Systematic Review on the Contribution of Diary-based reflection to Equity Literacy among Teachers

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Abstract

This systematic review explores the impact of diary-based reflection on fostering equity literacy among pre-service and in-service teachers in primary and secondary education. Given the growing emphasis on equitable educational practices, this study examines how reflective diary methods can enhance teachers' awareness and ability to address educational inequalities. Utilizing PRISMA guidelines, the review identifies 18 studies employing various reflective diary techniques, including written reflections, video diaries, and structured interviews, across diverse geographical and educational contexts. Thematic analysis and inductive coding were used to uncover patterns and insights related to reflective practices in education. The findings suggest that diary methods significantly enhance teachers' critical self-awareness, culturally responsive teaching, and community engagement. Additionally, these methods improve teachers' ability to recognize, respond to, and redress inequities within the classroom, thereby fostering more inclusive learning environments. Future research should focus on scalable diary frameworks and longitudinal studies to further validate the long-term benefits of diary methods in promoting equity literacy.

Key words: Diary methods, Reflective writing, Teacher education, Pre-service teacher, In-service teacher, Critical self-reflection, Critical self-awareness, Secondary school, Systematic review

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In the evolving landscape of education, the critical role of teachers extends beyond traditional academic outcomes, such as credit acquisition and skill development, to include a focus on equitable educational practices. Recent studies show the importance of integrating equity literacy into teaching, emphasizing the need for educators to develop skills that enable them to recognize and address inequities within the educational system (Noble et al., 2019). Equity literacy involves recognizing and addressing both visible and structural sources of inequality, thus promoting an inclusive learning environment for all students (Gorski, 2016).

Equity literacy, as defined by Gorski (2016), involves the ability to recognize and address both visible and structural sources of inequality, fostering an inclusive and supportive learning environment for all students. It requires an in-depth understanding of and action against the structural obstacles impeding equitable educational results (Aragona-Young, 2017). Gorski (2016) lays stress on the necessity of shifting focus from culture-centric approaches in educational settings to frameworks that directly address and combat structural inequalities. The model of Equity Literacy comprises four main capabilities for educators:

- 1. Recognizing Inequity
- 2. Responding to Inequity
- 3. Redressing Inequity in the Long Term
- 4. Sustaining an Equity-Minded Approach

Gorski's framework provides a comprehensive approach to understanding and addressing

educational disparities, emphasizing the need for educators to be proactive in identifying and challenging systemic barriers to equity (Gorski & Dalton, 2019).

The development of antiracist multicultural educators necessitates the cultivation of critical reflection skills. While traditional notions of reflection often lean towards technical analysis, focusing on the mechanics of teaching without delving into the deeper underlying issues. Critical reflection, on the other hand, demands a more profound engagement with one's beliefs, assumptions, and identity. This approach aims to reveal power dynamics and uncover hegemonic practices within educational settings (Brookfield, 1995). Reflecting on these elements is not merely a technical task but an emotional and transformative process that reshapes an educator's identity and practice. Reflective learning activities can encourage educators to examine their biases and positionalities related to privilege, develop sophisticated understandings of oppression, and strengthen their commitments to educational justice (Gorski & Dalton, 2019)

Critical Reflection in Equity Literacy

Critical reflection is instrumental in fostering equity literacy, as it pushes educators to go beyond surface-level understandings of diversity and delve into the structural and systemic aspects of inequality. By critically examining their own positionalities and the power dynamics within educational settings, educators can better understand their roles in perpetuating or challenging these inequities. This deeper level of reflection encourages educators to become advocates for social justice, equipping them with the insight needed to implement meaningful changes in their teaching practices and educational environments (Gorski & Dalton, 2019) . Moreover, critical reflection has been shown to enhance educators' abilities to recognize their social justice responsibilities and to act upon them, thereby contributing to a more just and equitable educational system (Gorski, 2016).

Despite growing awareness, there remains a significant gap in the implementation of strategies aimed at comprehensively supporting students (Douwes et al., 2023). High-stakes testing and deficit discourses contribute to an environment that may not fully support diverse student needs, impacting mental health and academic engagement (Ryan & Deci, 2016). This is further complicated for students from marginalized groups, who often encounter additional barriers to feeling recognized and valued within the academic setting (Pendergast et al., 2018).

As educators strive to incorporate equity into their practice, it is essential to shift from culture-centric frameworks to those that prioritize educational justice. John Dewey's notion of reflection as an attitudinal set essential for meaningful learning, encompassing attributes such as open-mindedness and a desire for growth (Rodgers, 2002). True reflection involves a continuous process of questioning and re-evaluating one's experiences and beliefs, leading to a deeper understanding and transformation of practice (Larrivee, 2000). Gorski (2016) critiques the overemphasis on "culture" in diversity frameworks, arguing that such a focus can inadvertently mask deeper issues of structural inequity and injustice. The concept of equity literacy emphasizes the need for educators to recognize and respond to inequity, ensuring that their efforts genuinely address the systemic barriers faced by marginalized students (Gorski, 2016).

Diary-based Methods as Reflective Tools

Reflective practices, such as the utilization of diary-based methods, serve as a bridge between theoretical knowledge and practical application. This reflective process can help educators to critically assess their own practices and biases within educational environments. Diary-based methods, as detailed by Connelly and Clandinin (1986) as well as Brookfield (1995), have evolved beyond simple journaling to become a sophisticated tool for reflective practice. By engaging in reflective diary methods, educators can deepen their understanding of the structural inequalities that pervade educational settings. This transition not only aids in the identification of biases and systemic barriers but also promotes a more nuanced approach to handling diversity and inequity in the classroom (Larrivee, 2000; Farrell, 2013).

Diary methods align with the principles of critical reflection, urging teachers to question assumptions, consider multiple perspectives, and actively engage in dismantling systemic inequalities within educational settings (Gorski & Dalton, 2019). By documenting day-to-day experiences in many ways with doing reflection, teachers can explore the impact of their instructional strategies on student engagement, identify potential biases, and become more attuned to the diverse needs of their students. In the present research, diary-based methods refer to various reflective practices used by educators to document and critically examine their teaching experiences, biases, and interactions within diverse educational settings. These practices enable teachers to scrutinize their biases, teaching strategies, and interactions with students, leading to a heightened understanding of the challenges present in educating diverse groups of learners (Moon & Brighton, 2008). The practice of consistently recording thoughts, experiences, and observations has been beneficial across various educational settings, as indicated by Bolger et al. (2003). The reflective nature of diary writing is expected to encourage educators to delve into their own biases, classroom dynamics, and interactions with students, particularly those related to diversity (Stevens & Cooper, 2009).

Dodman et al. (2021) explored the use of dialectical journals as liminal

spaces—transitional spaces that facilitate critical reflection and identity transformation—in teacher education. In Dodman et al. (2021), practicing teachers engaged in a graduate course on critical teacher inquiry, using dialectical journals to dialogue with themselves and the course texts. Research by Wallin and Adawi (2017) suggests that incorporating diary-based methods into professional development can enhance self-awareness and contribute to a more reflective teaching practice. In the context of equity literacy, diary methods can serve as a catalyst for teachers to recognize and address both visible and structural sources of inequality in diverse classrooms. Promoting equity literacy among teachers not only contributes to their professional growth but also to creating a more inclusive educational environment.

Research Purpose

The overarching purpose of this research is to delve into the potential of employing diary methods as a reflective tool to stimulate critical (self-)reflection among pre-service and in-service primary and secondary school teachers. This exploration aims to contribute to the goal of enhancing equity literacy within educational settings. The leading research question guiding this study is: What is the state of affairs and available evidence for using diary methods for stimulating equity literacy in pre-service and in-service primary and secondary school teachers?

This leading question is translated into the following subquestions:

1. How are the existing working methods of diary-based reflection being used to stimulate aspects of equity literacy among pre-service and in-service teachers in primary and secondary education?

2. What are the outcomes of using these diary-based methods related to equity literacy of teachers?

By addressing these questions, the present study focuses on providing insights into the effectiveness of diary-based methods in enhancing equity literacy among educators, ultimately contributing to more inclusive and equitable educational practices. The utilization of diary methods as a reflective tool holds hopes in fostering a deeper understanding of the intricate factors contributing to inequality, thereby enabling teachers to recognize and address these challenges more effectively.

Methods

A systematic review were conducted in the research, which designed to provide a comprehensive, unbiased summary of existing evidence on a specific research question. It involves a structured approach to literature search, selection, and synthesis, adhering to predefined criteria to ensure reproducibility and rigor. This methodology is particularly suited for evaluating the impact of diary-based reflection on equity literacy among teachers, as it allows for the aggregation of diverse study findings, thereby providing a holistic view of the effectiveness and challenges associated with this approach.

Identification of Relevant Studies

To conduct a comprehensive systematic review, the study will follow a structure employing the *Population Intervention Comparison Outcome* (PICO) framework (Sackett et al., 1996), targeting studies that examine the effectiveness of diary methods in fostering equity literacy. The search period with no limitation on publication years to ensure the inclusion of all relevant studies and will encompass various terms related to teacher education, diary interventions, and outcomes focusing on equity and inclusion. This comprehensive search strategy is designed to capture a broad spectrum of relevant literature.

Table 1

Search string according to PICO-framework

Category	Search terms
Population	("teacher education" OR "pre-service teach*" OR "teacher train*" OR "primary school" OR "elementary school" OR "primary education" OR "elementary education" OR "secondary school" OR "secondary education" OR "middle school") AND (teacher OR "student teacher" OR educational* OR pedagog* OR instruct* OR mentor OR tutor OR educator*)
Intervention	"diary" OR "diaries" OR "audio reflect*" OR "audio journal" OR "personal reflect*" OR "personal journal" OR "private journal" OR "reflective writing" OR "written reflect*" OR "reflect* log*" OR "spoken reflect*" OR "oral reflect*"OR "teacher self-reflection."
Comparison	-
Outcome	"Equity" OR "divers*" OR "inclusi*" OR "equality" OR "intercult*" OR "multicult*" OR "educational justice" OR "equitability" OR "equal opportunity" OR "inclusive education" OR "cultural diversity" OR "justice in education" OR "inclusive practices" OR "educational equality" OR "social equity" OR "inclusive pedagogy"

Database Selected

To investigate the impact of diary methods on equity literacy among pre-service and in-service teachers, a comprehensive literature search was conducted across academic databases including Web of Science, Scopus, ERIC, and PsychInfo. The search focused on studies involving teacher education or training at various educational levels (primary, elementary, secondary, middle school) and included keywords related to teacher roles (teacher, student teacher, educator) and diary methods (diary, reflective writing, audio reflection). The outcomes of interest were centered around equity, diversity, and inclusivity in education. The synthesis will involve a narrative summary of the findings, focusing on study characteristics, interventions, outcomes, and the overall impact of diary methods on equity literacy among pre- service and in-service teachers.

Studies will be included if they meet the following inclusion criteria: the subjects are pre-service and in-service teachers in primary and/or secondary education; the studies are published in English; the research involves teachers using diary methods; the aims or outcomes of the study are at least partly related to teachers' equity literacy; and the studies contain empirical data.

Selected studies for inclusion in the systematic review target pre-service and in-service primary and secondary education teachers. This criterion is met to ensure that the subjects of the chosen studies are relevant to the target population for research. By focusing on teachers in these levels of education, the review will attempt to seek out knowledge that is relevant to those who are either entering the teaching profession or are already practicing within the school system. It was important to maintain consistency and to ensure that the studies could be easily accessed by and understood for the researcher; therefore, only studies published in English were included in the review. This decision also helps to maintain a standard quality of the reviewed literature, as English is quite a universal language for academic publication.

Furthermore, teacher research should include diary methods with different reflective practices; for instance, they could be in written diaries or video diaries, reflective journals, and the like. Since the review intends to find out whether and how such reflective tools can

contribute to promoting teachers' consciousness and reactivity related to educational inequalities, it is crucial that the studies using diary methods also be included in the review. Consequently, the review will focus on the use of diary methods in enhancing critical self-reflection and equity literacy by teachers.

Moreover, studies to be included must have aims or outcomes at least partly related to teachers' equity literacy. The studies were selected based on their contribution toward insights regarding how reflective practice can enhance teachers' responsiveness to and remediation of educational inequalities. Only empirical studies have been considered for review because such evidence improves the credibility and reliability of the findings, ensuring robust and verifiable conclusions that can be drawn from the review. That is, the research should come up with observable and measurable proof of the effectiveness of diary methods in fostering equity literacy.

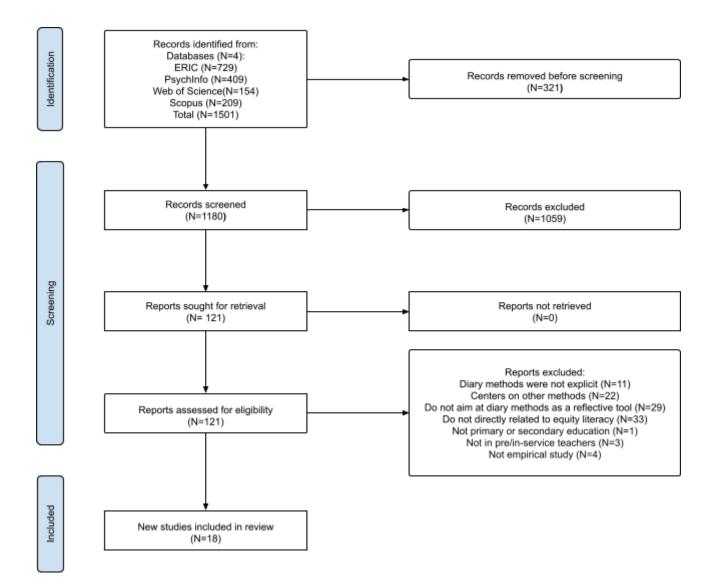
Preliminary Results

The initial search yielded a total of 1,501 articles. These references were uploaded to Rayyan (Ouzzani et al., 2016) to automatically remove duplicate references (N = 321). The remaining 1180 references underwent title and abstract screening according to the inclusion criteria outlined above. This implies that once a study failed to fulfill a specific criterion, it was excluded immediately, without evaluating it against any additional criteria. This initial screening allowed studies to continue being considered if there was any uncertainty. Following this, all the studies were evaluated. After applying the inclusion criteria by doing titles and abstracts screening, 1059 articles were excluded, 121 articles were potentially included. The full texts of the 121 articles were screened against the inclusion criteria. This resulted in a total of 18 articles

were included based on the basic criteria. Data selection, articles screening sees Figure 1, by using PRISMA flow chart tool that created by Haddaway et al. (2022).

Figure 1

Flow chart of study selection process



Data Analysis

The data analysis for this study was conducted using thematic analysis and inductive coding to uncover patterns and insights related to reflective practices in education. The following eight themes were identified: Personal Reflective Diary, Written Reflective Journals, Linguistic Autobiographies, Structured Reflection Logs, Written Essays and Structured Interviews, Journey Boxes, Video-Stimulated Recall, and Written Reflective Dialogue. Each theme provided unique perspectives and contributions to the overall understanding of reflective practices. Table 1 below is a detailed analysis of each theme.

Table 1

Themes of thematic coding

Themes	Description	Elicitation	Journaling mode	Content	Use in activities
Personal Reflective Diary	Captures day-to-day experiences and thoughts; used for insights and reflections on socio-cultural dynamics.	Ongoing professional role and personal commitment	Written	Reflects on positionality, power dynamics, and societal structures; daily activities and observations.	Data for critical self-reflection, support theoretical discussions, critique actions.
Written Reflective Journals	Documents changes in attitudes and actions; reflections on teaching strategies and student interactions.	Assigned readings, guided reflection questions, online postings	Written	Focuses on practical applications of teaching strategies, personal experiences, and evolving understanding of diversity.	Facilitates critical reflection and dialogue, final reflective assignments.
Linguistic Autobiographies	Detailed narratives about personal language histories; reflects on linguistic competencies and emotional impacts	Structured assignments, reflective prompts, researcher precedent	Written	Narratives on language acquisition, cultural and social contexts, and emotional responses.	Critical friend conversations, thematic analysis, reflective dialogues.
Structured Reflection Logs	Logs reflections on service-learning experiences; enhances understanding of inclusive education and personal beliefs.	Structured reflection prompts, service-learning experiences	Written	Initial reflections on diversity, ongoing reflections during experiences, and post-experience analysis.	Data for qualitative analysis, evidence of transformational learning.

Written Essays and Structured Interviews	Essays and interviews capture changes in mental models and personal growth through structured reflections.	Pre-departure and post-experience essays, structured interviews	Written and Oral	Pre-departure perceptions and post-experience reflections on teaching and diversity.	Data for thematic analysis, facilitates class discussions.
Journey Boxes	Boxes filled with artifacts, photos, and texts; used for developing counterstories and community building.	Assignments, family stories, reflective prompts	Written and Visual	Personal and collective histories, cultural and linguistic experiences, counterstories.	Develop counterstories, classroom discussions, reflective writing assignments.
Video-Stimulated Recall	Reflects on teaching practices through video analysis; enhances self-awareness and cultural responsiveness	Video clips of teaching sessions, open-ended questions, rating prompts	Oral and Visual	Reflects on classroom practices and beliefs about cultural diversity through video analysis.	Assess self-reflection depth, evaluate congruence with CRT practices.
Written Reflective Dialogue	Engages in reflective dialogue to explore equity-mindedness and professional growth in teaching practices.	Reflective questions from a mentor, observational feedback	Written	Reflections on classroom experiences, student interactions, and teaching practices with a focus on equity.	Basis for reflective dialogue, analyzed through theoretical lenses.

Results

Characteristics of the Included Studies

A total of 18 articles was included in this systematic review. They focused on methodologies ranging from qualitative (N=12), quantitative (N=1) and mixed-methods studies (N=5), incorporating various forms of diary methods including written reflections, video diaries, and integrated discussions (explicated in more detail below). 13 of them were conducted in North America (11 in the USA, 2 in Canada), 1 in Germany, 1 in Israel, 1 in Philippines, 1 in South Africa and 1 in Australia. Sample sizes varied significantly, involving as few as 1 participant to 159 participants. Basic characteristics of included studies see Table 2 below.

Study characteristics

•	Study	Country	Methodology	Participants	Main Diary-based Method form	Outcomes
•	Beneke et al. (2022)	USA	Qualitative	42	Structured interviews;	Empathy;
	Burgard et al. (2018)	USA	Qualitative	11	Structured interviews;	Commitment to equity; Empathy;
	Carrington & Selva (2010)	Australia	Qualitative	72	Structured reflection logs;	Empathy; Collaboration; Social justice;
	Civitillo et al. (2019)	Germany	Mixed-methods	4	Reflective journals; Video stimulated recall;	Cutural sensitivity; Quick decisions making; Empathy;
	Fránquiz et al. (2011)	USA	Qualitative	3	Journey boxes;	Quick decisions making; Adaptation; Sustained advocacy; Empathy;
	Eick & McCormick (2010)	USA	Mixed-methods	49	Reflective journals	Quick decisions making; Commitment to equity; Empathy;

Endo (2015)	USA	Mixed-methods	20	Reflective journals	Cutural sensitivity; Encouragement; Collaboration; Commitment to equity; Empathy; Social justice;
Fund (2010)	Israel	Quantitative	159	Personal reflective diary	Cutural sensitivity; Empathy;
Hyun (1997)	USA	Qualitative	138	Autobiographical self-examination	Empathy; Social justice;
Kyles & Olafson (2008)	USA	Mixed-methods	15	Reflective dialogue	Cutural sensitivity; Quick decisions making; Sustained advocacy; Empathy;
Lee (2022)	USA	Qualitative	37	Structured reflection logs; Reflective dialogue	Adaptation; Empathy;
Martin-Kerr et al. (2022)	USA	Qualitative	1	Reflective dialogue	Quick decisions making; Collaboration; Sustained advocacy; Empathy;
Mendoza (2021)	Philippines	Qualitative	21	Structured reflection logs;	Cutural sensitivity; Quick decisions making; Empathy;
Mensah (2009)	USA	Qualitative	23	Journey boxes; Reflective dialogue	Encouragement; Empathy;
Noel (2009)	USA	Qualitative	-	Personal reflective diary	Cutural sensitivity; Empathy;
Oskineegish (2019)	Canada	Mixed-methods	45	Reflective journals; Structured reflection logs; Reflective dialogue	Cutural sensitivity; Empathy;
Parker (2012)	Canada	Qualitative	75	Personal reflective diary	Cutural sensitivity; Empathy;

Prinsloo-Marcus &	South	Qualitative	35	Linguistic autobiographies	Cutural sensitivity; Empathy;
Campbell (2022)	Africa				

Using of Diary-based Methods

The usage of the diary-based methods were identified from the 18 articles: reflecting on personal professional experiences; structured and guided reflection; multimodal reflection and analyze; interactive dialogue. Participants in the included studies reflecting the diary, logs and dialogues by writing personal reflective diary, reflective journals, linguistic autobiographies, structured reflection logs, structured essays and structured Interviews, journey boxes, video-stimulated recall and reflective dialogues. Some of the articles conducted more than one diary methods, so they would appear in several different categories.

Personal and Professional Experiences

Reflection on personal experiences through the Diary method represents several reflective practices of personal and professional writing. The same is noted to possess the ability to develop deep reflection, professional growth, and critical analysis of the different forms of experience. In support of the experiences, the studies involve meditative written reflections, daily diary entries, and analytical journaling. 8 out of the 18 studies explore the effectiveness of writing down personal experiences in promoting reflective practices. In 3 studies (Fund, 2010; Noel, 2009; Parker, 2012), the experience of reflecting involves using personal reflective diaries to foster understanding and growth of reflective practices in educational environments. Centers on the reflections on previous lessons, encompassing both narrative and cognitive dimensions such as personal knowledge, identity, beliefs, development, perspectives, and theories, Fund (2010) provides structured guidance through a list of suggested questions and a feedback model, to implement deep and free reflections. It is making use of reflections through peer and instructor feedback, professional development, and case studies that link better reflective writing and professional development all the way, culminates in assessments through questionnaires and

interviews. Noel (2009) leverages the diary for critical analysis and reflection, program development, relationship building, and academic contributions to discourses on school-community partnerships and urban education. This approach is grounded in the author's role as the Coordinator in Education Center and is prompted by specific critical incidents, which trigger the journaling. The better way in which journal entries inscribed daily engagements with students, teachers, and members of the community marked ongoing engagements with critical theories on issues around race, class, and privilege. Similarly, Parker (2012) adopts a self-directed and continuous approach, by conducting real-time classroom observations, interviews, and informal conversations. These immediate reflections contribute to an iterative analytical process, informs the final analysis and discussion sections of the research, ultimately reflecting on classroom dynamics, pedagogical approaches, student responses, and teacher reflections, intertwined with an evolving understanding as a researcher.

4 studies apply the reflecting on experiences through writing reflective journals (Endo, 2015; Eick & McCormick, 2010; Oskineegish, 2019; Civitillo et al., 2019). In the study of Endo (2015), participants reflected the pre-class belief regarding language diversity, classroom observation, personal bias, critical incidents, and changes in perspective toward an inclusionist viewpoint on linguistic diversity through structured activities, critical reflection prompts, field-based experiences, and an interview and transcription activity. Journal entries are also combined with class discussions, reflective papers, and in-class presentations and serve as an opportunity to get constructive feedback. Eick and McCormick (2010) also assign reflective journaling around the book "From Rage to Hope" (Kuykendall, 1992), where student teachers reflected on practical strategies, connected readings to teaching practice, and documented changes in their thinking. By reading assignments, guiding reflection questions, and weekly

online journal postings, these entries contribute to seminar discussions, book studies, author talks, and critical reflection. For Oskineegish (2019), in research such as the one at the center of this article, content consists of personal beliefs and biases about Indigeneity and education, reflections on myths and stereotypes, and infusing Indigenous perspectives into pedagogy. The reflection papers, sharing circles, classroom discussions, and others that are prepared are all to challenge assumptions and for self-reflection. These reflections inform discussions, sharing circle contributions, and help in developing culturally inclusive teaching practices. Civitillo et al. (2019) focus on culturally responsive teaching, where teachers reflected on classroom interactions and their own teaching practices. Video-stimulated reflections, written episodes, open-ended questions, and self-ratings were conducted by using the Culturally Responsive Instruction Observation Protocol (CRIOP). The reflections are helpful in the analysis of self-reflection depth, comparative analysis, case profile creation, and informing results of research about culturally responsive teaching.

In the study of Prinsloo-Marcus and Campbell (2022), participants engaged in reflective journaling through guided questions that prompted detailed responses about their language experiences. The topics that have been touched on in the reflections are: the acquisition and abandonment of languages and their identity impact, both negative and positive, challenges of language transitions, attitudes in society, and the dominance of English. Participants discussed journal entries under critical friend grouping, facilitating collaborative reflection and enhancing understanding at a deeper level. In doing so, such discussions provided ways of accommodating student diversity in language backgrounds and encouraging greater inclusivity. The journal entries, therefore, served as both a personal reflective tool and a basis for collaborative activities to enhance educational inclusiveness.

Structured and Guided Reflection

Participants in 6 studies by writing structured reflections to guide the reflection for themselves. Participants in studies of Oskineegish (2019), Carrington and Selva (2010), Mendoza (2021), and Lee (2022) all write structured logs. These studies employ structured prompts and assignments to stimulate reflective journaling. In all of these studies, participants have responded to guided reflections that were more structured in nature regarding reflective practice within teaching and education. For example, participants in Oskineegish (2019) and Mendoza (2021) used weekly reflection logs with specified questions to encourage deep critical thinking relative to teaching methodology and cultural diversity. The research can evoke the depth of understanding for teacher candidates to build by reflecting theoretical ideas on their experiences and cause them to refute biases. For instance, participants guided their reflections to connect content from the course to their own experiences and biases regarding Indigenous Education (Oskineegish, 2019). It has, however, been strengthened by Mendoza (2021), who emphasizes reflections on the management of cultural diversity and class dynamics and appealed to pre-service teachers to develop a critical gaze on their teaching practices and engagement with other stakeholders.

In the study of Carrington and Selva (2010), by developing scaffolded reflection for preservice teachers around the 5Rs model (Bain et al., 2002) that will help participants report, respond, relate, reason, and finally reconstruct their service-learning experience. The structured logs scaffolded students' reflections on their pre-service thoughts, their experiences of those significant events occurring during the service-learning experience, and their post-service reflections, thus connecting theory learned with authentic teaching experiences. The strategy also included aligning reflection logs with online tutorial discussions for students to provide them

with feedback and assessment and become primary data in investigating the effectiveness of service-learning programs. Lee (2022) took even another approach, using prompts with structure and very guided interviews, namely "Getting to Know You" and Student Problem-Solving Interviews, to direct the candidates in journaling. The reflections are categorized as Interactive Journals around learning and teaching practices and Field Notes Journals, which represent the documentation and analysis of students' mathematical thinking. This approach was intended to afford support for reflecting and discussing candidate insights, using those drawn from Field Notes Journals to build on equitable mathematics teaching practices.

One of the significant ways in which journal reflections were included in classroom discourse and shared creatively included non-traditional sharing circles in Oskineegish (2019). The approach allowed both vocalization and expansion of written reflections as a way of deepening and broadening teacher-candidate reflective practices. Carrington and Selva (2010) also used reflection logs in online tutorial discussions to provide feedback and grading as well as one of the principal sources of data when determining the degree of success of service learning. In reality, the coding of reflections as qualitative information formed a significant part of Mendoza (2021) when delineating themes regarding transformational teaching and cultural competence. Such findings may inform training framework development and, at the same time, inform more extensive education research studies. Also, in Lee (2022), journal entries in course activities facilitated reflective practices and discussions while using data collection through Field Notes Journals to explore more equitable teaching practices in mathematics.

In both Burgard et al. (2018) and Beneke et al. (2022), journaling was a primary strategy that fostered deep reflection and processing within various written and formatted contexts. Burgard et al. (2018) asked teacher candidates to write essays and then discuss their essays before traveling to Guatemala. Such pre-departure activities were developed to get candidates to reflect on their expectations and anticipated experiences, whereby guiding reflective questions led them into consideration of educational practices and cultural differences they may be confronted with. This preparation was complemented by classroom discussions that focused on diversity and multicultural education, enabling them to have a broader understanding of some of the challenges and opportunities they were likely to face while abroad. Postcourse, candidates wrote reflection papers examining their fieldwork experiences in Guatemala and participated in audio-taped interviews to compare their conceptualization of teaching and development. To this end, Beneke et al. (2022) developed a guided prompt to facilitate the generation of responses for Critical Conversations Journey Maps (CCJMs) and written narratives of their school experiences navigating issues of race and ability. CCJMs were provided as exemplars to inspire and offer participants a sense of having creative license and the permission to be vulnerable. Both maps and narratives involved vital individuals, places, and events that helped shape participant's sense of self, thus the expression of a worldview. Journal entries and other forms of reflection were vital to the methods and findings in both studies. Burgard et al. (2018) also integrated journal entries, interviews, and class discussions in an inductive thematic analysis to identify themes of changes in mental models of teaching, personal growth, and expanded worldviews. Triangulation of reflections and interviews will provide reliability and comprehensiveness in understanding the impact that overseas teaching experience has on an individual. How this could happen and profoundly change candidates' perceptions and approaches to teaching were discussed.

However, for Beneke et al. (2022), it was the narratives and maps that served as their primary sources of data on how emotional practices sustain racial-ability hierarchies. Their analysis involved several rounds of coding to show patterns and themes leading toward strategies to promote intersectional justice within educational contexts. In sum, both studies successfully utilized journaling and reflective practices to elicit deep insights into participant experiences and perspectives. While Burgard et al. (2018) centered their analysis on shifts in perspectives of teaching and personal change through the employment of pre-departure essays, discussions, postcourse reflections, and interviews, Beneke et al. (2022) focused on the place where race and ability meet, utilizing narrative mapping and analysis to show the work of emotional practices in keeping systemic hierarchies.

Multimodal Reflection

3 of the 19 studies elaborate multimodal reflection with an emphasis on the written reflections underpinning two modes of reflection: journey boxes and video-stimulated recall. In the studies by Fránquiz et al. (2011) and Mensah (2009), journaling is applied as an example of different means of reflective practice in teacher education. The journaling refers specifically to how reflection was prompted, the actual reflections, and how journal entries were then used. In Fránquiz et al. (2011), preservice bilingual teachers collect artifacts, photographs, texts, and journal entries for the "My Literacy Journey Box" activity, in which they document their cultural and educational journeys. This assignment is purposefully designed to provoke reflections about what has and has not worked in their educations, catalyze them to contact family members and friends to receive detailed narratives of early literacy and language experiences and increase awareness of cultural and linguistic oppression. In another example, Mensah (2009) described preservice science teachers involved in structured book club meetings mediated by open-ended questions and prompts designed to provoke critical thinking about diversity, language, and community in science education. Throughout these discussions, a note-taker and the instructor function as social advocates and lead the students in small-group and whole-class reflections.

The content of the journaling in the two studies is concerned with personal and collective histories. Fránquiz et al. (2011) work on memories of school experiences, early literacy, language learning and uses, significant cultural events, and dealings with racism and linguistic prejudice. The genre comprises written narratives, artifacts, and decorated Journey Boxes design. On the other hand, critical reflections on diversity, assumptions, biases, and stereotypes in science teaching are emphasized by Mensah (2009). Preservice teachers documented their reaction to the readings, connections with their teaching experience, and discussion on the role of language and community in education. Journaling includes individual reflections, group notes, and collective reflections. The use of journal entries in both studies serves multiple purposes. In the entries and artifacts of the Journey Boxes (Fránquiz et al., 2011), the community is built, countersteering is shared, reflective practice is called for, and pedagogical development is challenged. Describing what was in the Journey Boxes does work: community is built, and a safe place is developed to reside; it sets up conversations regarding cultural and linguistic experiences, and deficit views related to bilingual learners are refuted. Critical reflection in practice has been associated with the development of critical consciousness about issues of race, culture, and language, whereas journaling informs more inclusive and culturally responsive teaching practices. In Mensah (2009), journal entries are used in small group discussions, whole class debriefing sessions, and final projects and presentations. Reflections are used as the grounds for discussions that will take place at book club meetings, shared and discussed in more extensive class settings, and eventually compiled into a final presentation. These reflections, coupled with exit surveys, assess changes in ideology beliefs and the development of preservice teachers as reflective multicultural science teachers.

Civitillo et al. (2019) conducted a study on written episodes, open-ended questions, and

Likert scale self-ratings that probed teachers to reflect deeply on culturally responsive teaching from video-stimulated reflections. Teachers view and score video clips of their classroom lectures, comment on written descriptions, respond to reflective questions, and self-evaluate behaviors using the Culturally Responsive Instruction Observation Protocol (CRIOP). The reflective diaries capture teachers' reactions and responses during classroom episodes, appraisals of their teaching behaviors and instructional strategies, links to professional knowledge, and discussions of beliefs about cultural diversity and its impact on practices. Descriptive, evaluative, and integrative reflections can be seen in journals because they capture the detailed recounting of classroom events, appraise their actions, and link them to broader pedagogical principles.

Interactive Reflection

The interactive reflection in the examined studies centers on how participants engage in interactive dialogue through journaling. These five studies reviewed: Martin-Kerr et al. (2022), Oskineegish (2019), Lee (2022), Kyles and Olafson (2008), and Mensah (2009) lay stress on the importance of interaction and critical reflection in journaling. For instance, Martin-Kerr et al. (2022) use mentor-guided questions that prompt reflections about equity in education while urging consideration around student interactions and teaching challenges. Oskineegish (2019) provided prompts for journaling about Indigenous education through reflection papers, non-traditional sharing circles, and classroom discussions led by an Indigenous instructor. Also, Lee (2022) included activities within the course that have structured prompts, while Kyles and Olafson (2008) provided weekly prompts and a structured activity to be completed for each week's reflective response letter and cultural autobiography. Mensah (2009) employed book club meetings with open-ended questions to foster critical reflections on diversity in science teaching. The variety above underlines the emphasis that guided structure and interactive activities hold in

promoting reflective journaling. Martin-Kerr et al. (2022) reflected on student interactions, instructional practices, and challenges related to equity among teacher candidates. Oskineegish (2019) centers on examining perspectives toward Indigenous education. While Lee (2022) engaged preservice teachers in reflecting on teaching practices and content standards in mathematics, Kyles & Olafson (2008) engaged preservice teachers in reflections on their cultural background and beliefs concerning diversity. Mensah (2009), on the other hand, is based on critical reflections about diversity, language, and community within science education. These reflections point to the development of understanding by the candidates about teaching and diversity.

Further, the activity of journal entry use in other activities indicates that the reflective journaling process is dynamic and multidimensional. Martin-Kerr et al. (2022) also used journal entries to underpin reflection dialogue, mentorship, professional growth, and theoretical analysis. Oskineegish (2019) integrated journal reflections into classroom discussions, sharing circles, and pedagogical development for culturally inclusive teaching practices. Lee (2022) journaled to support ongoing reflections and discussions throughout the class as a resource for future teaching. Kyles & Olafson (2008) used reflective writings for self-reflection, critical consciousness, and evaluating belief systems. Mensah (2009) used journals for small group discussions, whole-class debriefing, and final projects and assesses the changes in preservice teachers' beliefs and development as reflective educators.

Outcome

According to Gorski (2016), equity literacy comprise 4 models: Recognizing Inequity; Responding to Inequity; Redressing Inequity; Sustaining Equity. Different diary methods contributing to teachers' equity literacy emerge as outcomes from the included articles. The included studies somehow, directly or indirectly underscore Gorski's four models of equity literacy.

Recognizing Inequity

By conducting diary method based reflective practices from personal experiences and writing structured logs have been found to enable the identification and recognition of inequities within the classroom, which calls upon the educator to engage in critical reflection on one's teaching. 7 studies described that one of the equity-related outcomes for contributing to recognizing inequity is cultural sensitivity (Fund, 2010; Noel, 2009; Parker, 2012; Oskineegish, 2019; Civitillo et al., 2019; Endo, 2015; Prinsloo-Marcus & Campbell, 2022; Mendoza, 2021; Kyles & Olafson, 2008). For instance, Fund (2010) related the analyses made by teachers of standardized testing materials that are patently biased against non-dominant. This reflexive process is composed of social justice and ways to analyze the biases, being alert for subtle inequities in materials and interactions presented while teaching. Awareness of how tests like standardized testing are stacked against some learners would increase by developing strategies allowing fairer and less biased results. Reflexive journals also help educators reflect on stereotypes and myths about Indigenous students. As Civitillo et al. (2019) explained, video captures are used to pinpoint times when students from minority backgrounds are not engaging enough, thereby encouraging reflections on the responsive part of teaching. This enriched engagement equipped educators with their biases, or in other words, the ability to recognize and confront moments of inequity during classroom interactions and strategize how to implement inclusive teaching better. Other reflection tools provided were an exploration of the journeys through linguistics and how their language identities had morphed to affect personal lives and

then teaching practices, written reflections may tie the course theory to lived experiences, which set off the cultural sensitivity and self-reflection of biases (Prinsloo-Marcus & Campbell, 2022; Mendoza, 2021). According to Prinsloo-Marcus and Campbell (2022), through the writing assignments, students could develop linguistic autobiographies, thus making them aware of the inequity between society and institutions centered around language—the hegemony of English and all that is implied about confidence in and mastery of language. This led to understanding the linguistic biases and their effects on children and developed much appreciation for students with varied linguistic backgrounds.

Responding to Inequity in the Immediate Term

The reflective practices based on the diary method also prepared educators for real-time reactions to identifying inequities. Educators had to change their teaching practice on the fly by completing multiple diary forms and intervening at the moment that discriminatory behavior occurred. Reflective practices from studies such as Civitillo et al. (2019), Eick and McCormick (2010), and Mendoza (2021) have underlined the requirement for making quick decisions. From this perspective, educators learn to immediately pinpoint the emerging inequities and quickly outline corrective measures to guarantee continuous commitment to inclusivity. This means changing classroom management strategies to correct any potential inequities so that each student still feels respected and valued. For instance, reflecting on a classroom interaction where cultural background has been overlooked, the teachers would in the next class session plan and put in effect corrective actions that help checkmark those deviations to ensure the inclusivity of the learners—one that includes all learners as active members of a learning community (Civitillo et al., 2019). Through interaction with practical strategies found in the book From Rage to Hope by Kuykendall (1992), teachers could implement new approaches to classroom management and

place them into practice in daily teaching. They developed a learning atmosphere for students where they were valued and respected so that they could respond to observe inequities immediately in their classrooms. In the work of Mendoza (2021) on pre-service teachers, the weekly structured log of cultural diversity reflections was maintained through class observations. Therefore, an instructor can easily detect biases or misalignments in the approaches to teaching in a class and deal with them rightfully since keen observation, critical analysis, and sensitivity to diversified backgrounds are required. As pointed out by Endo (2015), there was a fast adaptability of teaching styles to become very inclusive in nature and more agile with changes according to the different needs of students.

Another aspect is encouragement, which is important while recognizing inequity in the immediate term. Both Endo (2015) and Mensah (2009) emphasize the necessity of courage to confront and address discriminatory behaviors and practices. The sustained practice of reflective journaling and discussion fostered a profound commitment to creating just learning environments. The reflective transposition of their lived experiences facilitated educators' conscientization and sensitivity to the topic of inequity, thus equipping them to act upon such events as they transpired, such as intervening right away when a student was being teased because of his home language by other students (Endo, 2015). Such practices include the immediate use of inclusive classroom management strategies and the quick addressing of discriminatory language practices that show the teacher correct practices that are not equitable and address insensitive comments promptly to provide respect and an inclusive learning environment. Mensah (2009) provides an example whereby journey boxes and book club meetings provided for immediate discussion of cultural and linguistic challenges. This proactive approach paves the way for addressing biases and promoting equity through collective

reflections and discussions. Reflective-trained educators will address biased comments or practices on the spot as long as it is within their scope. Fránquiz et al. (2011), Martin-Kerr et al. (2022), and Kyles and Olafson (2008) also underscored in their research that so much has to be done through quick decisions making. As a result of this, educators can address cultural insensitivity and biases there and then in a way that is both positive and helpful. Journey Boxes are, as described by Fránquiz et al. (2011), which preservice teachers use journey boxes to tell reflective stories and present artifacts to engage in on-the-spot discussions about cultural and linguistic challenges that provide the preservice teacher with a means to multi-modally reflect upon this interaction with linguistic oppression and continue a journal of personal and educational stories of cultural and linguistic journeys. This resulted in the immediate rectification of classroom cultural bias and discussions on the problems that followed from this cultural and linguistic diversification. When a teacher candidate observes that a student is failing because of unfair instructional methods, the candidate changes her instructions immediately reflects upon it, and records it in the reflective dialogue. The process included effective communication responsiveness to student needs and on-the-spot intervention, leading to changes in teaching practice for equity and enhancing communication and intervention skills.

Redressing Inequity in the Long Term

Long-term redressing of equity in education includes planning and supporting sustained efforts to improve the practices and policy of education. The learning is then applied to strategize further how more inclusive materials and practices might be included in the long run. One aspect for this is collaboration. Working with colleagues and administrators to promote equity is very important. Implementation of equitable practices requires collaboration with colleagues, mentors, and administrators. Endo (2015) foregrounds the importance of educators working with others in their institutions to effect systemic changes resulting in a culture of equity. School policies have to be revised, the curriculum needs to be inclusive, and all students have equal opportunity to learn through different ways (Martin-Kerr et al., 2022). Reflection logs that are structured and reflective dialogues written down have both emphasized the importance of working together to bring about systemic changes and foster a culture of equity within an educational institution (Carrington & Selva, 2010; Martin-Kerr et al., 2022).

Another aspect is the adaptation of the teaching method, asking educators to modify teaching approaches based on ongoing reflections and insights to meet the diverse needs of students. Fránquiz et al. (2011) go on to suggest that reflections using Journey Boxes can foster more inclusive classroom practices and more inclusive curriculum planning, reflective of the cultural diversity of student backgrounds. The capacity for bilingual teachers to reflect on their schooling experiences and the culture in which they have been brought up helps to break the hegemonic thinking that marginalizes different students. Assignments should make teachers look back on their racialized experiences and make sense of their impact regarding teaching practices. It is a reflection that deepens teachers' understanding of the cultural and linguistic resources students bring to the classroom and supports inclusive and responsive teaching approaches. According to Lee (2022), ongoing reflection, based on a record in interactive journals, is essential for teachers to change their teaching approaches as they try to ensure they are more responsive to the needs of students. Reflection, in this case, helps teachers adapt their instructional strategies to reach and teach all of their students effectively. It is by reflecting on classroom experiences and interactions that teachers gain knowledge to make appropriate changes in their teaching strategies, ensuring they keep up with the ever-increasing needs of students.

Sustaining Equity Efforts

Equitable work was sustained in the long run by ensuring that a commitment to equity was continuously and constantly further developed through the professionalism of educators and their reflective practices. Indeed, Endo (2015) showed how even reflective tasks are continuously completed and critical feedback mechanisms continuously support furthering a continued commitment to equity, just like revisiting initial self-assessment and reflection on growth by the preservice teachers. Eick & McCormick (2010) have established that reflective practices embedded into everyday professional development activities have been particularly supportive in keeping a focus on equity. Reflections and feedback, if consistent, can create networking supports for continuous professional development, which encompasses sustaining equity. Additional ways include utilizing structured reflection logs, essays, and interviews that support the crafting of sustainable teaching strategies validated by expert reviews. This practice needed commitment, vision, and the interest of peers and experts over time. Outputs came in sustainable and inclusive strategies in teaching with specialist support to validate and extend all equity work. The written paper and the structured interview showed that there were shifts in teaching philosophies and much commitment to sustaining the efforts in pushing for equity, according to Burgard et al. (2018). The research designed maps and narratives that described ongoing learning related to race, ability, and a commitment to sustained advocacy for intersectional justice within teaching practices. Another evidence found is a long-term effort to engage students through classrooms with sustained advocacy in education about equitable diversity. However, multimodal reflections such as journey boxes were utilized to prompt the ongoing integration of cultural and linguistic awareness in teaching, where preservice teachers continuously reflected on their cultural and linguistic backgrounds and personal growth and, this time, slowly integrated it into

their methods of instruction (Fránquiz et al., 2011). Continuing results included the infusion of both cultural and linguistic awareness in teaching and consistent reflection on one's personal and professional growth. The evolution of the video-stimulated recall sessions in use to fine-tune and improve CRT practices is highlighted by the results of the ongoing nature of this approach and the refinement of teaching practice through video analysis, focusing on CRT teaching methods. Written reflective dialogues interactively helped preservice teachers establish a habit of reflective practice, which they planned to continue into their professional careers (Kyles & Olafson, 2008; Martin-Kerr et al., 2022). Both authors identified continuity in the need for reflective dialogue with a mentor. That act allowed focus on equity-minded teaching practices. The result was that practices for reflecting on equity and continued professional growth were created from the mentorship and interactive, reflective dialogue.

Empathy and Social Justice

There are two significant aspects: empathy and social justice, which can contribute to the equity literacy of teachers. The reviewed articles, however, do not fall directly under any of the four equity literacy skills, according to Gorksi (2016). Still, all the same, are very critical to the ability to develop and apply the skills at any step of the way towards equity literacy.

The first one is empathy. In almost every study, participants enhanced their empathy to improve their equity literacy through various strategies. As they, and following them, engage in critical reflection regarding their practices and attitudes about culturally diverse students, and bias examination regarding themselves and their teaching methodologies on this process. Consequently, dealing with problems flexibly and sensitively encourages the development of empathy in pre-service teachers toward the students' outside lives and problems they might encounter (Eick & McCormick, 2010). In fact, it is this empathetic approach that helps teachers open up more inclusive classrooms by respecting and valuing students' diverse cultural and linguistic backgrounds. For instance, self-reflection within teacher preparation programs helps candidates integrate biases and assumptions—while doing so, creating more just teaching environments. Empathy allows teachers to build stronger relations with students for better classroom dynamics and student outcomes. Herein lies the process in which empathy development happens as inclusive and equitable learning environments are built. Empathy is also operationalized into classroom practices by encouraging students to consider other people's perspectives and emotions. In peacebuilding education, for example, students are given a chance to review how they feel and how others feel while conducting dialogues over conflict, whereby they acquire more insight into different perspectives and respectful ways of interactions (Hyun, 1997; Endo, 2015).

On the other hand, social justice is the twin call of critical reflection and action. The conceptual framework of critical social theory emphasizes reflection on and in practices and systems of education from a perspective of social justice by the pre-service teacher (Carrington & Selva, 2010). In other words, it means dealing with power relations, acknowledging privilege, and undertaking measures that would lead to more inclusive educational practices. Social justice-infused programs change teachers' understanding of systemic inequities and how to deal with them. In such a way, these approaches lead to a positive change in teachers' beliefs and practices and a further rise in their commitment to equity, increasing student engagement and achievement. Teacher candidates practice problem-posing and reflection activities that challenge the status quo toward issues of social and racial justice, thus preparing them with competence and disposition to develop equitable classroom settings (Hyun, 1997). The classroom settings

promoted social justice by including different perspectives and critical discussions regarding social issues. Teachers use culturally relevant pedagogies, as well as conflict dialogue, to engage students in meaningful conversations on topics such as race, ethnicity, and other factors of identity, which would enable the marginalized students to gain a sense of empowerment and agency (Endo, 2015). This will lead to cultural sensitivity and responsiveness on the part of the educator, engagement and learning of the student, and critical consciousness towards change within learners from a social perspective (Hyun, 1997).

Discussion

This study aimed to examine diary methods for promoting equity literacy in preservice and in-service teachers at both levels of education. Out of these, this systematic review found that 18 studies conducted with the help of different kinds of reflective diary-based techniques with teachers, such as personal reflective diaries, reflective journals, linguistic autobiographies, structured reflection logs, structured essays, structured interviews, journey boxes, video-stimulated recall, and reflective dialogues with teachers working in different educational setups. The diary-based interventions have been broadly classified into four categories based on the type of focus and approach made by them, which include: personal and professional experiences, structured and guided reflection, multimodal reflection, and interactive reflection. The methods also enhance the skills of teachers to identify, respond to, and correct inequalities within the classroom to create an all-inclusive learning environment. According to Gorski (2016), there is a clear indication that the promotion of equity literacy requires addressing structural inequalities. Most of the included studies extended these discussions by providing empirical evidence that diary methods can indeed be effective for fostering equity literacy, which can also be linked to Gorski's four models (Gorski, 2016). The essential indications are that the

diary-based methods increase critical self-awareness, culturally responsive teaching, and community engagement. Based on different pieces of research, diary-based methods reflections help teachers to develop their critical abilities regarding personal biases and assumptions, thus ensuring teaching that is more just. This also means that this is not a one-time achievement but a process that needs consistent reflection and tweaking strategies. This will be made possible by applying diary-based methods in teacher training programs.

The Importance of Critical Reflection

Critical reflection calls for educators to deeply engage with the beliefs, assumptions, and identities that they carry. Such deep engagement would constitute an essential site for the disclosure of the relations of power and hegemonic practices within educational contexts. Reflection, as identified by Brookfield (1995), moves beyond the technicalities of analyses; it is a process that is emotional and transformational in reshaping the teacher's identity and practice. Educators' reflection on their biases and positionalities related to privilege can help them gain a sophisticated understanding of oppression and strengthen their commitments to educational justice (Gorski & Dalton, 2019). For example, reflective journaling was found to assist the pre-service teacher in shifting from deficit views to more affirming views of linguistic diversity by Endo (2015). Similarly, Fund (2010) pinpointed that reflective practices improved student-teachers ability to discern biases in standardized testing materials. These findings suggest that critical reflection enables educators to develop a sophisticated understanding of oppression and strengthen scommitment to educational justice and self-awareness.

Culturally responsive teaching recognizes the presence of cultural background among all students. Critical reflection plays a vital role in enhancing culturally responsive teaching

practices. It is through questioning one's assumptions that teachers can then understand others' perspectives and consider the diversities of their learners' needs. The diary-based reflection method has reportedly improved a teacher's ability to practice a culturally responsive approach. For example, the video-stimulated recall has been successful in promoting the development of teachers who are critical of their teaching practices and sensitivity to the cultural backgrounds of students (Civitillo et al., 2019). Reflective journals also help enable educators to record and analyze their teaching experiences that were attached to making teaching more inclusive and responsive in the classroom (Farrell, 2013). Through these reflective practices, teachers are encouraged to collaborate toward the disintegration of the prevailing systemic injustices within their institutional contexts.

Critical reflection also empowers educators to support social justice. Through critical reflection on their involvement in perpetuating or resisting inequity, educators can move beyond thinking and directly work for the transformation of educational systems that are more just. The second essential component in Gorski's (2016) framework for equity literacy is recognizing and responding to not only the visible but structural roots of inequality. This thesis brings out the changed or transforming nature of the diary methodologies in the operationalization of the social justice responsibilities among educators and the ability to act on them. For example, reflective dialogues and structured reflection logs enhance the understanding of educators regarding social justice issues. (Martin-Kerr et al., 2022; Carrington & Selva, 2010). Such reflective practices help the teachers critically analyze their teaching, point out the areas where improvements are required, and bring in changes that would create equity. It is through ongoing reflection and dialogue that educators develop long-term commitments towards social justice and equity in their teaching.

In light of such benefits, diary-based reflective practice goes a long way. Such practices not only better the immediate teaching practices of educators but also lend themselves to sustained, equitable-minded approaches to education. Engaging in continuous critical reflection allows a habit to develop where all beliefs and practices are continuously questioned and re-evaluated. Future research should move on to scalable diary frameworks and longitudinal studies to further validate the long-term impact of these methods. Longitudinal studies would provide more concrete evidence on how reflective practices contribute to the professional growth of educators and the inclusiveness of educational environments over time. Research on how diary-based reflective practices are integrated into teacher education programs and professional development activities and their effectiveness in diverse educational settings is further warranted.

Limitations

The main limitation of the study is the small sample size and the resultant lack of generalizability in the results. The research is highly individualized and particularizes detailed and in-depth analyses. However, the sample size is small, which compromises the capability to generalize its findings to a broader population. While such insights are invaluable, they cannot be taken as proof that will be generalizable to all educational contexts or all teacher populations. Furthermore, the use of this reflective data, in the majority, was through self-reporting either from journals or interviews in which teachers related their teaching practices. This often raises the problem of biases, either because participants may wish to present themselves in a good light or may have inaccurate recall. This is further complicated by the fact that qualitative analysis is a subjective process; hence, in interpreting data, there might be divergent views among researchers. In such a case, interpretations at times could lead to a different conclusion by two analysts focusing their conclusion on the same set of data, hence lowering reliability. Another

limitation arises from the cultural and contextual specificity of the research. Should the study be realized within a unique, non-representative environment, the findings cannot be transferred to other settings. Given the highly diverse contexts of education and cultures globally, this has particular relevance. So, although the study would give deep insights within the specific context where it is applied, its applicability in other contexts will be limited. Another significant limitation is the lack of long-term data on how observed changes or developments are sustained over time. The study of immediate or short-term outcomes does not allow an understanding of the impact of the intervention or reflective practices used in the long run. It would be from such longitudinal data that it would be ascertained whether the changes were sustainable over a more extended period. A second level of complexity pertains to the richness of data concerning numerous backgrounds. Differences in individuals, originating from the level of specific experiences and cultural backgrounds, may significantly impact ways of responding to reflective practices. This variability makes it difficult to attribute changes observed solely to the interventions used in the study. The way these individual factors interplay has to be taken into consideration in the interpretation of the results. Last but not least is the fact that the reflective practices themselves are biased. Though the reflective exercises have an actual value, they can be influenced by such states of mind, personal biases, or social desirability within the participant who responds. These factors may influence authenticity and deep reflection, which might bias the findings. Identifying such biases is essential for objective interpretation of the data.

Implications

These implications have multi-dimensions and pave the way toward further practices in education, especially for the development of empathy and the promotion of social justice and equity literacy among educators. This is a vital way in which the research shows that diary-based practices could be used efficiently to develop empathic skills for educators. Educators can get more insights into and pay respect to the diversities and cultural backgrounds of their students if they are critical of their teaching practices and attitudes toward culturally diverse students. Such a compassionate approach would help develop inclusive classes and make all students feel valued and supported. Further, this shows how important these practices are to be embedded into education through social justice. Reflectional practices challenge teachers to critically address issues regarding power, privilege, and systemic injustices within the education system. It is from such critical inquiry that there will be instilled a deep commitment to social justice on the part of the educator makes him or her able to challenge and correct such inequities. In that case, the educators will have the opportunity to build appropriate academic environments founded on the principles of justice and equity for all students.

The other critical implication of this research process is that it enables teachers to respond promptly to the issue of inequities. Reflective practices empower teachers to identify and attend to inequities whenever they occur. By documenting their classroom interactions reflectively, teachers can respond as quickly as possible in implementing the necessary corrections for the respectful and fair treatment of all students. In this way, proactive measures are taken that safeguard and underpin an inclusive, supportive learning environment. Besides, sustained reflective practices give rise to long-term commitments supporting equitable education. Continuous professional development, through reflective journaling, allows the educator to change teaching strategies that suit the student of a diverse nature. This constant commitment is a must to develop an educational system that is fair enough for all students to become successful.

Further research stresses the impact of reflective journaling and other diary methods on teaching practices. This means that educators are becoming biased, can catch themselves in those

instances, and could adjust their ways to better relate to culture and be more inclusive. This has the direct impact of working on improved student engagement and learning results as well; thus, it is practical. Lastly, the research also shows the benefits of collaborative reflection and mentorship. Guided critical reflection with mentors is a crucial way educators come to truly understand what educational inequities are and how best to remediate the situation effectively. The collaborative approach ensures continuous professional growth in that the educators remain committed to equity and inclusivity in their teaching.

Suggestions

For future researchers, conducting longitudinal studies can provide valuable insights into the long-term impact of diary methods on equity literacy among teachers. These studies will help understand how reflective practices evolve over time and their sustained effects on teaching. Developing scalable frameworks for diary methods that can be easily integrated into teacher education programs is another key area for future research. Standardized guidelines for diary entries and reflection prompts that can be adapted to various educational settings would be beneficial. Cross-cultural comparisons should also be performed to understand how diary methods are used in different educational contexts globally. Identifying culturally specific challenges and benefits will contribute to a more comprehensive understanding of diary-based reflection. Finally, incorporating quantitative measures alongside qualitative analyses to evaluate the effectiveness of diary methods is essential. This could include pre-and post-intervention surveys, self-efficacy scales, and other metrics that provide measurable outcomes.

For practitioners, the use of structured reflection prompts to guide diary entries is highly recommended. This ensures that reflections are focused and cover essential aspects of equity

literacy, including specific teaching experiences, interactions with students from diverse backgrounds, and personal biases. Integrating diary methods into ongoing professional development programs can significantly enhance teachers' self-awareness and foster continuous improvement in teaching practices. Encouraging teachers to maintain reflective diaries as part of their professional growth can lead to better self-awareness and more effective teaching practices. Combining diary writing with interactive reflection activities such as group discussions, peer reviews, and mentorship sessions can deepen the reflective process and provide different perspectives on the recorded reflections. Establishing robust feedback mechanisms where teachers can receive constructive feedback on their diary entries from peers and mentors will refine their reflective practices and promote a culture of continuous learning and improvement. Lastly, it is important to focus on both immediate and long-term equity goals in diary reflections. Teachers should be encouraged to use their reflections to address immediate classroom issues and develop strategies for sustained equity efforts in their teaching practices.

Conclusion

In conclusion, this study underscores the potential of diary-based reflection to enhance equity literacy among teachers. By fostering critical self-awareness and culturally responsive practices, diary methods contribute to more inclusive educational environments. The findings offer valuable insights for teacher education programs and policymakers aiming to promote equity and inclusion in education. Future research should continue to explore innovative reflective tools and their impact on fostering equity literacy in diverse educational settings. Through sustained reflective practice, educators can play a crucial role in addressing educational inequalities and promoting social justice in schools. The integration of diary methods in teacher education represents a promising avenue for developing equity-minded educators capable of transforming educational practices to better serve all students.

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Appendix

Summaries per included article, alphabetically ordered

Beneke et al. (2022)

The research adopts a critical narrative methodology, involving 42 participants from teacher education programs in the Pacific Northwest. Participants provided written narratives and created qualitative maps to express their emotional geographies. The methodology includes qualitative mapping for participants to narrate their educational journeys and experiences around ability and race. The results reveal that TCs use emotions in ways that reinforce these hierarchies through gratitude, ambivalence, and care. TCs express gratitude for the benefits they receive from educational systems that marginalize others; they show ambivalence towards the systemic oppression of marginalized groups, allowing them to maintain emotional distance; and they display care in ways that often commodify the suffering of marginalized individuals, using these expressions to position themselves as aware and empathetic without necessarily engaging in transformative actions.

Burgard et al. (2018)

The study comprised 11 teacher candidates, and the sampling technique was voluntary participation following IRB approval. The participants, aged 20-23, were predominantly female (10 out of 11), monolingual in English, with varying levels of previous international experience. Measures used to assess outcomes included pre- and post-experience essays, group discussions, individual interviews, and field observations. The candidates initially held deficit-based models and assumptions about poverty and educational practices in Guatemala, which were challenged

and transformed through their teaching experience. They reported an increased understanding and ability to teach linguistically diverse students, emphasizing repetition, clarity, and engagement in the classroom. The experience also enhanced their self-efficacy, with participants noting personal growth in confidence, patience, and risk-taking, which they believed would positively impact their future teaching. Furthermore, the overseas practicum broadened their worldview and reduced their tendency to otherize non-U.S. individuals and people of different racial backgrounds, fostering a greater appreciation for diversity and the importance of culturally responsive teaching practices.

Carrington & Selva (2010)

The authors employed a qualitative methodology, analyzing the service-learning reflection logs of seventy-two pre-service teachers who participated in a program designed to integrate service-learning into their education curriculum. This sample consisted predominantly of white, mono-lingual, middle-class individuals in their final year of study. The methodology focused on the use of critical social theory to inform the reflective processes within the service-learning program. The study utilized Bain et al.'s (2002) 5Rs framework—Reporting, Responding, Relating, Reasoning, and Reconstructing—to evaluate the depth of reflection in students' logs, providing a structured approach to analyzing their reflections. Results indicated significant evidence of transformational learning among the participants. Students demonstrated increased awareness of social justice issues and reflected critically on their roles and responsibilities as future educators. They critiqued social norms and imagined ways to contribute positively to society through their professional roles. This transformative learning was facilitated by the structured reflection log, which prompted students to engage deeply with the critical social theories introduced during their coursework.

Civitillo et al. (2019)

The study involved four ethnic German teachers at a high school in a large urban area in Germany, focusing on how these components interact in a real classroom setting. The sample size was small, consisting of only 4 teachers, with purposeful sampling used to select a school known for its cultural diversity. The research team employed ethnographic methods, combining classroom video recordings and post-observation interviews. The Culturally Responsive Instruction Observation Protocol (CRIOP) was used to measure the degree of cultural responsiveness in teaching, encompassing dimensions like classroom relationships, assessment practices, instructional practices, critical discourse, and socio-political consciousness. Data analysis included both qualitative and quantitative approaches to provide a nuanced understanding of the interactions among the study variables. A high degree of congruence between the teachers' culturally responsive teaching and their beliefs about cultural diversity. However, the degree of cultural responsiveness and the beliefs varied across the individual teachers. Those observed as more culturally responsive also exhibited more elaborate self-reflection patterns concerning their teaching practices.

Eick & McCormick (2010)

The study investigates the impact of a book study on pre-service teachers' attitudes and practices regarding culturally responsive pedagogy. 49 student teachers (interns) in an elementary education program were involved, who were predominantly Caucasian with only one male participant. These interns were enrolled in a professional development seminar that alternated between face-to-face and online discussions. The methodology included a survey of 47 interns about their background experiences, reflective journaling on the book "From Rage to Hope," and a final set of reflections post-seminar and presentation by the author, Dr. Crystal Kuykendall. The sample size was 49 interns, with 31 consenting to the use of their final reflections for the study. The sampling technique was convenience sampling, as all participants were enrolled in the same program and seminar. Characteristics of the participants revealed that they mostly came from rural and suburban backgrounds, with limited exposure to urban settings and diverse populations. Measures to assess outcomes included the pre-study survey, reflective journal entries, and final reflections, which were analyzed using descriptive coding and thematic analysis. The four themes that emerged were: project positive teaching behaviors, respect, value, and embrace individual differences, teach to individual student differences, and get to know students' lives.

Endo (2015)

The study, employing a mixed-methods approach, utilized data from demographic surveys, focus groups, reflective journals, one-on-one interviews, and student work samples. The methodology aimed to illustrate shifts in the preservice teachers' attitudes towards language diversity, from predominantly monocultural and deficit views to more accepting and affirming perspectives. This transformation is framed within Nieto's model of multicultural support, which delineates levels from Monoculturalism (Level 1) to Affirmation and Critique (Level 5). The sampling included 20 White preservice teachers who participated in various interactive activities and field observations, which were designed to challenge their initial perceptions and foster a deeper understanding of the sociopolitical dynamics of language use in educational settings. The measures used to assess outcomes included participants' self-assessment tools, reflective writing, and observation feedback, focusing on their ability to recognize and critique linguistically biased practices. The results indicated a positive shift in their views towards linguistic diversity, with significant moves from Level 1 or 2 to at least Level 3 (Acceptance), and in some cases, to Levels 4 (Respect) and 5 (Affirmation and Critique).

Fránquiz et al. (2011)

The study is conducted through a purposeful sampling of teachers from three distinct urban teacher-preparation programs. The methodology involves documenting the life histories, discourse, and various material resources utilized by these teachers, with data analyzed through methods of portraiture, aligning with theoretical frameworks of Critical Race Theory (CRT) and Latino critical race theory (LatCrit). This study focuses on a small sample size, examining 3 teachers from each program, with purposive sampling techniques to ensure the representation of diverse counterstories from the participants. These teachers, as individuals of color, bring unique perspectives influenced by their personal and communal experiences. The measures to assess outcomes are largely qualitative, involving interviews, participant observations, and the analysis of personal narratives and educational artifacts to capture the detailed portraits of the teachers' pedagogical practices and their impacts on educational environments. By presenting alternative stories and challenging majoritarian tales, the teachers foster environments that recognize and value the cultural and linguistic assets of bilingual students.

Fund (2010)

The study employed a quantitative and qualitative mixed-methods approach over a three-year period. It involved student-teachers from science and mathematics backgrounds participating in a theoretically oriented teacher training course. The methodology included both face-to-face lessons and written reflections that were peer-reviewed, creating a co-reflective community. The reflections were analyzed under two different instructor feedback conditions: full and diluted. The sample size consisted of several cohorts of student-teachers, totaling 159 participants over three years. The study used a self-reported questionnaire designed to evaluate perceptions of professional development, alongside detailed case studies that provided deeper insights into individual experiences and development. The results indicated a significant improvement in student-teachers' reflective abilities and professional development over time, irrespective of the feedback condition, with notable differences between disciplines.

Hyun (1997)

The study involved prospective teachers enrolled in early childhood/elementary education courses at Pennsylvania State University and Clarion University of Pennsylvania from Fall 1993 through Spring 1996. The sample size included participants across four different course levels during these periods, although the exact number is not specified in the provided excerpts. Participants engaged in an autobiographical self-examination using a formatted list of 25 questions designed to elicit reflective writing on their own culture and ethnicity. This was followed by small and general group discussions where they shared their experiences and insights. The data collection included personal documents, academic journals, and reflective notes taken by Hyun as a participant observer. The analysis of the data was conducted through ongoing readings, employing techniques like open, axial, and selective coding. Results from the study indicated that autobiographical self-examination helped prospective teachers develop a conceptual sense of perspective-taking. It also encouraged them to critically assess pedagogical behaviors and recognize individual uniqueness beyond ethnic or racial groups. Participants reflected on the importance of understanding diverse family cultures and integrating this knowledge into their teaching strategies to create an equitable learning environment for all children.

Kyles & Olafson (2008)

The study consisted of 15 preservice teachers who underwent both qualitative and quantitative assessments. The authors employed a transformative methodology to explore the impacts of reflective writing and diverse field experiences on developing teacher efficacy in handling cultural diversity. The data collection included pre- and post-test measures assessing hope, motivation for teaching, and teaching efficacy, alongside the completion of reflective writing assignments like response letters and cultural autobiographies. The results indicated that while providing structured learning opportunities does initiate engagement with personal beliefs, it does not significantly change efficacy beliefs within a single semester. Qualitatively, though some students demonstrated an increased awareness and articulation of their beliefs regarding diversity, many did not progress beyond superficial recognition of these beliefs, particularly those with monocultural backgrounds.

Lee (2022)

The study employed a qualitative approach, focusing on the integration of a self-awareness framework within a mathematics methods course through a researcher-teacher educator partnership. The research involved 42 teacher candidates, although the specifics of the sampling technique were not explicitly detailed in the dissertation summary. The outcomes of the study were assessed using various measures including candidates' written reflections, interviews, and other artifacts produced during the course, supplemented by field notes, class observations, and interviews with teacher educators. The critical role of self-confrontation and critical self-reflection in aiding candidates to focus on equity in their teaching practices.

Martin-Kerr et al. (2022)

The sample size in this study is notably small, focusing intensively on one individual teacher candidate's experience. This allows for a detailed, in-depth analysis of her reflective processes and the impact of mentorship on her development. The sampling technique is purposeful, selecting an information-rich case that illuminates the phenomena under study—namely, the development of equity-mindedness through reflective practice. By applying three different theoretical lenses—those of Van Manen, Schön, and Freire—the researchers analyze the teacher candidate's reflections to explore how her understanding of equity and teaching practices evolve through guided reflection and dialogue with her mentor. The results indicate that engaging in guided, critical reflection helps the teacher candidate develop a deeper understanding of educational inequities and consider how to address these in her teaching practice. The dialogues with her mentor, framed through various theoretical perspectives, enhance her reflective capacity, making her more aware of the complexities of teaching for equity.

Mendoza (2021)

Mendoza uses a qualitative research methodology with a critical social design to delve into the transformative teaching experiences of 21 MAPEH (Music, Arts, Physical Education, and Health) pre-service teachers. These participants were selected through maximum variation sampling from seven Teacher Education Institutions in Region 3. The study gathers data primarily from written reflection logs, which are responses to specifically crafted questions that probe the teachers' cultural competency and their integration of diversity into teaching practices. The results of the study reveal that pre-service teachers highly value cultural competence and the inclusion of diverse student backgrounds in the educational process. Mendoza concludes that MAPEH subjects, which inherently touch on personal and cultural aspects of students' lives, can significantly benefit from transformative teaching approaches that embrace cultural diversity.

Mensah (2009)

This study involves qualitative analyses focusing on the book club's role in fostering reflective and critical thinking among PSTs. The study had a sample size of 23 PSTs who were enrolled in a 16-week elementary science methods course at a large urban university. These PSTs participated in regular, peer-directed group discussions centered on a specific ethnographic, multicultural text, which provided a context for examining issues related to urban science education. The primary measure used to assess outcomes was the analysis of PSTs' written reflections and journal notes taken by the researcher, which were evaluated to identify emerging themes reflecting learning and ideological shifts. The results show significant ideological changes among PSTs. They became more critically aware of their assumptions and biases concerning diversity in education, indicating that the book club effectively facilitated reflection and critical discussions. The study highlights the importance of integrating multicultural understandings and reflective practices in teacher education, emphasizing that such integration can lead to meaningful changes in PSTs' approaches to teaching in diverse urban environments.

Noel (2009)

The study primarily revolves around the author's reflective diary entries during her time at J Elementary School, which are subsequently analyzed through critical theory perspectives on race, class, power, and privilege. The specific sample size is not numerically defined since the study is more qualitative and narrative, focusing on the author's interactions and experiences rather than a broader population. The sampling technique can be described as purposive, centering on Noel's role and experiences as a White, middle-class, Ph.D.-educated female engaging with a low-income, culturally diverse urban school community. Participants in this study include the children, teachers, and community members associated with J Elementary School, which serves a predominantly African American and economically disadvantaged population. Measures used to assess outcomes involve the critical examination of Noel's positionality and the dynamics of power, race, and privilege in her interactions with the community. Noel discusses the importance of ongoing self-reflection and critical engagement to understand and mitigate the impacts of her privileged status in fostering authentic community partnerships .

Oskineegish (2019)

The study uses a mixed methods approach, combining qualitative and quantitative analyses to investigate the perspectives of 44 teacher candidates who participated in the fall 2016 semester. The methodology included surveys with open-ended questions, reflection papers, and classroom discussions, enriched by the researcher's observations as a participant. The course enrolled 23 undergraduate students in a concurrent education program over 12 weeks and 21 students in a one-year program over 9 weeks. The key measure to assess outcomes involved analyzing responses to open-ended survey questions, reflection papers, and observational notes. The findings suggest that self-reflection facilitated a deeper understanding of one's own cultural frames of reference, supported the personal connection of course material to individual experiences, and aided in developing culturally inclusive pedagogies.

Parker (2012)

The study spanned almost an entire school year, covering multiple units of study, and involved 78 students in total, comprising first-generation immigrants and children from diverse

ethnic backgrounds. This ethnographic method enabled a detailed examination of how conflict dialogue pedagogies were implemented and their impact on students' engagement and learning. Various conflict dialogue pedagogies were analyzed across three different classroom settings, each providing unique insights into the inclusion and exclusion processes facilitated by these pedagogies. When the curriculum explicitly connected to students' identities and experiences, the opportunities for democratic peacebuilding inclusion increased. Dialogic pedagogical processes that promoted cooperative engagement among students enhanced the classroom community and facilitated constructive education about conflict.

Prinsloo-Marcus & Campbell (2022)

The study analyzed linguistic autobiographies from 35 postgraduate certificate students in English education, including both first-language (L1) and additional language (L2/L3) English speakers. This reflective practice allowed the authors and their students to explore personal linguistic journeys and perceptions about language use in educational settings. Through thematic analysis of autobiographical narratives, the findings revealed that students often feel insecure about their English proficiency, which can impact their confidence as future English teachers. The study emphasized the value of 'critical friend' dialogues—open, reflective discussions between colleagues—to foster deeper understanding and to challenge assumptions about language and education.