

Teacher apprenticeships in North Dakota, South Dakota, and Wyoming: Early lessons from a strategy to reduce teacher shortages

Factsheet

Regional
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Schools nationally are facing pressing teacher shortages. Eighty-six percent of U.S. public schools reported challenges hiring teachers for the 2023/24 school year, with vacancies most frequently cited in elementary and special education.¹ To reduce teacher shortages, nearly all states have launched teacher apprenticeship programs since 2022 to offer a pathway for existing school staff to become fully credentialed teachers.²

The Regional Educational Laboratory (REL) Central has collaborated with leaders of teacher apprenticeship programs in South Dakota and Wyoming to design data collection instruments and co-interpret data. REL Central has also worked, less extensively, in North Dakota to summarize information about their programs. This factsheet summarizes the teacher apprenticeship programs in these states, early learning about experiences and outcomes, and areas for future learning.

What are teacher apprenticeships and how might they reduce teacher shortages?

Apprenticeships are a common earn-and-learn workforce strategy in many industries. In education, [teacher apprenticeships](#) combine on-the-job learning and mentorship, teacher preparation coursework that leads to a state teaching credential, and pay based on skills.^{3,4} Education agencies and entities can register teacher apprenticeship programs with the U.S. Department of Labor (DOL) or a state agency, which can provide access to resources and technical assistance. Although there is minimal research on teacher apprenticeships because of their newness, other teacher workforce studies have found that components included in many teacher apprenticeship programs, such as applied experiences, high-quality instruction, and mentoring are positively associated with teacher effectiveness and retention.^{5,6}

In North Dakota, South Dakota, and Wyoming, teacher apprentices are paraprofessionals or other staff working in school districts who continue earning

“Our first activity with REL Central was to develop a survey of paraprofessionals in South Dakota. Paraprofessionals from 96 percent of school districts in the state completed the survey. The responses indicated strong support for an apprenticeship pathway to teaching. Of more than 600 respondents, 86 percent were interested or maybe interested in becoming a teacher.”

David De Jong,
Dean of the College of Education,
Dakota State University

a salary or hourly wage while pursuing their degree. Teacher apprenticeships function as a type of grow-your-own (GYO) program⁷ that aim to train and certify highly qualified teachers who states and districts can reasonably expect to hire in schools where they are already supporting students.

An overview of the state of teacher apprenticeship programs in North Dakota, South Dakota, and Wyoming

The following pages provide more information on each state's teacher apprenticeship programs, with overall highlights and areas for future learning provided at the end.

North Dakota

The North Dakota Department of Public Instruction (NDDPI) operates GYO programs in partnership with university educator preparation programs, nonprofit organizations, and funders. Two programs, the Senate Bill (SB) 2032 Para-to-Teacher Program and the Registered Apprenticeship Program for Teachers (RAP-T), support paraprofessionals to obtain their bachelor's degree to teach in North Dakota. The programs aim to increase the number of credentialed teachers who intend to live and teach in the state.

NDDPI administered brief surveys in fall 2024 to the paraprofessionals in the SB 2032 Para-to-Teacher Program and to the participating universities in RAP-T. The information presented here is sourced from NDDPI's materials describing their GYO programs^{8,9,10} and from the results of the two surveys.

What are we learning about apprenticeship experiences in North Dakota?

- **Paraprofessionals have shown a broad interest in becoming credentialed teachers.** The 230 spots in the SB 2032 Para-to-Teacher Program were filled within three months of NDDPI accepting applicants in 2023. Paraprofessionals have applied for the program from school districts across the state.

What are early data suggesting about apprenticeship outcomes in North Dakota?

- **Apprentices in the SB 2032 Para-to-Teacher Program who responded to the fall 2024 survey reported high rates of persistence toward becoming certified teachers.** Of the 50 percent who responded, 81 percent were working as a paraprofessional in the program and 10 percent had completed their coursework and needed to student teach. Seven percent had finished the program and only 2 percent had stopped participating. Including those who had already finished, 43 percent of responding apprentices expected to complete the program by the end of 2025. Another 35 percent expected to complete in 2026 and 13 percent in 2027, with 9 percent not providing a date.

“Our Grow Your Own programs allow paraprofessionals to remain in their home community and work in their school district to support themselves and their families while getting their teaching degrees.”

Laurie Matzke,
Assistant Superintendent,
North Dakota Department of Public Instruction

North Dakota programs by the numbers

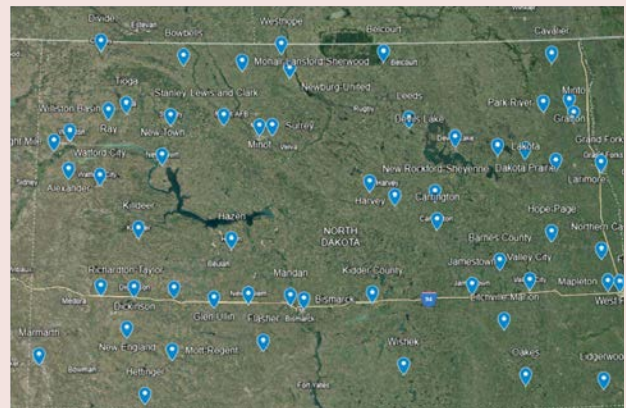
SB 2032 Para-to-Teacher Program

- 230 apprentices
- Paraprofessionals working at least half time apply and receive up to five semesters of tuition assistance at approved universities (up to \$360 per credit hour or \$20,000 per person)
- Funded by the state through June 2025

RAP-T

- 142 apprenticeship slots funded by winter 2024
- School districts partner with universities to apply for funding to provide full financial coverage for up to seven semesters of coursework and mentoring to full-time paraprofessionals who have an associate degree or equivalent
- Funded by a DOL grant through June 2027

Districts with paraprofessionals who applied for the SB 2032 Para-to-Teacher Program



Source: NDDPI

- **As of fall 2024, most teacher apprentices in RAP-T were on track to complete the program.** The six universities participating in RAP-T reported that 83 percent of the 75 RAP-T apprentices they had officially enrolled as of fall 2024 were on track to complete the program by 2027, with nearly 20 apprentices expected to graduate in 2025.
- **Anticipated teaching certifications for RAP-T apprentices include special education K-12 (55 percent), elementary education 1-8 (30 percent), math education 5-12 (11 percent), and English education 5-12 (5 percent).**

South Dakota

The South Dakota Teacher Apprenticeship Pathway (SD TAP) trains paraprofessionals working in South Dakota schools to become certified teachers in the state. SD TAP is collaboratively operated, with partners in the South Dakota Department of Education, the South Dakota Department of Labor and Regulation, the South Dakota Board of Regents, Dakota State University (DSU), and Northern State University. The universities have the most direct engagement with paraprofessionals. SD TAP is funded through a combination of grants, state appropriations, state allocations, contributions from districts hosting apprentices, and apprentices.

Teacher apprentices in SD TAP complete a program of coursework equivalent to that of traditional teacher candidates. For up to two years, apprentices pay reduced tuition (up to \$1,000 per year) and take courses primarily online. At DSU, these online courses are eight weeks long instead of traditional 16-week courses to provide working paraprofessionals more flexibility with when they take courses. Apprentices are also matched with two types of mentors. Primary mentors are experienced educators who provide day-to-day, classroom-focused mentoring in the apprentices' schools or districts. Secondary mentors are retired university professors who remotely help apprentices navigate coursework and career planning.

REL Central partnered with SD TAP designers to develop surveys of paraprofessionals statewide, apprentices, and primary mentors, and to analyze data from secondary mentor logs. These data helped inform program improvements and provided insights into how the program is being implemented. The information presented here is sourced from a fall 2024 SD TAP progress report.¹¹

What are we learning about apprenticeship experiences in South Dakota?

- **Interest in teacher apprenticeships has been strong.** SD TAP received 299 applications for an initial planned cohort of 60 apprentices in fall 2023. SD expanded cohort 1 to 88 apprentices due to the number of applicants and strong interest expressed via a paraprofessional survey co-designed with REL Central. SD TAP received 242 applicants for 90 spots for cohort 2 in fall 2024. Program administrators have prioritized admitting paraprofessionals who have already completed some required coursework to produce teachers most quickly.
- **Program satisfaction has been high among apprentices.** Of the 65 SD TAP apprentices from cohort 1 who responded to a spring 2024 survey, 89 percent indicated they were satisfied with their first year of programming and 97 percent said they would recommend the program to a friend.

SD TAP by the numbers

Apprentices in cohort 1 (began in fall 2023)

- 78 in elementary and special education
- 10 in secondary education

Apprentices in cohort 2 (began in fall 2024)

- 81 in elementary and special education
- 9 in secondary education

Mentor caseloads

- Primary mentors: 1-2 apprentices
- Secondary mentors: 8-10 apprentices

“Learning that 100 percent of teacher apprentices felt they might stay in South Dakota for the rest of their careers was a huge finding because low retention is a big contributor to the teacher shortage problem the apprenticeship model is trying to solve.”

David De Jong, Dean of the College of Education,
Dakota State University

- **Primary mentors most commonly reported that apprentices requested guidance with lesson planning and differentiated instruction** (68 percent and 58 percent, respectively, of 74 respondents to a fall 2023 survey).

What are early data suggesting about apprenticeship outcomes in South Dakota?

- **Most apprentices in cohort 1 (90 percent) had continued in SD TAP as of fall 2024, including three graduates.** Nearly all of those continuing (95 percent) were on track to complete the program by summer 2025, according to program records.
- **Half of the apprentices in cohort 1 have included a focus on special education in their degree program.** For example, 15 percent were pursuing a special education degree and 36 percent were pursuing a combined elementary education/K-12 special education degree. Other apprentices were pursuing a degree in elementary education (38 percent) or secondary education (11 percent). Cohort 2 data were similar.
- **Apprentices plan to teach in the state.** All survey respondents in spring 2024 reported being somewhat or very likely to stay in South Dakota throughout their educational careers.

Wyoming

The Wyoming Department of Education (WDE) launched the Wyoming Teacher Apprenticeship Program (WTAP) in 2023 to grow the teacher workforce by recruiting directly from local communities. WTAP was developed in partnership with the University of Wyoming, the Wyoming County College Commission, and the Professional Teaching Standards Board. It is a Registered Apprenticeship Program with DOL, which provides access to funding and technical support. Management of the program has shifted from WDE to districts, who directly fund the program and connect apprentices to learning and teaching opportunities.

When WDE launched the WTAP, the program featured several key aspects that districts are now implementing with minor adjustments. The program focuses on district staff who have completed some college credits and aspire to be fully credentialed teachers. Apprentices gain classroom experience and continue to earn a salary while completing coursework to become credentialed teachers. As part of their apprenticeship programs, they are matched with a primary mentor who is an experienced teacher in their district and a secondary mentor to provide additional coaching and training, such as on specific content areas or grades where the primary mentor has less familiarity.

Three districts piloted the WDE-sponsored apprenticeship program during the 2023/24 school year. REL Central partnered with program administrators to develop surveys of apprentices, mentors, and school administrators and co-interpret the results to understand experiences during this pilot. These data have shaped the initial learning below.¹²

“I feel we are getting a larger number of strong paraprofessional applicants for our positions now that we are offering the possibility of an apprenticeship program to teaching.”

Bruce Thoren, Superintendent
Fremont County School District #24

What are we learning about apprenticeship experiences in Wyoming?

- **Apprentices cited interest in teaching, earning a salary while learning, program location, program cost, and on-the-job training for teaching as reasons for participating in the program.** Among 22 apprentice survey respondents, at least

WTAP by the numbers

Participation

- 30 apprentices
- 3 school districts

Mentor caseloads

- Primary mentors: 1 apprentice
- Secondary mentors: 5 apprentices

86 percent reported each of these reasons as very or extremely influential.

- **Apprentices have felt strong connections to their school during their apprenticeships.** Most apprentices (87 percent) indicated feeling extremely or very connected to their school during the program.
- **Apprentices have been satisfied with the program’s focus and mentoring.** Most responding apprentices felt that the program’s required competencies were very or extremely relevant to their development as a teacher (82 percent) and rated the quality of program mentoring as excellent (73 percent). Nearly all felt that the mentoring was extremely helpful in improving their comfort in the classroom (96 percent), instruction (95 percent), and confidence in their teaching abilities (96 percent). Nearly all surveyed mentors indicated that they discussed classroom-related challenges and successes with their apprentice during mentoring sessions.
- **Mentors and administrators have viewed the program favorably.** Among those surveyed, 84 percent of mentors and 83 percent of administrators rated the quality of the apprenticeship program favorably.

What are early data suggesting about apprenticeship outcomes in Wyoming?

- **The most common subjects that apprentices reported teaching during their programs were special education (55 percent), general elementary (41 percent), and math (27 percent),** with some apprentices teaching in multiple subjects.
- **Apprentices plan to teach in their school district.** Possibly reflecting the strong connections apprentices reported feeling to their schools, almost all responding apprentices anticipated that in five years they would be in the teaching profession (96 percent) and working in their current school district (91 percent).

Highlights from early learning about apprenticeship experiences and outcomes in the three states

The following highlights are based on the available data for each state.

- The South Dakota apprenticeship program has prioritized paraprofessionals who are closest to completing teaching credentials based on prior coursework because South Dakota had more applicants than funded slots.
- Most apprentices have reported favorable views of their programs and interest in continuing to teach in their states when surveyed, suggesting the apprenticeship model holds promise for preparing new teachers and filling state vacancies.
- Most apprentices in North Dakota, South Dakota, and Wyoming have continued with their apprenticeship programs, with a small number of participants becoming certified as of fall 2024 and a larger wave expected in spring 2025.
- Elementary education and special education have been the most common intended certification areas for apprentices.

Areas for future learning about teacher apprenticeships

As our partners continue to gather and analyze data on teacher apprenticeships, they are focusing on several key questions to guide future learning and improvements.

- Do apprentices complete their programs within the intended timeframes, and what are their completion rates?
- Where are apprentices hired for teaching positions in their state?
- How do retention rates compare between former apprentices and other teachers?
- How do apprentices' skills compare to those of teachers who were traditionally trained?
- What are the downstream effects of teacher apprenticeships on the paraprofessional workforce?

Endnotes

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