

Complexities of Practitioner Research: Seeking Hallmarks of Quality

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ABSTRACT

The emphasis in Ed.D. programs on professional knowledge and practical research means methodological training in these programs must prepare their candidates for the career demands graduates will likely encounter; practitioner research is well-suited to this task. Yet, the lower status traditionally accorded to practitioner research, along with an absence of clear guidelines for its methodology and quality, challenge its acceptance as a form of knowledge production. The current study analyzes 74 accounts of practitioner research in literacy for evidence of methodological quality. Findings reveal ways practitioner researchers systematically conduct and report their inquiries as well as areas for improvement. The hallmarks of quality identified in this study can be used by research educators to advance practitioner research as a methodology and knowledge generating endeavor.

KEYWORDS

practitioner research, methods, quality, graduate education

The education doctorate prepares individuals to address complex and persistent problems of practice in their professional context through applied inquiry (The CPED Framework, 2021). The emphasis on professional knowledge and practical research means methodological training in Ed.D. programs must prepare their candidates for the career demands graduates will likely encounter; practitioner research, in its many forms and purposes (Cochran-Smith & Lytle, 2009; Stremmel, 2007), is well-suited to this task.

Practitioner research can make an important contribution to knowledge about teaching and learning, and over the years, support for teachers as creators of knowledge has developed. Publishing opportunities, arguably an indicator of relevance and importance, continue to expand (Dana, 2016), and practitioner research is a focus of professional organizations nationally and internationally. Scholars enumerate the benefits of practitioner research that include the emic perspective practitioners are able to provide because their research questions are derived from the intersection of practice and theory, and the level of detail their investigations offer because the research context is the practitioner's own professional setting (Cochran-Smith & Lytle, 1990; Hiebert et al., 2002). Furthermore, practitioner research extends the dialogue between researchers, policy makers, and practitioners by offering opportunities for practitioners to challenge and reveal issues of power and inequality in schools and classrooms (Anderson & Herr, 1999), helping researchers understand the complexities of classrooms, and providing policy makers with compelling accounts of practice (Rust & Meyers, 2006).

Yet, these strengths of practitioner research, particularly the emic perspective and localized context, are also its vulnerabilities (Anderson & Herr, 1999; Huberman, 1996). The lower status

traditionally accorded to practitioner research, along with an absence of clear guidelines for its methodology and quality, are frequently cited as reasons for debate about its role in research and knowledge production (Anderson, 2002; Heikkinen et al., 2016; Huberman, 1996; Zeichner & Noffke, 2001). A common focal point in the discussion about methodological quality is whether practitioner research should adhere to established research traditions or reflect a new genre of research (Cochran-Smith & Donnell, 2006). Since practitioner research draws from myriad traditions and involves data and analysis that can differ from conventional notions of research (Cochran-Smith & Donnell, 2006; Nichols & Cormack, 2017), establishing criteria for quality is challenging.

The scope of the literature in this debate is daunting; consequently, as a former classroom teacher and now a faculty member in a literacy-focused Ed.D. program, I grapple with how to prepare my students to conduct rigorous practitioner research. An important first step is identifying the methodological processes practitioner researchers engage, but there is little empirical evidence of this (Finch, 2021). To address this gap, the present study is a content analysis of reports of practitioner research in literacy to answer the question, what evidence of methodological quality do literacy practitioner researchers provide? I deliberately focused on literacy practitioner research because as a field, literacy has an established position in practitioner inquiry (Cochran-Smith & Lytle, 1999; Huberman, 1996); furthermore, this is the literature I read to help our students develop the skills and knowledge they need to become practitioner researchers.

Though some might argue the primary goal of most practitioner research is to address local issues (Mertler, 2016; Stieglitz, 2021), I believe education doctorate programs should expect more from it if



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the mission is to prepare graduates who “lead through scholarly practice for the improvement of individuals and communities” (The CPED Framework, 2021). When practitioner researchers share their work, it provides opportunities for dialogue about teaching and learning and becomes an epistemological stance (Cochran-Smith & Lytle, 2009) rather than an activity undertaken in isolation. This way of knowing can contribute to the broader knowledge about students, classrooms, and teachers. For this potential of practitioner research to be realized, we must cultivate a shared understanding about what constitutes methodological quality among those who pursue this inquiry and those who prepare them.

CONCEPTUAL FRAMEWORK

Examining the myriad terminology of practitioner research, its philosophical grounding, and the potential impact of it reveal some of the challenges and possibilities for establishing criteria for methodological quality. These ideas provide the framework for the subsequent literature review and methodology of this study.

Terminology

Teacher research, practitioner research, practitioner inquiry, and action research are often used interchangeably and scholars’ preferences vary. For example, Cochran-Smith and Lytle (2009) refer to practitioner inquiry as a “conceptual and linguistic umbrella” to denote the myriad terms researchers have used to characterize this work (p. 2), while Herr and Anderson (2015) use action research as “a cover term for several approaches that have emerged from different traditions,” (p. 9). This variation can complicate efforts to define practitioner research, especially for novice researchers such as graduate students. However, there is widespread agreement with Cochran-Smith and Lytle’s conceptualization of practitioner research as systematic and intentional (Currin, 2019; Dana & Yendol-Hoppey, 2020; Miller & Shinas, 2019; Schaenen et al., 2012; Schroeder, 2020; Stremmel, 2007). Furthermore, empirical practitioner research differs from other types of practitioner research in that it involves the systematic collection and analysis of data (Cochran-Smith & Lytle, 1993) and is intentional and more visible than reflection, a practice teachers engage in every day (Dana & Yendol-Hoppey, 2020). The acknowledgement of systematicity and intentionality in practitioner research provides a common ground from which to consider criteria for methodological quality. The philosophical worldview aligned with practitioner research also contributes to this foundation.

Philosophical Worldview

A researcher’s philosophical worldview influences their approach to research, and consequently their methodological choices (Creswell & Creswell, 2018). Pragmatism, a worldview concerned with what works and research that solves problems, is particularly germane to practitioner research. Because researchers who espouse a pragmatic worldview are concerned with the application of their inquiries, they have freedom of choice in selecting methods, designs, and analysis (Creswell & Creswell, 2018). Instead of being married to a singular method, they are concerned with the what and how of answering their question (Cohen et al., 2018; Creswell & Creswell, 2018). This perspective is also aligned with Blakely and Hemphill (2021) who argue the distinction of quantitative and qualitative research is a false binary and quote Allwood in

proposing researchers consider “the pros and cons of research methods...in relation to the specific research context that they are used in” (as cited in Blakely & Hemphill, 2021, p. 58). Although the emphasis on problem solving and flexibility in methods differs from other worldviews, Cohen et al. (2018) argue, this “methodologically eclectic, pluralistic approach to research...has its own standards for rigor” – answering the research question in “useful, practical, reliable, and valid” ways (Cohen et al., 2018). Another distinction between pragmatism and other views of research is pragmatism’s acknowledgement of the role of context in research (Creswell & Creswell, 2018); practitioner research occurs in one’s own context, and therefore one cannot enter the research as objective or distant researchers (Nichols & Cormack, 2017). An important consideration in the conduct of practitioner research, then, is reflexivity, which creates space for the practitioner researcher to examine the influence of their insider status (Nichols & Cormack, 2017).

Impact

Practitioner research is often described as having dual purposes – local, problem-solving in a specific context, and global, contributing to the knowledge base about teaching and learning (Dana & Yendol-Hoppey, 2020; Herr & Anderson, 2015). Although a desire to solve problems is often the impetus for practitioner research, the potential for such inquiries to have an impact beyond the immediate context means the research process must be shared (Hiebert et al., 2002). This creates a challenge for evaluating the impact of practitioner research that is often linked to debates about methodological quality (Cochran-Smith & Donnell, 2006; Dana & Yendol-Hoppey, 2020; Herr & Anderson, 2015). In fact, some scholars argue it is precisely because practitioner research aspires to meet these dual purposes, traditional concepts of validity and trustworthiness are not applicable (Heikkinen et al., 2016; Herr & Anderson, 2015; Nichols & Cormack, 2017). Attempts to establish criteria for quality draw from multiple perspectives including literary traditions (Bullough & Pinnegar, 2001; Connelly & Clandinin, 1990), Japanese lesson study (Hiebert et al., 2002), and Greek philosophy (Heikkinen et al., 2016), to name a few. Accordingly, the resulting indicators for integrity range in focus from defining validity in multiple ways (Anderson & Herr, 1999), to standardizing methods (Levin, 2012), to establishing principles for validation (Heikkinen et al., 2016).

In summary, although practitioner research is known by many terms and drawn from different traditions, there is consensus among scholars about the need for systematic and intentional practices. The alignment between practitioner research and a pragmatic worldview suggests the research question or problem should guide the choice of methods and also highlights the need for reflexivity in these endeavors. Finally, the potential for both a local and global impact raises questions about how to address credibility issues, resulting in a multiplicity of ideas. The hallmarks of quality identified in this study can be used by faculty in education doctorate programs to prepare candidates to design and implement their own rigorous practitioner research. The next section reviews the methodological literature and scholarly discourse to identify hallmarks of quality for practitioner research.



LITERATURE REVIEW

Two bodies of scholarship guided the approach to identifying hallmarks of quality in practitioner research: methodological literature and scholarly discourse about validating practitioner research as a legitimate form of knowledge generation. Literature included in this section was drawn from methodological textbooks, book chapters and articles about practitioner research, and books, which report, and provide guidance for conducting, practitioner research. Levin's (2012) discussion about legitimizing action research, a form of practitioner research, provides the rationale for drawing from methodological texts: the scientific method is a "transparent and argumentative way of reasoning" (p. 138) and so, in order for action research to be legitimized, it must "comply with the rules and regulations associated with the actual discipline" (p. 142). However, the ways in which practitioner research are distinct from traditional research (Cochran-Smith & Lytle, 2004) also necessitate consideration of the criteria proposed by scholars in this field.

The literature included in this review is not intended to be exhaustive but rather a representation of earlier and more recent scholarship to serve as a starting point for identifying hallmarks of quality in empirical practitioner research. Similarly, and echoing Herr and Anderson (2015), the indicators identified are meant to advance the discussion between practitioner researchers and academics rather than define it. The exclusive focus on methodology is intentional because regardless of whether the impact of practitioner research is local, global, or both, the processes for conducting it are paramount. The examination of this literature, particularly their shared features, led to three focal areas: research design, data analysis, and the emic perspective. These areas, described below, provided the foundation for codes then used analyze the data, published accounts of practitioner research in literacy contexts.

Research Design

According to Cochran-Smith and Donnell (2006), a key feature of practitioner research, regardless of the form it takes, is intentionality, which they define as the "planned and deliberate rather than spontaneous nature of practitioner inquiry" (p. 510). On the subject of intentionality, methodological textbooks typically assert the first steps in conducting practitioner research are to define an area of focus and develop research question(s) or goals (Check & Schutt, 2011; Dana & Yendol-Hoppey, 2020; Mertler, 2016; Mills, 2018). Research questions or goals then guide the selection of the research design, participants, data, and analysis, all of which are related to another key feature of practitioner research: systematicity.

Systematicity is defined as "ordered ways of gathering and recording information, documenting experiences inside and outside of the contexts of practice, and making some kind of written record" (Cochran-Smith & Donnell, 2006). Process validity (Herr & Anderson, 2015) and transparency in describing methods (Heikkinen et al., 2007) are similar to systematicity in their focus on the manner in which practitioner research unfolds; it is also important to justify and explain the choices practitioner researchers make (Dana & Yendol-Hoppey, 2020; Zuber-Skerritt & Fletcher, 2007).

Because of the emphasis in practitioner research on documenting the practitioner's own thinking and learning (Cochran-Smith & Donnell, 2006; Cochran-Smith & Lytle, 2004; Heikkinen et al., 2016), researcher journals, anecdotal records, and field notes are commonly used. Such records are legitimate forms of data and

contribute to the construction of knowledge by revealing tacit understandings (Zuber-Skerritt & Fletcher, 2007). Traditional ideas about validity and generalizability are not typically applicable in practitioner research; however, criteria for trustworthiness, while not suitable for all forms of practitioner research (e.g. those grounded in literary traditions), are viewed as useful by some (Cochran-Smith & Donnell, 2006; Levin, 2012). In particular, practitioner researchers should ensure their findings are accurate representations of the data to establish credibility (Lincoln & Guba, 1986). This can be accomplished through collecting and triangulating multiple forms of data (Check & Schutt, 2011; Dana & Yendol-Hoppey, 2020; Herr & Anderson, 2015; Mertler, 2016; Mills, 2018; Zuber-Skerritt & Fletcher, 2007), conducting member checks (Herr & Anderson, 2015; Mertler, 2016; Mills, 2018; Zuber-Skerritt & Fletcher, 2007), and establishing audit trails (Mills, 2018).

Data Analysis

The second focal area concerns data analysis. Bullough and Pinnegar (2001) explain self-study scholars must negotiate the tension inherent in this type of practitioner research through descriptions of how analysis occurred, an idea shared by Erlandson and colleagues (1993) who assert describing the analysis process helps warrant the findings and permits replication of the study. This seems particularly important given data used in practitioner research is often different from other forms of research (Cochran-Smith & Donnell, 2006; Nichols & Cormack, 2017). Dana and Yendol-Hoppey (2020) recommend practitioner researchers provide detailed descriptions about how the data were analyzed, including references to the methodological literature, when appropriate (p. 290). Similarly, Mills (2018) encourages practitioner researchers to "let readers 'see' for themselves" (p. 166).

Strategies for accomplishing this include providing excerpts of data and examples of instruments (Mills, 2018; Nichols & Cormack, 2017) and sharing authentic voices of the participants (Heikkinen et al., 2007). These practices illustrate and substantiate conclusions the researcher makes and are applicable to practitioner research where sharing student and teacher voices helps establish transferability and confirmability (Erlandson et al., 1993) by giving the reader a sense of an authentic interaction. Finally, details about instruments can establish dependability (Erlandson et al., 1993). These strategies also contribute to establishing the utility of the research findings for the intended audience (Mertler, 2016).

Emic Perspective

A common criticism of practitioner research is the insider status of the practitioner introduces issues of bias and questions about the legitimacy of findings (Cochran-Smith & Donnell, 2006; Herr & Anderson, 2015; Huberman, 1996). Two ways to mitigate this concern are collaboration and reflexivity (Check & Schutt, 2011; Dana & Yendol-Hoppey, 2020; Mertler, 2016). Notwithstanding the challenges of collaboration, an epistemological stance grounded in the idea about knowledge as collaboratively constructed suggests the affordances of practitioners partnering with others can lead to productive and meaningful experiences (Cochran-Smith & Donnell, 2006; Flessner & Klehr, 2016). Furthermore, Mertler (2016) recommends novice practitioner researchers partner with more experienced individuals; also, collaborative inquiry can promote dialogic and democratic validity (Herr & Anderson, 2015).

According to Nichols and Cormack (2017), because practitioner research occurs in practitioners' own contexts, "they cannot, therefore, utilize traditional views of objectivity or distance to demonstrate their own interests aren't influencing the research," (p. 102). Instead, the practice of reflexivity helps "to gain separation from context and reflective clarity from their own perceptions and actions" (Check & Schutt, 2011). Reflexivity can occur through dialogue with critical friends (Herr & Anderson, 2015), supposition statements (Mills, 2018), and interrupting the day to day routine to examine what often goes unscrutinized (Nichols & Cormack, 2017). Journaling also provides an opportunity to capture one's thoughts in the moment and then reflect on them over time; Dana and Yendol-Hoppey (2020) liken this to the pensieve from the Harry Potter series.

METHODS

The current study is part of a broader content analysis about practitioner research in literacy in which the methodology is described in detail (Finch, 2021). An overview is provided here. Content analysis methodology was used to answer the research question because it involves examining texts for patterns by employing a consistent coding process (Hoffman et al., 2011). In their review of the use of content analysis in literacy scholarship, Parsons et al. (2016) note this methodology is often used to examine trends across several decades within one journal or professional organization, but less frequently includes multiple journals. However, examining multiple journals over a shorter period of time provides a broader view of what is occurring in the field (Parsons et al., 2016). Thus, for the current study, I confined the selection of practitioner research to a single decade, 2007-2017 across 10 journals (the last year for which complete volumes were available).

Identification, Screening, and Selection

I employed a two-stage identification process to select the articles (Holsti, 1969), first identifying journals published by either a literacy organization or with an explicit focus on action research and with practitioners as the intended audience. Action research is a type of practitioner research and while not all practitioner research is considered action research, it is reasonable to assume practitioner researchers might select an action research focused journal to disseminate their work. The name of the journal and literacy organization affiliation (when applicable) are presented in Table 1.

Table 1. Description of Sources (n =74)

Journal	Literacy Organization (if applicable)	Number of Articles
Journal of Adolescent and Adult Literacy	ILA	11
The Reading Teacher	ILA	10
English Journal	NCTE	15
Language Arts	NCTE	6
Talking Points	NCTE	7
Voices from the Middle	NCTE	10
Voices of Practitioners		4
ie: inquiry in education		2
Journal of Teacher Action Research		5
Networks		4

Following this, I used an inclusion criteria framework that reflects the qualities of practitioner research to select articles characterized by a purpose of sharing the results of systematic and intentional inquiry:

1. Author is a practitioner (if multiple authors, the first author must be a practitioner).
2. The research concerns the practitioner's own practice and was conducted in K-12 school contexts, including after-school contexts.
3. Acknowledgement on the part of the author(s) s/he/they conducted a study. Terms could include *research*, *inquiry*, *study*. Using the word *project* without another term (research/inquiry) was insufficient to meet the inclusion criteria.
4. Evidence of data collection and description of the participants.

In total, the data corpus was comprised of 74 articles authored by 72 literacy practitioners about their own professional practice. Table 1 also indicates how many articles were included from each publication.

During data analysis in the original study (Finch, 2021), a lack of uniformity in how practitioners report their research endeavors, and presumably how they conduct them, became apparent, consequently leading to the focus of the current study of identifying hallmarks of quality in published accounts of practitioner research. This identification is an attempt to establish criteria to reflect the reality of practitioner research while also satisfying calls for "a robust yet tailored methodological repertoire" (Huberman, 1996, p. 138).

Coding

The reports of literacy practitioner research were imported into NVivo for analysis, and a priori codes were developed from the review of the literature. The three focal areas for coding included: research design, data analysis, and the emic perspective. I collaborated with another faculty member and a graduate assistant to establish inter-rater reliability and to evaluate the applicability of the codes. Throughout the coding process we met regularly to discuss questions we had about the coding process; we also had our graduate student randomly select and code 13 articles, and then check them against our coding to ensure we maintained consistency.

Research Design

The first focal area, research design, included seeking evidence of *all* of the following elements:

1. Explicitly stated research question, or in the absence of a question, clearly articulated goals for the research.
2. Specified research design.
3. Data derived from more than once source.
4. Some type of researcher records – research journal, anecdotal notes, field notes.
5. Consideration for credibility of the findings.

Data Analysis

To determine how literacy practitioner researchers provide evidence to warrant their findings, the data corpus was analyzed for evidence of the following:

1. Providing details about instruments.
2. Specifying or describing the analytic approach.
3. Sharing examples or excerpts of instruments and data.

Emic Perspective

Analysis of the final focal area, the emic perspective was guided by the following:

1. Collaboration, as evidenced by a co-author.
 - a. Co-author's position and education level (this information was also collected for the first author in the original study).
2. Reflexivity, as evidenced by statements indicating an awareness of the importance of uncovering underlying assumptions of biases.

FINDINGS: HALLMARKS OF QUALITY IN PRACTITIONER RESEARCH

A review of methodological literature and scholarly discourse about practitioner research suggested hallmarks of quality that were then applied to reports of literacy practitioner research. The following section presents findings that illuminate the research processes practitioner researchers engage and highlight examples of research reporting that can strengthen the credibility of this type of inquiry. The organization of the findings mirrors the literature review and description of coding: research design, data analysis, emic perspective.

Research Design

Many of the reports of practitioner research included at least one of the features of research design (research question/goal, stated design, multiple sources of data, researcher records, consideration for credibility) (Finch, 2021); in the present study, the focus is on the reports incorporating *all* of the features so exemplars may be identified. The classifications and filter features of NVivo were used to classify articles meeting all of the criteria, resulting in a winnowing down from 51 articles either explicitly stating a research

question or presenting goals for the inquiry to four articles also specifying a design, collecting data from more than one source, keeping researcher records, and addressing trustworthiness issues. Figure 1 illustrates the results of the filter: articles including a research question or goal are represented in the first rectangle on the left; the next rectangle represents the articles that also specify a research design. Each subsequent rectangle applies a new hallmark of quality; the rectangle in the bottom right corner represents the four articles meeting all of the criteria.

From the full data corpus of 74 reports of practitioner research, 69% (n=51) stated a research question or goal, but nearly half (n=23) of those reports did not specify a research design. And, while most of the reports identifying a research design went on to collect multiple forms of data, only nine of the articles stating a research question remained on the list for using researcher records; one of the articles expressing a goal also met this criterion. Finally, just four articles attended to credibility of the findings, and therefore met all of the criteria (Figure 1).

Of the four exemplar articles, three of them were published in action research journals (and two are from the same journal, *Networks*) (Table 2). All of the articles explicitly state a research question instead of a goal and all describe their research design as either teacher or action research. The number of data sources in each of these ranged from two to four, and the variety in the data sources reflected the overall diversity in the data corpus (Finch, 2021). Reflective journals and field notes were each used by two practitioner researchers; anecdotal records were used by one. In terms of credibility, all but one of the studies mentioned the use of multiple sources of data to triangulate findings, and two studies acknowledged the need for a reliable method of data collection. In summary, the examination of 74 accounts of practitioner research revealed only four that stated a research question, specified a design, collected multiple forms of data, utilized researcher records, and incorporated elements to strengthen the credibility of their study.

Figure 1. Features of Practitioner Research Designs

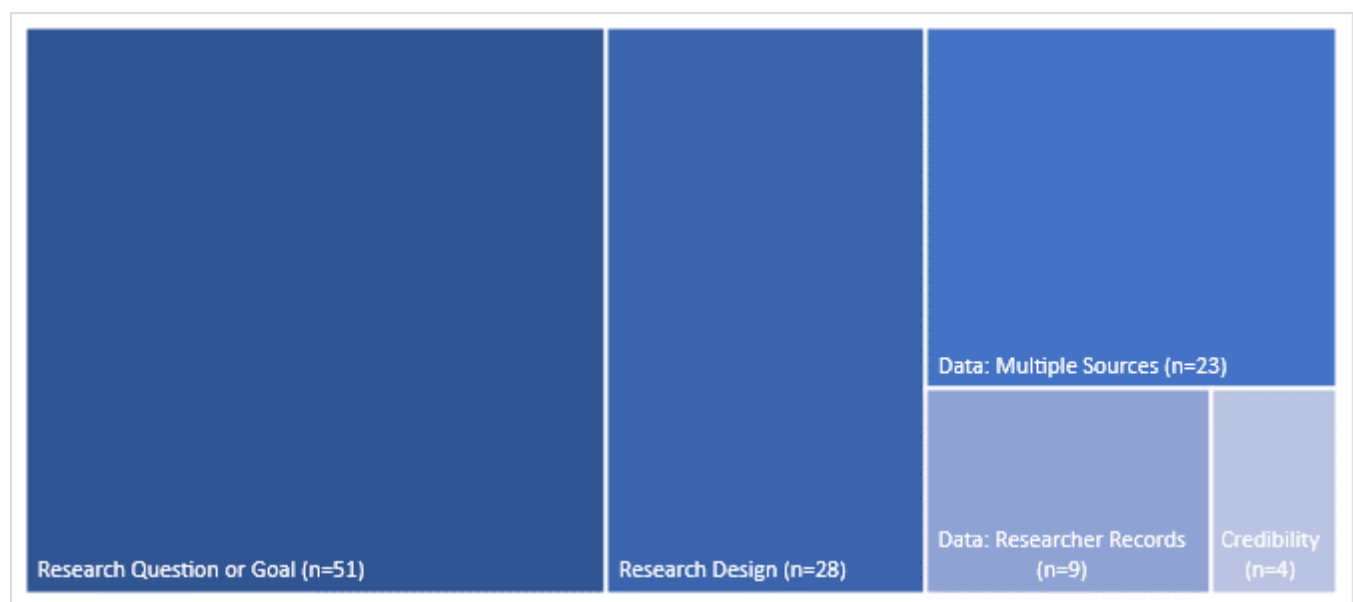




Table 2. Exemplars of Practitioner Research

Author(s) & Journal	Research Question	Research Design	Data Multiple Sources	Data Researcher Records	Credibility
Juana & Palak, 2011 <i>Networks</i>	What is the effect of podcasting to help improve student speaking abilities?	Action research	Rubrics Pre- & post survey University collaborators Student discussions	Reflective journal	Recordings increased reliability of data Triangulation of sources
McGee, 2011 <i>Language Arts</i>	What would it look like to construct a language arts curriculum that responds to the changing demographics of my students' community in a way that disrupts one-dimensional images of immigrants' negative stereotypes?	Teacher research	Student work Survey	Reflective journal Field notes	Triangulation of sources
Pankratz, 2015 <i>Voices of Practitioners</i>	How can picture books act as a tool to foster imaginative, collaborative, and sustained play within the block center?	Teacher research	Student interviews Photographs Student observations Event records	Anecdotal notes	Outside observer Triangulation of sources
Tomczak, 2014 <i>Networks</i>	How was student talk around reading influencing reading comprehension in my third-grade classroom?	Action research	Audio recordings of students' readings Student interviews	Field notes	Needed a reliable way to collect data

Data Analysis

The full data corpus (n=74) was used to examine the instruments and analytic methods practitioner researchers use. Due to the diversity of approaches they employed, it was difficult to characterize the description of analysis holistically. For example, in some cases, practitioner researchers offered clear descriptions of their entire analytic approach, but in others, they discussed the analysis of one type of data more fully than other types. The following sections elaborate on three hallmarks of quality in analysis of practitioner research: specifying or describing the instruments, explaining analytic approach, and sharing examples or excerpts of instruments and data.

Instruments

Providing details about pre and post-tests or surveys provides a context for understanding the findings from practitioner research and establishes confirmability. In the data corpus, this information included identifying if a test was a standardized assessment (e.g. DIBELS, DRA 4-8, ITRI) or one developed by the practitioner researcher and describing what was measured as shown in this example, "Assessments for rate, accuracy, prosody, and comprehension were administered prior to and after the intervention" (Guerin & Murphy, 2015, p. 554). Descriptions of surveys also help clarify the study for the reader. One example of this is, "This survey queried the students on many aspects of their Spanish abilities, including their speaking, reading, writing and listening abilities, as well as their grammar, their ability to express their ideas and their anxiety in recording their voice" (Juana & Palak, 2011). There was one instance where the description was presented in the appendix rather than the body of the article (Toth, 2013).

Analytic Approach

In cases where practitioner researchers use quantitative or qualitative methods common in other disciplines, specifying the

analytic approach demonstrates their authority as a researcher. An excerpt of the most elaborate example of this is a description of the statistical tests used:

For those readers interested in detailed statistics, we actually performed three statistical tests with this data: the rank signed test, the Mann-Whitney test, and the NPAR1WAY Procedure/Wilcoxon Two-Sample Test. According to the Mann-Whitney test, $Z = 4.1754$, $p < .0001$. (Chanski & Ellis, 2017, p. 6).

This information is presented as an endnote, perhaps reflecting a belief that most readers would not find this information useful; it is also the only instance where this level of detail was provided. In the five other cases where practitioner researchers used such tests, two identified the test (e.g. t-test, chi-square), while three referred to completing statistical analysis.

The 12 practitioner researchers who specified qualitative analytic approaches did so by naming the strategy and then referencing the methodological literature. For example, "The group used the constant comparative method to analyze data (Hendricks 2009)" (Ortiz et al., 2014, p. 5) and, "I also used the multiliteracies framework (New London Group, 2000) as a heuristic to conduct a fine-grained analysis of Concrete Voices artifacts" (Broderick, 2014, p. 201). In general, these researchers described their approaches more fully than those who conducted statistical analysis.

In instances when practitioner researchers do not identify a specific analytic approach, describing how they analyzed their data are useful. For example, this description (and the figure that accompanies the article) makes clear the categories the practitioner researchers used to analyze their data and brings to light questions they had about their process:

While we use the framework in Figure 1 to guide our discussion of zine entries, the four categories are not always discrete, causing us to wonder if the separation of the categories is the optimal way to present them. Nonetheless, the categories did



provide a way for us to examine the elements of critical stance taken up by students who chose to respond to classroom conversations around texts that had to do with coercive aspects of awards and prizes (Heffernan & Lewison, 2009, p. 24).

Descriptions of the analysis did not need to be lengthy to convey the process as seen here, "I collected and read student responses to the latter question (which were written in two-way response journals), recording anecdotal comments on an alphabetized list of the participants so I could trace general patterns of thought and inquiry" (McGee, 2011, p. 274).

Examples and Excerpts

Because of the idiosyncratic nature of practitioner research, examples of rubrics and checklists can be particularly helpful in understanding how the authors made sense of their data, strengthening the trustworthiness of their findings. Examples of rubrics were presented as appendices (e.g. Cease & Wilmarth, 2016; Juana & Palak, 2011) and as figures within the text (e.g. Brett, 2016; Lafferty, Summers, Tanaka, & Cavanagh, 2016). Another approach was to provide a narrative description of the criteria along with student performance:

At the end of the year, 20 out of 21 students (95%) met or exceeded the standard in identifying key events, 19 students (90%) met or exceeded the standard in identifying the character's actions or feelings, 14 students (67%) were able to provide evidence from the text, and 19 students (90%) met or exceeded the standard in identifying the author's message related to the key events," (Witte, 2016, p. 35).

In another study, an observation checklist was described narratively (Moratelli & Dejarnette, 2014), similar to the previous example.

In the data corpus, practitioner researchers indicated using transcripts collected from class discussions, interviews, and focus groups during data analysis. Brief excerpts of transcripts were shared within the body of the article (e.g. Gatto, 2013; Ragland & Palace, 2017), presented as tables (e.g. Lobron & Selman, 2007), and in one example, the entire transcript was presented in an appendix (Whitcotton, 2013).

Sharing results from open-ended survey items is another way practitioner researchers demonstrate confirmability. As seen in this example where students completed a pre-interest survey about writing topics, one way to do this is summarizing information: "Our study began in September with a pre-interest survey and classroom observations. The surveys had a reoccurring theme of writing topics. These writing topics included family, animals, and sports," (Gericke & Salmon, 2013). Another technique for sharing results is to elaborate on frequency counts by including student comments as Cease and Wilmarth (2016) do here: "For example, 18 participants wrote that they liked blogging because they could interact with classmates. One student wrote, 'I like that people can read blogs and comment on them.' Another stated, 'You can improve by getting comments'" (p. 6). Finally, including examples of students' responses also permits the practitioner researcher to share their own thoughts as they examined the data. This excerpt from a study about book clubs demonstrates the contrast between students' and the practitioner researcher's perceptions:

'Book clubs are fun and they challenge me,' Mary shared, 'by reading higher levels and thinking deep thoughts.' This comment was in response to an open question toward the beginning of the book club experience. Her response was

surprising because the first meetings contained awkward silence between the students as they did not know what to do with the unstructured time and conversation (Petrich, 2015, p. 7).

Emic Perspective

To mitigate concerns about bias when the researcher is also the practitioner, the studies were examined for evidence of collaboration and reflexivity. Nearly two-fifths (n=28) of the practitioner researchers in the dataset collaborated with a co-author; in four instances there were three or more authors in total. Most co-authors held positions in higher education compared to the 10 who worked in K-12 contexts. Evidence of reflexivity was less clear throughout the reports of practitioner research included in this study. In some instances, authors made a brief statement about their beliefs pertaining to teaching and learning. Though limited, these declarations reveal an awareness of the relationship between their perspectives and the research they conducted. Two practitioner researchers named a particular training as influencing their beliefs (Crowell, 2015; Krieling, 2016), and in three cases, they included a deliberate statement about their stance and the scholars who influenced it (Broderick, 2014; McGee, 2011; Nixon, 2012). In these cases, the authors went on to elaborate about how the training or stance shaped their inquiry. Most interesting was the relationship between reflexivity and the use of critical theory, a focus on critical literacy, or both. Of the 20 studies coded for evidence of reflexivity, four used critical theory to frame their study; critical literacy was the focus of the study in another four; and three studies incorporated both critical theory and a critical literacy focus. These eleven studies, perhaps unsurprisingly, included robust descriptions about how practitioner researchers' own identities, experiences, and subjectivities played a role in their research.

DISCUSSION

The findings of this study extend the literature on practitioner research through an examination of the research processes practitioners engage and report when conducting their own inquiries. To better understand the state of practitioner research in literacy, the methodological literature was reviewed to identify indicators of quality in the conduct and reporting of research; these indicators were then used as a lens to examine reports of practitioner research. Findings were organized into three focal areas: research design, data analysis, and the emic perspective.

Accounts of practitioner research that include all of the hallmarks of quality for research design are rare, suggesting that perhaps practitioner researchers are not attending to these matters or, alternatively, do not realize they should include them in their reports. If the latter is true, it is also possible journals that publish these accounts make allowances for practitioner research and do not ask for these elements to be included during the review process. Despite this, there is evidence of systematicity: practitioner researchers have a clear starting point for their inquiries, most frequently through a stated question, and in some cases, clear goals. Yet, less commonly noted is the type of research design. Again, there could be different reasons for this discrepancy: perhaps practitioner researchers focus more on defining their starting point and are less concerned with specifying a design for carrying out their inquiry. On the other hand, possibly they are unaware that different



types of research design exist. Regardless, the finding that practitioner researchers are likely to collect multiple forms of data is heartening; it implies practitioner researchers see value in relying on more than one data point. Cochran-Smith and Lytle (Cochran-Smith & Lytle, 2009) consider multiple data sources a strength of practitioner research because they “illuminate and confirm, but also disconfirm one another” (p. 44), and too, this practice can counter the practitioner’s own predispositions (Anderson & Herr, 1999). Few of the reports in this study also indicated the use of researcher records and considerations for credibility. This is consistent with the examination of the independent inclusion of these elements (Finch, 2021).

While elements of research design in practitioner research bear resemblance to what occurs in other types of social science research, data, and consequently, analysis often take new forms (Cochran-Smith & Donnell, 2006). Thus, findings about the practices practitioner researchers take up to make sense of their data extend our knowledge in this area. The variation in analysis shown in this data corpus reflects the diversity of the types of data collected and also provides evidence of systematicity on the part of practitioner researchers.

In particular, when practitioner researchers name their analytic approach and reference the methodological literature, it brings transparency to the research, thus enhancing the quality (Dana & Yendol-Hoppey, 2020; Heikkinen et al., 2007; Zuber-Skerritt & Fletcher, 2007). Providing examples of rubrics, checklists, and student work, as well as describing the instruments used, also strengthens the credibility of practitioner research. These details further contextualize the investigation, making clear the coherence between research questions or goals and data collection and analysis. In cases where standardized assessments are used, identifying the test allows readers familiar with it, particularly other practitioners, to consider whether the findings might be applicable in their contexts. Alternatively, when practitioner researchers use locally developed assessments, rich descriptions and excerpts support this purpose.

The ways in which practitioner researchers shared details about their data analysis is also notable. Practitioner researchers described these things in the text (including quotes and excerpts), in tables and figures, and in footnotes and appendices. These practices, quite common and expected in social science research (Duran et al., 2006), can be an effective bridge, bringing together traditional ways of presenting data analysis with the diverse types of data in practitioner research (Nichols & Cormack, 2017; Zeichner & Noffke, 2001).

Practitioner researchers appear to value opportunities to collaborate when conducting a study, most frequently with higher education faculty. It seems likely that such collaborations happen as a result of or concurrently with a teacher education program; this is encouraging because it suggests faculty also see value in practitioner research and such partnerships. Another benefit of collaborations between practitioners and higher education faculty is the research knowledge and experience the faculty member has to provide guidance in developing and executing the study (Mertler, 2016).

Finally, there is limited evidence of reflexivity in the data corpus. Similar to less attention being paid to defining the research design, lack of discussion about biases and assumptions could indicate practitioner researchers do not consider this when they conduct

inquiries, or it could be that they do not realize it has a place in reporting their study. This is important because reflexivity is widely considered essential in practitioner research (Check & Schutt, 2011; Heikkinen et al., 2007; Herr & Anderson, 2015; Mills, 2018; Zuber-Skerritt & Fletcher, 2007). Where evidence of reflexivity was apparent, the strongest examples come from articles also linked with critical theory, critical literacy, or both. Given this finding, it is feasible that practitioner researchers who draw from these approaches might be better positioned to recognize the importance of discussing their beliefs and assumptions and their potential impact on the study.

Limitations

An important limitation to note is the difficulty in disentangling research processes practitioner researchers engaged from the ones they reported. It is possible the authors employed processes (e.g. selecting a research design) they then did not include in their report for any number of reasons. Thus, it is difficult to state conclusively what processes practitioner researchers are using. Second, this study is limited to the specific journals included and consequently, as examination of other journals might confirm or challenge the findings in this study. Third, this study restricts reports of practitioner research to literacy education, and an examination of other fields might reveal different findings.

CONCLUSION

Practitioner research holds promise for building knowledge about improving teaching and learning, but thoughtful appraisal of this scholarship is inconsistent, in part because of the variety of guidelines for practitioner research methodology and quality, and too because dialogue around quality and rigor in practitioner research is more theoretical rather than grounded in research. One exception is Oolbakkink-Marchand et al.’s (2014) study of quality in teacher research by applying Anderson and Herr’s (Anderson & Herr, 1999) criteria for validity.

Similarly, although discourse about appropriate research skills for education doctorate programs is quite prevalent (e.g. Buss, 2018; Hochbein & Perry, 2013; Kochhar-Bryant, 2017), these discussions are largely conceptual and lack empirical evidence. An exception here is Hochbein and Smeaton’s (2018) study of the quantitative methods school leaders need to understand in order to apply research-based findings to their work improving schools. Notably, the researchers selected journals relevant to school leaders and then analyzed articles for the prevalence of quantitative methods. Based on their findings, they recommended school leadership preparation programs include explicit instruction in research methods beyond the introductory level and provide opportunities for reading and evaluating empirical research in content courses.

Oolbakkink-Marchand et al. (2014) endeavor to substantiate practitioner research as a knowledge generating form of inquiry while Hochbein and Smeaton’s (2018) goal is to influence school leadership preparation programs. I suggest the findings in the current study can, and should, contribute to both of these objectives. For practitioner research to have an impact beyond the local context, it must become public and open to scrutiny and peer review (Bullough & Pinnegar, 2001; Cochran-Smith & Donnell, 2006; Hiebert et al., 2002; Zeichner & Noffke, 2001). The findings of this study extend the discourse on practitioner research by first identifying hallmarks of quality in the extant literature and then applying them to published



accounts of practitioner research; this process allows research educators to initiate a discussion using common language for evaluating such inquiries and understanding how they contribute to knowledge generation about teaching and learning.

Since Ed.D. programs prepare students to respond to local problems of practice (The CPED Framework, 2021), this approach could respond to Blakely and Hemphill's (2021) call for a third space for education research in which technocratic methods refuted in favor of methods responsive to questions grounded in practice and contexts. If education doctorate programs provide explicit instruction in practitioner research methods, including how to evaluate quality, graduates will be prepared to design and conduct inquiry responsive to their professional context. Notably, the findings from this study suggest the need for a focus on research design and reflexivity. Disseminating their research will demonstrate its capacity to transform education systems and respond to Anderson's and Herr's (Anderson & Herr, 1999) call for "a new definition of rigor...that does not mislead or marginalize practitioner researchers" (p. 15).

REFERENCES

- Anderson, G. L. (2002). Reflecting on research for doctoral students in education. *Educational Researcher*, 31(7), 22–25.
- Anderson, G. L., & Herr, K. (1999). The new paradigm wars: Is there room for rigorous practitioner knowledge in schools and universities? *Educational Researcher*, 28(5), 12–40. <https://doi.org/10.3102/0013189X028005012>
- Blakely, E., & Hemphill, D. (2021). *Opening third spaces for research in education: Challenging the limits of technocratic methods*. Myers Education Press.
- Brett, A. T. (2016). Seeking a balance: Discussion strategies that foster reading with authorial empathy. *Journal of Adolescent and Adult Literacy*, 60(3), 295–304. <https://doi.org/10.1002/jaal.567>
- Broderick, D. (2014). Collaborative design: Participatory culture meets multiliteracies in a high school literary arts community. *Journal of Adolescent & Adult Literacy*, 58(3), 198–208. <https://doi.org/10.1002/JAAL>
- Bullough, R. V., & Pinnegar, S. (2001). Guidelines for quality in autobiographical forms of self-study research. *Educational Researcher*, 30(3), 13–21. <https://doi.org/10.3102/0013189X030003013>
- Buss, R. R. (2018). Using Action Research as a signature pedagogy to develop EdD students' inquiry as practice abilities. *Impacting Education: Journal on Transforming Professional Practice*, 3(1), 23–31. <https://doi.org/10.5195/ie.2018.46>
- Cease, B., & Wilmarth, M. (2016). Blogging about books: How choice in modality influences upper elementary students' responses to reading. *Talking Points*, 28(1), 3–9.
- Chanski, S., & Ellis, L. (2017). Which helps writers more, receiving peer feedback or giving it? *The English Journal*, 6(106), 54–60.
- Check, J. W., & Schutt, R. K. (2011). *Research methods in education*. SAGE Publications.
- Cochran-Smith, M., & Donnell, K. (2006). Practitioner inquiry: Blurring the boundaries of research and practice. In J. L. Green, G. Camilli, P. B. Elmore, A. Skukauskaite, & E. Grace (Eds.), *Handbook of complementary methods in education research* (Vol. 2, pp. 503–515). Lawrence Erlbaum Associates.
- Cochran-Smith, M., & Lytle, S. L. (1990). Research on teaching and teacher research: The issues that divide. *Educational Researcher*, 19(2), 2–11. <https://doi.org/10.3102/0013189X019002002>
- Cochran-Smith, M., & Lytle, S. L. (1993). *Inside outside: Teacher research and knowledge*. Teachers College Press.
- Cochran-Smith, M., & Lytle, S. L. (1999). The teacher research movement: A decade later. *Educational Researcher*, 28(7), 15–25. <https://doi.org/http://dx.doi.org/10.3102/0013189X028007015>
- Cochran-Smith, M., & Lytle, S. L. (2004). Practitioner inquiry, knowledge, and university culture. In J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. L. Russell (Eds.), *International handbook of self-study of teaching and teacher education* (pp. 601–649). Springer.
- Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. Teachers College Press.
- Cohen, L., Manion, L., & Morris, K. (2018). *Research methods in education* (8th ed.). Routledge.
- Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(5), 2–14. <https://doi.org/10.3102/0013189X019005002>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Crowell, C. G. (2015). What is DIBELS? *Talking Points*, 26(2), 2–9.
- Currin, E. (2019). From rigor to vigor: The past, present, and potential of inquiry as stance. *Journal of Practitioner Research*, 4(1). <https://doi.org/10.5038/2379-9951.4.1.1091>
- Dana, N. F. (2016). The relevancy and importance of practitioner research in contemporary times. *Journal of Practitioner Research*, 1(1). <https://doi.org/10.5038/2379-9951.1.1.1034>
- Dana, N. F., & Yendol-Hoppey, D. (2020). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry* (4th ed.). Sage Publications.
- Duran, R. P., Eisenhart, M. A., Erickson, F. D., Grant, C. A., Green, J. L., Hedges, L. V., & Schneider, B. (2006). Standards for reporting on empirical social science research in AERA publications: American Educational Research Association. *Educational Researcher*, 35(6), 33–40. <https://doi.org/https://doi.org/10.3102%2F0013189X035006033>
- Erlanson, D., Harris, E., Skipper, B., & Allen, S. (1993). *Doing naturalistic inquiry*. Sage Publishing.
- Finch, M.A. (2021). Making sense of methods: What does systematic and intentional practitioner research look like? *Journal of Practitioner Research*, 6(2), 3.
- Flessner, R., & Klehr, M. (2016). Lessons from the teaching of teacher research. *The Educational Forum*, 80(4), 479–480. <https://doi.org/10.1080/00131725.2016.1208024>
- Gatto, L. (2013). "Lunch is gross": Gaining access to powerful literacies. *Language Arts*, 90(4), 241–252.
- Gericke, N. J., & Salmon, L. G. (2013). Digging deeper into the culture of writing: Do mentor texts inspire male students to write? *Networks: An Online Journal for Teacher Research*, 15(2). <https://doi.org/10.4148/2470-6353.1058>
- Guerin, A., & Murphy, B. (2015). Repeated reading as a method to improve reading fluency for struggling adolescent readers. *Journal of Adolescent and Adult Literacy*, 58(7), 551–560. <https://doi.org/10.1002/jaal.395>
- Heffernan, L., & Lewison, M. (2009). Keep your eyes on the prize: Critical stance in the middle school classroom. *Voices from the Middle*, 17(2), 19–27.
- Heikkinen, H. L. T., de Jong, F. P. C. M., & Vanderlinde, R. (2016). What is (good) practitioner research? *Vocations and Learning*, 9(1), 1–19. <https://doi.org/10.1007/s12186-016-9153-8>
- Heikkinen, H. L. T., Huttunen, R., & Syrjälä, L. (2007). Action research as narrative: Five principles for validation. *Educational Action Research*, 15(1), 5–19. <https://doi.org/10.1080/09650790601150709>
- Herr, K., & Anderson, G. L. (2015). *The action research dissertation: A guide for students and faculty* (2nd ed.). SAGE Publications.
- Hiebert, J., Gallimore, R., & Stigler, J. W. (2002). A knowledge base for the teaching profession: What would it look like and how can we get one? *Educational Researcher*, 31(5), 3–15. <https://doi.org/10.3102/0013189X031005003>
- Hochbein, C., & Perry, J. A. (2013). The role of research in the professional doctorate. *Planning & Changing*, 44(3/4), 181–195.
- Hochbein, C., & Smeaton, K. S. (2018). An exploratory analysis of the prevalence of quantitative research concepts in journal articles. *International Journal of Education Policy and Leadership*, 13(11). <https://doi.org/10.22230/ijepl.2018v13n11a765>
- Hoffman, J. V., Wilson, M. B., Martinez, R. A., & Sailors, M. (2011). Content analysis: The past, present, and future. In N. K. Duke & M. H. Mallette (Eds.), *Literacy research methodologies* (2nd ed.). Guilford Press.
- Holsti, O. R. (1969). *Content analysis for the social sciences and humanities*. Addison-Wesley Publishing Company.
- Huberman, M. (1996). Moving mainstream: Taking a closer look at teacher research. *Language Arts*, 73(2), 124–140.



- Juana, M. B., & Palak, D. (2011). Podcasting as a means of improving Spanish speaking skills in the foreign language classroom: An action research study. *Networks: An Online Journal for Teacher Research*, 13(1). <https://doi.org/10.4148/2470-6353.1088>
- Knieling, M. (2016). "An offense to their human rights": Connecting Bud, not Buddy to the Flint water crisis with middle school ELA students. *Voices from the Middle*, 24(1), 31–35.
- Kochhar-Bryant, C. A. (2017). Symbiotic space: Exploring the nexus of rigor, problems of practice and implementation. *Impacting Education: Journal on Transforming Professional Practice*, 2(1), 6–14. <https://doi.org/10.5195/ie.2017.25>
- Lafferty, K. E., Summers, A., Tanaka, S., & Cavanagh, J. (2016). Evaluating multiple perspectives: Approaching the synthesis task through assessing credibility. *Journal of Adolescent and Adult Literacy*, 59(5), 587–598. <https://doi.org/10.1002/jaal.475>
- Levin, M. (2012). Academic integrity in action research. *Action Research*, 10(2), 133–149. <https://doi.org/10.1177/1476750312445034>
- Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and naturalistic evaluation. In D. D. Williams (Ed.), *New directions for program evaluation* (pp. 73–84). Jossey-Bass. <https://doi.org/10.1002/ev.1427>
- Lobron, A., & Selman, R. (2007). The interdependence of social awareness and literacy instruction. *The Reading Teacher*, 60(6), 528–537. <https://doi.org/10.1598/RT.60.6.3>
- McGee, A. R. (2011). Climbing walls: Attempting critical pedagogy as a 21st-century preservice teacher. *Language Arts*, 88(4), 270–277.
- Mertler, C. A. (2016). *Introduction to educational research*. SAGE Publications.
- Miller, M., & Shinas, V. H. (2019). Inquiring about inquiry: A research journey. *Journal of Practitioner Research*, 4(1). <https://doi.org/10.5038/2379-9951.4.1.1093>
- Mills, G. E. (2018). *Action research: A guide for the teacher researcher* (6th ed.). Pearson.
- Moratelli, K., & Dejarnette, N. K. (2014). Clickers to the rescue: Technology integration helps boost literacy scores. *Reading Teacher*, 67(8), 586–593. <https://doi.org/10.1002/trtr.1261>
- Nichols, S., & Cormack, P. (2017). *Impactful practitioner inquiry: The ripple effect on classrooms, schools, and teacher professionalism*. Teachers College Press.
- Nixon, R. L. (2012). Treating praxis as stance for teacher researchers in grade six science. *Networks: An Online Journal for Teacher Research*, 14(2).
- Oolbekink-Marchand, H. W., van der Steen, J., & Nijveldt, M. (2014). A study of the quality of practitioner research in secondary education: impact on teacher and school development. *Educational Action Research*, 22(1), 122–139. <https://doi.org/10.1080/09650792.2013.854175>
- Ortiz, A., Ferrell, D., Anderson, J., Cain, L., Fluty, N., Sturzenbecker, S., & Matlock, T. (2014). Teacher research on boys' literacy in one elementary school. *Voices of Practitioners*, 9(1), 1–19.
- Pankratz, L. M. (2015). Building with blocks: Incorporating picture books to motivate and guide block play in kindergarten. *Voices of Practitioners*, 10(2), 64–79. <https://doi.org/10.1017/CBO9781107415324.004>
- Parsons, S. A., Gallagher, M. A., Ainger, J., Bartolini, M. C., Bruyning, A. K., Clark, E., Crain, S., Daoud, N., Doheney, K. S., Duff, S., Groundwater, S. V., Heller, J., Jensen, A., King, L. A., Lindenauer, J., Newton, J., Parsons, A. W., Ramirez, E. M., Sherman, J., & Smith, P. (2016). A content analysis of nine literacy journals, 2009–2014. *Journal of Literacy Research*, 48(4), 476–502. <https://doi.org/10.1177/1086296X16680053>
- Petrich, N. (2015). Book clubs: Conversations inspiring community. *ie: inquiry in education*, 7(1).
- Ragland, J., & Palace, C. (2017). Literature circles for adolescent developmental readers. *The English Journal*, 106(6), 35–40.
- Rust, F., & Meyers, E. (2006). The bright side: Teacher research in the context of educational reform and policy-making. *Teachers and Teaching: Theory and Practice*, 12(1), 69–86. <https://doi.org/10.1080/13450600500365452>
- Schaenen, I., Kohnen, A., Flinn, P., Saul, W., & Zeni, J. (2012). "I" is for "insider": Practitioner research in schools. *International Journal of Action Research*, 8(1), 68–101. https://doi.org/10.1688/1861-9916_IJAR_2012_01_Schaenen
- Schroeder, S. (2020). Bad inquiry: How accountability, power, and deficit thinking hinder pre-service practitioner inquiry. *Journal of Practitioner Research*, 5(1). <https://doi.org/10.5038/2379-9951.5.1.1122>
- Stieglitz, A. (2021, June 7). Rethinking rigor in action research, with Dr. Alfredo Ortiz Aragón (No. 20) [Audio podcast episode]. *The Action Research Podcast*. <https://the-action-research-pod.captivate.fm/episode/episode-20-rethinking-rigor-in-action-research-with-dr-alfredo-ortiz-aragon>
- Stremmel, A. J. (2007). The value of teacher research: Nurturing professional and personal growth through inquiry. *Voices of Practitioners*, 2(3), 1–9.
- The CPED Framework*. (2021). Carnegie Project for the Education Doctorate. <https://www.cpedinitiative.org/the-framework>
- Tomczak, K. G. (2014). How does talk around reading influence comprehension in third grade? *Networks: An Online Journal for Teacher Research*, 16(2), 456–456. <https://doi.org/10.4148/2470-6353.1039>
- Toth, A. (2013). Not just for after lunch: Accelerating vocabulary growth during read-aloud. *The Reading Teacher*, 67(3), 203–207.
- Whitecotton, E. (2013). Readers coaching readers?: A teacher's reflection on discursive positioning in an elementary classroom. *Talking Points*, 25(1), 12–19.
- Witte, P. G. (2016). Teaching first graders to comprehend complex texts through read-alouds. *The Reading Teacher*, 70(1), 29–38. <https://doi.org/10.1002/trtr.1467>
- Zeichner, K. M., & Noffke, S. E. (2001). Practitioner research. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed., pp. 298–330). American Educational Research Association.
- Zuber-Skerritt, O., & Fletcher, M. (2007). The quality of an action research thesis in the social sciences. *Quality Assurance in Education*, 15(4), 413–436. <https://doi.org/10.1108/09684880710829983>