In the following report, Hanover Research reviews the challenges of teaching in high poverty, rural schools, and discussed strategies to prepare teachers to work in these settings.
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EXECUTIVE SUMMARY AND KEY FINDINGS

INTRODUCTION

In this report, Hanover Research reviews information on preparing teachers to work in high-poverty rural school districts. This report includes a combination of research specific to teacher retention in high-poverty or rural schools and general research on teacher retention and resilience that may be relevant to high-poverty rural schools. The report includes the following sections:

- **Section I** reviews issues facing teachers in rural and high-poverty schools that may contribute to teacher attrition, as well as factors that may promote teacher resilience.
- **Section II** reviews strategies that school districts and university-based teacher preparation programs can adopt to prepare teachers to work in high-poverty rural schools.

KEY FINDINGS

- **Research suggests that school climate factors have a strong impact on teacher retention, which may be partially responsible for increased teacher turnover in high-poverty schools.** Several studies relying on teacher surveys have found that teachers’ self-reported working conditions strongly influence their job satisfaction and intent to remain in the same school. A study which surveyed teachers at a rural school in North Carolina with an unusually low turnover rate found that teachers reported high levels of encouragement and support from administrators, suggesting that administrative support may be associated with improved retention outcomes.

- **Rural areas may face unique challenges in attracting and retaining teachers.** A survey of administrators in nine rural schools participating in the federal School Improvement Grant program found that administrators reported long commutes and a lack of adequate housing made it difficult for them to attract and retain teachers. In addition, a 2012 study published by the Center on Education Policy and Workforce Competitiveness at the University of Virginia suggested that a lack of amenities such as shopping and access to health care, and a perception of rural communities as tight knit and lacking in privacy, discouraged teachers from pursuing careers in rural schools.

- **Some research suggests that particular personality traits may be associated with new teachers’ likelihood of remaining in particular schools or the teaching profession in general.** For example, a 2015 study by researchers at the University of North Carolina at Chapel Hill’s Education Policy Initiative at Carolina (EPIC) found that new teachers’ levels of conscientiousness were significantly correlated with their likelihood of remaining in teaching positions in the same state after their first year. Similarly, a 2014 study published in *Teachers College Record* found that ratings of grit, a psychological construct associated with persistence over time, were more strongly correlated with first-year teachers’ retention in the classroom. Teacher preparation
programs may wish to incorporate these personality traits into the selection process for teacher candidates, although the EPIC study warned against using personality assessments as the only criteria in the teacher selection process.

- **Some research suggests that that many teachers prefer to work near their hometowns.** This implies that teachers from rural areas may be more likely to remain in rural districts. For example, a longitudinal study in the journal *Education Evaluation and Policy Analysis* which compared students who ultimately became teachers to their peers who obtained bachelor’s degrees but did not become teachers found that teachers were significantly more likely to live within 20 miles of the school where they had attended Grade 10. Similarly, a study of new teachers in New York between 1999 and 2002 found that 61 percent of teachers began teaching within 15 miles of their hometown.

- **To attract teachers with pre-existing ties to the area, several districts and states have developed “grow your own” teacher programs.** These programs provide access to teacher preparation programs to individuals already living in rural areas, often including paraprofessionals already employed by the district or current high school students. Grow your own teacher programs, such as the University of Nebraska at Kearney’s Transitional Certification Program, often rely on online coursework to expand access to aspiring teachers in rural communities.

- **Grow your own programs have had mixed results.** While some programs have successfully trained and retained substantial numbers of teachers, other programs have been unable to keep participants in the classroom. Grow your own programs in rural areas may face additional challenges, as some research suggests that teachers with rural backgrounds are more likely to move to non-rural schools than teachers with urban backgrounds are to move to non-urban schools.

- **Teacher preparation programs may also wish to prepare future teachers for the unique needs of rural schools.** For example, teachers in rural schools may be more likely to teach outside their original certification area, so teacher preparation programs focused on rural schools could encourage candidates to obtain multiple certifications or certifications in broad content areas rather than specific subjects. In addition, programs such as California State University, Chico’s rural teacher residency program place aspiring teachers in student teaching positions in rural schools to familiarize them with teaching in a rural setting.

- **School and teacher preparation programs preparing students to work in high-poverty schools may also wish to incorporate content focused on best practices for teaching in high-poverty schools.** Some programs designed to prepare teachers for working in high poverty schools, such as Salisbury University’s early childhood education program, incorporate a discussion of issues related to poverty and diversity in their curricula. Similarly, Metropolitan Nashville Public Schools incorporated issues related to poverty into its induction process for new teachers and offered ongoing professional development focused on issues related to poverty.
SECTION I: ISSUES FACING TEACHERS IN HIGH-POVERTY RURAL SCHOOLS

This section discusses factors affecting teacher retention in high-poverty and rural schools, beginning with a discussion of challenges facing teachers in rural schools and challenges specific to high-poverty rural schools. This section concludes with a review of literature suggesting factors, including school climate factors and teacher personality traits, which may encourage teachers to remain in rural schools.

This section relies primarily on information from academic studies, supplemented with information from advocacy organizations and research institutes focused on education issues. While the overall report focuses on research specific to rural or high-poverty schools, this section includes some general research on teacher retention and resilience that may be relevant to rural and high-poverty schools.

CHALLENGES FACING TEACHERS IN RURAL SCHOOLS

Rural school districts sometimes face unique challenges in recruiting and retaining teachers. A study of nine rural schools participating in the School Improvement Grants (SIG) program from the 2010-2011 to the 2012-2013 school years found that school staff identified the location-related factors listed in Figure 1.1 as obstacles to teacher recruitment and retention. To address these obstacles, district administrators reported providing financial incentives, including signing bonuses, performance-based pay, and financial support for commuting costs. District administrators also reported conducting outreach to potential teacher candidates in university teacher preparation programs and efforts to improve the working environment for current teachers.¹

![Figure 1.1: Obstacles to Teacher Recruitment and Retention Reported by Rural Schools](chart)

<table>
<thead>
<tr>
<th>CHALLENGE</th>
<th>NUMBER OF SCHOOLS REPORTING (OUT OF NINE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long teacher commutes</td>
<td>6</td>
</tr>
<tr>
<td>Limited housing and amenities</td>
<td>4</td>
</tr>
<tr>
<td>Low teacher salaries</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: National Center for Education Evaluation and Regional Assistance²

The social structures of rural communities may also pose challenges to new teachers. For example, teachers in rural communities may have less personal privacy than teachers in urban or suburban communities, and may perceive rural norms and social structures as constraining. In addition, teachers in rural schools may have multiple types of relationships with students and their parents, such as serving as athletic coaches or forming social

² Chart contents taken from: Ibid., pp. 9–10.
relationships with parents. A 2012 working paper published by the Center on Education Policy and Workforce Competitiveness at the University of Virginia suggested that a lack of community amenities, such as shopping and health care, as well as a perception of rural communities as tight-knit, dissuaded teacher candidates from pursuing careers in rural schools. Based on an analysis of teachers who began their careers in New York between 1994 and 2002, this study found that teachers, especially those with rural or suburban hometowns, were more likely to begin teaching in areas closer to colleges offering teacher education programs and with more shopping options and higher average rents, which were used as a proxy for unmeasured amenities.

In addition to challenges related to rural school settings, teachers at these schools may face challenges due to school structures and working conditions. For example, because rural schools and districts tend to be smaller than their urban and suburban counterparts, rural teachers may be more likely to teach multiple subjects and grade levels. As a result, rural school districts may wish to recruit teachers with certifications in multiple subject areas. A 2015 report which used data from the Schools and Staffing Survey (SASS), a national survey of teachers administered by the National Center for Education Statistics (NCES) in 1999, 2003, 2007, and 2011, found that teachers in rural schools were significantly less likely than other teachers to report engaging in professional development during the previous year. However, teachers in rural schools reported having somewhat more influence over their schools and autonomy in the classroom than teachers in urban or suburban schools.

**Teachers in rural districts may also have unique professional development needs.** For example, a 2009 survey of rural special education teachers found that teachers reported a need for greater professional development focused on specific disability types. In particular, respondents frequently reported working with students with low-incidence disabilities such as autism and emotional behavioral disorders that were outside their original certification, and requested additional professional development to support their work with these students. Respondents also reported a desire for more professional development focused on their work in general education classrooms, particularly regarding curriculum content,

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including students receiving special education services in general education classrooms, and collaboration with general education teachers.\(^7\)

**CHALLENGES FACING TEACHERS IN HIGH-POVERTY SCHOOLS**

High-poverty schools may also pose specific challenges to teachers. A 2009 report on teacher recruitment and retention by the National Education Association (NEA), a national teachers union, in collaboration with the Center for Teaching Quality, suggested that teachers in high-needs schools experienced increased workloads due to the demanding social-emotional, academic, and disciplinary needs of students, with work commitments commonly exceeding 60 hours per week. This report also suggested that teachers in high-needs schools faced greater challenges differentiating instruction due to wider ranges of student academic needs, particularly increasing populations of English language learners (ELLs).\(^8\)

A 2015 article in the journal *Teachers College Record* argues that working conditions in high-poverty schools contribute to increased teacher turnover in these schools. Although previous research had suggested that teacher turnover in high-poverty schools was driven primarily by teachers’ preferences to avoid working with poor and culturally diverse students, this article cites more recent research which suggests that teachers leave high poverty schools “because the working conditions in their schools impede their chance to teach and their students’ chance to learn.”\(^9\)

For example, a 2012 *Teachers College Record* article co-authored by Susan Moore Johnson, also one of the co-authors of the aforementioned 2015 article and a professor at the Harvard Graduate School of Education, reviewed the relationship between school working conditions measured in a statewide survey of teachers in Massachusetts and teachers’ reported job satisfaction.\(^10\) This study found that school climate factors were responsible for around 29 percent of overall variation in reported job satisfaction, while student demographics alone were responsible for only 6 percent of the variation, and that controlling for school climate factors reduced the apparent impact of student demographics on job satisfaction and career

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http://scholar.harvard.edu/files/mkraft/files/johnson_kraft_papay_teacher_working_conditions_final.pdf?m=1432425416
plans. This study also found that teachers were substantially more likely to plan to leave their schools when working conditions were poor.\(^\text{11}\)

A 2009 study published by the National Center for Analysis of Longitudinal Data in Research suggested that perceptions of administrative leadership may have a particularly strong impact on teachers’ desire to remain in their schools. This study reviewed a 2006 survey of teachers in North Carolina which included questions about working conditions and teachers’ intentions to remain in their schools.\(^\text{12}\) This study found a significant positive correlation between teachers’ ratings of their administrative leadership and their intention to remain at the same school when controlling for student demographic characteristics at the elementary, middle, and high school levels. This study also found a significant positive correlation between intention to remain and teachers’ empowerment within the school at the high school level, and between intention to remain and planning time at the middle school level.\(^\text{13}\)

**Rural school districts may be more likely to experience certain forms of poverty that pose unique challenges to schools and teachers.** For example, a 2007 article on rural schools in the journal *The Future of Children* reported that schools in rural areas with heavily agricultural economies may serve large numbers of children from migrant farm families. These families face high mobility rates and unique personal challenges, including malnutrition, gaps in school attendance, and substandard housing. Rural schools in areas with industries that rely heavily on immigrant labor with high rates of turnover may also face challenges relating to increased populations of low-income ELLs and student turnover. These demographic trends may be particularly challenging for teachers who do not have prior experience working with ELLs.\(^\text{14}\)

**TEACHER RESILIENCE**

School culture may impact the resiliency of teachers in rural schools. For example, a 2007 article in the academic journal *The Rural Educator* surveyed 28 teachers at a rural K-8 school in North Carolina with a substantially lower annual teacher turnover rate than the district or state average and relatively high student achievement. Respondents were asked to rate the school’s implementation of 11 strategies associated with teacher resilience in previous literature along a four point Likert scale.\(^\text{15}\) Figure 1.2 shows the percentage of respondents providing the highest possible rating, “we have this together,” for each strategy. Respondents were most likely to provide the highest rating for strategies associated with respect for teachers, such as encouragement and appreciation of staff, supportive feedback, and fair


\(^13\) Ibid., pp. 24–25.


distribution of resources, but less likely to provide the highest rating for formal recognition of staff and involvement in decision-making.

**Figure 1.2: Resilience-Building Strategies Reported by Survey Respondents**

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>PERCENT OF RESPONDENTS REPORTING “WE HAVE THIS TOGETHER”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouragement of staff</td>
<td>89.3%</td>
</tr>
<tr>
<td>Staff given supportive feedback</td>
<td>89.3%</td>
</tr>
<tr>
<td>Fair distribution of resources</td>
<td>84.3%</td>
</tr>
<tr>
<td>Appreciation of staff</td>
<td>78.6%</td>
</tr>
<tr>
<td>Staff believes they will succeed</td>
<td>78.6%</td>
</tr>
<tr>
<td>Staff express ‘can do’ attitude</td>
<td>78.6%</td>
</tr>
<tr>
<td>Staff engaged in job-specific and organization-wide responsibilities</td>
<td>75.0%</td>
</tr>
<tr>
<td>Staff encouraged to do what really matters</td>
<td>67.9%</td>
</tr>
<tr>
<td>Staff rewarded for risk taking</td>
<td>53.6%</td>
</tr>
<tr>
<td>Staff participation in decision making</td>
<td>53.6%</td>
</tr>
<tr>
<td>Recognition of staff</td>
<td>42.9%</td>
</tr>
</tbody>
</table>

Source: The Rural Educator

Certain personality traits may also affect the likelihood that individual teachers will remain in particular schools. For example, a 2015 study by the Education Policy Initiative at Carolina (EPIC), a research institute focused on education policy at the University of North Carolina at Chapel Hill, tracked the correlation between the Five Factor Model (FFM) personality traits and first year outcomes for 1,790 new teachers, using a 120 item personality survey. This study also found a significant correlation between new teachers’ openness to experience and their likelihood of accepting a first-year teaching position in schools with high poverty levels, high percentages of minority students, or low academic performance. This study found a statistically significant correlation between new teachers’ conscientiousness and their retention in North Carolina’s public schools after one year, as well as a positive but statistically insignificant relationship between conscientiousness and retention in the same school after one year. Based on these findings, the authors of this study suggested that teacher preparation programs consider incorporating personality traits into the selection process for teacher candidates, although they cautioned that these decisions should be made based on multiple indicators, rather than personality assessments alone, as responses to personality surveys may differ in high-stakes environments.

A 2014 study in Teachers College Record examined the impact of grit, a psychological construct associated with resilience, on teacher retention in two longitudinal samples of 154

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16 Chart contents taken directly from: Ibid., p. 22.
18 Ibid., p. 3.
19 Ibid., p. 6.
teachers in low-income school districts.\textsuperscript{20} This study defined grit as “perseverance and passion for long-term goals,” and assessed grit using blind reviews of new teachers’ resumes.\textsuperscript{21} Specifically, resumes were assessed for sustained involvement and achievement in extracurricular activities during college using a seven point rubric.\textsuperscript{22} This study found that grit ratings were strongly correlated with new teachers’ effectiveness and retention over their first year in the classroom, while new teachers’ SAT scores and college GPAs were not correlated with either retention over the first year or teacher effectiveness.\textsuperscript{23}

\begin{flushleft}

\textsuperscript{21} Ibid., p. 3.

\textsuperscript{22} Ibid., p. 14.

\textsuperscript{23} Ibid., pp. 17–18.
\end{flushleft}
SECTION II: STRATEGIES TO PREPARE TEACHERS FOR WORK IN RURAL HIGH-POVERTY SCHOOLS

In this section, Hanover Research reviews strategies that teacher preparation programs can use to prepare teacher candidates to work in high-poverty rural schools. This section begins with a review of teacher preparation strategies for rural schools, including a case study of a teacher preparation program at California State University, Chico that focused on preparing candidates to work in rural schools. This section goes on to discuss strategies for preparing teacher candidates to work in schools with high student poverty levels, including a case study of a preparation program for early childhood educators at Salisbury University in Maryland that focuses on preparing teachers to work in diverse, high-poverty schools and includes student teaching placements in rural schools.

In addition to the two detailed case studies, this section includes information on strategies used by individual teacher preparation programs and school districts. This section also includes available academic research on the effectiveness of these strategies.

STRATEGIES TO PREPARE TEACHERS FOR WORK IN RURAL SCHOOLS

A 2008 report by the Regional Educational Laboratory at Mid-Continent Research for Education and Learning (REL Central) reviewed strategies used by nine teacher preparation programs within its service areas to prepare teacher candidates for work in rural schools. REL Central is one of 10 research centers sponsored by the U.S. Department of Education’s Institute of Education Sciences (IES) to provide research support to school improvement efforts in designated states. This report included a literature review of previous research on rural schools. Based on this literature review, REL Central identified five program elements with the potential to more effectively prepare teacher candidates for work in rural settings:

- Opportunities to obtain certifications in multiple areas,
- Access to distance learning and courses in rural communities,
- Recruitment efforts targeting students who already lived in rural communities,
- Student teaching opportunities in rural schools, and
- Courses focused on issues affecting rural schools.\(^\text{25}\)

Several teacher preparation programs reviewed by REL Central’s 2008 report encouraged teacher candidates to obtain certifications in multiple subject areas. For example, Adams State College in Colorado encouraged undergraduate secondary level teacher candidates to obtain an additional certification in a content area with a shortage area, such as social studies, mathematics, science, or special education. Likewise, the University of Nebraska – Kearney streamlined program requirements to make it easier for teacher candidates to obtain two

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\(^{25}\) Bulleted text adapted from: Ibid.
certifications, and began offering “broad field endorsements” that prepared candidates to teach in multiple related content areas, such as social studies. The rural teacher residency program at California State University, Chico, profiled later in this section, offers students the opportunity to obtain either a multiple subject or an educational specialist certification.

A 2006 article in the journal *Rural Educator* recommends that rural schools invest in ongoing support for new teachers to encourage retention, citing prior research which suggested that teachers are most likely to leave the profession during their first five years of employment. In particular, this article recommends that schools create induction programs that provide newly hired teachers with information about their school and community and assistance with relocation to the area. This article also recommends that rural schools provide new teachers with several years of ongoing mentoring. In general, a 2011 literature review of previous empirical studies of teacher induction programs reported that induction programs appeared to have positive impacts on new teacher retention and classroom practices, as well as on student achievement.

A 2015 report on attracting teachers to rural districts prepared by the Rural Opportunities Consortium of Idaho, a research organization focused on college access for students in rural areas of Idaho, recommends that rural schools create induction programs for new teachers and provide all teachers with job-embedded professional development. Specifically, this report recommends that induction programs for new teachers include personal mentoring, common planning time, and inclusion in social activities to develop self-confidence and include new teachers in the school community. To increase rural teachers’ access to professional development and reduce feelings of isolation, this report recommends creating online professional learning communities that connect teachers across districts.

Several rural school districts have taken steps to provide ongoing support to new teachers. For example, Newtown Public Schools USD 373, located in a rural area of Kansas, implemented a mentoring program for all new teachers, and provided ongoing professional development and technology support. Similarly, Tangipahoa Parish School System, a high-

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26 Ibid., pp. 4, 6.
27 “Rural Teacher Residency Multiple Subject or Education Specialist Credential and M.A.” School of Education - California State University, Chico.  http://www.csuchico.edu/soe/advanced/education/rtr/index.shtml
poverty rural school district in Louisiana, developed an induction program referred to as the Framework for Inducting, Retaining, and Supporting Teachers (FIRST) beginning in 2001. A 2008 article in the professional magazine School Administration reported that Tangipahoa Parish School System increased its first year teacher retention rate from 70 percent to 91 percent between 2001 and 2008. The FIRST program included a five day induction program in a classroom environment with presentations focused on:

- Classroom management,
- Discipline,
- Effective lesson design and delivery, and
- District policies and procedures.

In addition to the initial induction, new teachers received ongoing mentoring through Louisiana’s teacher certification process. Tangipahoa Parish School System provided each school with a full-time FIRST support teacher who provided new teachers with instructional coaching and support in planning and implementing lessons and reflecting on and improving instructional practices. New teachers received additional professional development over a three year period based on an individual needs assessment conducted at the end of the initial induction.

Teacher preparation programs may also wish to provide teacher candidates who do not have rural backgrounds with practicum or student teaching experiences in rural schools. A 2016 article in the journal Global Education Review discussed questionnaires administered to 11 teacher candidates in a master’s degree program with a focus on rural issues. Six of these candidates reported a desire for more time in rural student teaching placements. The authors of the article recommended structuring these placements around rural culture and the influence of place on identity.

**CASE STUDY – CALIFORNIA STATE UNIVERSITY, CHICO**

California State University (CSU), Chico offered a rural teacher residency (RTR) program which combined a Master of Arts degree with a multiple subject or education specialist teaching certification from 2009 to 2015. This program combined academic coursework with a teaching practicum at a rural school. The teaching practicum was intended to be an immersive experience which enabled teacher candidates to develop a deeper understanding

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33 Bulleted text taken verbatim from: Ibid.
34 Ibid.
of their school’s community and resources. According to a 2015 article on the RTR program in *The Hechinger Report*, an online magazine focused on issues in education, this immersion helped teacher candidates move from a deficit-focused view of rural communities created by the secondary literature on rural education to a strengths-based view developed through interactions with rural communities.38

Teacher candidates were placed in a mentor teacher’s classroom in one of four partner districts. Each district was rural and considered high-need by CSU, Chico.39 Mentors were selected based on the following criteria:

- A teaching certification that authorized mentoring assignments,
- At least three years of teaching experience,
- Demonstrated effectiveness in the classroom,
- Use of instructional technology,
- A willingness to reflect on classroom practice and participate in professional development,
- Effective communication and collaboration with colleagues,
- Engagement in inquiry, and
- A commitment to the mission of the program.40

Mentors and teacher candidates worked together in a co-teaching arrangement which included instruction, identifying student needs, developing interventions, and monitoring student progress and instructional strategies. Teacher candidates spent four days each week in their school placement, and two days each week completing academic courses for the master’s degree. In addition, teacher candidates participated in professional learning communities and completed an action research project at the school site.41 Figure 2.1 shows a program timeline for the RTR program.

## Figure 2.1: RTR Timeline

<table>
<thead>
<tr>
<th>TIME</th>
<th>ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>Orientation for teacher candidates</td>
</tr>
<tr>
<td>May</td>
<td>Candidates complete California Basic Educational Skills Test (CBEST) or California Subject Examinations for Teachers (CSET) in Multiple Subject and Writing Skills</td>
</tr>
<tr>
<td>June-July</td>
<td>Academic coursework</td>
</tr>
<tr>
<td>August</td>
<td>One-week training session in co-teaching model</td>
</tr>
<tr>
<td>September</td>
<td>Candidates complete and submit a Program Plan to the RTR Graduate Coordinator</td>
</tr>
<tr>
<td>December</td>
<td>Candidates submit paperwork to CSU, Chico’s Human Subjects in Research Committee</td>
</tr>
<tr>
<td>December-January</td>
<td>Candidates present proposals for action research</td>
</tr>
<tr>
<td>April</td>
<td>Candidates complete the Performance Assessment for California Teachers (PACT)</td>
</tr>
<tr>
<td>May</td>
<td>Candidates file Graduate Clearance Forms for Summer Graduation</td>
</tr>
<tr>
<td>June</td>
<td>Oral examinations and project defenses</td>
</tr>
<tr>
<td>Following Spring</td>
<td>MA Graduation Ceremony</td>
</tr>
</tbody>
</table>

Source: CSU, Chico

Although the RTR program was discontinued due to the expiration of grant funding in 2015, CSU, Chico incorporated elements of the program into the university’s primary teacher preparation program. In particular, CSU, Chico began placing all teacher candidates in its secondary education program in rural schools.

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42 Chart adapted from: Ibid., p. 11.
STRATEGIES TO PREPARE TEACHERS FOR WORK IN HIGH-POVERTY SCHOOLS

Some studies have recommended that teacher preparation programs take specific actions to address issues affecting students in poverty. For example, a 2010 article in the journal *Action in Teacher Education* recommends that teacher preparation programs explicitly include a discussion of the impact of students’ socioeconomic statuses on education and effective strategies for teaching low-income students. In particular, this article recommends incorporating a discussion of poverty into introductory education courses and courses focused on multicultural education and supporting student teaching placements in high-poverty schools. A 2014 review of previous literature on teacher preparation for high-poverty and culturally diverse schools prepared by the Maryland Teaching Consortium (MTC), a consortium of representatives from school districts, university teacher preparation programs, and the state education agency of Maryland, recommended that programs preparing teachers to work in high-poverty and culturally diverse school districts include the components outlined in Figure 2.2.

Figure 2.2: Recommended Components of Programs Preparing Teachers for High-Poverty, Culturally Diverse Schools

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding Oneself</td>
<td><strong>Core Beliefs:</strong> Programs should encourage teachers to explore their own core beliefs about learning and develop a growth mindset about students.</td>
</tr>
<tr>
<td></td>
<td><strong>Reflective Practice:</strong> Programs should prepare teachers to reflect on and adjust their teaching practices using student assessment data, including reflection on issues related to cultural diversity.</td>
</tr>
<tr>
<td>Knowing Students</td>
<td><strong>Understanding Culture:</strong> Programs should explicitly address issues of diversity, and help teachers develop culturally responsive teaching strategies.</td>
</tr>
<tr>
<td></td>
<td><strong>Building Relationships:</strong> Programs should prepare teachers to build relationships with students and their families and incorporate cultural and linguistic diversity into classroom activities.</td>
</tr>
<tr>
<td></td>
<td><strong>The Child as a Learner:</strong> Programs should discuss the impact of constructivist pedagogical theories on multicultural education, particularly for ELLs and students with disabilities.</td>
</tr>
<tr>
<td></td>
<td><strong>Behavioral Intervention:</strong> Programs should incorporate a discussion of culturally responsive classroom management strategies that support students’ cognitive, social, physical, and emotional needs.</td>
</tr>
<tr>
<td></td>
<td><strong>Knowing the Resources:</strong> Programs should prepare teachers to assess the resources available to students and their families and to connect families with community resources.</td>
</tr>
</tbody>
</table>

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### Teaching in Context

<table>
<thead>
<tr>
<th>Concept</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instruction and Assessment:</strong></td>
<td>Teachers should develop effective instructional strategies for diverse student groups, such as ELLs and students with disabilities, and programs should provide teachers with strong basic pedagogical skills. In addition, programs should prepare teachers to use assessment results to inform curricula decisions and provide feedback to students.</td>
</tr>
<tr>
<td><strong>Positive Classroom Environment:</strong></td>
<td>Programs should develop the skills needed for effective leadership of diverse classrooms and teachers should develop students’ self-regulation skills and select culturally diverse curricula, textbooks, and instructional resources.</td>
</tr>
<tr>
<td><strong>Collaboration:</strong></td>
<td>Programs should prepare teachers to collaborate with their colleagues through co-planning and co-teaching</td>
</tr>
</tbody>
</table>

Source: Maryland Teaching Consortium

In other cases, districts have included support for working with students in poverty into their induction programs for new teachers. For example, Metropolitan Nashville Public Schools, an urban school district in Tennessee with a high poverty rate, added professional development focused on the Ruby Payne Framework for Understanding Poverty, differentiated instruction, and the Discipline with Dignity program to its induction process for new teachers. According to a 2005 article in the professional magazine *School Administrator*, Metropolitan Nashville Public Schools also offered ongoing professional development focused on poverty-related issues, including conflict resolution, building effective relationships with families, behavior management, and cultural diversity.

### Case Study – Salisbury University

In addition to suggesting best practices, the MTC reviewed 10 teacher preparation programs in Maryland with a focus on preparing teacher candidates to work in high-poverty schools. One of these programs, an early childhood education certification program offered by Salisbury University, includes student teaching placements at three elementary schools and one early childhood education program within Wicomico County Public Schools, a largely rural school district located on Maryland’s Eastern Shore. Each school participates in a statewide early childhood education initiative for children in high-poverty areas. The early childhood education certification program at Salisbury University includes the Professional Program Requirements outlined in Figure 2.3.

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Figure 2.3: Salisbury University Early Childhood Education Program Required Course

<table>
<thead>
<tr>
<th>BLOCK</th>
<th>COURSE TITLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block A</td>
<td>Integrated Reading and Language Arts Birth-4</td>
</tr>
<tr>
<td></td>
<td>Learning and Assessment for Diverse Classrooms</td>
</tr>
<tr>
<td></td>
<td>Integrating Aesthetic Experiences into Teaching and Learning</td>
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<td></td>
<td>Diversity and the Self</td>
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<tr>
<td>Block B</td>
<td>Play and Creativity in Early Childhood Education</td>
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<td></td>
<td>Integrated Reading and Language Arts Grades K-3</td>
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<td></td>
<td>Teaching Diverse Learners</td>
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<td>Literature for Children</td>
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<td>Diversity and the Family</td>
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<td>Block C</td>
<td>Teaching Mathematics in Early Childhood Classrooms</td>
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<td>Teaching Science in Early Childhood Classrooms</td>
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<td></td>
<td>Teaching Social Studies in Early Childhood Classrooms</td>
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<td></td>
<td>Literacy assessment and Intervention</td>
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<td>Diversity and the Community</td>
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<td>Block D</td>
<td>Early Childhood Education Clinical Practice I</td>
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<tr>
<td></td>
<td>Early Childhood Education Clinical Practice II</td>
</tr>
<tr>
<td></td>
<td>Clinical Practice Seminar</td>
</tr>
</tbody>
</table>

Source: Salisbury University[^48]

As shown in Figure 2.3, the early childhood education program includes two student teaching placements. Teacher candidates also complete classroom places in foundations and methods courses. Teacher candidates are placed in student teaching positions with mentor teachers who “help them understand what it means to be an effective teacher in an economically and culturally diverse school.”[^49] Placement decisions are made by Salisbury University’s Field Experience Coordinator.[^50]

Figure 2.4 shows aspects of the early childhood education program that align with the MTC’s recommendations for programs preparing teachers to work in high-poverty schools.

[^48]: Chart contents taken directly from: “Early Childhood Education Academic Checklist 2016-2017.” Salisbury University - Department of Teacher Education.
http://www.salisbury.edu/academics/checklists/pdfs/Early_Childhood_Education.pdf
[^50]: “Placement Requests.” Salisbury University - Department of Teacher Education.
http://www.salisbury.edu/teachered/Academic%20Information/FieldExperienceTools/FieldPlacements.html
**Figure 2.4: Aspects of Salisbury University’s Early Childhood Education Program Focused on Preparing Teachers to Work in High-Poverty Schools**

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>ASPECTS OF CURRICULUM</th>
</tr>
</thead>
</table>
| Knowing Students             | ▪ Salisbury University’s Early Childhood and Early Childhood/Elementary Education certification programs added coursework focused on mindsets, ELLs, neurological development, and teacher affect.  
▪ Salisbury University’s course on social studies in early childhood education emphasizes the importance of selecting culturally diverse children’s literature  
▪ Salisbury University offers a minor in Social Justice Studies |
| Understanding Oneself        | ▪ Students engage in projects that explore their own ethnic and cultural background  
▪ Faculty participate in a monthly book club focusing on growth mindsets and discuss growth mindsets in language arts methods courses |
| Teaching in Context          | ▪ Salisbury University’s early childhood education program’s added culturally responsive teaching to their focus on developmentally appropriate practices, which also includes a focus on ensuring that content is age appropriate, appropriate for individual students, promotes meaningful and purposeful learning, and leads students to be responsible for their own learning  
▪ Faculty and students work to create a community of learners through discussions with outside speakers and common activities |

Source: Maryland Teaching Consortium\(^{51}\)

The 2014 MTC report noted that Salisbury University was planning to expand its focus on preparing teachers for high-poverty schools with a dropout-prevention plan in middle schools developed through a partnership with Wicomico County Public Schools and faculty at another university in Maryland, and a proposal to add graduate and undergraduate courses focused on issues of cultural diversity. Participants also planned to expand book discussion clubs to include discussions of popular films focused on diverse schools, and holding a parent night in which student teachers and their mentors would help parents fill out school forms to build positive relationships between teachers and families.\(^{52}\)

**GROW YOUR OWN TEACHER PROGRAMS**

Both urban and rural school districts sometimes use grow your own strategies to recruit teachers who will be likely to remain in the district. In these strategies, schools provide support to residents of their areas who wish to obtain teaching certifications. These residents may be current high school students, who receive support through high school coursework, dual enrollment programs, summer programs, or job shadowing opportunities, or adults in


\(^{52}\) Ibid., pp. 129–131.
the community who receive access to and academic support in teacher preparation programs.\textsuperscript{53}

A 2015 report on attracting teachers to rural districts prepared by the Rural Opportunities Consortium of Idaho recommends that school districts in rural areas create grow your own programs that combined online academic coursework offered by university-based teacher preparation programs with mentoring or coaching provided by current district teachers. This report also recommends that districts provide incentives for teachers to obtain additional certifications in multiple content areas, particularly subjects associated with college access courses such as physics and calculus.\textsuperscript{54}

The 2007 article on rural teacher preparation in \textit{The Future of Children} notes that many grow your own programs in rural districts focus on individuals already employed as paraprofessionals within the targeted districts.\textsuperscript{55} Likewise, the Rural Opportunities Consortium of Idaho report recommends that grow your own programs focus on paraprofessionals currently employed in school districts, as well as individuals who had left rural communities for service in the military or Peace Corps and were seeking to return to their hometowns.\textsuperscript{56}

\textbf{School districts can also use grow your own strategies to increase the diversity of their teaching workforce.} For example, Austin Public Schools, located in an area of rural Minnesota with an increasingly diverse student population, is in the process of implementing a grow your own program which will provide access to teacher certification programs to individuals currently employed by the district who have obtained a bachelor’s degree but are not certified teachers, as part of a statewide initiative to recruit more teachers from underrepresented ethnic backgrounds. Participants will spend two years taking courses at a local community college, and a state university will offer courses at school campuses to enable participants to complete the program.\textsuperscript{57}

A series of surveys of rural school district administrators conducted in 2007 by the National Research Center on Rural Education Support, a federally funded research initiative focused on rural schools, found that respondents reported several common teacher recruitment strategies, as listed in Figure 2.5. Notably, 12 percent of respondents reported programs formally identified as grow your own strategies, while larger numbers of respondents reported providing opportunities for individuals currently employed as special education staff or paraprofessionals to obtain additional certifications. This report also found that several

\begin{itemize}
\item \textsuperscript{55} Monk, Op. cit., p. 169.
\end{itemize}
states operated programs to encourage current high school students to pursue careers in teaching.\(^{58}\)

### Figure 2.5: Teacher Recruitment Strategies Used by Rural Schools

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>PERCENT OF RESPONDENTS REPORTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing opportunities for special education staff to obtain additional qualifications</td>
<td>82.9%</td>
</tr>
<tr>
<td>Hiring teachers with emergency or provisional certification</td>
<td>66.7%</td>
</tr>
<tr>
<td>Hiring staff from local service providers</td>
<td>60.0%</td>
</tr>
<tr>
<td>Paying for paraprofessionals to obtain teaching certifications</td>
<td>17.0%</td>
</tr>
<tr>
<td>Using a grow your own strategy</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

Source: National Research Center on Rural Education Support\(^{59}\)

### Research on Grow Your Own Programs

Research on the effectiveness of grow your own strategies presents mixed outcomes. Some research suggests that new teachers prefer to work near their hometowns, suggesting that grow your own programs could have the potential to recruit aspiring teachers who would be more likely to stay in their home districts. However, the effectiveness of individual grow your own programs appears to vary, and some research suggests that grow your own programs in rural areas may recruit fewer teachers who actually remain in their original districts.

### ResearchSuggesting Positive Impacts of Grow Your Own Programs

Research suggests that individuals trained as teachers are likely to pursue teaching careers near their hometowns. A 2012 article in the journal *Educational Evaluation and Policy Analysis* used data from the national Education Longitudinal Study of 1988, which tracked a nationally representative sample of students who were in Grade 8 in 1988 through the year 2000 to compare geographic mobility for teachers and individuals with similar backgrounds in other careers. This study included a sample of 279 participants who became teachers after obtaining a bachelor’s degree with a sample of 2,210 participants who obtained a bachelor’s degree but did not become teachers and 5,046 participants who did not obtain a bachelor’s degree during the survey’s time frame.\(^{60}\) This study found that participants who became teachers lived a median of 13 miles from the school where they had attended Grade 10 in 2000, compared to a median of 54 miles for participants who obtained a bachelor’s degree but did not become teachers.\(^{61}\) Similarly, a 2005 study of teachers who began teaching in New York between 1999 and 2002 found that 61 percent of all teachers in the state began teaching

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\(^{59}\) Chart contents taken with minor alterations from: Ibid., p. 2.  
\(^{61}\) Ibid., p. 7.
within 15 miles of their hometown, and 85 percent began teaching within 40 miles of their hometown.\textsuperscript{62}

The Center on Education Policy and Workforce Competitiveness study found that teachers from rural hometowns were less influenced by shopping amenities, rent, and access to teacher education programs than teachers from urban or suburban hometowns. However, teachers from urban hometowns appeared more likely to work in schools that were farther from airports and located in areas with high unemployment rates than teachers from rural hometowns.\textsuperscript{63} A 2009 article in the journal \textit{The Rural Educator} suggested that teachers from rural areas may be more attracted to a rural lifestyle and have pre-existing ties to rural communities, in addition to a greater understanding of rural culture than teachers with urban or suburban backgrounds.\textsuperscript{64}

In addition, a 2011 article in the \textit{High School Journal} examined the personality traits of high school students participating in Future Educators of America, an extracurricular program which provides high school students with exposure to various aspects of the teaching profession, in 19 rural and suburban high schools in Georgia. The author assessed students’ personality traits using the Self-Directed Search (SDS) Form R, which rates the degree to which respondents’ personalities reflect six domains.\textsuperscript{65} This study found that scores for students in the sample were similar to scores for practicing teachers found in previous research using the SDS. Based on this finding, the author concluded that students in the program had similar personality traits to working teachers, indicating that they would be successful in a teaching career. Citing previous research suggesting that new teachers tend to select positions near their hometowns, the author suggested that schools in areas with teaching shortages create grow your own teacher programs that incorporated the SDS into the selection process.\textsuperscript{66}

A 2014 article in the journal \textit{Rural Special Education Quarterly} surveyed 638 participants in the Centers for the Re-education and Advancement of Teachers in Special Education (CREATE), a grow your own initiative that helped non-certified special education teachers in South Carolina obtain special education certifications. This study found that there was not significant difference in gender, ethnic background, certification, or employment status between teachers in rural and non-rural school districts who had completed the program. However, teachers from rural school districts were significantly less likely than teachers in non-rural school districts to have obtained certifications in teaching students with emotional


\textsuperscript{66} Ibid., pp. 128–130.
disabilities, and significantly more likely to have obtained multi-category certifications. The authors concluded that CREATE had led to a more equitable distribution of teachers with special education certifications across rural and non-rural school districts in South Carolina.  

Some school districts have reported success in attracting and retaining teachers using grow your own programs. For example, Oakland Unified School District, an urban school district in California, reported a 94 percent annual retention rate for teachers certified through its Teach Tomorrow Oakland program in 2011. Likewise, Cassville R-IV, a rural school district in Missouri, reported success with a grow your own program that focuses on high school students in the district and students in local community colleges. This program provides participating students with classroom experience through substitute teaching and student teaching placements. According to the Missouri Department of Elementary and Secondary Education, 25 percent of teachers in Cassville R-IV are alumni of the district, and around 50 percent of teachers have 11 years or more of overall teaching experience, suggesting that the grow your own program has contributed to strong teacher retention rates.  

RESEARCH SUGGESTING LIMITED IMPACTS OF GROW YOUR OWN PROGRAMS

Other grow your own programs have been less successful. For example, the Grow Your Own Teachers program, a statewide initiative in Illinois that began in 2005 with an initial goal of preparing 1,000 new teachers, had only prepared around 80 teachers by 2015. Some research suggests that grow your own programs operating in urban areas may be more successful at recruiting teachers who will ultimately remain in their hometowns than grow your own programs in rural areas. For example, only 39 percent of teachers in the Educational Evaluation and Policy Analysis study who had attended Grade 10 in rural areas were living within 20 miles of their high school in 2000, compared to 81 percent of teachers who had attended Grade 10 in urban areas. In addition, the Center on Education Policy and Workforce Competitiveness study found that teachers from rural areas obtained their first teaching job significantly farther from their hometown than teachers from suburban or urban regions, and were significantly more likely to move to a non-rural area than teachers from urban regions were to move to a non-urban area.

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UNIVERSITY-BASED TEACHER PREPARATION PROGRAMS FOR INDIVIDUALS IN RURAL AREAS

In addition to grow your own strategies supported by school districts and state education agencies, some university-based teacher preparation programs have adopted strategies to make their programs more accessible to individuals living in rural areas. Several programs reviewed by REL Central partnered with community colleges or offered courses online or at satellite campuses in order to make their teacher preparation programs more accessible to students already living in rural areas. For example, Adams State College partnered with community colleges in rural areas of Colorado to offer a combined program that allowed residents of rural areas to obtain a bachelor’s degree with a certification in elementary education on the campuses of the community colleges. Similarly, Wichita State University offers general education courses at community colleges in a rural area of south-central Kansas, allowing students to earn a bachelor’s degree in elementary education.73

Likewise, the University of Nebraska at Kearney offers a Transitional Certification Program that enables individuals with a bachelor’s degree who live in or within commuting distance of Nebraska to begin teaching with a provisional certification while completing coursework for a teaching certification. Teacher candidates complete 24 credit hours of graduate coursework online, and are placed in student teaching positions in a local school district. Candidates can earn subject endorsements which certify them to teach a single subject or field endorsements which certify them to teach a broader range of related subjects.74

Other university-based teacher preparation programs have developed strategies to provide professional development opportunities to teachers already working in rural schools. For example, Southern Illinois University–Carbondale, located in a rural area of Illinois, partnered with 12 high-poverty rural schools to deliver professional development focused on mathematics instruction.75 Likewise, the University of Nebraska at Kearney created an online program that enabled teachers working in rural Nebraska schools to obtain an additional early childhood education certification.76

74 “Transitional Certification Program.” University of Nebraska at Kearney.
http://www.unk.edu/academics/ted/transitional_certification/index.php
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