened social inequalities, and of integrating SEL into educational responses (Ares et al., 2021; Caarls et al., 2021). In particular, Latin American teachers are now expected to promote SECs among their students, often without adequate preparation (Coli et al., 2024; Caarls et al., 2021; Mels, 2023). Internationally, post-pandemic research revealed how resilience, learner engagement, and reflection are fostered in online settings (Deniz & Yakut-Özek, 2023; Derakhshan & Fathi, 2024). In European contexts, Papadakis et al. (2023) and Karakose et al. (2023) explored the role of cloud-based technologies and digital leadership in shaping emotionally informed instruction. Research reinforces the need for accessible, culturally responsive SEL PD opportunities to equip educators with the tools to approach education holistically (Bryan, 2022).

Teachers Need Preparation

The successful implementation of SEL initiatives in Ecuador's education system hinges on the preparation and ongoing training of teachers (Kendziora & Yoder, 2017). Current educational reforms in Ecuador emphasise the importance of teachers being subject matter experts and adept at understanding and addressing the emotional and social needs of their students (Mels, 2023). These efforts represent a significant shift in educational priorities within Ecuador, reflecting a global trend towards recognising the importance of SECs as a foundation for lifelong learning and well-being. As Ecuador supports the SEL integration into instruction, there is a pressing need for targeted teacher training programs that equip educators with the

skills and knowledge to foster students' SECs effectively (Burgin et al., 2021).

To meet these demands, Ecuadorian teachers require robust support systems, including access to specialised SEL training, resources, and continuous PD opportunities. Such support is critical to help teachers develop the capacity to create emotionally supportive classroom environments, implement SEL curricula, and engage in reflective practices that enhance their teaching strategies (Roffey & McCarthy, 2013). International organisations note that without adequate preparation, teachers may struggle to effectively integrate SEL into their daily instructional practices, potentially undermining the broader educational goals set by recent reforms (Bryan, 2022). Thus, current educational changes in Ecuador underscore the need for comprehensive teacher preparation and support mechanisms to ensure the successful promotion of SECs across the nation's schools.

Theoretical Framework

This study used the Transformative Learning Theory (TLT; Mezirow, 1991) as a framework to understand how these teachers' written reflections indicate a shift in their knowledge of SEL. Mezirow's theory focuses on how individuals change their frames of reference through critical reflection on their experiences. Transformative Learning Theory suggests that learning occurs through a process where individuals critically examine their existing beliefs, values, and assumptions, leading to a profound change in their perspectives (Mezirow, 1991). This transformative process involves phases such as experiencing a disorienting dilemma, engaging in critical reflection, and ultimately achieving a perspective transformation. The PD course offered to participants aimed to enhance and transform their SEL understanding and practices. Mezirow's (1991) theory aligns with the study's objective of exploring how teachers' understanding and use of SEL evolved through reflection and practice, revealing how critical engagement led to changes in teachers' SEL understanding, beliefs, and instruction. Teachers' responses throughout the course reflect key phases of transformative learning, including grappling with new concepts, re-evaluating prior assumptions, and adapting instruction accordingly.

Method

A qualitative case study was selected for its effectiveness in uncovering the meaning of interactions within a specific context (Creswell & Guetterman, 2019). This case study investigates the role of a three-week online PD course on enhancing Ecuadorian teachers' understanding of SEL concepts and strategies to support the integration of SEL in K-12 classrooms, enabling an in-depth exploration of their experiences and perceptions. Specifically, the study aims to understand how participation in the SEL online PD course influenced and informed K-12 Ecuadorian teachers' instructional practices. Additionally, this research study seeks to uncover the challenges teachers perceive in implementing SEL in their current practices. The following research questions guided the study:

1. How does teacher participation in a three-week online SEL PD course enhance teachers' understanding of SEL concepts and strategies?
2. How does the online SEL PD course influence teachers' instructional practices?
3. What challenges do teachers identify when implementing SEL strategies in their classrooms?

Professional Development Course

The three-week online PD course provided educators with foundational knowledge of SEL to support its integration in K-12 classrooms. Participants completed readings and engaged in reflective tasks weekly. Each module included a variety of reading articles, SEL strategies modelling videos, and implementation tasks. Module 1 introduced core SEL concepts and the five CASEL competencies; Module 2 focused on the benefits of SEL integration in the classroom; and Module 3 guided teachers in selecting and applying SEL strategies aligned with their instructional goals. The course was delivered asynchronously by a member of the research team, a former Uruguayan EFL teacher with expertise in SEL PD design and delivery.

Teachers defined SEL and its significance in their context three times throughout the course, before accessing Module 1, at the end of Module 2, and after Module 3. Task iteration gave participants the opportunity to reflect, review, and expand their understanding of the SEL framework. Participants also selected a strategy from each module, implemented it in their teaching, and submitted a weekly journal reflection discussing what worked well and areas for improvement. Feedback was provided utilising a four-point rubric (0 = not present; to 3 = fully present) assessing course content engagement, required task components, and practice evidence. Participants received individualised feedback after each of their submissions addressing the explicit and intentional integration of SEL, student centeredness, positive classroom environments, teachers' role in students' SECs development, and implications to their instructional practices.

Participants

This study was facilitated by the leadership of a private K-12 urban school in Ecuador with over 60 years of history and approximately 800 students. Their interest to provide SEL PD to their faculty responds to recent educational mandates that require Ecuadorian educators to prioritise SEL integration. This study employed purposeful convenience sampling. The school leadership invited all school staff to participate in a three-week online SEL PD course. Participants were recruited based on the following criteria: they were current educators or classroom teachers within the institution, willing to participate fully in the three-week PD course, and committed to engaging with its reflective and practical components. This sampling approach was appropriate given the study's aim to explore in-depth the perspectives of teachers already engaged in mandated SEL implementation efforts.

A total of 65 teachers enrolled in the SEL PD course. At this school, all classrooms are equipped with teacher computers, LCD projectors, student desks, and other teaching supplies. Of the 65 teachers enrolled in the three-week online SEL course, 52 (n= 40 female; n= 12 male) accessed Module 1. Participants' teaching experience ranged from 1 to 25 years (n=15 1-5 years; n=20 5-10 years; n=13 10-15years; n=2 15-20 years; n=5 over 20 years).

Data Collection and Analysis

Prior to data collection, ethical approval for this study was obtained from the Institutional Review Board (IRB). All participants provided informed consent, understanding that their participation was voluntary and their information would remain confidential. Following this, data were collected through two qualitative instruments: open-ended SEL definition prompts and weekly reflection journals. These were submitted at three points during the PD course:

immediately before starting Module 1 (n = 52), at the end of Module 2 (n = 35), and immediately after completing Module 3 (n = 30). The SEL definition prompts asked participants to describe their understanding of SEL, providing insight into how their conceptualisations evolved throughout the course. Weekly reflections were guided by prompts asking participants to describe the SEL strategies they implemented, what worked well, challenges encountered, and observed outcomes. Both qualitative instruments were used to capture the development of participants' SEL knowledge and the practical application of SEL strategies over time after participating in the SEL PD course.

Data were analyzed using thematic analysis, following the six-phase process (data familiarisation, generation of initial codes, theme search, reviewing themes, defining themes, and reporting) (Braun & Clarke, 2006). The emerging codes generated information to assess teachers' perceptions and understanding of SEL concepts. Three researchers collaboratively coded all data collected, meeting weekly to discuss initial codes and potential themes derived from these codes. This collective approach helped identify and correct potential biases. The iterative process served to reach a consensus on themes, enhancing the researchers' ability to interpret the findings and strengthening the study's overall validity and reliability. Visual summaries and quotes from participants' reflections were used to support and deepen the thematic findings. This triangulation between frequency analysis and qualitative excerpts helped strengthen the narrative and reinforce the validity of emergent themes.

Researcher Positionality

The research team consisted of three bilingual Hispanic female educators with experience in designing and facilitating SEL PD in both the United States and Latin America, including Ecuador, Guatemala, and Uruguay. One member of the team, an EFL teacher originally from Uruguay, facilitated the PD course. Her ongoing doctoral research centres on SEL implementation in Uruguayan schools, contributing to the course's design and contextual relevance. Another researcher, originally from Ecuador, maintained close professional ties to the country's education sector and played a key role in fostering collaboration with school leadership, which helped facilitate access and participation. As researchers operating across national contexts, the team recognised a potential dichotomy in systemic attitudes towards SEL and teacher training in different countries. This awareness informed a reflexive stance throughout the research process. Weekly coding discussions, use of a shared checklist (Tong et al., 2007), and peer debriefing sessions were used to mitigate individual bias and enhance consistency in data interpretation. The team engaged in ongoing reflexivity, acknowledging how their own cultural and professional backgrounds may influence analysis, and were intentional to balance insider and outsider perspectives when interpreting participants' responses.

Results

Three themes were identified: (1) Teachers' understanding of SEL concepts and strategies over time; (2) Perceived benefits of integrating SEL into instruction; and (3) Perceived challenges in the implementation of SEL practices.

Teachers' Understanding of SEL Concepts and Strategies Over Time

As part of the weekly assignments, participants were asked to define SEL immediately before having access to Module 1, at the end of Module 2, and after Module 3. Analysis of their responses revealed substantial differences in their SEL definitions over time. Findings indicate increased teachers' understanding of SEL from a basic focus on emotional regulation to a comprehensive and holistic view that incorporates social, cognitive, and behavioral aspects and their positive long-term impact on students' lives.

Data collected from 52 participants before Module 1 reveals teachers (n = 42) defined SEL primarily as a means to help students manage emotions and adapt to their environment. The SEL definitions collected before participants began the PD focus on self-management, which is one of the five SECs identified by CASEL (2025). One participant defined SEL as 'people's way of reacting and adapting to the environment.' Another participant said 'SEL is the ability to manage the emotions we have in everyday situations.' Similarly, other teachers agreed that SEL refers to 'skills that help students control their emotions' and 'the process through which students learn to better adapt to the school environment.' Other participants (n = 10) defined SEL as characteristics that make individuals who they are. One participant noted, 'SEL refers to the ways people are and who they become.' These definitions indicate participants had basic understanding of SEL before starting the PD focusing on emotion management and showing limited mention of other SECs. SEL was defined very broadly, lacking detail and depth. Figure 1 provides a visual summary of the most frequently used words in teachers' SEL definitions submitted before Module 1, with larger fonts indicating higher word frequency. 'Emotions' (n = 74) was the most frequent term used to define SEL, followed by a non-specific mention of 'student skill development' (n = 53), 'students' interpersonal skills' (n = 35), 'ways of being' (n = 27) and 'learning process' (n = 26). Other terms such as 'making decisions,' 'behavior management,' 'personal characteristics,' 'academic performance,' and 'school environment' appear from 21 to at least 10 times in the dataset. This visual highlights participants' emphasis on the emotional component of SEL and lack of depth in their definitions.

Figure 1. Word frequency summary of teachers' SEL definitions before PD

As the PD progressed, teachers increasingly acknowledged the cognitive and social dimensions of SEL, indicating deeper understanding of SEL as multifaceted and integral to students' development. Data collected from 35 participants after Module 2 indicate a shift from recognising SEL as emotion management towards a comprehensive and practical framework that includes empathy, decision-making skills, relationship building, and SEL strategies to be implemented in the classroom. A teacher noted, 'SEL addresses cognitive, emotional, and attitudinal development involving reflection, self-control, making appropriate decisions, considering individuality and social notion.' Many participants (n = 24) defined SEL referring to self-awareness, social awareness and decision-making competencies. One teacher shared, 'SEL includes emotional control, empathy, decision-making, and social awareness, which are essential for everyday life.' Another teacher agreed that 'SEL helps students manage emotions, make informed decisions, and interact effectively with others.' Findings reflect the teachers' recognition of SEL as a process that goes beyond emotional management to include interpersonal skills and ethical decision-making, highlighting the importance of healthy relationships.

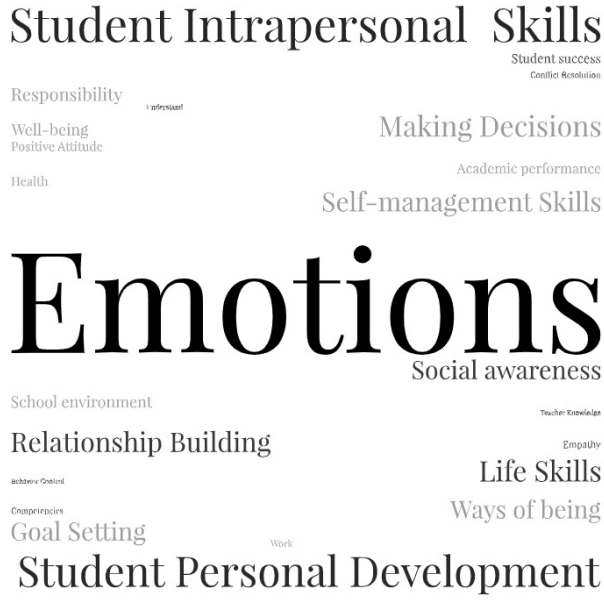

Figure 2. Word frequency summary of teachers' SEL definitions after Module 2

Some participants (n = 6) emphasised the practical application of SECs in the classroom and its consequences on students' lives. For example, a teacher said that 'implementing SEL in daily instruction helps students internalise and use these skills in their daily lives.' Additionally, a few participants (n = 5) mentioned the key role of SEL in students' holistic development explaining that SEL 'encompasses emotional and social development through a holistic approach to learning.' Thus, data collected after Module 2 illustrate teachers defined SEL emphasising its multifaceted nature and practical implications in the classroom. Figure 2 provides a visual summary of the word frequency in participants' definitions of SEL after completing Module 2. 'Emotions' remains the most frequent word (n = 78), indicating participants' continued emphasis on the emotional component of SEL, followed by 'students'

intrapersonal skills' (n = 74) and 'student personal growth' (n = 67). Higher frequency of terms such as 'life skills' (n = 25), 'making decisions' (n = 25), 'relationship building' (n = 23), 'self-management skills' (n = 22), indicate better understanding of SEL as encompassing skills that extend beyond the classroom. Additionally, the more prominent use of 'social awareness' (n = 20), 'goal setting' (n = 20), and 'well-being' (n = 15) suggests participants' deeper focus on personal growth and holistic development.

By the end of the SEL PD, at the end of Module 3, participants' SEL definitions (n = 30) expanded to acknowledge all other SECs, the role of SEL in fostering holistic development, and its significant impact on academic and personal growth. Participants (n = 23) provided more comprehensive and detailed definitions of SEL definitions referring to self and social awareness, self-management, conflict resolution, relationship building, and decision-making skills. Teachers referred to SEL as a 'continuous process' through which people 'learn to understand and manage their own emotions, create healthy relationships with others, make effective decisions, and achieve goals.' Participants' responses (n = 13) illustrate the increased recognition of the importance of SEL integration into daily instruction. Some participants shared, 'SEL must be integrated into the school curriculum to create supportive classroom environment and school culture.' A participant explained, 'fostering SECs daily promotes more inclusive and welcoming learning environments for all students.'

Figure 3. Word frequency summary of teachers' SEL definitions at the end of the PD

Furthermore, participants (n = 12) described it as an integral part of education and holistic student development, emphasising its comprehensive role in students' well-being. SEL was now seen as a key element in 'helping students become well-rounded individuals who can thrive in all aspects of life.' Participants (n = 9) linked SEL to students' academic success, highlighting its effect on life preparedness. One teacher explained that 'SEL is essential for academic success and lifelong development.' Another teacher added 'SEL prepares students to face personal and academic challenges.' Responses reflect the teachers' understanding of SEL impact on students beyond the classroom setting as some (n = 7) defined SEL as 'integral to the holistic development of students' to support 'their academic success, personal well-being, and contribution to society.'

Figure 3 illustrates the word frequency in the definitions provided after Module 3. 'Emotions' (n = 58) and 'interpersonal skills' (n = 54) remain the most prominent terms, followed by an evident increase in terms referring to other SECs like 'student intrapersonal development' (n = 42), 'conflict resolution' (n = 31), 'self-awareness' (n = 22), 'relationship building' (n = 22), 'self-management' (n = 21), 'student well-being' (n = 21), and 'decision-making' (n = 19). Concepts such as 'academic success' (n = 14), 'classroom strategies' (n = 12), 'effective SEL implementation' (n = 11), 'teacher collaboration' (n = 10) and 'classroom activities' (n = 10) are now more frequently used to define SEL, suggesting a more practical understanding of SEL and teachers' active role in promoting students' SECs development.

Overall, participants' responses suggest an emerging commitment from teachers. By the end of the PD, teachers had a deeper understanding of SEL, recognising its importance for fostering a wide range of social, emotional, and cognitive skills essential for lifelong success (CASEL, 2025; Durlak, 2015). The differences observed in the teachers' definitions over the three points of data collection suggest that the PD deepened their understanding of SEL, moving from a narrow focus on emotional control to a comprehensive view that includes social skills, self-awareness, and lifelong learning. Initially, the focus was on emotional regulation, but over time, teachers recognised the broader implications of SEL on relationships and decision-making. By the end of the PD, teachers connected SEL to classroom learning and real-life success, indicating a shift from theory to practice.

Perceived Benefits of Integrating SEL Into Instruction

As part of the weekly assignments, participants selected, implemented, and reflected on a SEL concept or strategy. When discussing the outcomes of their SEL implementation, participants (n = 52) agreed on the positive impact of SEL instruction on students, the classroom environment, and academic performance. Most participants (n = 45) highlighted that SEL helped students 'regulate their emotions and behavior.' Empathy and self-control were frequently mentioned as key outcomes of their SEL integration. 'helped students manage their emotions better, reducing issues like aggression and shyness in the classroom.' Some teachers (n = 7) also pointed out that students' self-esteem and motivation improved through SEL. Teachers noted that SEL 'fosters self-esteem and a sense of achievement, especially when rules are clear' and 'motivates them to behave better.' A few teachers (n = 3) mentioned that SEL can help prevent violence, bullying, and substance abuse in their school contexts. They emphasised the improvement of students' interpersonal skills agreeing that 'SEL enhanced students' abilities to work in teams and resolve conflicts.' Teachers highlighted SEL implementation 'promotes coexistence based on respect' and fosters 'values such as tolerance, empathy, solidarity, camaraderie.'

Participants (n = 22) also mentioned the overall classroom environment improvement as a benefit of SEL integration. Teachers observed that SEL contributed to a more collaborative classroom environment, leading to a stronger sense of community in the classroom. One teacher indicated, 'Implementing SEL helped create a positive classroom atmosphere where students feel safe and supported.' Participants highlighted the role of SEL in 'fostering compassionate classroom environments safe for students' learning.' Teachers agreed that SEL led to an improved classroom environment as 'students followed rules' and showed 'better interactions.' Participants (n = 11) linked SEL to better academic outcomes stating that 'students are more engaged and participate more in class activities.' Some comments suggest

that the overall improvement in the learning environment through SEL strategies led to more effective learning as teachers reported that 'students became more engaged and actively participated in lessons when SEL techniques were employed.' Teachers shared that students seemed more focused, engaged, and less stressed when working in class. Some mentioned that 'students' attention improves through SEL integration, having a positive effect on the teaching and learning process.' Overall, teachers' comments on the outcomes of their implementation of SEL strategies in the classroom suggests widespread acknowledgment of the positive effects on individual students and the overall classroom dynamic, ultimately contributing to better academic performance (Durlak, 2015). These findings suggest that providing participants with tools, time, and supports to reflect on their SEL implementation can help them take a closer look at what is possible in the classroom (Kendziora & Yoder, 2017).

Perceived Challenges in the Implementation of SEL Practices

Participants' reflections revealed four major challenges they (n = 29) encountered when implementing SEL strategies in the classroom, pertaining to student behavior, student openness, teacher preparedness to address diverse learners' needs, and the role of external factors. Managing students' emotional and behavioral issues was a significant concern (n = 20). Participants reported difficulties in fostering self-control and respect in the classroom, particularly among students who exhibit aggressive behaviors. One teacher found it challenging to promote self-control among 'students who, despite their young age, are intolerant, disrespectful.' Similarly, another teacher expressed concern about effectively promoting SECs among students with aggressive tendencies and asked, 'How can I help them improve socially and emotionally?' Some participants (n = 15) reported a general lack of student openness to the SEL activities implemented in the classroom. A teacher noted, 'There are many young students who do not find meaning in the activities presented.' A few teachers (n = 6) expressed difficulty helping students 'improve their attitude' towards SEL despite implementing different strategies. A recurring challenge (n = 8) was ensuring the inclusion and participation of all students, particularly those who are introverted or reluctant to engage in group work. These participants expressed concern about helping 'students participate with a positive attitude during group work' and 'show empathy and not exclude others.'

Furthermore, many participants (n = 18) expressed concern about their ability to tailor SEL strategies to meet the diverse needs of students, particularly those diagnosed with ADHD, learning disabilities, or mental health issues. Participants mentioned that the presence of anxiety and depression among their students made their SEL implementation challenging. Teachers noted that 'anxiety, stress, and depression are significant barriers' to fostering a positive classroom environment. As one participant noted, 'the heterogeneity among students adds complexity to the implementation of SEL.' Participants grappled with adapting SEL strategies to accommodate students with special educational needs. One teacher asked how to "adapt SEL activities to students that receive special education.' This points to a broader concern about their knowledge and understanding of SEL to modify instruction and support students with diverse learning and emotional profiles (Casma, 2015).

Successful SEL implementation is often dependent upon the teachers' own SECs (Aguilar, 2018; Schonert-Reichl, 2017). Participants (n = 8) expressed concerns that teachers' personal biases and entrenched worldviews inhibit their ability to empathise with students and create inclusive classroom dynamics. One teacher expressed that 'it is hard to change teachers that don't empathise with the student's reality due to prejudices.' Other teachers (n = 6) expressed

concern about their own emotional stability to support the development of students' SECs. One participant expressed difficulty in 'modelling and teaching SECs being diagnosed with psychological issues.' This concern underscores the need for emotional well-being among students and teachers, as emotional disconnects may prevent meaningful engagement with students (Aguilar, 2018).

Participants' responses (n = 9) also revealed the role of external factors, specifically family involvement and technology use, as significant challenges in their SEL implementation. Family involvement was mentioned as a frequent challenge, particularly when it comes to child overprotection or lack of collaboration with teachers. Participants (n = 4) expressed concerns over students with overprotective parents indicating that these students often struggle with developing independence and emotional expression. A participant noted that 'in this post-pandemic stage, children became very dependent on their parents, so they are overprotected children and in many cases, they are afraid of showing their emotions.' Another participant mentioned the challenge of engaging with overprotective parents, 'we must help students make good decisions as their overprotective parents don't.' A few participants (n = 4) highlighted the difficulties faced when working with students from families characterised by conflict and mistreatment. Participants expressed that the emotional burden from these environments often leads to students' negative attitudes hindering academic performance. A teacher explained, 'we have students who come from dysfunctional families where they are the first victims of conflicts, misbehavior and abuse, and this is reflected in their negative attitudes, inappropriate behavior affecting their academic performance.' Participants (n = 3) expressed that some families actively undermine teachers' efforts to promote SEL. Teachers expressed frustration in dealing with students whose emotional and behavioral challenges are deepened by family dynamics that resist collaborating with teachers. One teacher said 'it is hard to handle students' negative behavior when parents encourage it.'

Technology use was identified as another external factor that hinders SEL implementation in the classroom. Teachers (n = 3) argued that the increased use of digital devices, such as mobile phones, has become a significant source of distraction for students, hindering their engagement and autonomy. One participant explained that 'the emotional attachment many students have to their devices complicates efforts to engage them meaningfully in SEL activities.' Another participant emphasised that students' reliance on technology can impair their emotional regulation. Overall, teachers' lack of knowledge and experience regarding SEL instruction, the emotional challenges faced by teachers themselves, students' home environments and technology use all presented significant barriers to participants' implementation of SEL strategies in their classrooms. Addressing these challenges is necessary for creating environments conducive to students' SECs development (Schonert-Reichl, 2017).

Discussion and Conclusion

This study explored the impact of a three-week online PD course on Ecuadorian teachers' understanding and implementation of SEL in K-12 classrooms. The findings provide insight into how participation in structured, reflective PD can enhance teachers' understanding of SEL concepts and implementations, particularly in diverse educational settings. Aligned with the first research question, the study revealed that participants' definitions of SEL evolved significantly throughout the PD course. Initially, SEL was described in limited terms, often

focused on emotional regulation. By the end of the course, teachers articulated more precise definitions of SEL that encompassed different SECs and recognised its long-term value in student development. This conceptual progression corresponds to Mezirow's (1991) notion of critical reflection, as teachers engaged with new content, questioned prior assumptions, and re-evaluated their pedagogical beliefs. This shift suggests that the structure and content and structure of the intervention fostered teachers' engagement with SEL as a holistic approach to education. Teachers gained insights from iterative journal reflections, repeated definition prompts, and contextualised feedback during the PD, leading to more thoughtful and comprehensive definitions over time. Additionally, the iterative process of revisiting and refining definitions weekly may have contributed to this enhanced understanding.

Findings related to the second research question indicate that teachers moved from theoretical understanding to classroom application of SEL strategies. Many described implementing practices that fostered empathy, emotional regulation, peer collaboration, and inclusive participation. By the end of the PD, teachers defined SEL in terms of its application and positive changes in their classrooms. This stage of perspective transformation, a core concept in TLT, was obervable as teachers adopted new approaches that reflected their evolving beliefs. The participants' shift toward SEL implementation suggests that the PD content and tasks, especially the opportunity to apply strategies and reflect on their effectiveness, encouraged deeper learning among participants. This shift underscores the critical role of teachers' knowledge and preparedness in enacting effective reform in Ecuadorian K-12 classrooms (Burgin et al., 2021; La Hora, 2023).

Despite the significant improvement in teachers' understanding and implementation of SEL, participants identified several challenges, including student behavioural issues, lack of parental engagement, the emotional toll of teaching, and lack of resources. These findings respond to the third research question and highlight conflicts between theory and classroom realities. Some teachers expressed concerns about their ability to model SEL due to their own emotional stress, underscoring the importance of teacher well-being for effective SEL implementation. Addressing the challenges identified by participants requires robust understanding of SEL that allows them to tailor comprehensive strategies to their students' needs and context. The findings highlight the potential of SEL to promote more equitable and inclusive educational practices, particularly in contexts with inequality and exclusion (Ramirez et al., 2021). However, it is evident that some challenges identified respond to broader systemic constraints and suggest that transformative learning is shaped by internal reflection and external institutional and social structures.

Findings support that the successful implementation of SEL relies on educators acquiring relevant PD and undergoing a paradigm shift in their views, beliefs, and educational goals (Mezirow, 1991; Roffey & McCarthy, 2013). PD initiatives must focus on equipping teachers with the skills to address students' emotional needs and integrating SEL practices into daily classroom activities. The participants' emphasis on the need for training to integrate SEL across all aspects of schooling reinforces the importance of a holistic approach to education. SEL should not be seen as isolated activities but rather embedded into the everyday instructional practices. By embedding SEL throughout the school day, educators create environments that value and accommodate diverse student backgrounds, fostering skills essential for navigating a complex world (Mels, 2023). This approach highlights the necessity of a systemic commitment to SEL integration to achieve its full potential in enhancing educational equity and inclusion in K-12 Ecuadorian classrooms (Burgin et al., 2021). Overall,

the findings illustrate the relevance of TLT in understanding how teachers internalise and implement SEL through critical reflection and experience. Teachers reviewed and reaccommodated their prior knowledge of SEL and adopted new instructional practices over time. This process reflects the transformative learning phases, implying that structured PD can be meaningful in promoting educational change when it creates opportunities for cognitive and experiential development.

Implications

The study findings suggest that integrating SEL can effectively address the needs of diverse students. Educators worldwide can adopt similar PD programs to help teachers manage multicultural classrooms and support students' SECs. As the need for PD to build teachers' knowledge and confidence in integrating SEL is a universal concern (Coli et al., 2024; Casma, 2015; Lumpkin, 2023), other countries can use this study as a model to develop comprehensive PD programs that equip teachers with the skills and knowledge needed to support SEL in their classrooms, thus bridging the gap between theory and practice. While the study's findings are specific to Ecuador, the core principles of SEL can be adapted to different contexts. Countries can tailor these insights to fit their unique cultural, social, and educational landscapes, ensuring that the implementation of SEL is contextually relevant and effective. By considering these implications, educational stakeholders from different countries can enhance their approaches to SEL, fostering environments that support the social and emotional development of all students, particularly in increasingly diverse and multicultural classrooms.

This study findings have important implications for school leaders, and policymakers. School leaders can strengthen SEL integration by embedding it within professional learning communities and supporting structured reflection, peer dialogue, and the sharing of strategies across grade levels and content areas. Educational policymakers should embed sustained and culturally responsive SEL training within national teacher PD initiatives. Investments in ongoing teacher training and school-wide SEL strategies can bridge the gap between national standards and local classroom realities. Allocating resources for follow-up coaching, collaboration opportunities among educators, and classroom materials can enhance the impact of SEL training. Teacher education should include SEL as a foundational element of teacher preparation, with explicit attention to how it promotes equity, inclusion, and well-being. Additionally, PD initiatives should equip educators with SEL knowledge and tools as well as prepare them to navigate challenges such as family engagement, classroom behaviour, and supporting students with diverse needs.

Future studies should explore the influence of SEL PD in teachers' understandings and practices in varied school types, including public and rural contexts, to assess generalisability beyond private school settings. Longitudinal research could track how teachers' SEL beliefs and practices evolve over time and impact student outcomes. Additionally, further research could examine the role of teacher well-being in effective SEL implementation.

Limitations

This study used purposeful convenience sampling, which may pose limitations regarding the transferability of findings. This sampling approach was appropriate for the in-depth exploration of a specific context, the findings are not intended to be generalised to broader

populations. The aim was to gain rich and contextual insights into how an online SEL PD influenced teachers' SEL understanding and instructional practices. Data were collected through participants' self-reported reflections, there is potential for bias related to personal interpretation or social desirability. To mitigate this possible bias, reflections were collected at three distinct points during the course and analysed through collaborative coding sessions involving three researchers, supported by a shared coding checklist.

Declarations

Authors' contributions: SSC was responsible for conceptualization, methodology, investigation, formal analysis, writing of original draft, review and editing, project administration, manuscript editing, and submission. XDB contributed to methodology selection, participant recruitment, resources, validation, data analysis, review, and editing of the manuscript. MDD contributed to methodology selection and editing, data analysis, and manuscript reading.

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