TEACHER-RESEARCHER IDENTITY: EXAMINING TEACHERS' PERCEPTIONS OF TEACHERS AS RESEARCHERS

CAITLIN RIEGEL
KAYLA CHARROIS
TIERNEY DEKKER
KATHLEEN FERGUSON

Niagara University, U.S.A.

ABSTRACT

This study investigates the nuanced dimensions of the teacher-researcher identity, focusing on teachers' perceptions of teachers as researchers within the educational landscape. Employing a mixed-methods research design, the study aims to uncover the extent to which 198 K-12 teachers working in the field identify teachers as researchers, as well as identify the frequency they believe teachers participate in specific research activities. The findings highlight the necessity of embedding "researcher" as a core element of teachers' professional identity, as well as suggest implications for both educator preparation and broader educational planning, calling for expanded efforts to develop teachers' research competencies and integrate research as a fundamental part of their professional roles. This study not only sheds light on the current state of teacher-researcher identity, but also provides implications for educator preparation programs and broader educational planning to develop pragmatic research competencies in teacher candidates.

INTRODUCTION

Educational research is essential for broadening the scope of facts and perspectives that contribute to the advancement of the field. By exploring different aspects of teaching and learning, educational research fosters deeper understanding and continuous improvement. This process enables educators and stakeholders to critically examine current practices, identify areas for growth, and implement evidence-based strategies that enhance learning outcomes (Bourke & Loveridge, 2017; Cohen et al., 2018). Furthermore, research serves as a bridge between theory and practice, allowing teachers to apply theoretical frameworks to real-world classroom challenges (Mertler, 2021). In doing so, it supports a reflective and dynamic profession in which teachers continually adapt their approaches to meet the evolving needs of students (Hargreaves & Fullan, 2012). Educational research also plays a pivotal role in influencing policy decisions, shaping curricula, and guiding professional development, ultimately improving the quality of education systems on a broader scale (Darling-Hammond & Bransford, 2005). By contributing to both practical applications and policy reforms, educational research ensures that the field remains responsive and effective in addressing the complexities of modern education.

At the classroom level, research empowers teachers to become reflective practitioners who can adapt and improve their teaching strategies based on evidence (Mertler, 2021). When teachers conduct research, they gain deeper insights into student learning, classroom dynamics, and effective pedagogical practices, allowing them to make informed decisions and address challenges more effectively (Dana & Yendol-Hoppey, 2020). Research also enables teachers to personalize instruction to meet the diverse needs of their students (Cochran-Smith & Lytle, 2009). Additionally, teacher-researchers contribute to the profession by sharing their findings with colleagues, fostering a collaborative culture of continuous improvement (Hargreaves & Fullan, 2012). When teachers

actively share knowledge gained through research, they help build a professional community and shape the minds within that community (McRae & Parsons, 2018). Ultimately, when teachers engage in research, they not only enhance their own practice but also contribute to the broader field of education, helping to shape educational policies and innovations (Cochran-Smith & Lytle, 2009).

LITERATURE REVIEW

Professional Identity of Teachers

Professional identity refers to a practitioners' views on "career goals, social values, and other factors" (Zhu, 2021, p. 124). The development of professional identity is shaped by various factors, including personal experiences, interactions with colleagues, and engagement in ongoing professional development (Beijaard et al., 2004). Zhang, et al. (2024) goes on to allude to the important role that professional identity plays, stating it can "influence an individual's thinking, feelings, and behavior". (p. 124) For those who work in public service (e.g., nurses, teachers, etc.), high expectations can lead to feelings of being overworked and underpaid. Having a positive perception of their identity within their chosen profession can be impactful enough to "overcome their dissatisfaction with poor working conditions," (Zhu, 2021, p. 124), combat burnout and turnover (Liske et al., 2023), and improve the overall quality of work (Liu & Zhang, 2019).

For teachers, the formation of a strong professional identity is linked to both their sense of purpose and job satisfaction, as well as their ability to manage their multiple roles and demands in a classroom (Ambusaidi & Alhosni, 2023; Day et al., 2006). A well-established professional identity enhances teachers' resilience in the face of challenges and promotes a greater commitment to their students and the profession as a whole (Kelchtermans, 2009). Moreover, the process of identity formation is dynamic, evolving throughout a teacher's career as they gain more experience and adapt to changes in the educational landscape (Sachs, 2001). This continuous development of professional identity is crucial for fostering reflective teaching practices, as teachers who are confident in their professional roles are more likely to engage in self-reflection and implement innovative teaching strategies (Ambusaidi & Alhosni, 2023; Van Veen & Sleegers, 2006).

The construction of a teacher's professional identity is complex given their identity "will be in part a projection of the teacher's view of the institutional role of *teacher* and in part a projection of a unique individual identity based on the teacher's autobiography" (Pennington & Richards, 2016, p. 7). Clarke (2009) and Reves (2018) outline four key elements to teachers developing their professional identity: substance, authority sources, self-practices, and the endpoint. Substance refers to the core characteristics, values, and beliefs that teachers hold about themselves in relation to their professional roles. This involves their personal convictions about teaching, learning, and the purpose of education. Authority sources are the external influences that shape and inform a teacher's professional identity. These sources can include formal institutions such as policies and standards, as well as informal sources like stakeholder expectations. Self-practices encompass the actions and behaviors that teachers engage in to develop and express their professional identity. This includes the ways in which they reflect on their teaching, adapt to new challenges, and continuously work to improve their craft. Finally, the endpoint is the ultimate goal that teachers have for themselves within their profession. It represents the ideal version of who they want to become as educators.

Research integrates into each of Clarke (2009) and Reves' (2018) key elements of a teacher's professional identity. For example, reading about the experience of others in the field through their published work relates to the "substance" of a teacher's professional identity. Looking to and relying on scholarly experts in the field to guide decisions and legitimize theoretical teaching

practices learned during teacher preparation relates to the "authority sources" of a teacher's professional identity. Developing and evolving professionally through knowledge gained from shared qualitative and quantitative research studies done in the field relates to the "self practices" of a teacher's professional identity. Finally, the drive to be a lifelong-learner and continue to meet the needs of all students through innovative experiences and adaptive curriculum relates to the "endpoint" of a teacher's professional identity. Overall, the integration of research into a teacher's professional identity allows educators to not only engage in reflective practice but also to contribute to the evolution of the field, creating a cycle of continuous learning and improvement that benefits both their personal development and the broader educational community.

Teacher-Researcher Identity

Teacher-researcher identity is grounded in the idea that incorporating evidence-based research into teachers' daily practice will enhance the quality of their instruction. This teacher-researcher identity involved teachers taking on the dual roles of educators and inquirers, which fosters reflection, continuous learning, and innovation in teaching (Castelló et al., 2021). There are several existing frameworks and conceptual models that characterize the teacher-researcher identity. This is attributed to the various roles, competencies, and responsibilities that the teacher-researcher encompass within the field of education. The existing frameworks and conceptual models propose several understandings of this identity, yet all agree that teachers who engage in research not only refine their instructional methods but also build a deeper understanding of their practice.

Teachers engaging in action research is one model, sometimes referred to the practitioner inquiry model, involving systematic inquiry conducted by the practitioners to improve their own teaching skills (Alves et al., 2024; Mertler, 2009, 2021). This model begins with the teacher-researcher identifying a problem in their practice, gathering evidence to support this, reflecting on their findings, then drawing conclusions to then apply in practice (Mertler, 2009). While the action research model benefits individual classroom practice mainly, it emphasizes an active role the teacher-researcher plays in the classroom given their involvement in their class and integration of research in their practice. Alves et al. (2024) stated that "engagement with research, … , provides lifelong tools for teachers to identify and remove barriers to ensuring that all learners can access, participate, and succeed in education" (p.10). This knowledge strengthens teachers' practices as well as identifies barriers in the field of education to ensure they meet the needs of their students. Mohamed (2024) suggests that action research in education assists in identifying practical classroom challenges. This is the type of research and application of findings that will directly benefit the teacher and students. On top of the direct benefits to their instructional practices, it also empowers them to make informed decisions and increases teachers' confidence (Mohamed, 2024). This model is empowering for teachers and beneficial for all parties which makes it a highly desirable endeavor. Through the process of action research, teachers better themselves and their students.

The reflective practitioner model proposed by Schön (1983) emphasizes the importance of reflection in practice. This framework suggests that effective practitioners, in this case teachers, continuously conduct research by reflecting on their experiences and actions to improve their instructional practice. According to Ranglund et al. (2023), Schön promoted two types of reflection, in action and on action. Reflection in action involves active reflection while teaching or in the classroom, whereas reflection on action is performed retrospectively to analyze the situation and its implications for the future (Ranglund et al., 2023). By conducting systematic and reflective evaluation of instruction, teachers can identify more effective practices which will encourage teachers to experiment with new concepts or instructional methods (Ilisko et al., 2010). Professional

learning communities (PLCs), commonplace in education, also offer an arena for teachers to reflect on practice, sharing their knowledge and experiences, resources, and support their fellow peers (O'Connor & Park, 2023). O'Connor and Park (2023) also suggest that teachers should constantly be evaluating data in PLCs. By employing research skills such as data collection, analysis, and interpretation, teachers can reflect upon daily practice providing insight into their own growth as well as student learning outcomes. This information can then be used to improve their teaching, which will in turn improve student learning. If teachers do not reflect on their experiences and outcomes some improvement opportunities are missed.

A similarity amongst the frameworks is the duality of a teacher's role, being both a practitioner and researcher in the classroom. Whether it is through acting as a reflective practitioner, conducting action research, practitioner inquiry or professional learning communities, teachers are consistently engaging in the actions of reflection, inquiry and collaboration with their colleagues and students. This is all conducted with the goals of improving teaching practices which in turn improves student learning outcomes. As Ilisko et al. (2010) indicate, "the positive effects of conducting research in the classroom are tremendous: teachers build their own theory of teaching; they act as curriculum designers and make informed decisions in their classrooms" (p. 53). In both frameworks, teachers are actively engaging in their own professional development and strengthening their teacher-researcher identity.

Benefits and Challenges

Research-informed teaching is linked to improved student learning outcomes, specifically for students with diverse needs (Lu & Zhang, 2023). Teachers who incorporate evidence-based practices are more likely to create engaging and effective learning environments that positively impact student achievement as they stay on top of new findings and instructional methods. Teacher-led research is a powerful tool for enhancing teachers' practices and strengthening students' educational experiences (Mohamed, 2024). This reflection and evaluation of classroom processes and student experiences inspire mutually beneficial, collaborative changes amongst the students and their teacher. As teachers conduct their own research, they are not only examining their teaching methodologies, but the unique student population and assessment measures in place (Mohamed, 2024). These are important considerations as research and theories are constantly evolving in the areas of culturally responsive classroom management and various assessment methods that suit different needs (Mertler, 2021). Taking all of these into account in their teaching strengthens the quality and effectiveness of their pedagogical practices. Teacher initiated research can aid in classroom practices, giving teachers the capacity to make professional judgements (Ilisko et al., 2010). This new confidence derived from their research in their judgment empowers new and experienced teachers in their practice. Mohamed (2024) identified a significant conclusion that action research improves teachers' problem-solving skills, reflective practice and boosts their self-confidence. These are essential qualities for teachers to strengthen and gradually leads to higher job satisfaction as teachers grow with their roles.

Research is only one of many important factors within the classroom that teachers need to focus their attention upon (Danijela, 2018). Factors such as classroom management and behavioral issues, lesson planning and other school commitments can all prevent a teacher from conducting research. However, time and resources are the leading factors preventing teachers from conducting research (Craig et al., 2023; Teig et al., 2019). The global teacher shortage placed more barriers to research with more demands from teachers on their daily jobs. Teachers are expected to teach more without a pay increase; specifically in the United States, teachers are teaching 200 more contracted

hours per year (compared to teachers around the world), and receive lower salaries than graduates with similar degrees (Craig et al., 2023). Teachers lack the ability to allocate time toward research with increased workloads due to the shortage of trained substitute teachers and reduced school funding (Craig et al., 2023). Overall, the current job demands of teachers do not allow for allocation of time and resources towards research, despite the aforementioned benefits.

RESEARCH QUESTIONS

The purpose of this research was to better understand the teacher-researcher identity in an effort to pragmatically develop this identity within Educator Preparation Programs (EPP). This study gathered quantitative and qualitative data through a web-based survey designed to address the following research questions:

1. To what extent, if any, do K-12 teachers perceive teachers as researchers?
2. Why do teachers perform or not perform research?
3. Which research competencies do K-12 teachers perform and how often are they engaging in these competencies?

METHODS

Research Design

The study utilized a mixed-methods research design, incorporating both quantitative and qualitative approaches to provide a comprehensive understanding of teachers' perceptions of themselves as researchers and their engagement in research competencies. The quantitative component involved the collection of data through Likert scale survey questions to quantify the extent teachers are researchers and the frequency they participate in specific research activities. Meanwhile, the qualitative component added depth to the findings by incorporating an open-ended response to provide context and elaboration on the Likert scale responses. The integration of both methods allowed for a more nuanced interpretation of the data, enhancing the overall validity of the study's conclusions.

Sample of Participants

Convenience and snowball sampling were used to identify a population of K-12 teachers currently working in the field. Convenience sampling was used to identify teacher candidates enrolled from Fall 2023 to Fall 2024 within an EPP at an independent liberal arts university in the American Northeast. Within this population, teacher candidates completing field experience within a K-12 school were identified. Given the university's proximity to the border and international student population, this included teacher candidates located both in the United States as well as Ontario, Canada. Through snowball sampling, the identified teacher candidates were asked to forward the survey to current K-12 teachers within their own networks, including those they were working with through their field experience, as well as those within their personal networks. After cleaning the data to remove incomplete surveys and participants who were not currently working in the field of education, a sample of 198 teachers was included in the study.

Research Instrument

Participants were asked to complete a survey that was designed to measure the extent teachers perceive educators as researchers and engage in research competencies. The survey included one Likert scale question designed to collect overall perceptions related to how often teachers do

research, one open-ended question to provide a brief explanation of the first answer, and then 23 follow-up Likert scale questions designed to collect perceptions related to how often teachers perform specific research competencies (see Appendix). The 23 items were developed based on a comprehensive review of relevant literature (Mertler, 2009, 2021) and initial items were reviewed by a panel of three experts that taught graduate research education courses to ensure content validity. The experts assessed the items for clarity, relevance, and alignment with the research objectives. Demographics were also collected for analysis related to teacher gender, age, ethnicity, level of education, years of experience, current position, and grade level taught. Additionally, school type and location (i.e., city and state) data were collected.

Data Analysis

Frequency distributions were developed and analyzed using Likert scale responses from the survey and reported out in a visual manner (i.e., bar and stacked-bar charts). This quantitative data were compared to the qualitative data gathered through the one open-ended question soliciting an explanation to participants' overall perception of how often teachers do research. Data were analyzed using in vivo coding (Saldaña, 2013). Specifically, this involved the development of themes in the form of short phrases or words from participants' own language.

RESULTS

Demographics of Participants

Of the 198 participants, the sample included primarily white (87.4%) females (82.8%) ranging from 20 to 69 years old, with the majority under the age of 40 (59.6%) (see Table 1). The participants included teachers teaching in Canada (74.2%) and the United States (25.8%) who were primarily full-time (74.7%), public school (84.3%) teachers with more than one year of experience in the field of education (94.4%), suggesting answers stem from a strong foundation of experience in the field. Participants included a diverse sample of teachers from various grade levels, with the majority teaching elementary grades (61.1%).

Table 1

Demographics of Participants

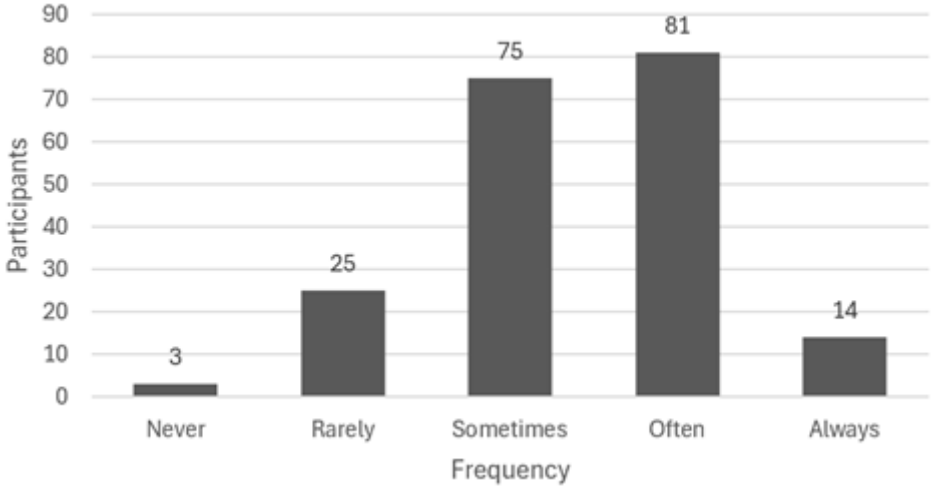
	n	%		n	%
Gender			**Ethnicity**		
Male	32	16.2	Black or African American	5	2.5
Female	164	82.8	American Indian or Alaska Native	1	0.5
Non-binary/other gender	2	1.0	Asian	5	2.5
Age			Latino	4	2.0
20-29	59	29.8	Multiple Ethnicity/Other	10	5.1
30-39	59	29.8	Native Hawaiian or Pacific Islander	0	0.0
40-49	48	24.3	White	173	87.4
50-59	27	13.6	**Years Experience**		
60-69	5	2.5	Less than 1 year	11	5.6
Highest Level of Education			1-5 years	58	29.3
Bachelor's degree	131	66.2	6-10 years	37	18.7
Master's degree	58	29.3	11-15 years	27	13.6
Professional degree	6	3.0	16-20 years	27	13.6
Doctorate degree	3	1.5	More than 20 years	38	19.2
Position			**Current Grade Taught**		
Full-time Teacher	148	74.7	Elementary (PreK-6)	121	61.1
Part-time Teacher	11	5.6	Secondary (7-12)	52	26.3
Substitute Teacher	18	9.1	Other	25	12.6
Teacher's Aide	2	1.0	**Type of School**		
Other	19	9.6	Public	167	84.3
Country			Private	20	10.1
Canada	147	74.2	Other (all grades, college, etc.)	11	5.6
United States	51	25.8			

Teacher Perceptions

Understanding the frequency of teachers' research can help identify their level of engagement with current educational trends, highlight areas where additional support or resources may be needed, and contribute to creating a culture of continuous improvement and evidence-based teaching practices within schools. Participants were asked how often they believe teachers conduct research (see Figure 1). Results indicated that the majority of participants believe teachers Sometimes (37.9%) or Often (40.9%) conduct research. In contrast, 14.1% of participants indicated they believe teachers Rarely or Never conduct research, while 7.1% of participants indicated they believe teachers Always conduct research. These findings suggest research is a common activity among practicing teachers.

Figure 1

Participants' Beliefs of How Often Teachers Conduct Research



Participants were also asked to briefly explain why they believed teachers Always, Often, Sometimes, Rarely, or Never conducted research (see Table 2). While being coded in groups related to frequency, the themes were also categorized as positive or negative based on the way they were worded by participants. The themes are listed in order of priority, with the more prevalent themes being listed first. Table 2 highlights how as the frequency participants believe teachers conduct research decreases from Always to Never, the comments shift in theme from positive to negative. For example, those who indicated they believe teachers Always or Often conduct research phrased their comments in a positive manner, focusing on staying current and a commitment to continuous improvement through research directed towards best practices, student needs, and professional "growth". On the contrary, those who indicated they believe teachers Never conduct research phrased their comments in a negative manner, focusing on a lack of time to do research, research not being part of the job, and research only being conducted to address a professional "deficit".

Those who indicated they believe teachers sometimes conduct research expressed positive notions related to curriculum, student needs, and professional development, but added there were time constraints related to the ability to conduct research and "reactive" research related to issues rather than purposeful research related to goals. These negative themes came up again by those who indicated they believe teachers rarely conduct research, as they described research as a task hard to fit into a teacher's busy schedule, external pressure to conduct research, resource constraints, and an overall lack of administrative support. Throughout all responses, there was a theme of informal research. It is clear that the research being done in the field is not always formal; teachers believe it applies to a small group, cannot be generalized, is not scientific, and is used for immediate feedback.

After participants indicated and discussed the overall frequency they believed teachers conduct research, they were asked to indicate how often teachers perform *specific* research related activities, such as synthesizing information, collecting, interpreting, and analyzing data, communicating findings, etc. (see Figure 2). Participants indicated varying degrees of engagement across different research-related activities. A significant proportion of teachers reported that they

Always adhere to ethical standards (63.4%) and frequently gather resources (40.6%). However, only a small fraction of participants indicated that they Always make a hypothesis (9.9%) or collect evidence towards a hypothesis (17.3%), suggesting that formulating hypotheses may not be a common practice among educators.

Table 2

Why Participants Believe Teachers Never-Always Conduct Research

Frequency	Positive Themes	Negative Themes
Always	Staying Current	
	Research for Best Practices	
	Continuous Learning	
	Professional Growth	
	Action/Informal Research	
	Commitment to Student Needs	
Often	Curriculum Development	Employment Requirement
	Subject-Specific Research	
	Informal/Self-Directed Research	
	Adapting to Changing Needs	
	Data-Driven Decision Making	
Sometimes	Informal Research	Time Constraints
	Professional Development-Driven	Reactive Research
	Differentiation Based on Teacher Interest	
	Research for Student-Specific Needs	
Rarely	Focus on Immediate Classroom Needs	Lack of Time/Resources
		Formal Research Not Expected
		External Pressures
		Lack of Institutional Support
Never		Needed for Career Advancement
		Research Not Part of the Job
		No Time or Motivation
		Professional Development Deficit

In terms of practical problem-solving, 28.7% of teachers reported that they Always seek practical solutions to issues, while an even higher percentage of teachers Often analyze data (34.2%). Meanwhile, nearly 35.2% of teachers indicated that they Always solve issues based on the research process. Moreover, while a considerable number of participants Always engage in data collection (37.1%) and organizing data (38.1%), there is a significant number who only Sometimes engage in activities like making data-informed decisions (21.3%), interpreting data (31.7%), and synthesizing information (20.8%). Furthermore, 28.2% of participants Always use the results to impact future practices, indicating a strong tendency towards applying research findings to practical classroom

scenarios. Lastly, while 25.7% of participants reported that they Always act as agents of change, there is still room for growth in terms of translating research into broader systemic changes within educational settings.

Overall, the data reflect a broad spectrum of engagement with research processes, with more emphasis placed on ethical adherence and resource gathering than on hypothesis formation and theoretical exploration. Formal research often requires Institutional Review Board (IRB) approval to ensure safety of human subjects; it follows that teachers would adhere to a similar high level of ethical standards when collecting data, analyzing, interpreting, and sharing educational data from vulnerable populations every day.

Figure 2

Participants' Beliefs of How Often Teachers Perform Specific Research Related Activities

CONCLUSION

The findings support the need for "researcher" to be integrated into teachers' professional identity, as well as the overall importance of the teacher-researcher identity identified in the literature (Alves et al., 2024; Ilisko et al., 2010; Mertler, 2009, 2021; O'Connor & Park, 2023; Ranglund et al., 2023; Schön, 1983). Implications for both educator preparation and broader educational planning are supported by findings that suggest efforts needed to expand teachers' focus on research competencies. By providing teachers with the skills, resources, and opportunities to engage fully in research—beyond simply addressing immediate classroom concerns—both new and experienced educators can contribute to the profession's ongoing development. This will help cultivate a research-driven culture in education, where inquiry and evidence-based practices are central to both day-to-day teaching and long-term planning and reform.

Professional Identity

The findings regarding how often they believe teachers conduct research confirm that, although many teachers engage in research-like activities, not all teachers are identified as researchers. As outlined by Clarke (2009), building a stronger professional identity incorporating research requires both internal and external support; educators must see the value in formal research processes, and educational systems must recognize and incentivize these efforts. The findings demonstrate that external support, identified as a barrier to research in the literature (Craig et al., 2023; Teig et al., 2019) continues to be identified as a barrier by teachers in the field. Encouraging teachers to view research as a core part of their professional identity, rather than an optional or peripheral activity, can foster a deeper sense of agency and innovation (i.e., providing internal support). By allocating time and resources to self-reflection, collaborative inquiry, and knowledge dissemination, administration can increasingly assist educators in seeing themselves as contributors to a larger body of educational knowledge, thus transforming both their practice and the broader educational landscape (i.e., external support).

Findings also suggest that many teachers engage in research related activities, suggesting that "researcher" should be part of their professional identity (despite not being identified by all). Given engagement in research related activities will support their professional growth (Ilisko et al., 2010; Mohamed, 2024), it follows that building a professional identity that includes "researcher" is important. This can be done in the field through encouraging research as part of professional development for educators. Instead of solely relying on traditional professional development courses, teachers can conduct research to adopt a constructivist approach to learning, constructing their own knowledge through findings relevant to their specific teaching context. Ultimately, the findings suggest that teachers are already engaging in the pragmatic research activities that are likely to contribute to meaningful and sustainable changes in their teaching practice; the ability for them to identify this as part of their professional identity may allow them to better harness the power of research identified in the literature.

Educator Preparation and Educational Planning

The findings suggest important implications for both educator preparation and broader educational planning, particularly in terms of how research is viewed and integrated into teaching practices. While the data indicate that teachers frequently engage in practical aspects of research, such as gathering resources, adhering to ethical standards, and solving classroom issues, there is less focus on foundational research tasks like hypothesis formation and formal data analysis. This suggests that many educators view research as a tool for addressing immediate classroom needs

rather than as a structured, ongoing process aimed at generating new knowledge or advancing the profession.

For EPPs, this underscores the importance of integrating action research into courses and practical experiences to equip future teachers with the skills necessary for pragmatic, real-world problem-solving. Action research, which involves identifying issues, implementing solutions, and reflecting on outcomes in a cyclical process, allows teachers to directly apply research to their practice. Courses and practical experiences should emphasize the importance of developing hypotheses, exploring theoretical frameworks, and interpreting data, skills that are currently less utilized according to the findings. Integrating these components into teacher preparation in ways that are immediately relevant to the classroom context could help bridge the gap between theory and practice, empowering educators to approach teaching with a research-oriented mindset from the outset of their careers. By focusing on action research, teacher candidates can cultivate a research-oriented mindset that is both practical and responsive to the dynamic needs of students. Additionally, preparing teachers to reflect on their findings and share research outcomes with colleagues foster a collaborative and improvement-focused teaching culture, which can enhance professional growth and student outcomes. Through this approach, future educators will be better positioned to engage in continuous inquiry, ensuring that their teaching is informed by both data and reflective practice.

From the perspective of broader educational planning, the findings reveal opportunities for schools, districts, and policy makers to support teachers in engaging more fully with research. While many educators are solving problems and acting as agents of change, fewer are consistently writing reports or sharing their findings. Educational planners could create structures to support these activities, such as professional learning communities, dedicated research time, and incentives for publishing or presenting research. Offering professional development focused on data analysis, synthesizing information, and report writing would also encourage a more systematic approach to research, ultimately enriching the knowledge base of the profession. Moreover, the finding that a significant portion of teachers frequently solve issues and act as agents of change suggests that there is potential to further capitalize on teachers' interest in research as a tool for innovation. By addressing common barriers, such as time constraints and lack of resources, educational planning at the system level can empower educators to engage more deeply with research. This could include reallocating responsibilities, offering research grants for teachers, or creating collaborative research networks where educators can work together to address broader educational challenges. In this way, research would not only serve the needs of individual classrooms but also contribute to shaping curriculum, policy, and broader educational reforms.

LIMITATIONS

While the findings provide valuable insights into teachers' engagement with research and its implications for educator preparation, there are several limitations to consider. First, the data primarily reflect the perceptions and self-reported behaviors of educators, which may not fully capture actual research practices or the diversity of experiences across different educational contexts. The sample size, although strong and representative of the field (Gist & Bristol, 2022), has varied representation that may also limit the generalizability of the findings, particularly for certain underrepresented demographics (i.e., male, BIPOC, secondary, and private school teachers). Additionally, the survey questions may not have fully explored the nuances of how teachers conceptualize and define research, potentially leading to varied interpretations of what constitutes research-based practice. Future research could include longitudinal studies that track research engagement over a teacher's career and further qualitative data collections to better understand the

barriers and motivators for teachers' involvement in research. These limitations suggest that while the results offer important insights, they should be interpreted with caution and as part of a broader conversation about the role of research in education.

REFERENCES

Alves, I., Christodoulidis, A., Carpenter, J., & Hogg, V. M. (2024). Practitioner enquiry as lifelong teacher education for inclusion. *Education Sciences, 14*(3), 268. https://doi.org/10.3390/educsci14030268

Ambusaidi, A. K., & Alhosni, K. Z. (2023). Mathematics and science teachers' perceptions of the factors influencing teaching and professional identity. *Problems of Education in the 21st Century, 81*(3), 303–326.

Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education, 20*(2), 107–128. https://doi.org/10.1016/j.tate.2003.07.001

Bourke, R., & Loveridge, J. (2017). Educational research and why it's important. *New Zealand Journal of Educational Studies, 52*, 207-210. https://doi.org/10.1007/s40841-017-0093-0

Castelló, M., McAlpine, L., Sala-Bubaré, A., Inouye, K., & Skakni, I. (2021). What perspectives underlie 'researcher identity'? A review of two decades of empirical studies. *Higher Education, 81*, 567-590.

Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. Teachers College Press.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.

Clarke, M. (2009). The ethic-politics of teacher identity. *Educational Philosophy and Theory, 41*(2), 185–200. https://doi.org/10.1111/j.1469-5812.2008.00420.x

Craig, C. J., Hill-Jackson, V., & Kwok, A. (2023). Teacher shortages: What are we short of? *Journal of Teacher Education, 74*(3), 209–213. https://doi.org/10.1177/00224871231166244

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.). Corwin.

Danijela, M. (2018). The teacher's role and professional development. *International Journal of Cognitive Research in Science Engineering and Education, 6*(2), 33–45. https://doi.org/10.5937/ijcrsee1802033m

Darling-Hammond, L., & Bransford, J. (Eds.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. Jossey-Bass.

Gist, C. D., & Bristol, T. J. (2022). *Handbook of research on teachers of color and indigenous teachers*. American Educational Research Association.

Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school.* Teachers College Press.

Iliško, D., Ignatjeva, S., & Mičule, I. (2010). Teachers as researchers: Bringing teachers' voice to the educational landscape. *Journal of Teacher Education for Sustainability, 12*(1), 51-65. https://doi.org/10.2478/v10099-009-0046-x

Kelchtermans, G. (2009). Who I am in how I teach is the message: Self-understanding, vulnerability and reflection. *Teachers and Teaching: Theory and Practice, 15*(2), 257–272. https://doi.org/10.1080/13540600902875332

Liske, C., Tutticci, N., & Diño, M. J. S. (2023). Joy at work and vocational identity during COVID□19: A structural equation model. *Journal of Nursing Scholarship, 55*(5), 1058-1067. https://doi.org/10.1111/jnu.12886

Liu, W., & Zhang, M. (2019). An empirical study on the impact of career identity of secondary vocational teachers on work engagement. *Contemporary Vocational Education, 4*, 68–78. https://doi.org/10.16851/j.cnki.51-1728/g4. 20190718.014

Lu, H., & Zhang, X. (2023). Developing sustainable career paths as teacher-researchers in a changing academic landscape: A tale of two EFL teachers in China. *PLoS One, 18*(5). https://doi.org/10.1371/journal.pone.0285363

McRae, P., & Parsons, J. (2018, June 26). *Teachers as researchers.* Alberta Teachers Association. https://legacy.teachers.ab.ca/News%20Room/ata%20magazine/Voluhttps://ssp.niagara.edu/Student/Account/Loginme%2087/Number%203/Articles/Pages/Teachers%20as%20Researchers.aspx#:~:text=Research%20(as%20a%20process%20of,the%20minds%20within%20that%20community

Mertler, C. A. (2009). *Action research: Teachers as researchers in the classroom*. Sage.

Mertler, C. A. (2021). *Action research: Improving schools and empowering educators* (6th ed.). SAGE Publications.

Mohamed, R. A. A. (2024). Enhancing pre-service EFL teachers' teaching performance through action research. *Journal of Language Teaching and Research, 15*(1), 178-189. https://doi.org/10.17507/jltr.1501.20

O'Connor, B., & Park, M. (2023). Exploring the influence of collaborative data-based decision making among teachers in professional learning communities on teaching practice. *Disciplinary and Interdisciplinary Science Education Research, 5*(1), 17. https://doi.org/10.1186/s43031-023-00086-1

Pennington, M. C., & Richards, J. C. (2016). Teacher identity in language teaching: Integrating personal, contextual, and professional factors. *RELC Journal, 47*(1), 5-23. https://doi-org.ezproxy.niagara.edu/10.1177/00336882166

Ranglund, O. J., Haave, H., & Void, T. (2023). Academic development through course enhancements: Becoming reflective practitioners. *Proceedings of the 24th European Conference on Knowledge Management, 24*(2), 1099-2023. http://dx.doi.org/10.34190/eckm.24.2.1767

Reeves, J. (2018). Teacher identity work in neoliberal schooling spaces. *Teaching & Teacher Education, 72*, 98–106. https://doi-org.ezproxy.niagara.edu/10.1016/j.tate.2018.03.002

Sachs, J. (2001). Teacher professional identity: Competing discourses, competing outcomes. *Journal of Education Policy, 16*(2), 149–161. https://doi.org/10.1080/02680930116819

Saldaña, J. (2013). The coding manual *for qualitative researchers* (2nd ed.). Sage Publications.

Schön, D. (1983). *The reflective practitioner: How professionals think in action*. Temple Smith.

Teig, N., Scherer, R., & Nilsen, T. (2019). I know I can, but do I have the time? The role of teachers' self-efficacy and perceived time constraints in implementing cognitive-activation strategies in science. *Frontiers in psychology, 10*, 1697.

Van Veen, K., & Sleegers, P. (2006). How does it feel? Teachers' emotions in a context of change. *Journal of Curriculum Studies, 38*(1), 85–111. https://doi.org/10.1080/00220270500109304

Zhang, Q., Li, W., Gao, J., Sun, B., & Lin, S. (2024). Teachers' professional identity and job burnout: The mediating roles of work engagement and psychological capital. *Psychology in the Schools, 61*(1), 123-136. https://doi-org.ezproxy.niagara.edu/10.1002/pits.23039

Zhu, J. (2021). Correlation study of empathy fatigue, professional identity and organizational support of nurses in the department of infectious diseases. *Nursing Practice and Research, 18*(12), 1743–1746. https://doi-org.ezproxy.niagara.edu/10.3969/j.issn

APPENDIX

Teachers as Researchers Survey

*In your opinion, how often do teachers:

	Never	Rarely	Sometimes	Often	Always
Do research	○	○	○	○	○

Briefly explain

*In your opinion, how often do teachers:

	Never	Rarely	Sometimes	Often	Always
Identify significant issues	○	○	○	○	○
Make a hypothesis	○	○	○	○	○
Seek practical solutions to issues	○	○	○	○	○
Collect evidence towards a hypothesis	○	○	○	○	○
Explore issues	○	○	○	○	○
Seek practical approaches to solving issues	○	○	○	○	○
Gather resources	○	○	○	○	○

Compare resources	○	○	○	○	○
Synthesize information	○	○	○	○	○
Collect data	○	○	○	○	○
Adhere to ethical standards	○	○	○	○	○
Organize data	○	○	○	○	○
Analyze data	○	○	○	○	○

Analyze data	○	○	○	○	○
Interpret data	○	○	○	○	○
Remain objective	○	○	○	○	○
Make data-informed decisions	○	○	○	○	○
Develop plans to solve issues	○	○	○	○	○
Use results to impact current/future practice	○	○	○	○	○
Solve issues	○	○	○	○	○
Write reports	○	○	○	○	○
Share/communicate findings	○	○	○	○	○
Reflect on how issues were solved	○	○	○	○	○
Act as agents of change	○	○	○	○	○