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EXPLORING CHALLENGES OF INDONESIAN EFL TEACHERS IN ADOPTING TEACHER-RESEARCHER IDENTITY THROUGH CLASSROOM ACTION RESEARCH

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Abstract
This study centres on investigating the challenges faced by Indonesian EFL teachers when conducting classroom action research (CAR). In this pursuit, the paper employs content analysis techniques to delve into teachers' competency in conducting CAR. This exploration is facilitated through an in-depth examination of the teachers' CAR reports and conversations in the discussion forum on the learning management system (LMS) of *Pendidikan Profesi Guru (PPG)* or the Teacher Professional Education (TPE) program. The thematic content analysis was conducted manually and using NVivo 12 software to ease the data coding process. The results of the study showed that teachers' knowledge of CAR varied, with most teachers perceiving an improvement in students' scores as the primary indicator of CAR success. It also found that some teachers grappled with the technical aspects of conducting CAR, such as formulating appropriate research questions, reviewing the literature, selecting appropriate research instruments, analysing data, and reporting writing, while others encountered practical obstacles, including constraints related to time and resources. This study underscores the importance of providing ongoing support for EFL teachers to develop their CAR competencies and ultimately improve their teaching practices. The paper concludes with implications for future research and practice.

Keywords: classroom action research, EFL teacher-researcher identity, *Pendidikan Profesi Guru (PPG)* or Teacher Professional Education (TPE), reflective teaching, research competence

Introduction
The effectiveness of English as a Foreign Language (EFL) instruction has long been a topic of interest and debate, rooted in the ongoing quest to optimise language learning outcomes and address the diverse needs of learners worldwide. With the growing emphasis on evidence-based practices in education, classroom

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action research (CAR) has become a popular approach for English as a Foreign Language (EFL) teachers to reflect on and improve their teaching practices (Handoyo, 2020; Nappu, Dewi, & Daddi, 2019; Rahmatina, Zuardi, & Helsa, 2022).

However, conducting CAR requires specific competencies and skills that may not be familiar to all EFL teachers (Albalawi & Johnson, 2022). CAR involves systematic inquiry and reflection on EFL teachers' teaching practices, which can help them identify their strengths and areas for pedagogical and professional improvement (Burns & Rochsantiningsih, 2006; Yuan & Burns, 2017). The nature of CAR allows teachers to adopt hybrid identities. They live teacher-research identities as they attempt to improve their teaching practice through systematic inquiry as researchers and reflect on it. This process enables teachers to adapt their instructional methods to meet their students' needs better and generate new ideas for effective teaching strategies (Comon & Corpuz, 2024). As a result, EFL teachers equipped with robust research competence through CAR will be able to cultivate dynamic and student-centred learning environments, fostering enhanced language proficiency among their learners. Therefore, EFL teachers may benefit from professional development programs that provide them with the necessary competencies and skills for conducting CAR (Hendricks, 2019; Kemmis, 2006).

Studies by Cochran-Smith and Lytle (1993), Comon and Corpuz (2024), Caingcoy (2020) and Eliver, Abule, Cornel, and Maguate (2023) have highlighted the importance of teachers' research competence to allow teachers to stay abreast of the latest findings and best practices in education. In their study, Nasr and Perry (2023) indicate the importance of research competence in facilitating teachers to tailor their instruction to meet the needs of their students. Research competence empowers EFL teachers to be responsive, adaptable, and effective educators who are capable of meeting the diverse needs of their students and fostering meaningful language learning experiences in the classroom. However, findings from Dignos (2021) and Oestar and Marzo (2022) shed light on the negative implications of lower levels of research competence among EFL teachers, particularly in the context of action research writing and the overall proficiency in conducting classroom action research (CAR). The lower levels of research competence identified in these studies can have far-reaching implications for EFL teachers, impacting the quality of their action research endeavors, the effectiveness of their instructional practices, and ultimately, the learning outcomes of their students.

In the Indonesian context, as mandated in Law Number 14 of 2005 concerning Teachers and Lecturers, the Indonesian educational system emphasises the development of professional skills among teachers to improve their teaching abilities and enable them to progress in their careers. One way in which teachers can improve their skills is through research and publication (Comon & Corpuz, 2024; Dikilitaş & Comoglu, 2022), specifically through conducting Classroom Action Research (CAR)(Geva & Labo, 2023). As such, CAR has been integrated into the curriculum of *Pendidikan Profesi Guru* (*PPG*) or Teacher Professional Education (TPE). As such, Classroom Action Research (CAR) has been integrated into the curriculum of Pendidikan Profesi Guru (PPG) or Teacher Professional Education (TPE). Consequently, Indonesian educators are encouraged to engage in CAR, adopting and further strengthening their teacher-researcher hybrid identities.

Dealing with the issue of teachers' continuous professional development, university lecturers in Indonesia designed and conducted service programs in the

form of providing CAR workshops and training sessions for teachers as part of their community service responsibility (Fitria, Kristiawan, & Rahmat, 2019; Handoyo, 2020; Khaidir, 2018; Mediatati, 2016; Nappu et al., 2019; Rahmatina et al., 2022; Rosmaliwarnis, 2021). The outcomes of these numerous programs are reported to have an impact on enhancing the CAR competence of teachers. As teachers become more proficient in CAR, they are better equipped to identify and address specific challenges and opportunities in their classrooms, leading to enhanced student engagement, learning outcomes, and overall educational effectiveness. Such conclusions, however, are mostly drawn from post-training perception surveys conducted among participating teachers. While such workshops have been reported successful in improving teachers' understanding and skills in CAR, there has been limited exploration of their in-depth research competencies. Conducting an in-depth analysis of teachers' CAR competencies is paramount to ensure that the skills and knowledge gained from workshops translate into meaningful and sustainable improvements in teaching practice.

To enhance Indonesian teachers' research competencies, the principles and practices of conducting CAR have been integrated into the curriculum *of Pendidikan Profesi Guru (PPG)* or the Teacher Professional Education (TPE) program. The program strives to develop in-service teachers into well-rounded educators. These teachers should be religious, ethical, knowledgeable, and adaptable. Ultimately, the program strives to equip teachers with the skills to effectively educate, guide, and assess their students, transforming teachers from graduates with theoretical knowledge to competent professionals equipped with practical teaching skills (Syahril et al., 2020). By incorporating CAR into the curriculum, the TPE aims to foster a teacher-researcher identity, empowering teachers to become self-reflective practitioners who can actively investigate and improve their teaching methods, ultimately leading to enhanced student outcomes.

In line with these goals, which underscore the transformative journey of teacher identity, this study aims to fill the existing gap by examining the EFL teachers' CAR competence as reflected in their initial writing process and the outcomes of their CAR reports during the online TPE program. The study goes beyond quantitatively surveying the teachers' perceptions of the workshop experience. It delves into the actual application and manifestation of CAR competencies in their reports and their perceived challenges and competencies as revealed in their conversations in the discussion forum. In online learning, discussion forums are a vital communication tool, providing an interactive platform where participants can actively exchange ideas, ask questions, share their experiences, and work together on projects (Kilinc & Altınpulluk, 2021; Ouariach, Nejjari, Ouariach, & Khaldi, 2024). In the forum, the teachers participated at their convenience, giving them more time to reflect on their own ideas and respond to others' posts, leading to a richer learning process.

The findings of this research are expected to offer some insights into policymaking in teacher professional development programs, particularly in determining the level of research competence expected from teachers to be able to conduct CAR. In other words, the study aims to provide a picture of the minimum CAR competency standard that can be set for teachers with various limitations.
To guide the current study, the following research questions are addressed:

1. What key obstacles did the EFL teacher-reserchers encounter when conducting Classroom Action Research (CAR), as evidenced by their conversations on the discussion forum of the learning management system?
2. What was the level of the EFL teachers' comprehension of CAR, as reflected in their CAR reports?

Method

The study took place in an online Teacher Professional Education (TPE) program in an EFL context at a private university in Yogyakarta. The participants of the program were 30 in-service EFL teachers who attended the program to be certified teachers. Five of the cohort were eliminated as they did not submit the reports. They had a minimum of 10 years of teaching experience and were selected and sponsored by the Indonesian Government to undertake the program. The demographics of the participants are presented in Figure 1 The TPE program for in-service EFL teachers was conducted fully online. The TPE curriculum required the participants to conduct CAR while they were doing the teaching practicum. Prior to the CAR implementation, these teachers had joined a CAR workshop session, during which they prepared their CAR. The study received ethical approval from the Swinburne Ethics Committee as part of a broader project.

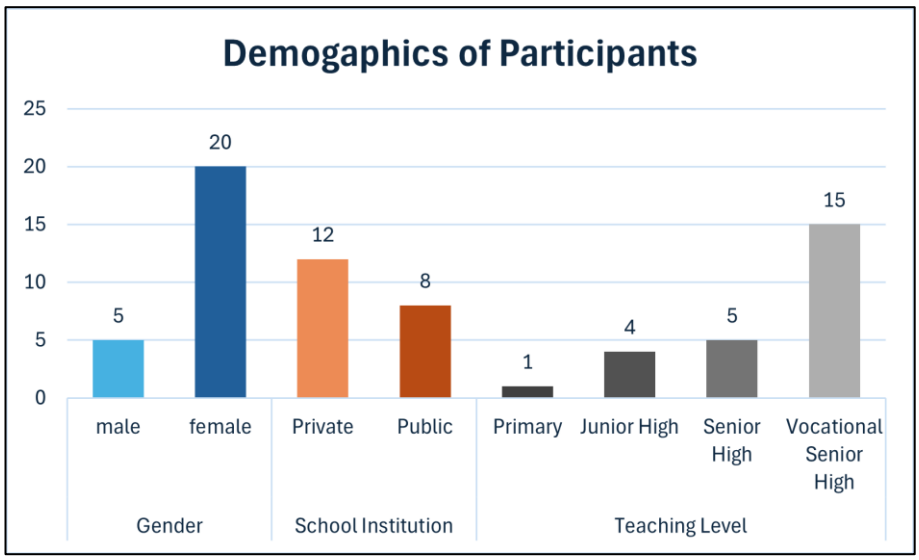


Figure 1. Participants' demographics

This study employs content analysis to investigate the depth of teachers' understanding and their skillset in conducting Classroom Action Research (CAR). The method is selected to enable researchers "to study human behaviour in an indirect way, through an analysis of their communications (Fraenkel, Wallen, & Hyun, 2022, p. 432)." The online mode of the TPE presents unique opportunities and challenges for assessing teachers' understanding and skillset in conducting CAR. Content analysis offers a well-suited methodological approach in this context, as it allows researchers to examine and analyse teachers' written communications, such as online discussions and CAR reports, in a systematic and comprehensive manner. The data were obtained from their CAR reports and their conversations in

the discussion forum on the learning management system (LMS) of professional education. They include 25 reports of the teachers' classroom action research and the downloaded conversations of the discussion forum on the LMS. The downloaded conversations from the discussion forum on the LMS offered insights into how teachers discuss CAR, potentially revealing uttered challenges in conducting CAR.

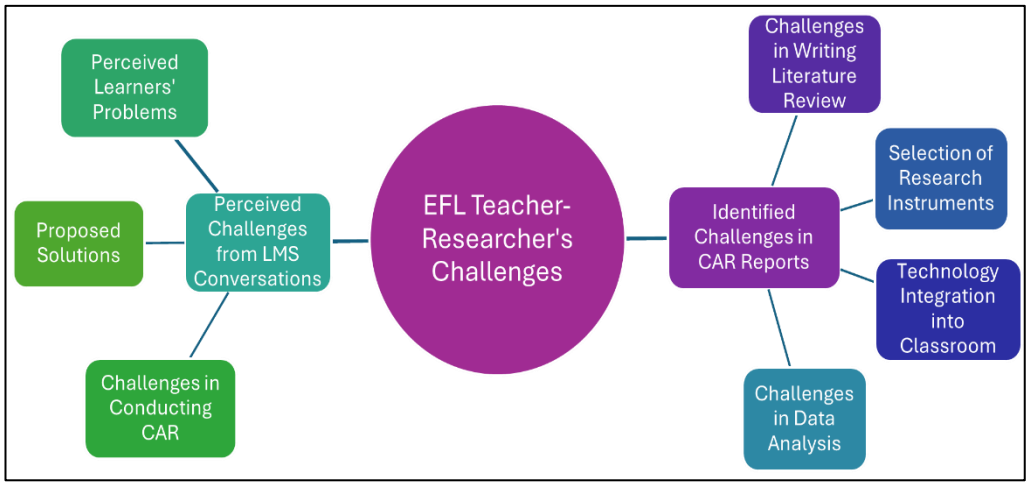


Figure 2. Coding scheme of the thematic analysis

In the analysis, the researchers followed the thematic analysis steps developed by Braun and Clarke (2019). It emphasises a clear coding scheme to categorise the data from both reports and discussions. The coding scheme is presented in Figure 2. By doing so, the researchers ensured consistent analysis in identifying key themes. The reports provided a direct window into the teachers' understanding of the CAR process. NVivo 12 software was used to ease the data coding process. Analysing both the structured data in the form of CAR reports and semi-structured data from forum discussions, the study provided a more comprehensive picture of the structure and content of their research while revealing their thought, processes, and collaboration. Following the coding scheme outlined in Figure 2, the qualitative data analysis yielded results that were then tabulated and presented visually through charts or figures. By analysing both CAR reports and forum discussions, the study triangulates data sources, increasing the reliability and validity of the conclusions drawn from the analysis and maintaing its trustworthiness.

Findings and Discussion

Findings

The study's findings are presented in two distinct sections, organised by their respective data sources. The first section explores insights gleaned from analysing the teachers' conversations with their lecturers and coursemates within the LMS discussion forum. Following this, the second part unveils the findings derived from the teachers' CAR reports.

Teachers' conversations about CAR

The teachers used the discussion forum on LMS to brainstorm their topics, share problems and seek advice from the lecturer and classmates. CAR should begin

with real classroom problems that a teacher considers urgent to solve (Burns, 2009). In the early stages of their CAR, they shared the issues they wanted to address for their CAR topics in the discussion forum on the LMS. Figure 3 shows the problems the teachers encountered in their classrooms. Seventy percent of teachers identified writing skills as the most prevalent area of difficulty among their students. Following behind were learners' motivation and learning achievement, which were ranked second and third, respectively, with 14% and 10% of teachers noting these as challenges for their students. Other challenges identified by teachers included students' grammar learning and speaking skills, each accounting for three percent.

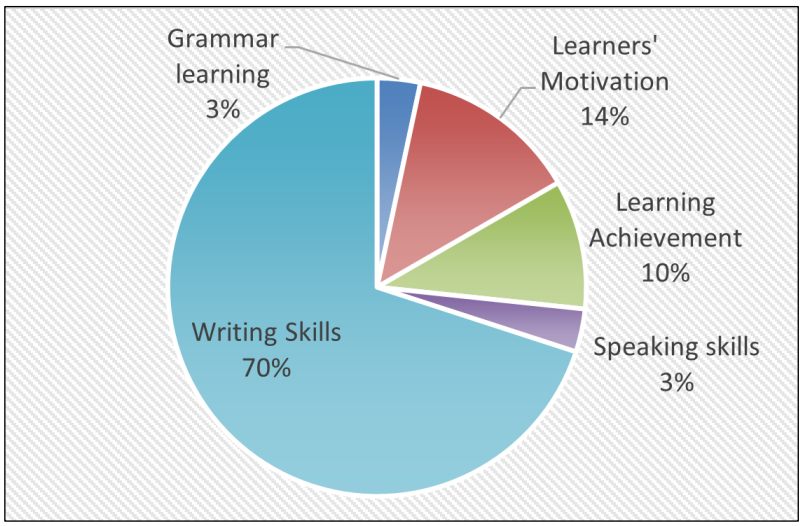


Figure 3. Perceived classroom problems to address

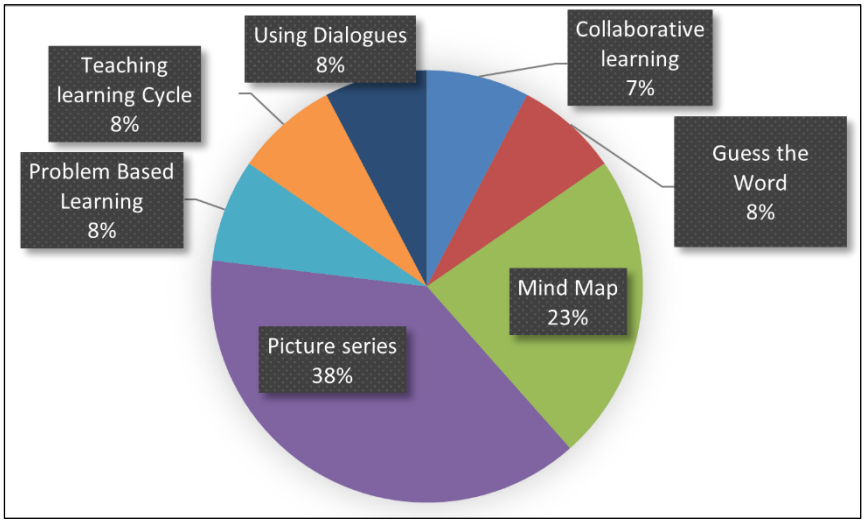


Figure 4. Proposed solutions and innovations

Figure 4 shows teachers' proposed solutions and innovations in CAR. Identifying writing as the most challenging skill for students, 38% of teachers decided to use picture series, while 23% advocated for mind maps to enhance writing abilities. In addition to picture series and mind maps, several teachers explored diverse strategies to enhance their teaching. These included implementing

problem-based learning (8%), revising the teaching-learning cycles (8%), incorporating dialogues (8%), using "Guess the Word" games (8%), and applying collaborative learning activities (7%).

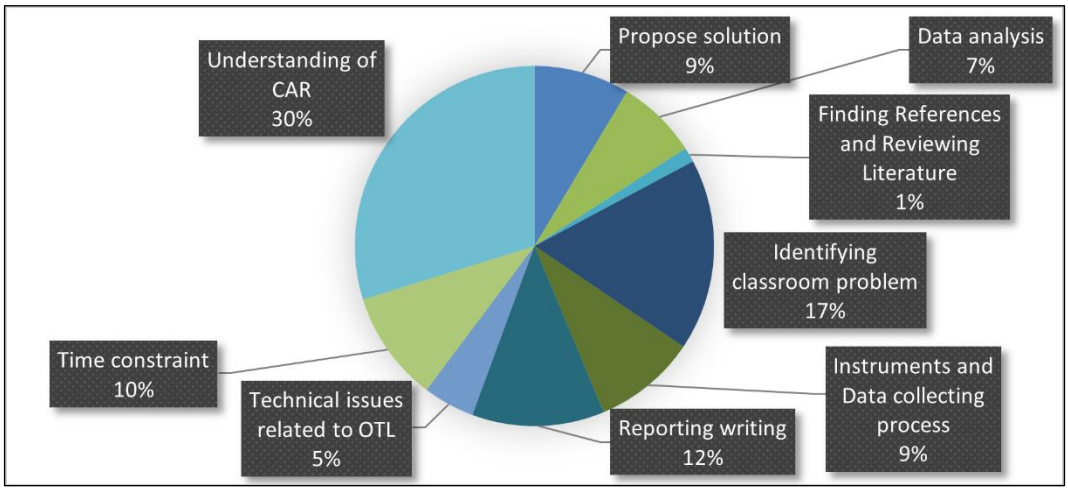


Figure 5. Teachers' perceived challenges

The teachers used the LMS discussion forum to share their challenges in the CAR process. While sharing, they also sought advice from their coursemates and lecturers. Figure 5 summarises the issues they raised during the discussion on the LMS. Teachers' limited understanding of the intricacies of classroom action research (CAR) itself topped the list at 30%. Identifying and selecting the appropriate classroom problem to address followed closely at 17%. Writing the final report of CAR posed a hurdle for 12% of teachers. Ten percent of teachers reported experiencing time constraints when conducting CAR. The challenges of proposing solutions and designing research instruments proved difficult for 9% of teachers. Another 9% identified challenges in designing research instruments and gathering data. Notably, conducting CAR in online teaching and learning (OTL) settings presented technical challenges for 5% of teachers, and a mere 1% found referencing and literature review particularly problematic.

Evidence from teachers' CAR report

The teachers conducted CAR while doing their online teaching practicum at their respective schools. Subsequently, they were required to write CAR reports. This section delves into the findings concerning the teachers' CAR competence, as evidenced in their reports.

Figure 6 illustrates the quality of the literature review and references used in the teachers' CAR reports. The green slice represents the percentage of references about theories underlying the research topic (74%). For example, in a teacher's research about "Enhancing Announcement Writing Creativity Using Canva for 10th Grade Science Students", the literature review talked about theories of teaching writing, the use of Canva, and theories about creativity. The blue slice represents the percentage of references about CAR (22%). Interstingly, only four percent of the reports included reviews of previous studies.

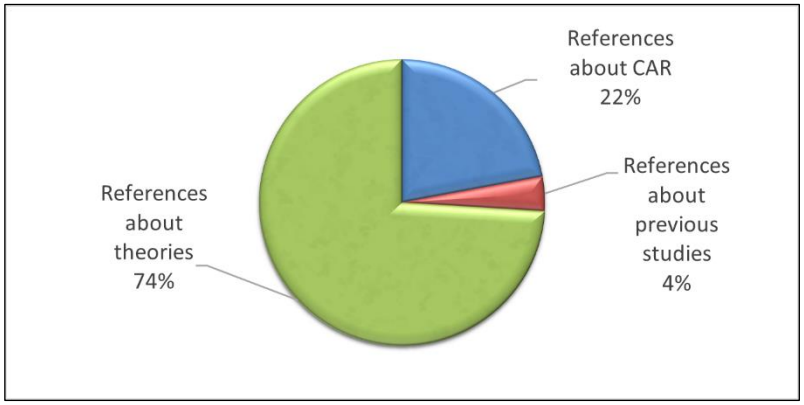


Figure 6. Teachers' literature review and references

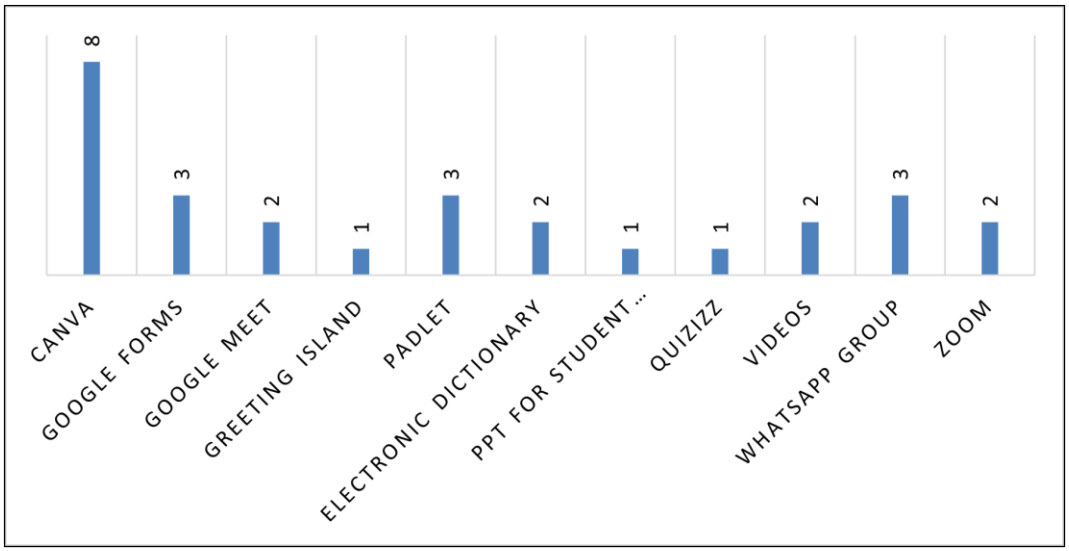


Figure 7. Teachers' technology integration

Figure 7 summarises the integration of technology as a required component of CAR. Upon scrutinising the reports, it became evident how the participating teachers incorporated technology into their teaching during CAR. In Figure 7, out of the 28 reports, Canva emerged as the most preferred technology for teachers, being utilised in eight reports. Three reports each featured Padlet, WhatsApp Groups, and Google Forms as the selected technologies integrated into the teachers' lessons. Additionally, Google Meet, electronic dictionaries, and Zoom were each used in two reports. Rounding out the list were Greeting Island, student presentations created with PowerPoint, and Quizziz, each used by one teacher.

Table 1. Evidence from teachers' data analysis

	Proposed instrument	Analysed data
Documents	3	0
Interview	8	1
Observation	17	16
Questionnaire	7	5
Student Reflections	1	0
Tests and Quizzes	18	57

The evidence derived from teachers' data analysis in Table 1 showed a gap between the data collection methods they planned in their methodology section and the data they actually analyzed and presented in the next chapter. Table 1 details these discrepancies, highlighting the variance between the intended data collection methods and the data actually utilised in their findings.

Specifically, Table 1 reveals that while three reports outlined plans to utilise students' documents as primary data sources, none of these documents were mentioned or analysed in the subsequent chapter of the reports. Similarly, although eight teachers indicated the intention to conduct interviews for data collection, only one report provided evidence of data gathered from interviews being analysed. Regarding classroom observations, while 17 were proposed, only 16 were analysed in the reports. Conversely, none of the teachers had planned to utilise peer feedback as a data source. Additionally, while seven questionnaires were proposed, only five were ultimately analysed.

Interestingly, although student reflections were proposed in one instance, none were analysed in the reports. Conversely, a notable observation was made in the analysis of tests and quizzes, with 18 proposed but a significantly higher number, 57, actually being analysed in the teachers' reports.

These findings shed light on the discrepancies between the proposed methodologies and the actual execution of data collection and analysis among the participating teachers. Such insights provide a nuanced understanding of the challenges and complexities inherent in the implementation of CAR within the educational context. The following section will delve into a comprehensive discussion of these findings and examine their implications.

Discussion

The discussion section of this paper critically examines the findings in light of the research questions guiding this study. These questions aimed to illuminate the challenges faced by the EFL teachers during the implementation of Classroom Action Research (CAR) and to assess the depth of their understanding and competence in executing CAR practices. The discussion section addresses the two research questions posed in this study. The first part explores the participants' perceptions of the challenges in conducting CAR as revealed in their conversations on the LMS. The next part examines gaps between their perceived challenges and their CAR competence as reflected in the reports they submitted.

Teachers' perceived challenges in conducting CAR

Action research is a cyclical process where educators or any practitioners investigate issues in their own work environments to improve their practices and achieve positive outcomes through cycles of planning, action, reflection, and refinement (Burns, 2009; Hendricks, 2019; Norton, 2018). According to Comon and Corpuz (2024), teachers' perceptions of their research abilities are positively correlated with their engagement in CAR. The findings of this study show that the majority of teachers perceived their competence in CAR to be lacking despite the CAR workshop session they had attended. This finding aligns with those of Oestar and Marzo (2022). Their perceived lack of CAR knowledge has led them to express difficulties in identifying issues faced by students in the classroom. The challenges they articulated result in uncertainty in determining solutions and instruments for

data collection. Consequently, it was not surprising that they also reported challenges in data analysis and composing final reports. Therefore, to effectively engage teachers in action research, it is crucial to address their knowledge base, their overall attitude towards research, and the resources available to them (Oestar & Marzo, 2022).

On the other hand, a minority of teachers expressed time constraints in implementing CAR. These teachers revealed that the TPE program's inflexible schedule sometimes clashed with the realities of the teachers' school calendars. The finding concurs with that of Toquero (2021) and of Caliwan-Fuentes (2017), which revealed that a lack of time and class schedules were primary obstacles in CAR implementation. Interestingly, in the discussion forum, only few teachers reported to have encountered difficulties in implementing Online Teaching Learning (OTL) during CAR. These challenges include, among others, their students' limited internet data or unsupported devices and the unstable internet connection, which could happen to anyone. It may indicate that as teachers delved deeper into online teaching and learning (OTL), they underwent a professional identity transformation. The online teacher identity becomes integrated with their overall teaching persona (Nasari & Molana, 2020; Schulte, 2019).

Gaps between teachers' perceived challenges and actual competence

While teachers' CAR reports may not fully capture their CAR capabilities, they provide insight into their competencies. Of a particular note is the discrepancy between the challenges they articulated and the issues evident in their CAR reports, which is exemplified in their literature review quality. During discussions within the Learning Management System (LMS), literature review challenges were scarcely mentioned (1%). However, it sharply contrasts with the quality of their literature reviews, which primarily consist of summaries of fundamental theories related to problem-solving and CAR theory. The content analysis also revealed that only a small fraction (4%) of their literature reviews discussed prior studies in the field. Citing the work of fellow teachers was notably absent from teacher reports. This lack of reference may be attributed, in part, to the limited exchange of teacher-produced reports. Cochran-Smith and Lytle (1993) point out that this limited circulation could be due to the unpublished nature of such resources. However, another attributing factor seemed to involve teacher low understanding of the importance of literature review as a one of basic research skills. This finding validates the finding from the discussion forum, in which only 1% raised the issue of finding references and reviewing literature. Geva and Labo (2023) share similar findings that teachers possessed low capability in evaluating sources in writing literature review. They argue that teachers need ongoing support from more expert researchers to improve this aspect.

The findings of this study also indicated that one potential explanation for the disparity between these teacher-reserchers perception and their actual performance was time constraints. Although only a small percentage of their discussions (10%) cited time constraints, the reports they wrote appeared hastily compiled. A key indicator was the mismatch between research instrument planning and the data ultimately collected and analysed. For instance, while eight teachers planned to gather data through student interviews, in practice, only one teacher utilised this method, processed the data, and incorporated it into their analysis. It stands in

contrast to the utilisation of tests and quizzes. Although only 18 reports mentioned their use, the data presented revealed a heavy reliance on information obtained from 57 tests and quizzes, a significantly larger number than initially intended. This suggests a difference between the methods teachers planned to use and what they actually employed. It does not explicitly state the reasons, but it also hints at the possibility of time constraints. Since tests or quizzes might be quicker to administer and analyse compared to other data sources, such as interview or observation data.

This study, investigating both the EFL teachers' conversations in the LMS discussion forums and their written CAR reports, delves deeper into the challenges faced by EFL teachers as they develop a teacher-researcher identity. It goes beyond previous research by Handoyo (2020), Irwansyah (2020), Khaidir (2018), Mediatati (2016), Rahmatina et al. (2022), Rosmaliwarnis (2021), and Rubi (2021), which relied on pre- and post-test scores to show that training workshops improve CAR competence. It is reasonable that participants felt enlightened after attending CAR training because they could refresh and upgrade their knowledge of CAR. This study, looking beyond test scores, analysed the rich data from online discussions and written reports, which yielded a more nuanced understanding of the challenges faced by teachers.

This study utilises data from EFL teachers' discussions on the LMS to examine their perceptions of CAR competence and challenges. This approach differs from previous studies by Anub (2020), Dignos (2021) and Geva and Labo (2023). These studies relied solely on quantitative surveys, correlating between the amount of research training and teachers' competence and between teachers' research competence and the facilities and resources they had. Their studies undoubtedly revealed that providing teachers with training, facilities, and resources could promote teachers' CAR competencies, but they did not portray their actual competencies. In other words, although such information is useful, it does not adequately provide a clear picture of the content and quality of teachers' CAR. As such, this study also examines the EFL teachers' CAR reports. By examining teachers' conversations during CAR workshop sessions and their submitted CAR reports, this study complements these insights by specifically identifying which aspects pose challenges for teachers in CAR.

The study's findings, which indentified the disparities between EFL teachers' perceived challenges and their actual research competence, resonate with the conclusions drawn by Oestar and Marzo (2022). Their research emphasises the importance of addressing not only the competency gaps in action research writing but also the factors influencing teachers' engagement in action research. Enhancing the teachers' CAR competence will enable teachers to offer innovative solutions to classroom challenges (Eliver et al., 2023). In other words, when teachers possess such competencies, they can make students become more engaged and motivated learners (Nasr & Perry, 2023). Thus, when teachers are competent and actively researching their teaching methods, they are likely to create more effective learning environments, leading to enhanced student academic performance (Eliver et al., 2023).

Conclusions

In conclusion, the findings of this study shed light on the challenges faced by Indonesian EFL teachers in conducting CAR. Firstly, the findings highlight a

crucial gap between teachers's perceived challenges and their actual understanding, as evidenced by their reports. The problems identified in their CAR reports include reviewing the literature, selecting appropriate research instruments, analysing data, and writing reports. These findings underscore the importance of providing EFL teachers in Indonesian context with adequate training, mentoring and support in research methodology. It implies that EFL teacher education programs must support teachers in improving their CAR competencies by providing hands-on training in these areas and mentoring on research methodologies, data analysis, and writing research reports. Teacher education institutions, thus, play a crucial role in empowering EFL teachers to conduct effective CAR by equipping teachers with the necessary skills for successful CAR projects and ongoing mentoring process.

The TPE program in Indonesia emphasises transforming teachers into competent professionals, one of which is developing their professional identity as teacher-researchers. This study has portrayed the EFL teachers' perceived and actual CAR competence, which warrant attention as long as teacher professionalism is still relevant. While it should be admitted that teachers' CAR reports may not be a perfect measure, they have offered valuable insights into their actual CAR competence in the current study. They have captured major parts of their research skills, reflective practice, instructional effectiveness, and professional growth. This study has moved beyond surveying teachers' perceptions, thereby enriching our understanding of their capacity as teacher-researchers. However, there remains room for further exploration. Future research, therefore, could still delve deeper into practical experiences and attitudes towards CAR, involving interviews or focus groups to gain insights into their motivations, challenges, and beliefs regarding the effectiveness and utility of CAR.

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