

Unions as Change Agents: Washington Education Association's Pioneering Approach to Special Education Teacher Preparation

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Abstract

Alternate route certification programs for special education teachers have gained prevalence for several decades as states attempt to address national shortages of teachers who are adequately prepared to meet the needs of students with exceptionalities. This article presents an exploratory case study of the Washington Education Association (WEA) Teacher Residency Program, the first teacher union-sponsored alternative pathway for special education teacher certification in the United States. The program was co-designed with families and other members of the education community throughout Washington State with the purpose of increasing the number of certified special educators in the state. The case study examined the level at which WEA included evidence-based training components during the preparation program. WEA's collaboration with partner school districts, expectations from teacher residents, and the standards addressed during the program are reported. In addition, details of the collaboration with the Center for Innovation, Design, and Digital Learning (CIDDL) are described. The WEA case study will provide other collaborative community partnerships and alternate certification programs with a blueprint for integrating strategies to diversify the special education teacher workforce while maintaining high standards.

Key Words: teacher residency programs, alternate certification program, special education teacher preparation, technology integration

Introduction

Across the United States, special education teacher shortages are most prevalent in large urban and small rural districts characterized by high poverty rates, where the teacher workforce demographics fail to reflect the diversity of the student population it serves (Ingersoll & Tran, 2023). In Washington state, more than 20% of special education teachers are licensed under a conditional certificate (Washington Education Association, 2024). This is consistent with many states nationwide (Wilkerson et al., 2021). Emergency substitute teacher waivers place unprepared teachers with students who require the most intensive instruction and assessment practices. This is true across disciplines including early childhood education (Mavrides Calderon, 2024). While this shortage affects various educational domains, it is especially acute in special education. As a result, the U.S. Department of Education's Office of Special Education and Rehabilitative Services released a letter to State Directors of Special Education (2022) explicitly stating special education teachers should obtain certification through a teacher certification program providing "high-quality professional development that is sustained, intensive, and classroom-focused" (p. 2).

Day et al. (2023) found alternative teacher certification training programs affiliated with institutions of higher education (IHE) more closely align with traditional preparation standards. In contrast, non-IHE programs often lack comprehensive training components. Various entities, including for-profit organizations, schools, districts, and regional education service agencies, manage non-IHE programs. Despite managing fewer programs overall, for-profit entities enroll a substantial number of students (e.g., > 65,000 in 2022), raising concerns about the efficacy and accountability of these programs. The wide variability in program quality underscores the need for rigorous evaluation and oversight to ensure all teacher candidates receive adequate preparation for classroom instruction and behavior management (King & Yin, 2022).

This article presents an alternative perspective to the findings of Day et al. (2023) through an exploratory case study of the Washington Education Association (WEA) Teacher Residency Program. Developed collaboratively by the Washington State Teacher's Union and local school districts throughout the state, the program was piloted during the 2023–24 academic year. This initiative operates without direct affiliation to any in-state IHE.

Instead, it maintains membership with the Tech Alliance affiliated with the Center for Innovation, Design, and Digital Learning (CIDDL, 2023), which is a national center sponsored by the Office of Special Education Programs at the U.S. Department of Education under award #H327F200008. The article includes a discussion of the program's goals and practices for achieving high rigor and retention for special education teachers.

Alternative Teacher Certification

Alternative teacher certification programs have gained traction due to the persistent shortage of qualified teachers, especially in special education (U.S. Department of Education, 2018). These programs aim to fast-track the certification process for individuals with bachelor's degrees in noneducation fields. For example, the New York City Teaching Fellows program offers an accelerated pathway for career changers and recent graduates to become certified teachers. The program provides participants with intensive summer training, two years of coursework, and teaching experience while working in high-need schools. Evaluative data indicated teachers in this program performed at or above satisfactory levels and demonstrated instructional and management competencies comparable to traditionally certified teachers (Yin & Partelow, 2020).

A significant aspect of alternative teacher certification programs is their ability to attract a diverse pool of candidates, including career changers and individuals from underrepresented groups (Carver-Thomas, 2018). Research indicates alternative certification programs not affiliated with IHEs have higher enrollments of underrepresented racial and ethnic groups than traditional teacher certification programs (Day et al., 2023). The flexibility of alternative certification programs also makes them appealing to nontraditional students, such as recent liberal arts graduates and career changers. These candidates often bring diverse experiences and perspectives to the classroom, enriching the educational environment. However, their lack of traditional academic training necessitates a comprehensive support system to ensure they can meet the demands of the teaching profession (McLeskey & Brownell, 2015).

The success and retention of teachers in alternative teacher certification programs significantly depends on the program's structure and support systems. Effective programs typically combine rigorous coursework, supervised field experiences, and mentoring (Dori et al., 2023). Quality educator preparation programs integrate performance-based outcomes and best practices for teaching diverse student populations, which results in higher retention rates among graduates (King & Yin, 2022). They also include

comprehensive support through intensive preservice training, ongoing professional development, and structured field experiences, which are integral to the success of alternative certification programs (Cochran-Smith & Reagan, 2021). These programs also stress the importance of preparing teachers to work with culturally and linguistically diverse students and their families, addressing the needs of students in diverse classrooms (Accardo et al., 2020; Day et al., 2023).

Teacher residency programs represent a specialized subset of alternative certification programs, offering a unique approach to teacher preparation that combines intensive classroom experience with targeted academic coursework. According to the National Center for Teacher Residencies (NCTR, 2024), 94% of principals reported that teacher-resident graduates are more effective than typical first-year teachers. These programs provide full-year classroom apprenticeships for preservice teachers with academic coursework closely aligned with their hands-on experiences. In addition, 95% of mentors who hosted resident teachers reported becoming more effective teachers and leaders due to participating in the program. This finding highlights the dual impact of residency programs on novice and veteran teachers in the education community.

The structure of these programs, which emphasizes the practical application of pedagogical theory and sustained mentorship, aligns closely with research on effective teacher preparation (Afacan, 2022). Teacher residency programs offer a promising model for developing highly effective educators by bridging the gap between theory and practice. This approach to alternative certification sets the stage for a broader discussion on the key components of effective teacher preparation programs and how they can be implemented across various pathways to teaching.

Effective Teacher Preparation

Darling-Hammond (2006) identified three crucial elements in effective teacher preparation programs. These elements emphasize the integration of coursework and practical experience, supervised clinical work, and strong relationships with diverse school communities.

Coursework and Practical Experiences

In modern teacher preparation programs, coursework and practical experiences are being reimaged to meet the evolving needs in diverse classrooms. Traditional pedagogical theories are now complemented by hands-on training with educational technology and exposure to innovative teaching methods. This comprehensive preparation ensures that future educators are well-versed with content-specific subject matter and classroom

management. In addition, they must be adept at leveraging digital tools and adaptive technologies to enhance learning outcomes (CIDDL, 2023). Practical experiences, such as classroom observations and student teaching, increasingly incorporate technology integration and data-driven instruction, preparing teachers to use these tools effectively in their future careers.

Emerging technologies such as artificial intelligence (AI) hold tremendous potential to enhance instruction for neurodiverse students, including students with disabilities (Marino et al., 2024). Neurodiversity includes an array of neurological conditions, inclusive of but not limited to autism spectrum disorder, attention deficit hyperactivity disorder, specific learning disabilities, and other learning exceptionalities. Each condition presents distinct educational needs and aptitudes. General and special education teachers are expected to identify and respond to the unique needs of all students in their classrooms. However, many teachers report needing to be more adequately prepared to teach neurodiverse students effectively (Chiu et al., 2023; Jensen et al., 2023). This discrepancy highlights an urgent need to empower future educators with the knowledge and skills to recognize and support neurodiversity in their classrooms.

Supervised Clinical Work

Supervised clinical work provides aspiring teachers with hands-on experience under the guidance of experienced mentors, fostering a supportive environment where theory is applied to practice and novice educators can refine their skills by leveraging expert feedback and modeling. Mentorship and coaching play critical roles in the effectiveness of alternative teacher certification programs. Mentors provide practical information, management tips, and feedback—all crucial for novice teachers. Rosenberg et al. (2023) suggested mentorship is essential for fostering professional growth and improving teacher retention rates. Mentoring should also encourage participation in professional learning communities, such as the CIDDL Community (n.d.), to support engagement with technology in the classroom (Ghamrawi, 2022). These communities can act as a hub for sharing experiences, strategies, and insights on the use of technology in education, thereby facilitating collaborative learning among educators (Vogel & Wood, 2023).

Additionally, collaborative partnerships among local educational agencies, IHEs, and state departments of education can enhance the success of alternative teacher certification programs. These partnerships ensure such programs are aligned with state and local standards for teacher preparation and provide realistic, rigorous field experiences. The collaborative efforts can enhance special education teachers' recruitment, development,

and retention (Accardo et al., 2020). Partnerships also facilitate sharing resources and expertise, which are essential for the continuous improvement of alternative certification programs.

Strong Relationships With Diverse Schools

Establishing strong relationships between teacher preparation programs and diverse school communities yields significant benefits for all involved parties. For novice teachers, these partnerships provide rich, immersive experiences in varied educational settings, fostering a deeper understanding of diverse student needs and culturally responsive teaching practices. Research indicates exposure to ethnically, racially, and linguistically diverse classrooms enhances the development of critical pedagogical skills and cultural competencies, equipping future educators to address the complexities of multicultural and special education (Young et al., 2024). Additionally, such experiences promote reflective practice and adaptability as novice teachers engage with different teaching styles and classroom dynamics, thereby enhancing their professional preparedness and resilience (Franco et al., 2023).

For IHE faculty and novice teachers at the partnered schools, these relationships facilitate access to the latest pedagogical research and innovative teaching strategies. Collaborative engagements between schools and teacher preparation programs can lead to the co-creation of curricula and professional development initiatives tailored to the specific needs of the school community, thereby improving educational outcomes (Mu et al., 2023). Furthermore, these partnerships often bring additional resources, such as teaching assistants and educational materials, which can alleviate some of the resource constraints underfunded schools face (Sohn et al., 2023). By fostering a mutually beneficial exchange of knowledge and resources, these collaborations contribute to a more inclusive and equitable educational landscape, enhancing the learning environment for all students.

Center for Innovation, Design, and Digital Learning

The University of Kansas, along with the Toni Jennings Exceptional Education Institute at the University of Central Florida, CAST, and the Metiri Group, serve collectively as the CIDDL team (CIDDL, 2022). CIDDL disseminates the latest information, strategies, and challenges associated with faculty use of technology in special education, early intervention, related services personnel preparation, and leadership personnel preparation programs. CIDDL is currently working to develop and disseminate research-based strategies and resources regarding effective technology use in

education. Dissemination is grounded in a networked community model (Networked Learning Editorial Collective, 2021) known as the CIDDL Community.

The CIDDL Community enhances access to fellow educators, contextualized examples, and research-based resources supporting the increased use of various educational technologies in preparation programs. Peer-to-peer connections within the community and sustained engagement with resources and services meet the targeted needs of its constituents. The CIDDL Community is an innovative approach to facilitate communication about the use of technology among current and future faculty members (Ghamrawi, 2022) and support the integration of technology into preparation programs so that future educators will be prepared to utilize technology in their teaching while effectively engaging with families.

Ten institutions participated in CIDDL's Tech Alliance during the 2023–24 academic year. The Tech Alliance aims to improve faculty capacity to integrate educational technology during special education teacher preparation using a collaborative approach to circumvent barriers within preparation programs. The Alliance included five minority-serving institutions from a diverse array of Carnegie classifications, ranging from small liberal arts to research-intensive programs. The WEA Teacher Residency Program was one of the partners in this collaborative endeavor.

The following sections describe WEA's development of a unique teacher residency program designed to meet the needs of future special education teachers by incorporating technology during the teacher preparation process. The WEA Teacher Residency is the first union-led teacher preparation program in the United States. The program prepares aspiring educators who are committed to equity, focused on student-centered teaching, and dedicated to working with students with disabilities. The program is designed to recruit and retain teachers who reflect the diversity of the communities they will serve.

WEA Teacher Residency Program Purpose

The WEA Teacher Residency Program was designed to address several challenges associated with teacher preparation. First, there is a sustained national need to bolster the number of teachers for students with neurodiverse learning profiles (Bettini et al., 2023). Second, in Washington State, special education teachers represent the largest area of need, with every school district reporting a need for certified special education teachers (Washington State Professional Education Standards Board, 2024a). Third, significant discrepancies exist with the alignment of demographic features

across students and teachers statewide. For example, while the student distribution of males and females is 51.5% and 48%, respectively, the teachers were 74% female and 26% male. In 2024, most Washington students were White (49%), followed by Hispanic/Latino (26%), Asian (9%), two or more races (9%), Black/African American (5%), Native Hawaiian/Other Pacific Islander (1%), and American Indian/Alaskan Native (1%). Teachers of the students were predominantly White (85%), followed by Hispanic/Latino (6%), Asian (3%), two or more races (2%), and Black/African American (2%). Less than 1% were American Indian/Alaskan Natives or Native Hawaiian/Other Pacific Islanders.

The WEA created the Teacher Residency Program in response to critical teacher shortages and the lack of diversity in the educator workforce. The program's purpose was to collaboratively create an alternate pathway for certification through a robust clinical training experience. The residencies were designed using an iterative development process with the goal of reducing barriers for underrepresented groups by providing strategic mentoring and coaching along with financial incentives (WEA, 2024).

Research Questions

The purpose of this exploratory case study was to investigate how the WEA union-led, non-IHE-affiliated teacher preparation program provided training for preservice special education teachers during the 2023–24 academic school year. The following research questions guided the study:

RQ1: *At what level were evidence-based, comprehensive training components included in the WEA Special Education Teacher Residency Program?*

RQ2: *At what level were emerging technologies incorporated in the Teacher Residency model?*

RQ3: *What types of incentives were provided to the teacher residents?*

Methodology

Research Design

An exploratory case study design was identified as most appropriate methodology due to the novel nature of the program. Developing an exploratory case study requires a systematic approach beginning with a clear research question and a well-defined purpose. According to Yin (2014), the initial stage involves identifying the research problem and setting the boundaries of the case. Researchers must articulate the specific phenomenon to be explored and justify the choice of the case within the broader context

of the research objectives. In this study, the development and implementation of the WEA Teacher Residency Program formed the phenomenon under investigation. The clarity in the problem definition ensures that the case study remains focused and relevant, providing a solid foundation for the inquiry. Thomas (2019) emphasized the importance of bounding the case by specifying parameters such as time, place, and context, which helps maintain the scope of the study.

The second phase involved data collection, when multiple sources of evidence are utilized to ensure a comprehensive understanding of the case. The program's structure was examined through a needs assessment, followed by a coursework and field experiences analysis. Semi-structured interviews were conducted with teacher residents, mentor teachers, academic coaches, and program instructors. Observations of teacher residents and their mentors were conducted during their field placements. Additional information was obtained from the program website at <https://www.washingtonea.org/events-training/residency/>.

Yin (2014) suggested employing various data collection methods, including individual and small group semi-structured interviews, classroom observations of teacher residents, their mentors, and coaches, and document analysis from course materials, field notes, and websites, to capture the complexity of the case. Triangulation of data sources enhanced the validity and reliability of the findings by allowing for cross-verification of information. Harrison et al. (2017) recommended creating a detailed case study protocol outlining the data collection and analysis procedures, ensuring consistency and replicability were followed. This protocol served as a guide for systematically gathering and organizing data, facilitating a thorough case examination.

The researchers in this case study began by administering a technology needs assessment to course instructors, resident teachers, mentors, and coaches associated with the WEA project. Researchers collaborated with these participants at three points (i.e., fall, winter, and spring) during the case study period. The research team provided professional development for WEA stakeholders on using artificial intelligence (AI) for data analysis, enhancing technology selection for students with unique needs, and incorporating Universal Design for Learning in the curriculum. The investigative team conducted embedded observations and interviews across diverse settings, ranging from professional development sessions in Olympia to classroom environments in three of the participating school districts.

The final stage of the case study involved data analysis and interpretation as the researchers synthesized the collected data to draw meaningful

conclusions. According to Merriam and Tisdell (2015), data analysis in case studies should involve coding and categorizing the data to identify patterns and themes. This process enabled the researchers to construct a detailed narrative to explain the Teacher Residency Program while linking empirical evidence to the research questions.

Setting

Eight Washington school districts participated in the development of the WEA Teacher Residency Program: Auburn, College Place, Federal Way, Mukilteo, Pasco, Peninsula, Sumner Bonny-Lake, and Walla Walla. These districts each have a need for special education teachers. Three of the eight districts (i.e., Federal Way, Mukilteo, Walla Walla) hosted resident teachers during the case study period. Demographics from the hosting districts are included in Table 1.

Table 1. District Demographics

OSPI Report Card	Washington Students	Washington Teachers	Federal Way Students	Federal Way Teachers	Mukilteo Students	Mukilteo Teachers	Walla Walla Students	Walla Walla Teachers
People of Color	50%	13%	79%	23%	65%	17%	48%	18%
White	50%	87%	21%	78%	35%	83%	52%	82%
Low-Income	48%		70%		55%		60%	
English Learners	13%		24%		22%		14%	

Note. OSPI Report Card Data (2022)

Participants

Sixteen teacher residents participated in the 18-month training program with the goal of receiving K–12 special education teaching certification. Prospective teacher residents needed a Bachelor’s degree to be eligible for the program. They were vetted by both WEA and the districts where they hoped to complete their residency. Applicants submitted their contact information, demographic information, college transcripts, and a personal narrative describing why they wanted to be a special education teacher prior to admittance to the program. In addition, they completed a basic skills assessment and participated in a simulated teaching experience and reflection process using Mursion simulation software (Dieker et al., 2020; Mikeska et al., 2021). Finally, they submitted reference letters and a resume.

Prospective teacher residents were interviewed if they met the minimum requirements for program admission.

In-person interviews included two components, each lasting approximately 45 minutes. Component 1 was a personal interview between the candidate and interview committee members (i.e., WEA members and district representatives). Component 2 consisted of a group reading experience and teaching dilemma with three to five potential residents who would form a cohort in the districts. Demographic information for the 16 participants in the first cohort is provided in Table 2.

Table 2. Demographic Information for Teacher Residents by District

	Federal Way	Mukilteo	Walla Walla
Residents Applied	25	20	10
Residents Screened	20	17	5
Black, Indigenous, & People of Color	24%	35%	14%
Hispanic/Latinx	0%	18%	14%
First Languages Other Than English	Hindi, German, Farsi, Tamil & Korean	Ukrainian, Spanish, Indonesian	Spanish
Emergency Sub Cert	57%	24%	43%
Number Interviewed	18	16	5
Selected	8	4	4

While 25 candidates applied for the program, 16 teacher residents were admitted across the three districts. Cohorts of four teacher residents (i.e., one for each placement in the 9-week classroom rotation) were organized in each district. Federal Way had two cohorts, while Mukilteo and Walla Walla each had one. Of the accepted teacher residents, 38% ($n = 6$) were from diverse non-White racial or ethnic backgrounds; 31% ($n = 5$) spoke a language other than English as their primary language; 63% ($n = 10$) had emergency substitute teacher status at the time of admission; 56% ($n = 9$) had experience as a paraprofessional; and 14% ($n = 2$) of teacher residents reported having a disability.

Results

RQ1: *At what level are evidence-based, comprehensive training components included in the WEA Special Education Teacher Residency Program?*

The WEA Teacher Residency Program incorporated evidence-based, comprehensive training components across multiple levels of its structure and curriculum. At its core, the program was built upon a foundation of cultural competency, equity, diversity, and inclusion, aligning closely with the Multiethnic Think Tank's (2007) position statement on cultural inclusivity and lifelong learning.

This foundational commitment manifests in several key areas of the program. Firstly, the recruitment and retention strategies employed strongly emphasized supporting resident teachers from racial and ethnic minorities. This was accomplished using a multifaceted approach, including strategic marketing to diverse district paraprofessionals and substitute teachers. Teachers, administrators, and other members of the WEA staff also directly contacted individuals identified as potential candidates for the program.

Family engagement formed another crucial component of the program's evidence-based approach. Recognizing the invaluable roles of families in education, the WEA program actively integrated K–12 students' families as partners by including them during focus groups, interview committees, and professional development events. By doing so, the program enriched the training experiences for residents by effectively preparing them to engage with diverse communities in their future roles. This is consistent with research by Antony-Newman (2024) who identified parent engagement as critical for effective teaching. It also considers the importance of involving preservice special education teachers with parents during the preparation process as advocated by Greenbank (2023).

The curriculum design of the residency program further exemplified its commitment to evidence-based practices. Courses were developed, taught, and assessed using the Universal Design for Learning (CAST, 2024) framework, ensuring that lessons were planned using the inclusive and accessible teaching model the program aimed to instill in its teacher residents. Finally, the program maintained a solid connection to state educational standards, carefully aligning its core academic standards with the Washington State Essential Academic Learning Requirements to prepare its teacher residents to meet the state's expectations of competency.

Coursework

In terms of instructional delivery, the program employed a Hyflex (or hybrid-flexible) model (Howell et al., 2023), included face-to-face and

online curricular materials, synchronous and asynchronous courses, and class meetings. This process accommodated diverse learning preferences and schedules. Coursework was mapped across four domains: (1) understanding self and others; (2) education equity; (3) student, family, and community engagement; and (4) learning partnerships. Teacher resident expectations and assessment domains are presented in Tables 3–6 (Washington Education Association, 2024).

In addition to the expectations described in these figures, the WEA strategically mapped each of the Teacher Residency Program experiences (i.e., coursework, assessments, four special education placement experiences) to the Washington State Teaching Standards for special education. The Washington State Professional Education Standards Board (2024b) developed the standards. They include six domains: (1) knowledge of foundations of special education; (2) knowledge of characteristics of learners; (3) knowledge of assessment, diagnosis, and evaluation; (4) knowledge of planning, content, and practice; (5) knowledge of managing student behavior and social interaction skills; and (6) skills and instructional methodology. The case study coincided with the inaugural cohort's second year of program participation. Therefore, persistence rates of teacher residents in the program, certification rates at the state level, and retention rates for special education teachers (i.e., former residents) could not be calculated.

The teacher residents spent the first six months as paraprofessionals in districts where they would serve. The WEA provided seven weeks of coursework in summer one for the teacher residents, one weekend a month of synchronous face-to-face instruction during the residency, and seven weeks of coursework during the summer of year two. The program utilized a competency-based approach to assess the teacher residents during their coursework and four field placements. Teacher residents noted during semi-structured interviews that the diverse instructional formats within the Hyflex course model offered flexibility, enabling participation in synchronous or asynchronous sessions according to their individual needs and schedules.

Table 3. Understanding Self and Others

Understanding self and others: Awareness as diverse cultural beings to better serve others across a range of human differences			
Assessment:	Understanding Self: Educators demonstrate knowledge of self from their perspective and others as related to human diversity	Understanding Others: Educators actively seek to understand, learn, and question their own assumptions about others	Responsiveness: Educators employ the principles of cultural competence, diversity, equity, and inclusion to build connections with communities
Educators are expected to show/illustrate:	• How concepts* shape identity, perspectives, worldviews • Understands self-identity as: ○ a fluid ongoing learning process ○ impacting the work of serving students, families, and others • Themes of: ○ understanding of intersectionality ○ marginalized identities compared to dominant identities ○ power of privilege and dominant perspective ○ The extent to which those identities match or do not match those they serve	• Knowledge of students and staff • Identities • Community • Neighborhood demographics • Culture • Awareness of potential biases based on: ○ social group categories, ○ identities of students, ○ families, ○ communities, ○ and all school staff	• Responsiveness to others in ways that are: ○ asset-focused ○ flexible—changing approach as needed • Application of practical, culturally responsive strategies in all school environments • Strength-based approaches to all students • Accommodate/adapt to diverse student strengths and learning strategies • Centering on cultural competence and cultural humility • Engage, motivate, promote students, families, and other educators by: ○ identifying strengths and adapting accordingly ○ acknowledging emotions ○ providing comfort and assistance when appropriate ○ proactively anticipating needs

Note. *Concepts such as race and ethnicity, gender identity, sexual orientation, disability status, age, educational status, religion, geography, primary language, culture, and other forms.

Table 4. Education Equity

Learning for education equity: Creating opportunities and removing barriers			
Assessment:	Self-Reflection: Educators analyze and reflect on their strengths, biases, and privileges to advance cultural competency, diversity, equity, and inclusion	Commitment: Educators understand the history of U.S. schooling, the ways in which it has been used historically and in present times to maintain an unequal social order	Advocacy: Educators actively pursue a just education system for the common good of all; educators identify and change policies and practices that harm students, families, and communities (zero-tolerance policies, punitive practices, disproportionality in discipline, etc.)
Educators are expected to show/illustrate:	• Acknowledge ways of being that may cause harm to students, families, and other educators • Consider strengths that might be used to produce a change in their sphere of influence • Examine evidence to identify opportunity gaps in their own practice • Seek feedback from students, families, and colleagues to improve their practice • Pursue professional learning that addresses opportunity gaps in their own practice	• Work to improve the education system for historically underserved populations • Examine the history of schooling in the U.S. and its impact on various populations • Hold themselves to the highest ethical standards using equitable and inclusionary practices in all places at all times • Engage in positive and productive professional learning communities that support and sustain all educators	• Empower the voices of students, families, and educators • Demonstrate a sense of advocacy for change • Work collectively to solve persistent problems of practice in education through inquiry and innovation • Partner with diverse students, families, communities, and other educators to improve classrooms, schools, and districts • Seek out opportunities to learn about and lead sustainable change in education

Table 5. Student, Family, and Community Engagement

Student, family, and community engagement: Including students, families, and communities as valued contributors			
Assessment:	Relationships: Educators continually form authentic, trusting relationships; adapt approaches; and reflect on their own identities, perspectives, and socialization	Communication: Educators can explain how communication styles may differ across cultures and adjust content or conversation to others' lived experiences and interests	Service: Educators serve and care for students, families, and communities by centering their voices, building on their experiences, and understanding their needs and strengths
Educators are expected to:	• Apply the power of authentic relationships with students, families, and staff • Understand the power of socialization of identity • Apply culturally responsive strategies, creating a classroom culture • Listen and respond with empathy • Seek out ideas and perspectives • Initiate caring and positive social experiences • Share space and engage in activities	• Learn strategies to adjust to student cultures based on individualism and collectivism (group/tribal focus) • Provide additional resources and strategies for multilingual communication with families and communities • Adapt communication strategies to match the preferred communication styles of others • Compose or select written materials using the principles of plain talk and multiple languages • Employ a variety of strategies to maintain communication with students and families	• Learn inclusive strategies for community voices in classroom curriculum and activities • Learn how to integrate student/community focus data into classroom curriculum and instruction • Learn how to integrate restorative practices to resolve classroom discipline • Provide time, space, and opportunity for students, families, and communities to share their experiences and assets • Design experiences with and for students, families, and educators that engage, reflect, and honor their uniqueness in the community • Provide effective and timely help to resolve problems with and among students, families, and communities

Table 6. Learning Partnerships

Learning partnerships: Creating conditions that support partnerships and shared responsibility for learning			
Assessment:	Shared Expertise: Educators create an environment that welcomes all students and families by recognizing that the school belongs to them and the community	Collaboration: Educators support partnerships by shifting focus on the individual to the collective “we”; educators collaborate with a variety of roles inside and outside the school community	Shared Decision-Making: In a diverse society, students, families, and communities are recognized and valued for the assets and perspectives they bring; educators seek their input and pursue shared decision-making
Educators are expected to:	School faculty, staff, and administration: • Highlight, center, and apply community knowledge and expertise for partnerships and to support learning • Introduce strategies that create a welcoming environment to: ○ students ○ families ○ community entities • Co-design learning spaces that represent people, histories, and cultures reflected in communities • Provide ways for students, families, and communities to participate and take risks that support learning	• Provide specific protocols to include student, family, and community leaders as part of the school culture and decision making • Provide specific strategies, conversations to help build relationships among families, communities, students, and staff • Build partnerships based on shared interests and desired outcomes • Set cooperative learning goals for classrooms, schools, and districts • Facilitate collaboration across populations	• Provide strategies to create school community based committees that participate in shared decision making • Provide strategies to include community stakeholders in the design process prior to completing the product (focus groups, equity teams) • Share ownership for learning by sharing decision-making power with those impacted by the decision whenever possible • Allow students, families, and community members to provide input in decision-making processes • Ensure adequate research has taken place before making decisions that impact others

Mentors and Coaches

Mentoring has improved teacher performance and retention in the field (Evashkovsky & Osipova, 2023). The WEA paid mentors in the program for their work with the residents. Each mentor had at least three years of teaching experience and letters of support from their school districts noting their aptitude to become a successful mentor. Mentors underwent a comprehensive training regimen comprising 16 days of intensive preparation during the initial summer, monthly Saturday sessions throughout the academic year, and a five-day reflective workshop for program evaluation and refinement in the subsequent summer.

Coaches, who were senior members of the district faculty, provided regular guidance to mentors and teacher residents during weekly or biweekly meetings. In return, they received release time and a stipend to perform their duties. It is essential to note that the district administration and the WEA vetted the mentors and coaches who volunteered for the project before assuming their roles. Coaches focused on posing reflective questions and suggesting high-leverage practices to enhance the residency experience (Rakap & Balikci, 2023). In addition to their direct support roles, coaches actively participated in the curriculum planning and attending monthly meetings or more frequently as needed. Their integral involvement in program development, coupled with the stipends provided by the WEA, underscored the value placed on their expertise and contributions.

Assessment

Teacher residents were formally assessed by field supervisors who were compensated by WEA as independent contractors at the midpoint and conclusion of each placement experience. Teacher residents demonstrated competency in the standards and high-leverage practices identified at the beginning of each field placement. An example of the special education rotations a teacher resident might experience, depending on the district, would be (a) elementary self-contained classroom, (b) middle school resource room, (c) self-contained life skills high school classroom, and (d) inclusive co-teaching high school classroom. Each teacher resident had unique experiences based on the needs of their placement district(s). Small rural districts were able to partner to ensure four unique placements could be offered to the teacher residents. Cohorts rotated through the same placements within the district(s). The current resident assisted the next resident during the transition process to a new placement. This rotational cohort model allowed residents to develop bonds within their cohort and across the school district(s).

RQ2: *At what level were emerging technologies incorporated in the Teacher Residency model?*

The program incorporated Mursion software to assess potential teacher resident interactions with virtual students with disabilities at different grade levels. Mursion incorporates AI to develop these virtual students with disabilities. During these interactions, potential teacher residents interacted with virtual students with disabilities, spanning from low incidence (i.e., students with intellectual disabilities) to high incidence (i.e., students with specific learning disabilities). The virtual students expressed varied degrees of stress, anxiety, behavior challenges, and executive function deficits. Potential teacher residents were presented with scenarios in which they needed to teach the students a specific content standard. They reflected on the interaction with members of the interview committee, discussed their strategies, and identified areas in need of improvement.

Emerging technologies such as Google's Jamboard and mobile-based speech generation devices were integrated throughout students' coursework and seminars. Technology goals were linked to Washington State Standards and the International Society for Technology in Education (ISTE) Standards. In addition, teacher residents evaluated and implemented both assistive and instructional technologies with their students during their four nine-week rotations. These assistive and instructional technology evaluations were resident teacher and K-12 student specific. Meaning, each teacher resident experienced different types of technology based on their individual placement and K-12 students during the rotation. The experiences were discussed and analyzed during the seminars. This process was overseen by their mentor teacher, instructional coach, and WEA supervisor. In addition, WEA leadership participated in monthly professional development with CIDDL faculty, who provided comprehensive professional development at several events during the winter and spring.

RQ3: *What types of incentives were provided to the teacher residents?*

The teacher residents were paid a living wage and health insurance, provided a venue for four nine-week residence placements, and provided mentors and instructional coaches within the district. In return, the Residents committed to working in the district where the residency occurred for three years upon obtaining licensure. Teacher residents finished their certification with employment at the highest degree obtained (e.g., bachelor's degree) plus 90 clock hours of professional development. This translates to income of approximately \$72,000 annually in their first year as certified teachers.

Funding for the teacher residents was split between the WEA, who provide funding for the coursework, mentors, coaches, and placement evaluators, and local districts who provided funding for a salary of at least \$40,000 a year and benefits including health care. The WEA offset benefit costs for the district by providing \$12,000 per teacher resident to the districts. A grant from the State of Washington, Office of the Superintendent of Public Instruction #20220852 supports WEA funding. An additional grant from the Department of Labor to the State of Washington to support this work was recently secured but has yet to be executed at the time of writing this article. Grants supporting this innovative program total more than 10.5 million dollars to date. This funding provides evidence of the program's importance to the future teaching needs in the state.

Discussion

The WEA Teacher Residency Program represents a pioneering approach to alternative teacher certification, particularly within the special education sector. Unique in its union-led structure, this program addresses the urgent need for special education teachers and the broader goal of diversifying the teaching workforce. By recruiting individuals from underrepresented racial or ethnic groups, emergency certified teachers, English language learners, and paraprofessionals, the program creates a teaching force that is more reflective of student demographics (Carver-Thomas, 2018). The use of strategic recruitment aligns with national efforts to enhance teacher diversity, which has been shown to improve educational outcomes for students from diverse backgrounds (Kimmel et al., 2020).

Implementing culturally responsive teaching practices is another crucial component in effective alternative teacher certification programs. Research has consistently emphasized the importance of equipping teachers with the skills to address the needs of culturally and linguistically diverse students (Gay, 2018; Ladson-Billings, 2014; Theobald et al., 2022). Culturally responsive teaching practices have been shown to enhance educational outcomes for diverse students and prepare teachers to create inclusive learning environments that celebrate and leverage students' cultural backgrounds (Hammond, 2015; Khalifa et al., 2016). Recognizing this imperative, the WEA Teacher Residency Program has integrated culturally responsive practices at its core, aligning with the Multiethnic Think Tank's (2007) position statement on cultural inclusivity and lifelong learning. The program centers its approach on the Think Tank's principles of culturally competent education, culturally and linguistically responsive education, and alternative

assessments for measuring student academic achievement, demonstrating a commitment to addressing the historical exclusion and underrepresentation of certain populations in the teaching profession.

WEA has implemented intentional recruitment strategies targeting historically excluded populations to support this commitment further. This approach is crucial, as research indicates that teachers from diverse backgrounds can positively impact students of color, serving as role models and improving academic outcomes (Gershenson et al., 2018; Redding, 2019). Additionally, the program offers financial incentives to support these candidates, addressing one of the primary barriers to entry into the teaching profession for many individuals from underrepresented groups (Baker-Doyle & Petchauer, 2015). The measures are particularly important given the persistent disparities in educational opportunities and outcomes for students from historically marginalized communities (Darling-Hammond, 2010; Milner, 2013). Programs emphasizing culturally responsive teaching practices not only enhance the educational outcomes for diverse students, but also prepare teachers to create inclusive learning environments (Dignath et al., 2022).

The program's design incorporates evidence-based activities through a structured curriculum adhering to the UDL framework, ensuring accessibility and effectiveness for all learners (CAST, 2024). This synchronous and asynchronous curriculum, combined with competency-based assessments and diverse field placements, prepares residents to effectively meet special education students' complex needs (Lohmann et al., 2019). The inclusion of dynamic support mechanisms, such as experienced mentors and nonevaluative coaches, further enhances the professional development of teacher residents (Guha et al., 2016). These supports, alongside financial incentives like a living wage and health insurance, address significant barriers to entering the teaching profession (Banks & Dohy, 2019; Patterson-Stephens et al., 2017), particularly in high-need areas like special education (Mason-Williams et al., 2020).

Technological innovation plays a significant role in the program's success. Using AI for data analysis and the Hyflex course model offers flexibility and enhances the learning experience for teacher residents (Howell et al., 2023). For example, teacher residents could take some courses using a synchronous or asynchronous method depending on their weekly schedules. The options were flexible, meaning they could join a synchronous meeting one week and participate asynchronously the next. These elements ensure the program remains aligned with contemporary educational trends, promoting continuous improvement and adaptation based on emerging needs and technological advancements.

Recent advances in AI have instigated a paradigm shift across a myriad of sectors, including teacher education (Gangone & Fenwick, 2024; Maphosa & Maphosa, 2023). Originating in the mid-20th century, AI transcended from theoretical frameworks to intricate systems mimicking human cognition during discrete tasks (U.S. Department of Education, 2023). AI is rapidly transforming industries from healthcare to finance (Green, 2023). Its integration automates tasks and creates new roles focused on AI management and ethics (Akgun & Greenhow, 2022).

For educators, this shift underscores the need to foster teacher expertise in areas such as cognitive flexibility, critical thinking, and social skill development (Chiu et al., 2023). These skills are needed to prepare students for an AI-integrated, continuously evolving job market (CIDDL, 2024). Teacher education programs must model these characteristics, ensuring future educators can guide students effectively in an AI-dominated landscape (Marino et al., 2023).

Limitations

While the program shows promise, several challenges and limitations must be acknowledged. Scalability and sustainability remain critical, particularly in ensuring consistent quality across diverse district contexts. Additionally, the short time frame and small sample size of the current study limit the generalizability of the findings. Future research should focus on longitudinal studies to track the career trajectories of program graduates and comparative studies with traditional certification routes to provide a comprehensive evaluation of the program's effectiveness.

Conclusion

This article examined the development and implementation of the WEA Teacher Residency Program using an exploratory case study designed to explore the evidence-based strategies included in the country's first union-led teacher preparation program. While focused on special education, the principles and practices demonstrated by the WEA program offer valuable insights that can be generalized to other effective teacher preparation initiatives across various disciplines. The WEA Teacher Residency Program exemplifies a robust, innovative approach to addressing the special education teacher shortage while promoting inclusion in the teaching workforce. By strategically recruiting and supporting a racially, ethnically, and linguistically diverse cohort of teacher residents, the program addresses the immediate need for qualified special education teachers and contributes to a more inclusive and representative teaching workforce.

Continuous evaluation and adaptation will be crucial to sustaining the program's success and ensuring it can meet the evolving needs of special education in Washington State and beyond. The program's emphasis on evidence-based practices, comprehensive support, and technological integration provides a model that can be emulated and adapted by other states and educational organizations seeking to address similar challenges in special education teacher preparation. By fostering a diverse and well-supported cadre of special education teachers, the WEA Teacher Residency Program holds significant potential for positively impacting student outcomes, promoting educational equity, and setting a precedent for future teacher preparation initiatives.

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Authors' Note. The contents of this publication were developed under a grant from the U.S. Department of Education #H327F20008. However, contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government. Project Officer, Christina Diamond, Ph.D.

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