Derleme Makalesi



Review Article

Hizmet Öncesi Öğretmen Eğitiminde Eylem Araştırmasının Tematik Bir Analizi: Yansımalar ve Gelecek Yönelimler*

A Thematic Analysis of Action Research in Initial Teacher Education: Reflections and Future Directions

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ABSTRACT

This systematic literature review aims to gain a comprehensive understanding of the opportunities that action research (AR) provides for initial teacher education and the challenges that teacher educators and pre-service teachers (PSTs) may experience during the AR process. We analyzed 20 empirical studies on AR conducted in initial teacher education programs, adopting a hybrid approach to thematic analysis. The findings indicate that AR is a promising practice that helps PSTs to reflect critically, (re)construct their teacher identity, see students as partners, value collaboration, and (re)conceptualize their understanding of research. However, it is also important to consider the challenges faced during the AR process, such as practicum restrictions, assessment demands, weak communication between partners, and time constraints. Therefore, it is essential to consider AR within initial teacher education as distinct from in-service AR practices since the needs and concerns of PSTs might be different in this transitional period of their lives. Implications are included for initial teacher education programs which are planning to use AR as a tool for teacher learning and development.

Keywords: Action research, pre-service teacher education, opportunities, challenges.

ÖZ

Bu sistematik alanyazın taramasının amacı, eylem araştırmasının hizmet öncesi öğretmen eğitimine sağladığı faydaları ve süreçte karşılaşabilecek zorlukları ortaya koymaktır. Araştırma kapsamına alınması uygun bulunan 20 çalışmanın bulgularına hibrit bir yaklaşımla tematik analiz uygulanmıştır. Bulgular, eylem araştırmasının öğretmen adaylarının eleştirel bir bakış açısı kazanmalarına, profesyonel kimliklerini yeniden yapılandırmalarına, öğrencileri öğretim faaliyetinin aktif katılımcıları olarak görmelerine, iş birliğine değer vermelerine ve araştırma anlayışlarını (yeniden) kavramsallaştırmalarına yardımcı olan önemli bir uygulama olduğunu göstermektedir. Bununla birlikte çalışmanın bulguları, eylem araştırmasını hizmet öncesi öğretmen eğitimine dahil ederken öğretmenlik uygulaması dersi kısıtlılıkları, değerlendirme talepleri, ortaklar arasındaki zayıf iletişim ve zaman kısıtlamaları gibi problemlerin göz önünde bulundurulması gerektiğini de göstermektedir. Bulguların değerlendirilmesi sonucunda, öğretmen adaylarının hayatlarının bu geçiş döneminde ihtiyaçları ve kaygıları farklı olabileceğinden; hizmet öncesi eylem araştırması çalışmalarının farklı bir boyutta ele alınması ve bu konuda daha fazla çalışma yapılması

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gerektiği ortaya çıkmıştır. Eylem araştırmasını öğretmenlerin gelişimi için kullanmayı planlayan hizmet öncesi öğretmen eğitimi programları için öneriler çalışmaya dahil edilmiştir.

Anahtar Kelimeler: Eylem araştırması, hizmet öncesi öğretmen eğitimi, faydalar, problemler.

INTRODUCTION

It is commonly known that PSTs face a variety of difficulties when they begin teaching in the practicum school, usually accompanied by feelings of frustration, self-doubt, and stress (Murray-Harvey et al., 2000). One reason for this appears to be the divide between theory and practice in traditional pre-service teacher education (Conroy, Hulme & Menter, 2013). To address this gap, researchers have proposed various forms of research-based professional development (e.g., narrative inquiry, action research, lesson study, exploratory practice) in which PSTs can engage in ongoing collaborative dialogue with others (i.e., teacher educators, peers, mentor teachers, students) about academic concepts around the activities of planning and teaching (Burns, 2019; Clandinin, 2019; Consoli & Dikilitaş, 2021; Johnson & Golombek, 2016; Ustuk & Çomoglu, 2019).

AR, which, as the name suggests, "simultaneously incorporates and integrates both action and research" (Burns, 2019, p. 992), is one of the most recommended strategies for PSTs to deal with the competing messages they receive from their university and their practicum school. AR is viewed as "a means towards creating meaning and understanding in problematic social situations and improving the quality of human interactions and practices within those situations" (Burns, 2005, p. 57). It is an iterative process in which the outcomes of each cycle serve as the foundation for the next cycle (Tripp, 2005). It recognizes teachers as legitimate knowledge producers (Burbank & Kauchak, 2003), acknowledges students as a valuable source of information in evaluating the action taken (Ponte, Beijard, & Ax, 2004), and emphasizes the importance of an empowered community of practice. Therefore, AR in initial teacher education is a practical tool which may lead to creative teaching, new insights about teaching, increased collaboration, interaction of theory and practice, and time for reflection (Ulvik & Riese, 2016).

Even though AR empowers teachers and is promoted by many researchers as a tool for teacher development, it has not yet gained widespread acceptance in schools (Willegems, Consuegra, Struyven, & Engels, 2017). Often, it is not viewed as an integral part of teaching, but as something that is added to it and expected by other people, especially outsiders (Faikhamta & Clarke, 2015). One probable reason for this is that initial teacher education programs fail to prepare teachers who embrace the role of the teacher as a researcher and are convinced of how beneficial research is for teaching and learning (Willegems et al., 2017). Many researchers emphasize that one of the main responsibilities of teacher education programs is to prepare teachers who can use research to address the complexity of teaching, not to provide PSTs with predetermined practices and expect them to apply them in their teaching (Calderhead, 1989; Dikilitas, 2020). The programs should adopt "an approach that empowers them with the freedom to generating new ways of teaching" (Dikilitaş, 2020, p. 167), create a space in which they can develop "inquiry stance" (Van Katwijk, Jansen, & Van Veen, 2021, p. 15), and equip them with research tools to observe, analyze, and evaluate their practices. In this regard, this review study aims to reveal the opportunities that AR provides for initial teacher education programs as well as the challenges teacher educators and PSTs might face over the course of the AR process.

METHODOLOGY

We conducted a systematic review to summarize the findings of existing studies on AR in initial teacher education (Petticrew & Roberts, 2008). We identified 20 full-text articles in English published in journals through the following electronic databases: ERIC, Web of Science (WOS),

Scopus, and PsycInfo, using text word search or combinations of: action research, pre-service teacher, student-teacher, pre-service teacher education, initial teacher education. Potential studies were selected using predetermined criteria: (1) empirical studies; (2) studies reporting findings of PSTs engaging in/with AR; and (3) studies published between 2000 and 2022. We excluded abstracts, editorials, commentaries, and review articles. An overview of the studies included can be found in Table 1.

Table 1. Overview of Studies Included in the Review (in Chronological Order).

Author/s	Year	Country/s	Study Group	
Price	2001	USA	11 PSTs doing their practicum and specializing in diverse subject areas, including science, social science, Spanish, and mathematics	
Burbank & Kauchak	2003	USA	10 PSTs doing their practicum and 10 in-service teachers from diverse subject areas, including science, social studies, English, French, and English as a Second Language (ESL)	
Levin & Rock	2003	USA	5 fourth-year pre-service primary education teachers doing their practicum and their 5 mentor teachers	
Smith & Sela	2005	Israel	40 fourth-year PSTs doing their practicum	
Trent	2010	China	6 fourth-year pre-service English language teaching (ELT) teachers doing their practicum	
Hagevik, Aydeniz & Rowell	2012	USA	20 fifth-year PSTs doing their practicum and specializing in diverse subject areas, including science, language arts, and social studies	
Castro	2014	Spain	A teacher educator and 50 PSTs in a master's course in teacher training	
Ulvik	2014	Norway	14 fourth-year pre-service secondary school teachers doing their practicum in a five-year teacher education program	
Capobianco & Ríordáin	2015	USA & Ireland	17 pre-service science teachers and 24 pre-service mathematics teachers doing their practicum	
Faikhamta & Clarke	2015	Thailand	23 fifth-year pre-service science teachers doing their practicum	
Ulvik & Riese	2016	Norway	32 fourth-year pre-service secondary school teachers doing their practicum in a five-year teacher education program	
Amir, Mandler, Hauptman & Gorev	2017	Israel	74 third-year PSTs attending a course on 'Research Literacy' and specializing in diverse subject areas, including language, literature, science, and mathematics	

Table 1. (Continued).

Ulvik, Riese & Roness	2018	Norway	8 fourth-year pre-service secondary school teachers doing their practicum in a five-year teacher education program	
Darwin & Barahona	2019	Chile	11 ELT graduates who had conducted AR projects as part of their practicum course	
Jakhelln & Pörn	2019	Norway	10 third-year PSTs doing their practicum in a five- year teacher education program for primary and lower secondary schools	
Banegas & Consoli	2021	Argentina	14 fourth-year pre-service ELT teachers attending a course on 'Research in English Language Teaching'	
Aras	2021	Turkey	23 preservice early childhood teachers doing their practicum	
Arefian	2022	Iran	15 pre-service EFL teachers doing their practicum	
Dikilitaş & Çomoglu	2022	Turkey	53 first-year pre-service EFL teachers taking a reading course in a four-year teacher education program	

In our attempt to synthesize the main findings from the studies, we adopted a hybrid approach to thematic analysis (Fereday & Muir-Cochrane, 2006). We first performed a deductive thematic analysis where the starting themes were "opportunities of AR in pre-service teacher education "and "challenges for AR in pre-service teacher education" based on previous literature. Then, we allowed for sub-themes to emerge directly from the data using inductive coding. We first read the selected articles individually and conducted a deductive analysis. We then re-read the data, co-discussed the emerging themes, and co-identified five sub-themes for the first major predetermined theme and four sub-themes for the second major predetermined theme. We also asked a teacher educator who conducted AR projects with in-service/PSTs and published widely on the issue to review our themes and sub-themes. The EFL teacher educator agreed with our findings and indicated that the major themes and their sub-themes reflect the current literature and practices on AR in pre-service teacher education.

FINDINGS

Our initial deductive analysis of the selected research articles on AR in pre-service teacher education yielded two major themes: "opportunities of AR in pre-service teacher education" and "challenges for action research in pre-service teacher education". We now discuss these major themes together with their sub-themes which emerged because of our subsequent inductive thematic analysis. A thematic overview of included studies is presented in Table 2.

Table 2. Thematic Overview of Studies Included in the Review.

Major Theme	Sub-theme	Studies
Opportunities of AR in pre-service teacher education	Critical reflection	Aras, 2021; Arefian (2022); Burbank & Kauchak (2003); Dikilitaş &Çomoglu (2022); Hagevik et al. (2012); Levin & Rock (2003); Ulvik, (2014); Ulvik et al. (2018)
	(Re)construction of teacher identity	Banegas & Consoli (2021); Capobianco & Ríordáin (2015); Dikilitaş & Çomoglu (2022); Levin & Rock (2003); Price (2001); Smith & Sela (2005); Trent (2010)
	Students as partners	Aras (2021); Hagevik et al. (2012); Levin & Rock (2003); Smith & Sela (2005); Ulvik et al. (2018)
	Collaboration	Arefian (2022); Amir et al. (2017); Capobianco & Ríordáin (2015); Levin & Rock (2003), Yan (2016)
	(Re)conceptualization of research.	Aras (2021); Banegas & Consoli (2021); Faikhamta & Clarke (2015); Trent (2010), Ulvik et al. (2018); Yan (2016)
Challenges for AR in pre-service teacher education	Practicum restrictions	Darwin & Barahona (2019); Price (2001)
	Assessment demands	Darwin & Barahona (2019); Jakhelln & Pörn (2019); Ulvik, (2014); Ulvik & Riese (2016)
	Weak communication between partners	Burbank & Kauchak (2003); Darwin & Barahona (2019); Jakhelln & Pörn (2019); Ulvik, (2014); Ulvik & Riese (2016)
	Time constraints.	Capobianco & Ríordáin (2015); Faikhamta & Clarke (2015); Price (2001); Smith & Sela (2005); Ulvik, (2014); Ulvik & Riese (2016)

3.1. Opportunities of AR in Pre-Service Teacher Education

The literature has shown that a wide range of AR opportunities have been reported in previous research, however the main theme, 'opportunities of AR in pre-service teacher education', was developed from common findings across the studies reviewed. These included critical reflection, (re)construction of teacher identity, students as partners, collaboration, and (re)conceptualization of research.

3.1.1. Critical Reflection

Previous studies have shown that participation in AR allows PSTs to reflect on and critically examine their practices, assumptions, and beliefs about teaching (Aras, 2021; Arefian, 2022; Burbank & Kauchak, 2003; Dikilitaş & Çomoglu, 2022; Hagevik et al., 2012; Levin & Rock, 2003; Ulvik, 2014; Ulvik et al., 2018). Hagevik et al. (2012), for instance, used data from 20 PSTs to examine the role of AR in fostering reflective thinking and practice in the context of a year-long course where PSTs learned the value of AR and how to conduct it in a school setting. In this course, the PSTs were encouraged to choose topics that were important and interesting to them in their schools, and they were supported by their action research professor, their university supervisors, and their mentor teachers through collaborative dialogues during their AR projects. The results showed that the process allowed the PSTs to challenge their existing beliefs and develop new personal theories about how to effectively promote student learning through changes in practice. They became more open to considering the use of new strategies and ideas as they engaged in dialogic interactions with the partners about their projects.

The literature review has also demonstrated that engaging with and in AR projects helps PSTs recognize the value of reflection for the teaching profession. In their study, Dikilitaş and Çomoglu (2022) examined the professional development of 53 first year EFL PSTs in the context of a reading course in which they read and co-reflected on AR studies by other teachers. The study conducted in the Turkey context revealed that reading and collaboratively reflecting on AR stories enabled the participants to realize that teachers need to critically examine their own practices, reflect on the issues they face in their teaching, and act accordingly.

3.1.2. (Re)construction of Teacher Identity

Another theme emerged from the literature review is related to the reconstruction of teacher identity (e.g., Banegas & Consoli, 2021; Capobianco & Ríordáin, 2015; Dikilitas & Comoglu, 2022; Levin & Rock, 2003; Price, 2001; Smith & Sela, 2005; Trent, 2010). The research suggests that AR creates a space for reflection and questioning that allows PSTs to work on the discrepancy between vision and reality, which could engage them in a process of identity formation. For example, Trent (2010) examined the role that participation in an AR project played in (re)constructing the teacher identities of six pre-service English language teachers in Hong Kong. The results showed that participants experienced a contradiction when they realized that the results of their AR projects were not what they had expected. That is, although they used the techniques in their projects that they thought modern teachers would use, the results showed that the students did not like the techniques they used. Therefore, the participants began to question their ideal teacher identity (i.e., becoming a modern teacher who uses group work, inductive grammar instruction, etc.). Through this questioning and reflection, they realized that context (e.g., the school, the classroom, a particular group of students) can play a key role in teaching. Participation in the AR projects helped the PSTs (re)construct their teacher identities by opening new possibilities for new meanings of teaching and learning and by leading the participants to abandon rigid notions of teaching (modern teaching versus traditional teaching).

The review has also revealed that not only engaging in research, but also engaging with research can reshape teacher identities of PSTs (e.g., Dikilitaş & Çomoğlu, 2022). In Dikilitaş and Çomoglu's (2022) study, reading, and collaboratively reflecting on AR stories created the reflective space needed in initial teacher education for (re)considering PST selves in relation to future selves as teachers. Their findings revealed that PSTs' reflective engagement with the stories of AR increased their awareness of real classroom challenges and teacher researchers' strategies for overcoming them, which contributed to their future teacher selves.

Additionally, the studies reviewed have revealed that the discursive spaces created by AR studies expose PSTs to empowered teacher identities (i.e., change agent, problem solver), thus their understanding of being a teacher is reconstructed and they start to position themselves as teacher-researchers (e.g., Dikilitas & Çomoğlu, 2022; Smith & Sela, 2005). For example, in

Dikilitaş and Çomoglu's (2022) study, the PSTs were exposed to empowered teacher identities through reading and co-reflecting on AR stories, and they reported that they wanted to use the research in their teaching practice in the future. Similarly, the results of Smith and Sela's (2005) study of 40 students in the fourth year of an initial teacher education program, who participated in AR projects within the practicum course, indicated that they began to see themselves as problem solvers because the course provided them with some research tools that they could use in the future to solve their own teaching problems.

3.1.3. Students as Partners

The literature review has also revealed that PSTs conducting AR studies gradually shift their attention to students, rather than focusing solely on their own concerns or practices (Aras, 2021; Hagevik et al., 2012; Levin & Rock, 2003; Smith & Sela, 2005; Ulvik et al., 2018). In their study, Levin and Rock (2003) examined the perspectives and experiences of five PSTs who planned, implemented and evaluated AR projects with their mentor teachers during a semesterlong practicum experience. Their findings demonstrated that as they focused their attention on students via AR projects, they were able to gain new insights into students' perspectives, become more conscious of their needs and motivations, and learn about their progress, abilities, and performance.

The review has also revealed that through conducting AR projects, PSTs start to see students as partners or collaborators. Villacañas de Castro (2014), for instance, conducted a collaborative AR with PSTs to solve a problem related to an action research course he taught. Because PSTs in this course had difficulty understanding the procedural principles of AR, Villacañas de Castro redesigned his course by working with PSTs as co-researchers in an AR study to solve this challenge. The results showed that engaging in such a collaborative AR not only helped PSTs internalize the procedural principles of AR, but also changed their understanding of the role of students and heightened their awareness of the importance of coworking with students to solve a problem in the classroom. Similarly, Hagevik et al. (2012) found that PSTs gained a better understanding of the value of incorporating students' ideas to improve their teaching practice.

3.1.4. Collaboration

Several studies have shown that the PSTs working in AR teams begin to view collaboration as a fruitful way for their professional learning and improve their collaboration skills (e.g., Arefian, 2022; Amir et al., 2017; Capobianco & Ríordáin, 2015; Levin & Rock, 2003; Yan, 2016). However, the studies have also reported that one factor, the nature of collaboration, determines how PSTs conceptualize collaboration. In the AR projects with a triad collaborative model including teacher educators, mentor teachers, and PSTs, the results have varied depending on the context and the power relations between the partners. The findings have indicated PSTs consider collaboration a vital asset of AR if it is characterized by a less hierarchical relationship conducive to collaborative reflection. For example, in Levin and Rock's (2003) study, five PSTs planned, implemented, and evaluated action research projects with the support of their mentor teachers. Since the relationship between the mentor teachers and the PSTs was less hierarchical and a space for co-reflection was created, the collaboration and shared dialogue was deeply appreciated by the PSTs. Similarly, in Amir et al. 's (2017) study with 74 students in the third year of an initial teacher education program, the teacher educators created a "safe space" in which they were not only instructors but also members of a research group. In this atmosphere of mutual trust, the PSTs talked openly about sensitive topics and recognized the importance of collaboration. However, in the study of Burbank and Kauchak (2003), the PSTs reported that the hierarchical relationship negatively impacted open communication because they were in a vulnerable position as they were also evaluated by their mentor teachers. One of the PSTs reported that as a team member, she was primarily concerned with pleasing the mentor teacher instead of openly discussing problems that arose during the AR project.

3.1.5. (Re)conceptualization of Research

The studies reviewed have revealed that participation in AR projects (re)constructs PSTs' understanding of research and improves their research skills (e.g., Aras, 2021; Banegas & Consoli, 2021; Faikhamta & Clarke, 2015; Trent, 2010; Ulvik et al. 2018; Yan, 2016). For example, in the context of a four-year pre-service ELT program in southern Argentina, Banegas and Consoli (2021) explored the impact of a mandatory research module which aimed to help PSTs gain a research mindset by giving them the opportunity to conduct individual AR projects. The results indicated that the PSTs' traditional views of research were challenged and reconstructed as they saw how AR bridged the gap between theory and practice. They started to value research through realizing that it is a powerful practice which can transform or change their situated teaching practices.

3.2. Challenges for AR in Pre-Service Teacher Education

Despite the benefits given above and the widespread advocacy of AR as a tool to enhance the professional growth of PSTs, previous studies have demonstrated that there are some issues to consider when integrating this tool into initial teacher education. This section discusses the impediments encountered in incorporating AR into pre-service teacher education programs.

3.2.1. Practicum Restrictions

Since most of the AR studies implemented in initial teacher education were embedded in a practicum course in which PSTs are "outsiders" and have "little ownership over the norms, commitments or agendas" (Price, 2001, p.45) in the practicum school, doing AR in this context can be challenging (Ceylan, Uştuk & Çomoglu, 2017; Darwin & Barahona, 2019; Price, 2001). Indeed, Price's (2001) study of 11 PSTs conducting individual AR projects in the practicum school revealed that some mentor teachers were cynical about the ideas the PSTs wanted to pursue in their projects and therefore unconsciously set limits on them. The PSTs reported that they were not able to make as many changes or implement as many things as they wanted in their studies because they did not want to get a negative reaction from their mentor teachers. Similarly, examining the PSTs' experiences of AR in a practicum course, Darwin and Barahona (2019) found that the classrooms that they had borrowed and the schools that they temporarily had been during the practicum did not "act as facilitative sites" for conducting research, thus the PSTs had a negative or even "hostile" attitude towards research (p. 723). As a result, they suggested that the realities and constraints of practicum courses should be considered when designing AR projects.

3.2.2. Assessment Demands

Another issue reported in the context of integrating AR into initial teacher education concerns its use as a form of assessment. Previous studies have shown that the duality of research and assessment could have negative effects on PSTs' understanding and future practice of AR (e.g., Darwin & Barahona, 2019; Jakhelln & Pörn, 2019; Ulvik, 2014; Ulvik & Riese, 2016). As Cochran-Smith et al. (2009) stated, the requirement to write a project paper or report might prevent some PSTs from developing an inquiry mindset—an understanding of research as a vital part of daily instructional practices and drive them to focus on the aspects of inquiry called for in the scoring rubric. For example, in their study, Darwin and Barahona (2019) used Cultural Historical Activity Theory (CHAT) to examine PSTs' experiences of conducting AR in the context where AR is used as an assessment tool and they found that differing objectives, namely incremental development and completion of the criteria prescribed for the assessment, undermined the effectiveness of AR in initial teacher education. For the PSTs, conducting AR study turned into a compulsory task that simply had to be ended. In response to this problem, Smith and Sela (2005) suggested that teacher educators should be transparent with their students about what they value and appraise. That is, PSTs should know that the process is as important as the product (e.g., final paper, project report, etc.). They also emphasized that a portfolio approach can be used instead of requiring a final product so that PSTs can make as many revisions in different sections as they want. In this way, they can feel more at ease during the research process.

3.2.3. Weak Communication in Partnerships

Partnerships among PSTs, mentor teachers, and teacher educators in AR studies have been advocated by many scholars (Hagevik et al., 2012) but research has shown that collaboration can be undermined by weak communication between different stakeholders (e.g., Burbank & Kauchak, 2003; Çomoglu & Dikilitaş, 2020; Darwin & Barahona, 2019; Jakhelln & Pörn, 2019; Ulvik, 2014; Ulvik & Riese, 2016). For example, to better understand the challenges of supporting and assessing PSTs' AR projects in the context of university-school collaboration, Jakhelln and Pörn (2019) examined the experiences of ten PSTs and found that teacher educators and practicum teachers tended not to contact each other, i.e., they avoided boundary crossings. Consequently, the PSTs reported that they had to work on the project alone. Similarly, in their study, Darwin and Barahona (2019) found a discrepancy between the design of AR and its implementation. Their findings revealed that even if AR projects were designed in a collaborative format, the PSTs had to operate as "solo outsiders" because there was little interaction between teacher educators and practicum teachers (Darwin & Barahona, 2019, p. 721). Darwin and Barahona (2019) stress that PSTs should not be the only ones crossing school-university boundaries if we want productive collaboration, like Jakhelln and Pörn (2016).

3.2.4. Time Constraints

One of the challenges reported in previous studies is the lack of time (e.g., Capobianco & Ríordáin, 2015; Faikhamta & Clarke, 2015; Price, 2001; Smith & Sela, 2005; Ulvik, 2014; Ulvik & Riese, 2016). Since AR studies conducted in initial teacher education were mostly integrated with practicum to bridge the gap between theory and practice, PSTs had to perform multiple roles, namely student, teacher, and researcher (Smith & Sela, 2005). Considering that they are new to two of these roles (i.e., they are novices in the teaching profession and have no research experience), participating in an AR project in this context is challenging and time-consuming for PSTs (Kennedy-Clark et al., 2018). For example, in Price's (2001) study, PSTs reported that they spent much of their time trying to figure out what to teach rather than reflecting on how to teach it. In addition, the findings showed that although PSTs managed to collect data for their AR projects, they had difficulty finding time to write in their journals.

The literature reviewed in this section has demonstrated that the potential benefits of preservice teacher AR may be constrained by the realities of practicum experience (e.g., little ownership over norms and practices in practicum classroom), criteria prescribed for the assessment, weak communication between stakeholders (e.g., teacher educators and mentor teachers), and time constraints.

DISCUSSION AND IMPLICATIONS

The current review highlights that integrating AR into initial teacher education programs offers a variety of opportunities for PSTs, including promoting critical reflection, helping (re)construct teacher identity, positioning students as partners, valuing collaboration, and helping (re)conceptualize research. For instance, previous research has shown that participation in AR studies can create a space for PSTs to critically reflect on and examine their understanding and practice of learning and teaching. It also allows PSTs to reconstruct their professional identities by introducing them to empowered identities and providing them with the tools that enable them to develop their own personal theories. They come to realize that teachers can create change, solve problems, and conduct research in their classrooms and schools. In addition, prior studies have revealed that AR studies can raise PSTs' awareness of students' needs and interests, help them see students as their partners, and lead to changes in their understanding of collaboration and research

for professional growth. PSTs begin to view research and collaboration as integral parts of their professional development by engaging in/with AR projects.

Apart from the benefits AR could offer in initial teacher education, previous literature also emphasizes the micro and macro constraints of PSTs' conducting AR: practicum restrictions, assessment demands, weak communication between partners and time constraints. The literature reviewed indicates that AR should be introduced to PSTs as an important practice for ongoing professional development rather than a one-off project for which they are assessed or which they must complete to receive a diploma. It also demonstrates how participation in AR studies in the context of a practicum course brings about work overload, which exceeds PSTs' ability to complete the tasks or assignments in the time given. PSTs have difficulty in balancing the many competing demands on their time, such as lesson planning, writing reflection journals, collaborating with mentor teachers and teacher educators, collecting data, meeting other course requirements, etc. In addition to the lack of time, the review reveals that weak communication between partners undermines the impact of AR on PSTs' professional development. Therefore, particularly in a triad collaborative model that includes mentor teachers, teacher educators, and PSTs, it is essential to create a communicative space where all partners can come together and talk openly about sensitive issues to facilitate productive and genuine collaboration.

These limitations highlighted in the literature need to be taken into consideration by teacher educators since they are the basic realities of PSTs in a transitional period of their lives. This "becoming something new", i.e., transition from a learner to a teacher accompanied by "transition from self-concern to concern for others" (Delamarter, 2019, pp.149-171) is not always an easy task. Therefore, AR in initial teacher education needs to be considered as distinct from in-service AR practices since the PST self is somewhere in between a student and a teacher. PSTs are yet to develop a teacher identity, by negotiating their current and past selves with the help of "discursive spaces" where they could become critical of their own beliefs, attitudes and assumptions related to teaching and learning (Delamarter, 2019; Mezirow, 1997). It is at this point we believe that AR could open that discursive space needed for "the dialogue between past and future selves" (Delamarter, 2019, p. 175), if integrated appropriately into the programs and co-conducted with teacher educators, mentor teachers and PSTs in a reflective and non-hierarchical manner.

We suggest that AR conducted to help nurture teacher identity, that is, more teacher-self oriented rather than problem-focused, is more in line with the demands of this transitional stage for PSTs. We also believe that AR in pre-service teacher education could start with self-reflection and/or collaborative reflection with peers which includes engaging in negotiations with oneself, beliefs, attitudes, assumptions, previous experiences as a learner and current practices as a teacher (Kemmis, 2010; Ulrik & Riese, 2016). As Amir et al., propose, this kind of discourse requires the existence of a "safe space" where PSTs can better express themselves "in an atmosphere of mutual trust and immunity both within and outside the group" (p. 238). Hence, it is important for teacher educators to provide a safe place for AR initiatives where there is openness, mutual trust, and a symmetrical communication pattern.

Despite the benefits of conducting research for-PSTs as reported in this current review, initial teacher education programs in Turkey still do not position PSTs as teacher researchers who are able to work on their pedagogical puzzles. This insufficiency of initial EFL teacher education programs in Turkey in terms of equipping PSTs with research skills is a previously reported problem in the literature (e.g., Kizilaslan & Leutwyler, 2012). However, even after many years, almost no visible improvement has been achieved in the programs including EFL and other fields of teacher education in terms of boosting PSTs' inquiry and research skills. PSTs in the country are still considered passive receivers of knowledge from their teacher educators (Öztürk & Aydin, 2019). Overall, this international review on AR in pre-service teacher education pinpoints the need for the integration of inquiry and research skills into initial teacher education programs in the country for more reflective and empowered teachers

collaborating with their learners/peers through research. Therefore, the integration of AR and other forms of teacher research into existing courses or the design of new courses which position PSTs as knowledge generators should be on the agenda for teacher education in the country.

REFERENCES

- Amir, A., Mandler, D., Hauptman, S., & Gorev, D. (2017). Discomfort as a means of pre-service teachers' professional development–action research as part of the 'Research Literacy' course. *European Journal of Teacher Education*, 40(2), 231-245.
- Aras, S. (2021). Action research as an inquiry-based teaching practice model for teacher education programs. *Systemic Practice and Action Research*, *34*(2), 153-168.
- Arefian, M. H. (2022). Collaborative action research as a reflective tool for pre-service EFL teachers' inclusion. *Reflective Practice*, 1-12.
- Banegas, D. L., & Consoli, S. (2021). Initial English language teacher education: The effects of a module on teacher research. *Cambridge Journal of Education*, *51*(4), 491-507.
- Burbank, M. D., & Kauchak, D. (2003). An alternative model for professional development: Investigations into effective collaboration. *Teaching and teacher education*, 19(5), 499-514.
- Burns, A. (2019). Action research in English language teaching: Contributions and recent developments. In X. Gao (Ed.), *Second handbook of English language teaching* (pp. 991-1005). Cham: Springer.
- Calderhead, J. (1989). Reflective teaching and teacher education. *Teaching and teacher education*, 5(1), 43-51.
- Capobianco, B. M., & Ní Ríordáin, M. (2015). Navigating layers of teacher uncertainty among preservice science and mathematics teachers engaged in action research. *Educational Action Research*, 23(4), 581-598.
- Ceylan, E., Uştuk, O., & Çomoglu, I. (2017). The ELT practicum in Turkey: A meta-synthesis of 2008-2017 qualitative research. *The Literacy Trek*, 3(2), 102-113.
- Clandinin, D. J. (2019). Teacher education as narrative inquiry. In *Journeys in Narrative Inquiry* (pp. 79-90). Routledge.
- Conroy, J., Hulme, M., & Menter, I. (2013). Developing a 'clinical' model for teacher education. *Journal of Education for Teaching*, 39(5), 557-573.
- Consoli, S., & Dikilitaş, K. (2021). Research engagement in language education. *Educational Action Research*, 29(3), 347-357.
- Çomoglu, I., & Dikilitaş, K. (2020). Learning to become an English language teacher: Navigating the self through peer practicum. *Australian Journal of Teacher Education*, 45(8), 23-40.
- Darwin, S., & Barahona, M. (2019). Can an outsider become an insider? Analysing the effect of action research in initial EFL teacher education programs. *Educational Action Research*, 27(5), 709-725.
- Delamarter, J. (2019). Becoming something new. In *Proactive Images for Pre-Service Teachers* (pp. 149-187). Palgrave Macmillan.
- Dikilitaş, K. (2020). Pre-service and in-service EFL teachers as researchers. In S. Çelik (Ed.), *Preparing teachers for a changing world: Contemporary issues in EFL education* (pp. 167-174). Ankara: Vizetek

- Dikilitaş, K., & Comoglu, I. (2022). Pre-service English teachers' reflective engagement with stories of exploratory action research. *European Journal of Teacher Education*, 45(1), 26-42.
- Faikhamta, C., & Clarke, A. (2015). Thai pre-service science teachers engaging action research during their fifth-year internship. *Asia Pacific Journal of Education*, *35*(2), 259-273.
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80-92.
- Hagevik, R., Aydeniz, M., & Rowell, C. G. (2012). Using action research in middle level teacher education to evaluate and deepen reflective practice. *Teaching and Teacher Education*, 28(5), 675-684.
- Jakhelln, R., & Pörn, M. (2019). Challenges in supporting and assessing bachelor's theses based on action research in initial teacher education. *Educational Action Research*, 27(5), 726-741.
- Johnson, K. E., & Golombek, P. R. (2016). *Mindful L2 teacher education: A sociocultural perspective on cultivating teachers' professional development*. Routledge.
- Kemmis, S. (2010). What is to be done? The place of action research. *Educational Action Research*, 18(4), 417–427.
- Kizilaslan, I., & Leutwyler, B. (2012). Pre-service teacher action research: Concept, international trends and implications for teacher education in Turkey. In N. Popov et al. (Eds.), *International perspectives on education* (pp. 155–162). Sofia: Bulgarian Comparative Education Society.
- Levin, B. B., & Rock, T. C. (2003). The effects of collaborative action research on preservice and experienced teacher partners in professional development schools. *Journal of teacher education*, 54(2), 135-149.
- Mezirow, J. (1997). Transformative learning: Theory to practice. In P. Cranton (Ed.), Transformative learning in action: No. 74. Insights from practice – New directions for adult and continuing education (pp. 5-12). San Francisco: Jossey-Bass.
- Murray-Harvey, R., T. Slee, P., Lawson, M. J., Silins, H., Banfield, G., & Russell, A. (2000). Under stress: The concerns and coping strategies of teacher education students. *European journal of teacher education*, 23(1), 19-35.
- Öztürk, G., & Aydin, B. (2019). English language teacher education in Turkey: Why do we fail and what policy reforms are needed?. *Anadolu Journal of Educational Sciences International*, 9(1), 181-213.
- Petticrew, M., & Roberts, H. (2008). Systematic reviews in the social sciences: A practical guide. John Wiley & Sons.
- Ponte, P., Beijard, D., & Ax, J. (2004). Don't wait till the cows come home: Action research and initial teacher education in three different countries. *Teachers and Teaching*, 10(6), 591-621.
- Price, J. N. (2001). Action research, pedagogy and change: The transformative potential of action research in pre-service teacher education. *Journal of Curriculum Studies*, *33*(1), 43-74.
- Smith, K., & Sela, O. (2005). Action research as a bridge between pre-service teacher education and in-service professional development for students and teacher educators. *European Journal of Teacher Education*, 28(3), 293-310.

- Trent, J. (2010). Teacher education as identity construction: Insights from action research. *Journal of Education for Teaching*, *36*(2), 153-168.
- Tripp, D. (2005). Action research: A methodological introduction. *Educação e pesquisa*, 31(3), 443-466
- Ulvik, M. (2014). Student teachers doing action research in their practicum: why and how?. *Educational action research*, 22(4), 518-533.
- Ulvik, M., & Riese, H. (2016). Action research in pre-service teacher education—a never-ending story promoting professional development. *Professional Development in Education*, 42(3), 441-457.
- Ulvik, M., Riese, H., & Roness, D. (2018). Action research—connecting practice and theory. *Educational Action Research*, 26(2), 273-287.
- Ustuk, Ö., & Çomoglu, I. (2019). Lesson study for professional development of English language teachers: Key takeaways from international practices. *Journal on Efficiency and Responsibility in Education and Science*, 12(2), 41-50.
- Van Katwijk, L., Jansen, E., & Van Veen, K. (2021). Pre-service teacher research: a way to future-proof teachers?. *European Journal of Teacher Education*, 1-21.
- Villacañas de Castro, L. S. (2014). Meta-action research with pre-service teachers: A case study. *Educational Action Research*, 22(4), 534-551.
- Willegems, V., Consuegra, E., Struyven, K., & Engels, N. (2017). Teachers and pre-service teachers as partners in collaborative teacher research: A systematic literature review. *Teaching and teacher education*, 64, 230-245.
- Yan, C. (2017). 'You never know what research is like unless you've done it!' Action research to promote collaborative student-teacher research. *Educational Action Research*, 25(5), 704-719.

GENIŞLETİLMİŞ ÖZ

Öğretmen adayları, öğretmenlik uygulaması dersi kapsamında öğretmenliğe başladıklarında, genellikle hayal kırıklığı, kendinden şüphe duyma ve stres duygularının eşlik ettiği çeşitli zorluklarla karşı karşıya kalmaktadırlar (Murray-Harvey ve diğerleri, 2000). Geleneksel hizmet öncesi öğretmen eğitiminde teori ve uygulama arasındaki boşluk, bu durumun sebeplerinden biri gibi görünmektedir (Conroy ve diğerleri, 2013). Bu sorunu gidermek için eylem araştırması, anlatı araştırması ve ders imecesi gibi araştırmaya dayalı profesyonel gelişim yaklaşımlarının kullanılması birçok araştırmacı tarafından önerilmektedir (Burns, 2019; Clandinin, 2019; Consoli ve Dikilitaş, 2021; Johnson ve Golombek, 2016; Ustuk ve Çomoglu, 2019).

Bu çalışmanın odak noktası olan eylem araştırması, adından da anlaşılacağı gibi, eylem ve araştırmayı aynı anda içeren ve bütünleştiren (Burns, 2019) ve öğretmen adaylarının gelişimi için en sık önerilen uygulamalardan biridir. Eylem araştırması, yaşanan sosyal sorunları anlamaya, anlamlandırmaya çalışmak ve bu sorunları yaşayan insanlar arasındaki etkileşimlerin ve uygulamaların kalitesini iyileştirmek için kullanılan bir araçtır (Burns, 2005). Eylem araştırması, öğretmenleri bilgiyi üreten ve yaşadıkları sorunlara çözüm bulabilen bireyler olarak görmekte (Burbank ve Kauchak, 2003), öğrencileri ise yapılan çalışmaların değerlendirilmesinde değerli bir bilgi kaynağı olarak kabul etmektedir (Ponte ve diğerleri, 2004). Yani eylem araştırması hem öğretmenin hem de öğrencinin sorunların çözümünde etkin rol oynamasının önemini vurgulamaktadır.

Eylem araştırması, birçok araştırmacı tarafından öğretmen gelişimi için önemli bir araç olarak görülse de okullarda henüz yaygın olarak kullanılmamaktadır (Willegems ve diğerleri, 2017). Coğu zaman, öğretimin ayrılmaz bir parçası olarak değil, öğretime ek olarak yapılan ve başkalarının isteği üzerine gerçekleştirilen bir faaliyet olarak görülmektedir (Faikhamta ve Clarke, 2015). Bunun olası bir nedeni, hizmet öncesi öğretmen eğitimi programlarının, araştırmacı rolünü benimseyen ve araştırmanın öğretme ve öğrenme için ne kadar faydalı olduğuna ikna olmuş öğretmenler yetiştirmede başarısız olmasıdır (Willegems ve diğerleri, 2017). Birçok araştırmacı, öğretmen yetiştirme programlarının temel sorumluluklarından birinin, öğretimin karmaşıklığı ile başa çıkmak için araştırmayı kullanabilen öğretmenler yetistirmek olduğunu vurgulamaktadır (Calderhead, 1989; Dikilitas, 2020). Programlar öğretmen adaylarına sorgulayıcı bakıs acısı gelistirebilecekleri bir alan yaratmalı (Van Katwijk ve diğerleri, 2021) ve derslerini gözlemlemeleri, analiz etmeleri ve değerlendirmeleri için onlara gerekli arastırma araçlarını tanıtmalıdır. Bu bağlamda, bu alan taraması çalışması, eylem araştırmasının hizmet öncesi öğretmen eğitimi programları için sağladığı faydaların yanı sıra öğretmen eğitimcilerinin ve öğretmen adaylarının eylem araştırması süreci boyunca karşılaşabilecekleri zorlukları ortaya cıkarmavı amaclamaktadır.

Araştırmanın amaçları doğrultusunda ulaşılması hedeflenen çalışmalar ERIC, Web of Science (WOS), Scopus ve PsycInfo veri tabanlarından 2000-2022 yılları arasını kapsayacak şekilde sistematik alanyazın taraması gerçekleştirilerek elde edilmiştir. Taramalarda "eylem araştırması", "öğretmen adayı" ve "hizmet öncesi öğretmen eğitimi" anahtar sözcükleri farklı kombinasyonlarla kullanılmıştır. Potansiyel çalışmalar önceden belirlenmiş şu kriterler kullanılarak seçilmiştir: (1) deneyime dayalı olması (2) eylem araştırması yapan ya da yapılan eylem araştırmalarını okuyan öğretmen adaylarının bulgularını içeren çalışma olması (3) 2000 ve 2022 yılları arasında yayınlanmış olması. İncelemeler sonucunda bu kriterlere uygun 20 tam metin İngilizce çalışma bulunmuştur.

Araştırma kapsamına alınması uygun bulunan 20 makalenin bulgularına hibrit bir yaklaşımla tematik analiz uygulanmıştır (Fereday ve Muir-Cochrane, 2006). İlk olarak daha önceki literatür okumalarına dayanarak tümdengelime dayalı iki ana tema belirlenmiştir: "hizmet öncesi öğretmen eğitiminde eylem araştırmasının faydaları" ve "hizmet öncesi öğretmen eğitiminde eylem araştırmasının zorlukları". Daha sonra alt temalar tümevarımsal kodlama ile veriden elde edilmiştir.

Araştırmanın sonuçları hizmet öncesi öğretmen eğitiminde eylem araştırmasının öğretmen adayları için sağladığı birçok faydanın olduğunu ve çalısmalarda yaygın olarak yurgulanan faydaların beş alt tema altında verilebileceği görülmüştür. Bu alt temalar şu şekildedir: eleştirel derinlemesine düşünme, öğretmen kimliğinin (yeniden) inşası, öğretme faaliyetine öğrencinin aktif katılımı, iş birliği ve araştırmanın (yeniden) kavramsallaştırılması. İncelenen araştırmalarda, eylem araştırmasına katılımın ve yapılan eylem araştırmalarını okumanın, öğretmen adaylarının öğrenme ve öğretme ile ilgili düşüncelerini tekrar gözden geçirmesi, daha derinlemesine ve eleştirel bir bakış açısıyla incelemesini sağladığı görülmüştür. Aynı zamanda öğretmenlerin sınıflarında ve okullarında değişim yaratabileceklerini, kendi sorunlarını çözebileceklerini ve araştırma yapabileceklerini fark etmelerini sağlayarak öğretmen adaylarının profesyonel kimliklerini yeniden yapılandırmaya olanak sağladığı belirlenmiştir. Buna ek olarak, incelenen araştırmalar, eylem araştırmasına katılmanın öğretmen adaylarının öğrencilerin ihtiyaçları ve ilgileri konusunda farkındalıklarını artırabileceğini, öğrencileri öğretimin faaliyetinin aktif katılımcıları olarak görmelerine yardımcı olabileceğini de göstermistir. Ayrıca, öğretmen adayları, eylem araştırmalarına katılarak veya yapılan çalışmaları okuyarak araştırma ve iş birliğinin mesleki gelişimlerinin ayrılmaz bir parçası olduğunu görmeye başlamışlardır.

Analizler ikinci ana temayla yani "hizmet öncesi öğretmen eğitiminde eylem araştırmasının zorlukları" ile ilgili dört alt temanın olduğunu göstermiştir. Bunlar şu şekildedir: öğretmenlik uygulaması dersi kısıtlılıkları, değerlendirme talepleri, ortaklar arasındaki zayıf iletişim ve zaman kısıtlamaları. İncelenen çalışmalar, eylem araştırmasının öğretmen adaylarına, mezun olmak için

tamamlamaları gereken tek seferlik bir projeden ziyade mesleki gelişimleri için sürekli kullanabilecekleri önemli bir araç olarak tanıtılması gerektiğini göstermektedir. Çalışmalar, ayrıca öğretmenlik uygulaması dersi bağlamında yapılan eylem arastırmalarında öğretmen adaylarına yapabileceklerinden çok daha fazla iş yüklendiğini, bu durumun öğrencilerde strese sebep olduğunu göstermiştir. Yani ders planlama, yansıtma günlükleri yazma, uygulama öğretmenleri ve üniversite danışmanları ile çalışma, veri toplama, diğer ders gereksinimlerini karşılama vb. gibi birçok sorumlulukları olduğu için bunları zamanında tamamlamakta zorlandıkları belirlenmiştir. Yine öğretmenlik uygulaması dersi kapsamında yapılan eylem araştırmaları, öğretmen adaylarının uygulama okullarındaki yetkisinin sınırlı olmasından kaynaklı sorunlar yasadığını göstermistir. Özellikle yetkiyi elinde tutan uygulama öğretmenleri olduğu için onların araştırmaya ve iş birliğine olan bakış açıları bazı durumlarda öğretmen adaylarını zor durumda bırakabilmektedir. Buna ek olarak ortaklar arasındaki zayıf iletisimin eylem araştırmasının öğretmen adaylarının mesleki gelişimi üzerindeki etkisini olumsuz yönde etkilediği ortaya konulmuştur. Bu nedenle, özellikle uygulama öğretmenlerini, öğretmen eğitimcilerini ve öğretmen adaylarını içeren üçlü bir işbirlikçi modelde, üretken ve gerçek iş birliğini kolaylaştırmak için tüm ortakların bir araya gelip hassas konular hakkında açıkça konuşabileceği bir iletişim alanı yaratmak oldukça önemlidir.