

An Introduction to the CITE-ITEL Database: Access, Dialogue, and Possibility

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The body of peer-reviewed research investigating literacy preservice teacher education is vast and broadcast widely in a variety of journals. What if there was a single, searchable, interactive platform where the literature was collected and synthesized? How might such a database inform research, practice, and policy? These were the questions faculty and graduate students from a large university in the Southwestern US set out to answer in 2015. Four years later, the authors introduce CITE-ITEL, a Critical, Interactive, Transparent, and Evolving review of literature on Initial Teacher Education in Literacy, an effort toward answering these important questions. The purposes of this paper are to share the methodology guiding the development of CITE-ITEL, to review some of the initial findings from the systematic review of the literature from 2000-2018, to describe the user experience of the CITE-ITEL database, and to propose future possibilities for CITE-ITEL and similar databases.

As teacher educators and educational researchers, we recognize the need for a recursive relationship between research and practice within teacher education. This article is a report of the development of an innovative digital tool designed to synthesize and analyze existing research within the field and includes proposed uses of this tool for improving the practice of teacher education.

In a 2015 interview with the *Journal of Teacher Education*, Pam Grossman stated that teacher educators and universities are “responsible for preparing the next generation of teachers” (Arbaugh, Ball, Grossman, Heller, & Monk, 2015, p. 436) and, therefore, “have a professional and moral obligation to hold ourselves accountable” (p. 436) for creating and sustaining high-quality teacher education programs. She asserted, however, that “researchers still need to address questions around the characteristics of teacher education that make the most difference in preparing teachers to teach well” (p. 428). In this interview, Grossman also spoke of the need for a reflexive relationship between research on effective university-based teacher education and the design of those same programs.

Critiques of university-based teacher education (TE) programs have emerged in the political arena of recent years, questioning the effectiveness of such programs (e.g., Berrett, 2013; Green, 2015). For instance, former Secretary of Education Arnie Duncan (2011) stated,

Education schools act as the Bermuda Triangle of higher education—students sail in but no one knows what happens to them after they come out. No one knows which students are succeeding as teachers, which are struggling, and what training was useful or not.

These critiques have led to an increase in alternative pathways into classrooms, as well as calls for new accountability measures for TE programs (Zeichner, 2016). While Obama-era accountability provisions for TE programs have been repealed, the provisions encouraging alternative paths into teaching remain intact (Brown, 2017), despite a lack of research substantiating claims that teachers prepared in these programs are more successful in classrooms or stay in the field longer than teachers prepared in university-based programs (Zeichner, 2016). Some have argued that this move toward privatizing teacher education is rooted within neoliberal, market-based ideologies that espouse innovation and competition, leading to higher quality performance (Pandolfo & Smith, 2011; Weiner, 2007).

This public debate alongside Grossman’s argument brings to the forefront the critical role that both research and reviews of research can play in understanding the value of TE programs. While continual improvement of university-based teacher education is needed, we dispute claims that little is known about the characteristics of these programs that seem to make a difference. A large body of rigorous, peer-reviewed research examining aspects of university-based teacher education exists (e.g., Clarke, Triggs, & Nielsen, 2014; Pasternak, Caughlan, Hallman, Renzi & Rush, 2014; Risko et al., 2008; Rogers & Schaenen, 2014).

Yet, accessing this research has its challenges. The research is published in multiple journals, some with broad foci, like *Educational Researcher*, and others with more narrow, discipline-specific foci, like the *Journal of Literacy Research*. In addition, many people have a stake in the education of preservice teachers, including in-service teachers, administrators, and policymakers, who may not subscribe to the many journals where this research is found.

In response to some of these challenges, faculty members and graduate students from a large university in the Southwestern US and graduates now at a variety of institutions – from large research universities and smaller liberal arts colleges to school districts and classrooms across the country – posed the following questions:

- What if there was a single, searchable, interactive and dialogic platform where the research on literacy preservice teacher education was collected and synthesized?
- How might a dialogic, online medium facilitate timely engagement with the research literature for all stakeholders?
- And, most importantly, how might this database inform research, practice, and policy?

Our efforts to answer these questions led to the project we introduce here: CITE-ITEL, a Critical, Interactive, Transparent and Evolving review of literature on Initial Teacher Education in Literacy.

This project involves two components. The first – CITE – refers to the digital platform, which allows researchers to engage in ongoing and collaborative review and analysis of a body of research while simultaneously providing a variety of stakeholders with access to this work. The second – ITEL – refers to the topical focus of this particular review of literature, focused on the initial preparation of teachers of literacy.

This project, thus, uses the CITE platform to conduct an ongoing review of all empirical research focused on the initial preparation of P-12 teachers in theories and methods of teaching literacy, broadly defined. However, we envision the CITE platform as operational for reviews of literature on any topic of interest.

This project had several goals. First, we aimed to create a central, searchable database of the research on university-based literacy preservice teacher education. Second, we provided evolving, theme-based syntheses and reviews of this literature. We granted all stakeholders access to the literature in literacy preservice teacher education, encouraging dialogue in response to this literature. Finally, we supported a movement away from a view of research as a static product toward a view of research as a public process of building knowledge that informs the intersection of research, policy, and practice. We invite researchers, policymakers, and practitioners to interact with the syntheses, which will be described in more detail throughout the paper, to bring their expertise to the analysis of the literature, allowing the field to build knowledge together.

Typically, reviews of literature are published in the same restricted access academic journals in which the empirical research was published (e.g., Clark et al. 2014; Pasternak et al., 2014; Risko et al., 2008; Rogers & Schaenen, 2014). These reviews serve as valuable documents for educational researchers. Challenges of access arise, however, for those outside of academe. Although these reviews are usually available digitally through journal websites, the documents themselves function as print texts; that is, once they have been published on that website, they are not alterable.

These reviews of literature, which are often laborious to produce, quickly become out-of-date as new research is published, a phenomena which is exacerbated given the extended timeline required for the peer-review process. We envision CITE-ITEL as providing a critical forum for all stakeholders (including researchers, practitioners, and policymakers) to engage with each other and the ever-growing, evolving body of research on initial teacher education in literacy, publicly generating knowledge through timely and ongoing dialogue.

The purpose of this article is to introduce CITE-ITEL to the educational research community at large and encourage participants committed to literacy teacher education to join us in exploring this literature. The next section includes the methods and process of the project to date. Some of the themes we have found within the literature thus far are

then discussed, as well as some of the features of the CITE-ITEL platform. The article closes with implications, including possibilities for this project as it continues to evolve.

Methods and Process

The CITE-ITEL system has been developed over a period of 4 years by a team initially consisting of six professors and 22 doctoral students at a large university in the Southwest. Many of the doctoral students involved in the initial development of CITE-ITEL have graduated and continue to work with CITE-ITEL from the institutions at which they are now employed. Both graduate student and faculty involvement at the host university has increased across the 4 years we have been working on this project, and we expect it will continue to do so.

At the initial meeting of the CITE-ITEL team in February 2015, the inward facing CITE-ITEL platform was introduced. This platform, designed by the participating faculty members and graduate students in collaboration with a leader in technology from the host university, would become a space in which the team would log their findings as they engaged in the three iterative and ongoing phases of this research process. The work that has been done is highlighted in Table 1 and discussed throughout the methods and process section.

Table 1
The Iterative, Ongoing Process of Identification, Analysis, and Synthesis

Phases	When	What
Phase 1: Identification	February 2015-June 2015	Reviewed table of contents and abstracts in journals on our list to locate studies meeting our criteria.
	May 2016-August 2016	
	May 2017-August 2017	Uploaded potential studies within the CITE-ITEL system for review.
	May 2018-August 2018	
Phase 2: Analysis	June 2015-August 2016	Confirmed studies within the CITE-ITEL system and used analytic review template to document features of studies.
	May 2016-August 2016	
	May 2017-August 2017	Linked findings to areas/ categories.
	May 2018-August 2018	
Phase 3: Synthesis	August 2016-November 2016	Explored articles within assigned areas/categories.
	August 2017-November 2017	Defined areas/categories, unlinking studies that did not fit.
	August 2018-November 2018	Engaged in open and axial coding to report findings across areas/categories in the form of syntheses.

Between 2015 and 2018, changes were made to the platform in response to the feedback of the research team. Just as the literature referenced in the CITE-ITEL system will continue to grow, it is our intention that the system will continue to be updated, with article identification occurring each summer, and analysis and synthesis revision occurring each fall. We hope that the platform will mature as users interact with the data, allowing the research team to better understand the experience of working with the CITE-ITEL platform.

Phase 1: Article Identification

Comparing high-ranking journals in teaching and teacher education to the reference list from the Risko et al. (2008) review of literature on literacy teacher education, faculty members involved in this project began this process by compiling a working list of journals that the CITE-ITEL research team examined to locate the literature on literacy preservice teacher education written between 2008-2014. We have since expanded our database to include articles published between 2000-2018.

Initially, we divided our research team into six working groups, assigning each group a number of journals to manually search in order to locate articles that (a) highlighted empirical[a] research; (b) appeared in peer-reviewed journals written in English; (c) were located online in resources accessed through the university system; (d) were published between 2008 and 2014; (e) focused on questions related to the preparation of teachers in initial licensure programs; (f) presented clearly stated research questions (or purposes), a description of methodology, and a report of findings; and (g) described, as a significant part of the research, a focus on preparing preservice literacy teachers to teach.

In cases where a reviewer was unclear whether or not an article met the criteria for inclusion, the article was entered into the system and flagged for secondary review. Another member of the team then reviewed the article in more depth and made a decision regarding inclusion or exclusion. Following this manual review of all articles published in the journals explored, the team engaged in an electronic search to locate articles we had missed, increasing the reliability of our search process.

During the manual search process, each research team examined the most recent issues of the journals on our list, working backwards until the team familiarized itself with all that was published on literacy preservice teacher education between 2008 and 2014. Upon identifying an article, researchers documented the first and last year of the journal's publication, whether or not the journal was peer reviewed, and how the journal was selected for exploration. Because parts of the identification and analysis were done independently, features were included within the inward-facing CITE-ITEL platform that allowed us to make notes and ask questions, inviting other researchers to revisit particular articles. This process created opportunities for conversation regarding whether or not the inclusion criteria was met.

The process of engaging in a manual search of journals included checking the table of contents to locate articles that might fit the criteria and reviewing the abstracts of these articles. When the abstracts did not provide enough information, we read the article itself. Once an issue of a journal was reviewed, we noted this within the CITE-ITEL inward facing platform, adding information about all articles that met our criteria. A PDF of the article was uploaded, and we documented the title, the authors' last names, the journal name, the abstract, the bibliographic reference, and the publication date for each piece that would eventually be analyzed by another researcher on the team.

Upon deciding to include an article in the CITE-ITEL system, we engaged in bibliographic branching (Compton-Lilly, Rogers, & Ellison, 2012), noting other articles referenced in the pieces we explored that might relate to literacy preservice teacher education. When such articles were identified, we searched the CITE-ITEL system to confirm whether the journal in which that article appeared was part of our collection. If the article met our criteria but the journal was not yet in our system, the journal was added and assigned to one of the research teams for systematic review.

Phase 2: Article Analysis

After identifying articles for inclusion, we began analysis. To ensure that the articles selected truly met the criteria, we reviewed pieces identified by other members of our group, working toward consensus when there were differences of opinion. As we confirmed or disconfirmed articles, we recorded our reasoning for doing so. Upon confirming an article, we used an analytic review template within the CITE-ITEL system to document the following characteristics of each study: theoretical perspective, research paradigm, research questions, context and settings, information on the participants, sample size, data sources, duration of data collection, methods of data analysis, researcher positionality, and findings.

When recording this information, we drew on the language used in each of the articles, rather than paraphrasing, in order to maintain fidelity in our analysis of this literature. Similar to Phase 1, we posed questions and made notes within the inward facing CITE-ITEL platform when articles required further negotiation.

After 6 months of identification and analysis, we participated in a retreat, at which we explored the findings in the CITE-ITEL system, considering codes that we might draw on when further analyzing articles that met our criteria. Initially, we worked together to identify broad areas (e.g., teacher educator, university coursework, content of study, field experiences, etc.). We then created categories that could be highlighted within those broad areas (e.g., teacher educator identity; knowledge, beliefs, attitudes and/or orientation to teacher preparation in literacy, etc.).

After developing a preliminary list of areas and categories, we worked on defining the areas, noting examples that could be drawn on while coding articles. Initially, we worked in pairs to engage in this work, coding the articles together. Later, we coded the same articles independently, discussing our choices in order to come to consensus. During this part of the process, we used a collaborative digital word processor to document challenges we experienced and to note adjustments that needed to be made to our categorization.

In September 2015, the seven major areas on which we have continued to draw were established: teacher educators, preservice teachers, coursework, field work, program structure and organization, program effects, and content or process findings related to a focus for the research. Each of these areas includes a variety of related categories (e.g., multimodality, digital literacies, content area literacy, and assessment). In addition, we added an eighth area that we draw on when findings highlighted in an article do not fit within any of our established areas. Currently, 15 articles in the CITE-ITEL system are linked to the eighth area, and these articles will likely lead to new focus areas over time.

Each summer, the research team, which continues to grow as new graduate students join the program and as former graduates move to other institutions, has committed to continuing the identification and analysis process, moving forward, exploring recent publications, and back, reminding ourselves of the history of the work done in literacy

preservice teacher education. As we engage in the process, we will continue to locate journals and review articles that were overlooked during earlier rounds of identification and analysis.

Phase 3: Synthesis

During summer 2016, we formed smaller teams based on expertise and interest. These teams worked together to explore the literature on categories that would most interest potential audiences of researchers, policymakers, and practitioners. This approach to synthesis allowed for a “clear identification of prominent themes, and organized and structured ways of dealing with the literature under these themes” (Dixon-Woods, Agarwal, Jones, Young, & Sutton, 2005, p. 47).

Teams tasked with exploring the literature associated with a particular category began by reading assigned articles and discussing how each category would be defined. In our teams, we then determined which articles were coded appropriately and which were not, this time drawing on each group’s expertise as well as the team-generated definition of the category.

Once an updated list of the literature linked to each category was compiled, the research teams engaged in open coding (Glaser & Strauss, 1967) and axial coding (Strauss & Corbin, 1998) to construct and report the findings across articles linked to particular categories. Syntheses are updated each summer/fall to include the findings of recently identified studies. These statements are initially published in draft form on the CITE-ITEL platform and remain in this form while going through a peer review.

This peer review is facilitated by the CITE-ITEL editorial board, a body of senior faculty members affiliated with the Literacy Research Association. Both reviewers and members of the editorial board were solicited from outside the host university. Once the syntheses are reviewed, revised, and accepted, they will no longer be labeled as drafts. A few of these syntheses have recently been developed into traditional literature reviews for a special issue of a peer-reviewed literacy journal, discussing some of the insights thus far gained from the CITE-ITEL initiative. By fall 2019 these, too, will be linked within the CITE-ITEL system and will be updated yearly.

Findings

On November 30, 2017, CITE-ITEL became available to the public. When this article was submitted, the CITE-ITEL team had identified 519 studies that met our criteria. This section includes general descriptive data regarding these studies and features of CITE-ITEL, as well as the interactive experience of using the website.

The studies confirmed in the database reflect a range of methodological approaches taken, as well as diversity regarding the researcher positionality and locations in which the studies were facilitated. Some of the characteristics of these studies are presented in Figures 1 and 2.

The statistics of the research on literacy preservice teacher education reveal many points worthy of discussion. First, the scholarship represented in the database was conducted across several different countries and regions of the world. This evidence suggests that work with preservice teachers in literacy is not only widely significant, but it directs researchers to examine preservice teachers’ preparation across varying contexts. Second, analysis revealed that claims for initial teacher preparation in literacy have been reached by using varying methodological approaches; some studies used general terms such as

qualitative, while others used more specific terminology to name the approach taken. These differences invite researchers to think outside of their own methodological epistemologies to consider the affordances of alternative possibilities for studying initial teacher preparation in literacy.

Third, the breadth of the scholarship on initial teacher preparation in literacy can be recognized through different certification foci. While the majority of the studies in our database examined undergraduate preservice teachers working toward certification at the elementary level, some studies focused on teachers seeking initial certification in secondary, special education, early childhood, and language (e.g., bilingual, ESL) education. The range of certification provides multiple perspectives that add to the complexity of growing teacher educator practices and course and field experiences across settings and areas of expertise. Our decision to focus on preservice literacy preparation in particular has likely excluded research that would be informative to literacy teacher preparation across these educational contexts.

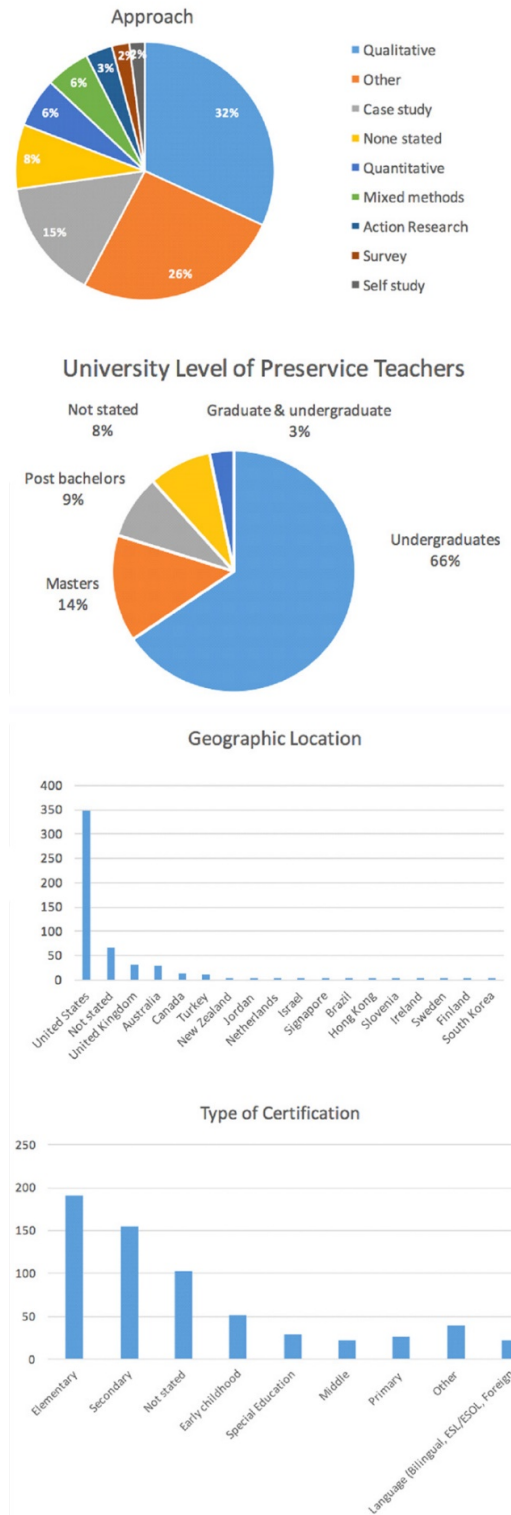


Figure 1. Distributions and characteristics of studies. (While this number and others named were current as of the article submission date, they will continue to shift as additional studies are added to the database.)

Journals

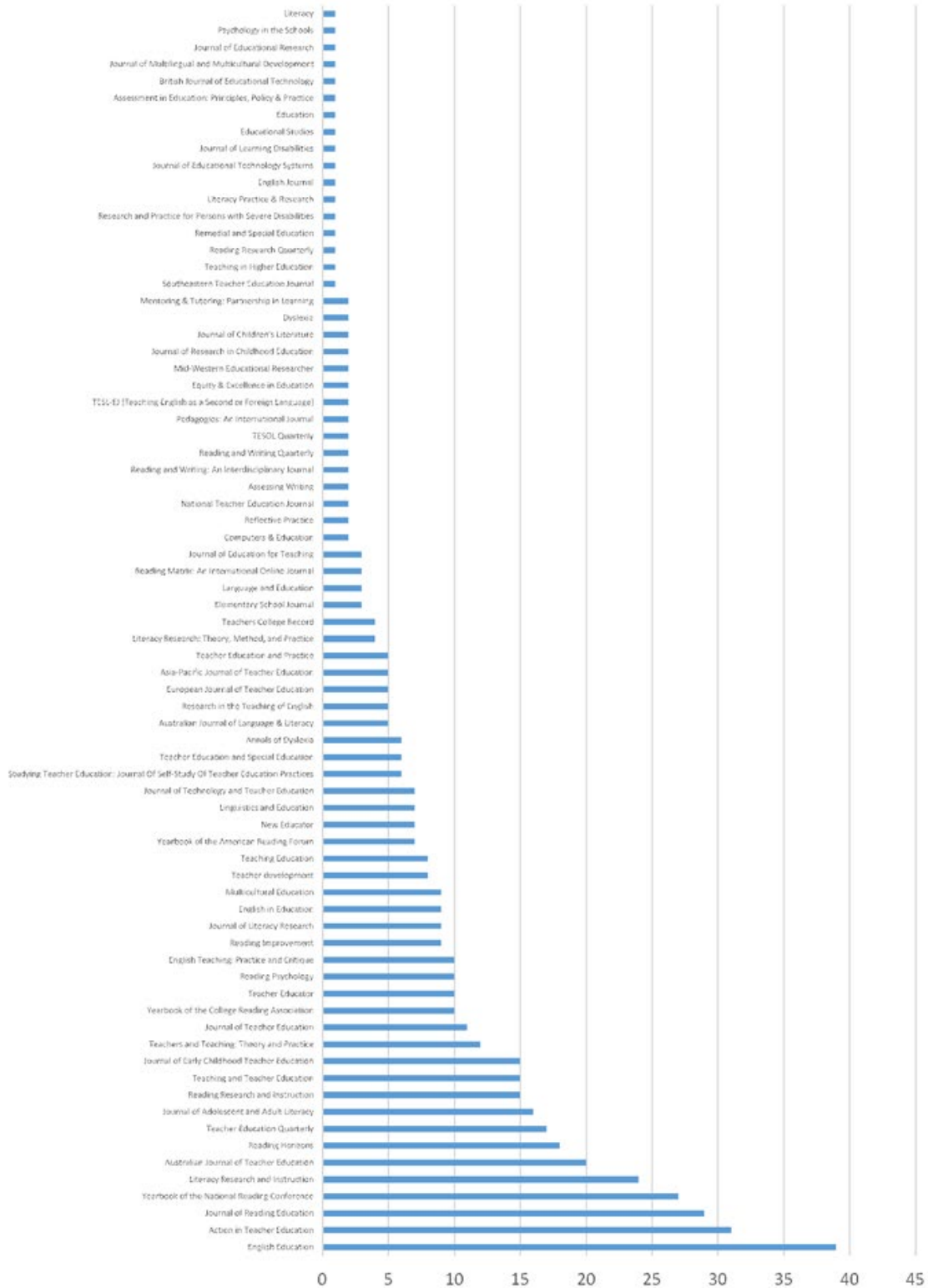


Figure 2. Number of studies per journal.

In order for this database to be transformative, it requires the participation of a wide variety of stakeholders. We are actively working to construct spaces for dialogue between such stakeholders, which we describe later in this paper; however, this active dialogue is not yet occurring on the platform. CITE-ITEL offers a step forward in the generation of literature reviews, because it is a dialogic space for disseminating, interpreting, and guiding research. That is, researchers, policymakers, practitioners, and other stakeholders may find opportunities to collaborate through CITE-ITEL, working toward improving the quality of TE programs. As such, this introduction aims to encourage others to take on a participatory stance, responding to the current syntheses and offering new perspectives on the literature included in the database.

Features and Experience of CITE-ITEL

CITE-ITEL offers a number of interactive features from which users can draw to engage with others around initial teacher education in literacy. Online access to CITE-ITEL (<http://cite.edb.utexas.edu/>) is available to anyone who registers. Users have multiple pathways for exploring the content as well as understanding the process of building this literature review as an online platform.

First-time visitors to the website can learn more about the path to the identification and analysis of studies under the Welcome to CITE-ITEL link. From the Welcome page, users can access information based on their interests. Users can also locate studies related to a topic, from a certain journal, written by a specific author, published at a particular time, or conducted in a particular region of the world. The following section provides descriptions of what users can see and do by following these primary links on the CITE-ITEL platform: articles, journals, categories, syntheses, and search.

Articles

Users in search of a specific article can follow the articles link to an alphabetical list of all the studies currently included in the database. Clicking on a bibliographic reference brings users to an analysis page that includes the article in full text (when available, which is an access challenge to which we are still working to find a solution) and details regarding the study, including (but not limited to) the abstract, research approach, geographic setting, preservice teacher sample size, duration of data collection, researcher positionality, research questions, data sources and analysis, and findings important to the preparation of preservice teachers around literacy.

Journals

The journals link allows users to browse an alphabetical listing of the 74 journals included in the database. Selecting a journal from this list will take users to the listing of the articles specific to that journal, which in turn, can take users to each study's respective analysis page.

Categories

Users in search of studies that focus on a specific topic within initial teacher preparation in literacy can view the list of 45 categories across the seven areas identified as part of the analysis process (e.g., preservice teachers' beliefs and ideas, course experiences, structure of preparation programs, and content area literacy). Following the link to these categories gives users a list of the articles that have been linked to particular topics. Most articles are

linked to multiple categories. This approach can provide opportunities for the research team and users of CITE-ITEL to make connections across categories and areas.

Syntheses

Users can read and respond to any of the 10 syntheses thus far included in the database, all of which are authored by the different CITE-ITEL teams: children's literature, culturally relevant and responsive pedagogy, discussion, drama, English (secondary), sociocultural influences and understandings, reading processes, students identified with disabilities, tutoring, and writing. Many of the syntheses posted are not complete literature reviews but are, instead, thematic summaries of the research that has been reported and collected in the CITE-ITEL database.

As discussed in the methods section, the CITE-ITEL team is working on what might be considered traditional literature reviews of some of these areas. These will be published as part of a special issue on the CITE-ITEL initiative and linked within the CITE-ITEL database. Like the syntheses, the literature reviews will be revisited and updated each academic year, in an effort to draw on recent research. Each synthesis offers readers the following:

1. An *introduction* to the topic in terms of overall focus. The narrative identifies any subareas of focus within the area of work especially when addressing a large number of studies.
2. A *graphic display* of information on the studies that have been linked to the area.
3. A *narrative synthesis* for each of the subareas highlighting important findings and connections across studies.
4. *Implications* drawn from these syntheses are included to address important interactions across other topics as well as highlight areas in need of further research.

Search

In addition to the links, a search function allows users to locate studies by author, key terms, article title, geographic area, and publication year in the CITE-ITEL database.

Growing CITE-ITEL Through Dialogue

CITE-ITEL's ability to provide access to research on initial teacher preparation in literacy education and interpretations of that literature depends on the active participation of the users of the system. CITE-ITEL is designed to be continuously negotiated in response to users' insights and expertise.

Discussion boards can be accessed at the bottom of web pages throughout the system for users to dialogue with the authors as well as with each other. This review and its process (e.g., identifying articles and journals, analyzing articles, and synthesizing categories and areas) are made purposefully transparent on CITE-ITEL to invite feedback and grow the website.

Users are encouraged to post questions, comments, corrections, critiques and responses to others' posts, delving deeply into the research that we are investigating. While we have attempted to be as inclusive as possible regarding journals and articles, no doubt we have missed some things. We hope that stakeholders will initiate and facilitate conversation in

a myriad of ways: recommending studies that are not included in the database, noting journals missed in the database, inspecting the analysis of articles, making suggestions for the revision of categories, providing alternative interpretations of the syntheses, and informing others of additional resources (e.g., policy initiatives, chapters, dissertations) related to the topics explored within CITE-ITEL. While we have formed teams to review the literature and compose related syntheses associated with 10 categories identified by our research team, it is our plan, eventually, to put out an open call, inviting interested scholars to explore a category within the system that we have not yet inquired into, adding new syntheses to the database.

Though we have made an effort to develop a system that is collaborative in nature across the 4 years in which we have built CITE-ITEL, these are only the beginning stages of identification, analysis, and synthesis. Users play a critical role in growing CITE-ITEL, as new studies are included, as new categories are added, and as syntheses are updated each year. We invite researchers, policymakers, and practitioners not only to draw on CITE-ITEL for their own purposes but also to interact with the research team through the website. What new features should be installed on CITE-ITEL? What other functions do users wish to have? We look forward to feedback on the users' experiences within the website, which we will draw on to improve the platform.

Discussion and Implications

We began the process of constructing CITE-ITEL in response to our experiences as educational researchers and teacher educators. While a significant body of empirical research on the initial preparation of literacy teachers exists, there was no central repository in which all of this literature was organized. Instead, this research was spread across dozens of journals, each with their own digital presence.

The challenge presented by this existing structure was twofold. First, it created access barriers for researchers, policymakers, practitioners, and other stakeholders for whom this research was intended. Not only was it challenging for these groups to access the majority of articles, which were gated content, but even those stakeholders with access would have to expend significant energy to locate relevant articles. If a teacher educator or policymaker wanted to review the existing research on the use of tutoring in preservice literacy teacher education, for instance, they would have to search through multiple volumes of multiple journals to locate such research. Second, this diffusion of information led to challenges for researchers, as well, in that it was difficult to identify gaps in the existing literature, not only with respect to topical categories but also with respect to theoretical frameworks, study design, and other theoretical and methodological features of research.

In the construction of CITE-ITEL, we sought to create a platform that would respond to these challenges by allowing for an ongoing and evolving review of the empirical literature on initial teacher education in literacy. In this process, we retained aspects of traditional literature reviews that can be valuable, in particular, through the construction of syntheses of research on different aspects of the field. These syntheses separate CITE-ITEL from simply being a repository of research.

The site provides not only an outlet for gathering and centralizing research on particular topics but also an analysis of these bodies of literature. The peer review of these syntheses and reviews by the external editorial review board also serve to build and maintain the trustworthiness of these documents.

This project is ambitious, and we hope that CITE-ITEL will continue to develop as researchers, policymakers, practitioners, and other stakeholders beyond the host university interact through the platform and eventually craft syntheses. As mentioned, we hope to see an increase in the use of the embedded discussion features, which allow anyone to comment, to provide critiques, and to suggest revisions in response to the current syntheses and literature reviews. This discussion feature may be considered an additional form of peer review, allowing not only educational researchers, but stakeholders from multiple groups to comment on these documents, so that it is utilized within and beyond the field.

A second issue with which we continue to contend is access to the original empirical research, particularly for those outside of academe. Although CITE-ITEL provides detailed summaries of each article in our database, current copyright policies prevent us from making available full-text versions of many of these articles. We continue to explore options to respond to this limitation, but it is unlikely to be resolved without significant reform towards open-access publication. This being said, the syntheses may increase access to this research for those who are unable to obtain the related literature.

Finally, we hope that CITE-ITEL can function as a model for similar sites focused on other bodies of empirical research. Our interests as researchers and teacher educators led us to focus on the literature on initial preparation of literacy teachers, but the CITE-ITEL platform is not in any way limited to this topic. We encourage other groups of researchers to take up and adapt the CITE-ITEL platform to produce reviews of their own areas of scholarship.

As stakeholders engage and continue to participate with the CITE-ITEL platform, we intend to apply research methods described by Fielding, Lee, and Blank (2017) to examine user activity, including

- General website analytics, such as the number of users and time spent per page on the platform;
- The use of interactive features over time;
- User surveys sent after a user has reached a threshold of contacts with CITE-ITEL, probing user roles, goals, and outcomes; and
- Citations of CITE-ITEL as they appear in the literature.

Our lens for this analysis will focus on the participation of researchers, policymakers, and practitioners. We will also engage in revision of CITE-ITEL as we learn from the experiences of those interacting with the site. We will employ design-development research principles in tracking the changes in use as a function of program changes (Van den Akker, 1999; Wang & Hannafin, 2005).

In the development of CITE-ITEL, we sought to construct a platform that would allow diverse groups of stakeholders, including researchers, policymakers, and practitioners, to easily view the significant body of research on the outcomes of the initial teacher education of literacy teachers. The platform can, thus, serve as a response to political attacks on university-based teacher education and provide access to a breadth of research literature in ways that disrupt the echo chamber and knowledge ventriloquism that builds education policy on a narrow, sometimes tenuous, set of selected studies (Conklin & Zeichner, 2017).

Through the construction of the platform, we have found additional affordances of this approach, particularly for researchers seeking to identify gaps in the existing research and possible directions for future work. While CITE-ITEL has already been modified through

our process of construction, CITE-ITEL is in continual revision, and we look forward to the collaboration with and critique from researchers, policymakers, practitioners, and other stakeholders as we continue to make the experience more relevant and user-friendly going forward.

Author Note

In this manuscript, the acronym CITE refers to a digital platform for reviewing and synthesizing literature on a topic. This initiative is not affiliated with the *Contemporary Issues in Technology and Teacher Education* (CITE) Journal.

Notes

[a] We recognize that there are varied definitions of empirical research. In fact, the research team had numerous conversations about this terminology. For the purposes of this database, we operationalized this term as meaning: reporting on the analysis of new data or a secondary analysis of existing data, with the report including clearly stated research questions (or purposes), a description of methodology, and a report of findings.

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