

Research Brief

**NEW EVIDENCE ON SPECIAL
EDUCATION TEACHER
PREPARATION**

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American Institutes for Research/CALDER

Suggested citation:

Theobald, R. (2022). *New Evidence on Special Education Teacher Preparation*. (CALDER Policy Brief No. 31-0322). National Center for Analysis of Longitudinal Data in Education Research.

New Evidence on Special Education Teacher Preparation

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CALDER Policy Brief No. 31-0322

Abstract

Two recent CALDER studies published in *Exceptional Children* provide new evidence about special education teacher preparation and its implications for students with disabilities. The first study (Theobald et al., 2021) shows that special educators who received dual endorsements in special education and another subject had lower rates of workforce entry and retention in special education classrooms. The second study (Theobald et al., 2022) demonstrates that students with disabilities experienced greater reading gains when their district and their special education teacher's preparation program both used/emphasized evidence-based literacy practices. Together, these papers suggest caution around state-level policies that seek to use dual licensure to address special education teacher shortages, but also suggest potential promise around better aligning special educator literacy preparation and practice as a policy lever for improving reading outcomes for students with disabilities. Future research could study specific policy interventions to design dual-license programs, address special educator shortages, and better align special educator preparation and practice.

Acknowledgements

The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R324A170016 to the American Institutes for Research. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education. The author thanks Nathan Jones for comments that improved this brief.

The author gratefully acknowledges financial support from CALDER, which is funded by a consortium of foundations (for more information about CALDER funders, see www.caldercenter.org/about-calder). All opinions expressed in this paper are those of the authors and do not necessarily reflect the views of our funders, data providers and partners, or the institutions with which the author(s) are affiliated, and all errors are our own.

“Over the past 9 years, researchers have capitalized on state data systems to draw conclusions about general education teacher education programs and their candidates based on eventual performance once they transition to their first teaching jobs (e.g., Goldhaber, Krieg, & Theobald, 2016; Goldhaber et al., 2013; Ronfeldt et al., 2013). This ... growing body of research offers the advantage of improving the methodological rigor of research on teacher education, an area where we have few studies that support causal inferences. Efforts by states to improve the quality of data on programs and their candidates also encourage the kind of systematic study our field [the field of special education] desperately needs. We believe that studies like this should be one source of evidence—among many others—to support changes in preparation.”

Brownell, Jones, Sohn, & Stark, 2020

Motivation: Extending the Evidence Base on Special Education Teacher Preparation

As described by Mary Brownell and colleagues in a 2020 review in *Teacher Education and Special Education*, research on special education teacher preparation has primarily focused on classroom- and program-level interventions to improve special educators’ effectiveness in teaching students with disabilities (SWD) and eventual workforce retention. Important and influential examples from this prior research include studies connecting beginning special educators’ knowledge and skills acquired in teacher preparation to student reading gains (Brownell et al., 2009), the length of special education candidates’ student teaching experiences to workforce retention (Connelly & Graham, 2009), and special educators’ licensure pathways to their later perceptions of preparedness and efficacy (Nougaret et al., 2005; Sindelar et al., 2004).

But with some important exceptions (e.g., Gansle et al., 2015; Noell et al., 2014), there has been relatively little *systems-level* research on special education teacher preparation that can inform state and federal policy. This is important because special education teacher preparation is back in the policy spotlight with ongoing and persistent special educator shortages (e.g., Mason-Williams et al., 2020) and long-standing concerns about reading instruction (e.g., Education Week, 2019), particularly for SWD (e.g., Leko & Brownell, 2011). Notable prior examples of systems-level research on these topics include studies that have used federal data to document variation in special education teacher shortages (e.g., McLeskey et al., 2004; Peyton et

al., 2021) and state-level research connecting special educator licensure to outcomes for SWD (e.g., Feng & Sass, 2013; Gilmour, 2020).

This prior work provides an important research base that informs the new research discussed in this policy brief. This new research seeks to address a single overarching policy question: **What *specific teacher preparation experiences* predict the workforce entry, effectiveness, and retention of special educators?** Specifically, this policy brief provides an overview of findings from an ongoing project—funded by the National Center for Special Education Research at the Institute for Education Sciences (<https://ies.ed.gov/ncser/>)—that combines *state-level data on students and teachers* from Washington State (www.k12.wa.us) with *program-level data on teacher candidates* provided by 15 teacher education programs (TEPs) in Washington participating in the Teacher Education Learning Collaborative (TELC, www.telc.us). The combined dataset for this project allows us to follow over 1,400 special education teacher candidates from these TEPs to their student teaching placement(s) and into the state’s public teaching workforce.

Overview of Project Findings

The main findings from this project to date are now published in two articles in *Exceptional Children* (Theobald et al., 2021, 2022). The first of these papers (Theobald et al., 2021) is a descriptive analysis of specific measures of special education teacher preparation collected from the TEPs participating in TELC and their relationships with workforce entry and early-career retention. This analysis documents *overall* high rates of workforce entry and retention for these special education candidates: specifically, over 80% of the special education candidates in the sample enter a public teaching position in Washington within 3 years of completing their preparation program, and attrition rates are lower than 10% in each year of data.

That said, rates of entry into and retention *in special education teaching positions* are considerably lower, particularly for candidates who hold a dual endorsement in special education and another subject; for example, fewer than 70% of these candidates enter a special education position immediately, and attrition rates of special educators from these positions into general education teacher positions are generally higher than overall attrition rates from the public teaching workforce in each year.

As summarized in **Figure 1**, there are at least two implications to these trends. The first is that a large proportion of candidates who were trained to be special educators are no longer in special education positions as they progress in their careers; for example, as shown in Panel A of Figure 1, less than half of the 2010 graduating cohort of special education candidates in our data were teaching in special education positions by 2016. A second consequence—and a feature of the teacher labor market not often discussed in the context of special education teacher shortages—is that, as shown in Panel B of Figure 1, there are far more teachers in the state’s workforce who have the necessary credentials to teach special education than are teaching in special education positions in any given year.

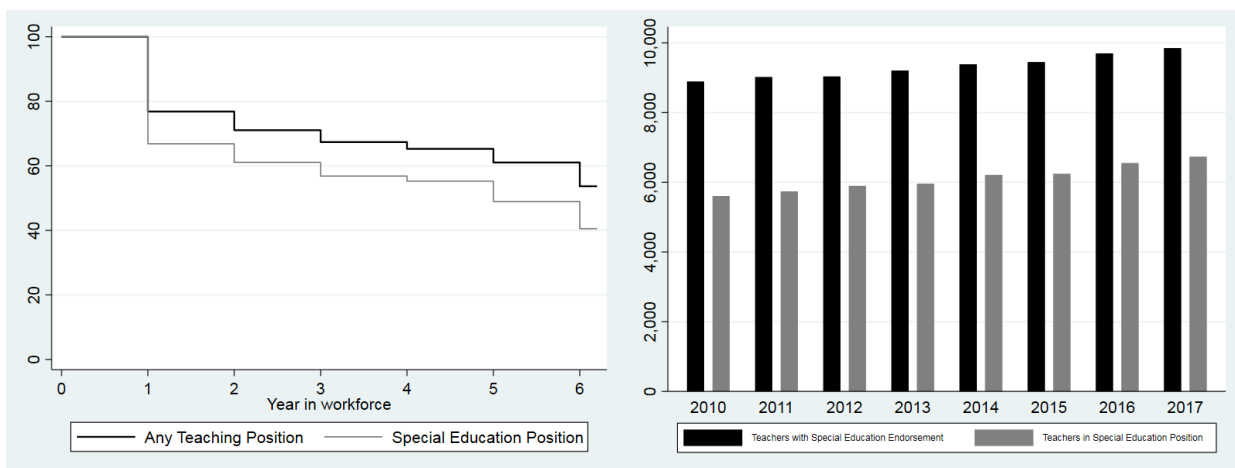


Figure 1. Entry rates and retention rates by year of experience for 2010 graduating cohort (Panel A, reproduced from Figure 6 in Theobald et al., 2021) and Washington special education public teaching workforce by endorsement and position (Panel B, reproduced from Figure 3 in Theobald et al., 2021).

The second paper (Theobald et al., 2022) further supplements the TELC data with survey data from special education TEP faculty and K–12 district special education directors in Washington about the literacy practices emphasized/used in their TEP/district. For the subset of special education candidates who later taught English language arts in special education classrooms in Grades 4–8 in the state, we are then able to assess the degree to which special education teacher preparation, district literacy instructional practices, and the alignment between preparation and practice were associated with the reading test score gains of SWD in their classrooms. This analysis shows that these students tend to have larger reading gains when their districts use evidence-based literacy decoding practices (e.g., phonological awareness, phonics, and reading fluency) *and* when their special education teacher graduated from a TEP that also emphasizes these practices. For example, and as shown in **Figure 2**, SWD who are learning reading a) in a district that uses phonological awareness, phonics, and reading fluency; and b) with a special education teacher who graduated from a TEP that emphasizes these same practices; has reading gains that are about 0.05 standard deviations higher than the average student. In contrast, these same models suggest that SWD in districts that use balanced literacy practices tend to have lower reading gains, all else equal.

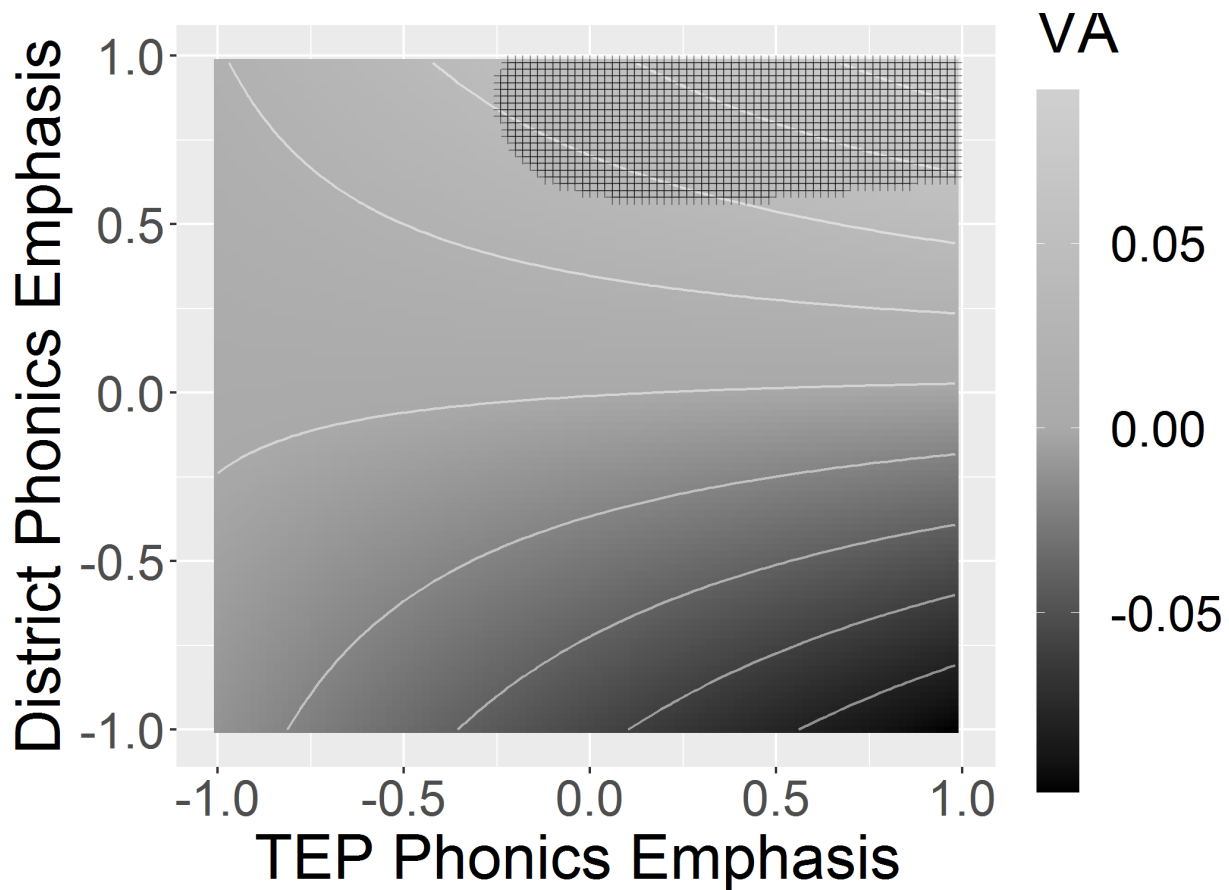


Figure 2. Predicted ELA test score gains by teacher education program (TEP) and district emphasis on “phonics, fluency, and comprehension” (reproduced from Figure 3 in Theobald et al., 2022).

Both papers also have findings related to the student teaching placements of the special education teacher candidates in the data, and specifically the characteristics of the mentor teacher (or “cooperating teacher”) who supervised this placement. In Theobald et al. (2021), we also show that special education candidates who are supervised in student teaching by a cooperating teacher who is endorsed in special education are more likely to become a special education teacher, even when controlling for whether the placement is in a special or general education setting. And in Theobald et al. (2022), we find that SWD tend to have larger reading gains when their special education teacher’s student teaching placement is supervised by a more experienced cooperating teacher.

Policy Implications and Recommendations

The state-level data used in this set of analyses lends itself to state-level policy conclusions, and there are several potential implications of this work. The first is a note of caution: while Washington (like many other states) has shifted to requiring dual endorsements of all special educators, our analysis of workforce entry and retention suggests that these policies may have the unintended consequence of potentially exacerbating shortages of educators in special education classrooms. That said, these potential consequences need to be balanced against the potential benefits of having more general educators with special education endorsements to serve SWD in inclusion settings.

“Policymakers may also want to consider policies like differential pay to make special education teaching positions more desirable to teachers who are already in the public teaching workforce, since many of them already have the necessary qualifications to teach special education.”

The overall trends in the special education teacher labor market in Washington—suggesting that there may not actually be a special education teacher shortage, but rather a shortage of teachers endorsed in special education who are actually teaching special education—also have some potential implications for state policy. Most generally, while many efforts to address special education teacher shortages have focused on special educator retention or recruitment from outside the profession, policymakers may also want to consider policies like differential pay to make special education teaching positions more desirable to teachers *who are already in the public teaching workforce*, since many of them already have the necessary qualifications to teach special education.

The findings connecting alignment between the literacy practices emphasized/used in TEPs and districts to outcomes for SWD have clear implications for state and program policy around special education teacher preparation. One natural way to improve the alignment between the practices emphasized/used in TEPs and school districts is to increase efforts to develop more substantive partnerships between TEPs and districts. Another is to mandate literacy programs and curricula that are aligned with the science of reading, as was recently done in Pennsylvania (Murphy, 2022). These policy changes could potentially have substantial benefits for all students, and SWD in particular, who have tremendous ground to make up in literacy skills as schools return after the pandemic (e.g., Bazzaz, 2022).

Finally, both papers contribute to a growing evidence base suggesting that student teaching placements, and particularly the specific cooperating teacher who supervises these placements, can matter for teacher candidate career paths and development. The findings from these papers suggest policies to incentivize more special education student teaching placements with experienced cooperating teachers who hold credentials in special education.

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