Advanced Teaching Roles: Evaluation Report

Prepared for the North Carolina Department of Public Instruction by
The William and Ida Friday Institute for Educational Innovation

October 2023

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Executive Summary

The purpose of the Teacher Compensation Models and Advanced Teaching Roles Program (ATR) is to allow highly effective classroom teachers (Advanced Teachers) to impact an increased number of students and enable local school administrative units to create innovative compensation models that focus on classroom teacher professional growth. Ultimately, the goal of ATR is to produce measurable improvements in student outcomes. To support these efforts, North Carolina General Assembly Session Law 2020-78, Section 2.6(b), directs the North Carolina State Board of Education to contract with an independent research organization to evaluate what ATR has accomplished. The Friday Institute for Educational Innovation at North Carolina State University was selected to conduct the evaluation on behalf of the North Carolina Department of Public Instruction (NCDPI).

Key Findings

The purpose of the evaluation is twofold: 1) to assist the NCDPI and Public School Units (PSUs) in assessing the academic and instructional *impact* of ATR programs, as well as their impact on the teaching profession more broadly; and 2) to better understand the *implementation* of these programs and help identify factors supporting or impeding their success. The findings summarized below highlight both the impact and implementation of ATR. These findings are drawn from a wide range of qualitative and quantitative data sources including, but not limited to, educator surveys and interviews, classroom observations, student achievement data, teacher evaluations, and PSU and NCDPI administrative data.

Program Impact

ATR had a statistically significant impact on school-wide academic growth in math, but not in English Language Arts (ELA), and has helped to mitigate academic disruptions caused by COVID. These academic improvements may be due to improvements in instructional quality reported by educators and significantly higher teacher value-added scores school wide. However, ATR did not significantly impact overall teacher turnover. Although ATR has become a tool used by PSUs to recruit and retain teachers, administrators and Advanced Teachers emphasized that ATR by itself does not ameliorate workforce challenges. Finally, there is evidence that ATR schools may be improving perceptions of teacher working conditions and that Advanced Teachers have helped to foster a sense of community and a focus on continuous improvement among participating schools.

Student Achievement: To what extent does ATR increase student academic outcomes?

- **ATR had a statistically significant impact on school-wide academic growth in math, but not in ELA.** These results are largely driven by the first cohort of ATR PSUs and schools with several years of implementation. Although estimates of impact are positive in science, they are not statistically significant. Moreover, ATR had no impact on school-wide ELA scores.
- **Citing a range of formative and summative assessment data, administrators and Advanced Teachers reported positive impacts on academic outcomes.** In addition, the majority of the teachers that receive support from Advanced Teachers reported improvements in academic achievement for students in their classes (81%), on their team (83%), and in their school (82%).
- **Administrators and teachers attributed academic growth to Advanced Teachers and recognized their help in mitigating the impacts of COVID.** Educators cited a wide variety of assessment data as evidence of ATR's positive impact on student learning and frequently shared that Advanced Teachers have been instrumental in addressing COVID-related learning interruptions.

Instructional Quality: How, and to what extent, does ATR improve the quality of classroom instruction?

- **Teachers in ATR schools have significantly higher average teacher value-added scores.** The findings suggest that teachers in ATR schools tend to have higher average Education Value-Added Assessment System (EVAAS) scores than comparison schools, mostly driven by value-added scores among math teachers. However, there are no differences in administrator evaluations (i.e., observation scores) of teachers in ATR schools relative to comparison schools.
- **ATR is growing teachers' understandings of *what* and *how* to teach more effectively.** Educators across the career spectrum cited multiple approaches Advanced Teachers have used to improve the quality of classroom instruction, such as facilitating Professional Learning Communities and co-teaching.

Recruitment, Retention & Recognition: How, and to what extent, does ATR support the recruitment, recognition, development, and retention of high-quality classroom teachers?

- **Educators viewed ATR as a tool to support the recruitment of new teachers.** School administrators and teachers noted how ATR supported their ability to recruit new teachers, and teachers recruited for ATR schools were also more likely to have higher average EVAAS scores.
- **The presence of an ATR program did not affect overall teacher retention for schools as a whole.** Although ATR has become a tool used by PSUs to recruit and retain teachers, administrators and Advanced Teachers emphasized that ATR by itself does not solve workforce challenges.
- **Advanced Teachers overwhelmingly reported that ATR contributes to being recognized and valued for their expertise.** The majority (92%) of Advanced Teachers agree the role is an opportunity to be recognized for their expertise and that their role is valued by other educators (85%).

School Culture: How, and to what extent, does ATR improve school culture?

- **Educators noted how Advanced Teachers fostered "togetherness" and provided teachers both academic and social-emotional support.** Advanced Teachers took on several leadership roles in schools, including coaching and mentoring other teachers. As a result, teachers across PSUs noted how they did not feel alone in their classrooms.
- **ATR programs emphasized a culture of continuous improvement.** A culture of continuous improvement was not only observed by evaluators and reported by educators at the school level but also highlighted as an important characteristic of teachers' work in their classrooms.
- **Teacher Working Conditions survey estimates suggest potential positive associations between ATR and teacher perceptions of their school.** Although not statistically significant, analyses suggest that ATR may be improving perceptions of the professional development and support teachers receive, and teachers see these improvements as leading to stronger instructional practice in the school.

Program Implementation

Evaluation findings suggest that most PSUs have adopted the Opportunity Culture ATR model, but the implementation of ATR models and programs varies widely across PSUs and schools, respectively. District- and school-level leadership have been instrumental in how these models and programs are implemented, but funding and class-size waivers are potential barriers to sustainability and scale. Finally, while ATR programs serve a higher proportion of racially minoritized and/or economically disadvantaged students, programs could benefit from school-wide strategies to better support their at-risk students and recruit diverse educators to the program.

Program Comparisons: What are the similarities and differences in approaches to models and programs among PSUs, and what components differentiate those that have demonstrated significant impacts?

- **Opportunity Culture (OC) is the most common ATR model in North Carolina.** Among ATR grant recipients, 13 out of 17 PSUs currently partner with (or launched their initial ATR work via partnership with) Public Impact, a third-party vendor for ATR programs. However, PSUs not using OC produced larger positive effects on End-of-Grade/Course assessments than PSUs using OC.
- **There is extensive variation in implementation of ATR programs at the school level.** Even within PSUs that adopted a common model like OC, there is extensive variation at the school level with respect to ATR job titles, roles, responsibilities, release time, and compensation. Across the districts, administrators reported at least 23 unique job titles, and salary supplements ranged from $1,500 to $20,750 annually.
- **While hiring protocols for Advanced Teachers were clear, evaluation protocols are still evolving.** Eligibility for the role is routinely informed by a combination of factors but unclear roster verification processes and/or missing EVAAS data pose a perennial challenge to administrators for effectively evaluating an Advanced Teacher's impact.

Program Barriers & Supports: What school, district, and state-level conditions support or impede compensation models and ATR program efforts?

- **District- and school-level leadership have been instrumental in advocating for and shaping the design of ATR programs.** At the PSU level, it was common for one person to be responsible for coordinating ATR program design, implementation, and monitoring efforts with school administrators.
- **Some district and school administrators indicated that class-size flexibility is critical to implementation.** However, administrators also noted that even if PSUs no longer need the grant money to sustain the program, they may still need the class-size waiver affiliated with the ATR grant.
- **Variable funding structures and ongoing teacher turnover limit the sustainability and impact of ATR.** School administrators see value in sustaining and scaling their ATR programs; however, under current funding structures there are often consequential trade-offs for staffing programs. In addition, Advanced Teachers sometimes need to provide emergency coverage, limiting the impact of ATR efforts.

Equitable Access: How can the design of ATR models and programs be improved to better address educational disparities among staff and students?

- **ATR schools tend to serve larger proportions of racially minoritized and economically disadvantaged students than the rest of the state.** ATR schools serve larger proportions of Black (48%) and Latino/a/x (19%) students relative to the average across the rest of the state (24% and 15% respectively). ATR schools also serve more economically disadvantaged and multilingual students.
- **Educators reported that ATR has improved access to highly effective teachers for students attending Title I and/or historically hard-to-staff schools.** Administrators and teachers also believe that having access to Advanced Teachers at their school has led to improvement in academic achievement for educationally disadvantaged students.
- **Administrators reported that ATR was a human resource strategy that supported PSU equity goals.** However, educators indicated a need for school-wide strategies to prioritize students most impacted by educational disparities and for PSUs to be more intentional and expansive in hiring practices.

Recommendations

Provided below are several programmatic recommendations that emerged from feedback shared by educators across PSUs, as well as recommendations for addressing some of the limitations of this evaluation and for a deeper investigation of key findings shared in this report.

Improving ATR Programs

- **Clearly define and communicate the roles, responsibilities, and evaluation methods associated with ATR positions.** Educators in several PSUs expressed a need for clear definitions and expectations regarding the roles and responsibilities of Advanced Teachers. Updated legislation and explicit policies that specify an appropriate range of competencies, responsibilities, and performance indicators for the primary types of Advanced Teachers could help to address this issue.
- **Consider restructuring Advanced Teacher workloads and eliminating non-essential duties.** To help ensure that those in ATR roles can effectively carry out their responsibilities without feeling overwhelmed, consider designating a fixed percentage of the instructional day or week for ATR tasks; eliminating non-essential duties such as administrative support; and providing Advanced Teachers with tools, resources, and support to manage essential duties more efficiently.
- **Foster collaboration and ongoing professional development**. Advanced Teachers expressed challenges such as lack of time, resources, and structured opportunities for effective collaboration and professional growth. PSUs, the NCDPI, and third-party groups should consider exploring new programs or expanding existing ones that facilitate regular collaboration among teachers and are tailored to complement advanced teaching roles.
- **Reevaluate compensation and funding approaches to ATR.** Both administrators and teachers shared several challenges around funding and compensation for ATR, as well as consequential staffing "trade-offs." PSUs and the NCDPI should consider reviewing the compensation models and stipends for those in advanced teaching roles and investigate ways to provide teacher compensation funding for the ATR program to ensure its successful implementation and sustainability.
- **Explore approaches that support equitable access to ATR for students and staff.** Specifically, consider convening an equity advisory board; exploring ways that Multi-Tiered System of Support and ATR might work in tandem; making pathways available, attractive, and accessible for teachers from underrepresented groups; enhancing hiring protocols to include specific equity competencies; and leveraging District Equity Plans and School Improvement Plans to monitor ATR.

Improving Evaluation Efforts

- **Systematize and stipulate common data reporting requirements across PSU grantees.** Moving forward, the evaluation team recommends requiring the collection and reporting of critical data points related to ATR implementation and using a standard data protocol to minimize errors and assist PSUs in data collection. The evaluation team also recommends that the NCDPI partner with the SAS EVAAS team and education researchers to develop a quantitative measure of Advanced Teacher effectiveness.
- **Conduct in-depth case studies of select ATR schools to further investigate program outcomes**. The intent of this evaluation was to provide a comprehensive assessment of ATR implementation and impact across all PSU grantees and was therefore broad in scope. Evaluation efforts moving forward should shift towards in-depth comparative case studies of ATR programs to better understand why some ATR schools have had the anticipated impacts on student and teacher outcomes while others have not.

Introduction

The Teacher Compensation Models and Advanced Teaching Roles Program (ATR) enables local school administrative units to create innovative compensation models that allow highly effective classroom teachers to impact an increased number of students. To support these efforts, North Carolina General Assembly Session Law 2020-78, Section 2.6(b), directs the North Carolina State Board of Education to contract with an independent research organization to evaluate what ATR has accomplished. The Friday Institute for Educational Innovation at North Carolina State University was selected to conduct the evaluation on behalf of the North Carolina Department of Public Instruction (NCDPI). The purpose of this report is twofold: 1) to assist NCDPI and PSUs in assessing the academic and instructional impact of ATR programs, as well as their impact on the teaching profession; and 2) to better understand the implementation of these programs and help identify factors supporting or impeding their success.

The Advanced Teaching Roles Initiative

The purpose of ATR is to allow highly effective classroom teachers to impact an increased number of students by assuming accountability for additional students. In addition, the program enables local school administrative units to create innovative compensation models that focus on classroom teacher professional growth and that lead to measurable improvements in student outcomes. Per section 2.6.(b) of SL 2020-78, the intent of the pilot programs is to (emphases added):

1. Allow highly effective classroom teachers to **reach an increased number of students** by:
    a. assuming accountability for additional students,
    b. becoming a lead classroom teacher accountable for the student performance of all of the students taught by teachers on that lead classroom teacher's team, or
    c. leading a school-wide effort to implement new instructional models that improve performance;
2. Enable local school administrative units to **provide salary supplements** to classroom teachers in advanced teaching roles;
3. Enable local school administrative units to **create innovative compensation models** that focus on classroom teacher professional growth and student outcomes; and,
4. Utilize local plans to **establish organizational changes related to compensation** in order to sustain evidenced-based teaching practices that have the capacity to be replicated throughout the State.

Section 2.6.(b) further states that Advanced Teachers should include at least one of the following roles:

1. Teaching an increased number of students and being accountable for their performance as the teacher of record for those students;
2. Becoming a lead classroom teacher among a group of teachers and participating in EVAAS according to a model developed by the Department of Public Instruction;
3. Leading a school-wide effort to implement data-driven instructional models that include blended learning environments, utilizing digital learning and resources, and focusing on methods of improvement for school-wide performance issues;
4. Providing in-house professional development or functioning as an instructional content area coach or a coach in another professional development area following the completion of certification training.

ATR Grantees

This evaluation report synthesizes findings across the following 18 North Carolina PSUs that were awarded ATR program funding by the NCDPI between 2016 and 2021:

- **2016 Grantees:** Charlotte-Mecklenburg Schools, Edgecombe County Public Schools, Pitt County Schools, and Vance County Schools;
- **2018 Grantees:** Bertie County Schools, Halifax County Schools, Hertford County Schools, and Lexington City Schools;
- **2020 Grantees:** Winston-Salem/Forsyth County Schools, Guilford County Schools, Wilson County Schools, Thomasville City Schools, Cumberland County Schools, Harnett County Schools, and McDowell County Schools;
- **2021 Grantees:** Lincoln County Schools, Mount Airy City Schools, and Nash County Public Schools.

Given PSUs' varying ATR implementation timelines, not all districts were included in both the qualitative and quantitative analyses. In addition, Chapel Hill-Carrboro City Schools and Washington County Schools discontinued ATR and were not included in this evaluation. See the Data Collection and Data Analysis sections for more detail.

Goals of the Evaluation

North Carolina General Assembly Session Law 2016-94, Section 8.7, directs the North Carolina State Board of Education to evaluate the advanced teaching roles and compensation plan pilots described in that law. The law requires evaluation of several components that fall into two broad categories: academic and instructional impact, and impact on the teaching profession. Additionally, North Carolina General Assembly Session Law 2020-78, Section 2.6(b), directs the North Carolina State Board of Education to contract with an independent research organization to evaluate the extent to which the advanced teaching roles and new compensation plans have accomplished, at a minimum, the following:

- Improvement in the quality of classroom instruction;
- Increases in school-wide [academic] growth or the growth of teachers who are mentored or impacted by a teacher in an advanced teaching role;
- An increase in the attractiveness of teaching;
- Recognition, impact, and retention of high-quality classroom teachers;
- Assistance to and retention of beginning classroom teachers;
- Improvement in and expansion of the use of technology and digital learning;
- Improvement in school culture based on school climate survey results.

The Friday Institute was selected to conduct an evaluation of the Teacher Compensation Models and Advanced Teaching Roles (ATR) program on behalf of the North Carolina Department of Public Instruction (NCDPI). The evaluation is inclusive of these components and has two broad goals:

1. To assist NCDPI and PSUs in assessing the academic and instructional **impact** of ATR models and programs, as well as their impact on the teaching profession; and,
2. To better understand the **implementation** of these models and programs and help identify factors supporting or impeding their success.

Evaluation Questions

The evaluation questions developed for this proposal are explicitly aligned with the requirements outlined in Session Law 2020-78 described above. In addition, the evaluation expands upon these requirements by examining the implementation of ATR programs across PSUs. Evaluation Question 1 (EQ1) and the related subquestions listed below are intended to help the NCDPI and PSUs better understand the academic and instructional impacts of ATR programs, as well as their impact on the teaching profession.

EQ1. **Program Impact**: What have advanced teaching roles and new compensation models accomplished?

a. **Student Achievement**: To what extent does ATR improve student academic outcomes, such as achievement in math, reading, and science?

b. **Instructional Quality**: How, and to what extent, does ATR improve the quality of classroom instruction?

c. **Recruitment & Retention**: How, and to what extent, does ATR support the recruitment, recognition, development, and retention of high-quality classroom teachers?

d. **School Culture**: How, and to what extent, does ATR improve school culture?

Evaluation Question 2 (EQ2) and related subquestions are intended to help the NCDPI and PSUs better understand how compensation models and advanced teaching roles are implemented and help identify factors that may be supporting or impeding their success. In addition, implementation questions examine how the design of these models and programs can be improved to better address educational disparities among staff and students, such as student achievement gaps that have widened since the pandemic and the recruitment and retention of a diverse teacher workforce.

EQ2. **Program Implementation:** What approaches and conditions are essential to implementing scalable and effective compensation models and programs for advanced teaching roles?

a. **Program Comparisons**: What are the similarities and differences in approaches to models and programs among PSUs, and what components differentiate those that have demonstrated significant impacts?

b. **Barriers & Supports**: What school, district, and state-level conditions support or impede compensation models and ATR program efforts?

c. **Equitable Access**: How can the design of ATR models and programs be improved to better address educational disparities among staff and students?

Evaluation Design

Thoroughly addressing these questions required a mixed methods approach, which incorporates quantitative and qualitative data from a variety of sources. Specifically, the evaluation development team used a mixed methods convergent design in which different but complementary data are collected concurrently and/or sequentially (Creswell & Clark, 2017). This design is appropriate for evaluation contexts in which a single data set is not sufficient, different questions need to be answered, or each type of question requires different types of data. The intent in using this design is to bring together the differing strengths and nonoverlapping weaknesses of quantitative methods (e.g., large sample size, trends, generalization) with those of qualitative methods (e.g., rich detail and depth). By using this design, the evaluation can "increase the interpretability, meaningfulness and

validity of the constructs and inquiry results by both capitalizing on inherent method strengths and counteracting inherent biases in methods or other sources" (David & Sutton, 2011, p. 296).

Data Collection

Table 1 below provides a summary of data collection activities during the 2022-2023 school year. The table also includes the number of administrators and teachers either directly participating in data collection efforts or the number of teachers and students included in the sample for quantitative analyses of NCDPI administrative records. Data sources are described in more detail below and surveys and interview protocols can be found in Appendix A.

Table 1. Data Collection Activities and Number of Educators or Students Included in Analyses

Data Source	Collection Dates	Participant Totals or Sample Ranges
NCDPI Student Administrative Records	September-March 2023	21,672 - 479,411
NCDPI Teacher Administrative Records	September-March 2023	2,968 - 39,909
PSU Administrator Interviews	September-January 2023	18
Advanced Teacher Focus Groups	February-April 2023	36
Supported Teacher Focus Groups	February-April 2023	41
PSU and School Administrators	February-April 2023	23
School Observations	February-April 2023	18
Advanced Teacher Survey	May-June 2023	163
ATR Supported Teacher Survey	May-June 2023	64
PSU/School Administrator Survey	May-June 2023	31

Interviews and Site Visits

Interviews and school site visits were conducted across two phases to understand how PSUs implemented ATR at the PSU- and school-levels, to solicit participants' perceptions of the impact of the program on teaching and learning, and to identify factors that may be supporting or impeding program implementation and impact. Interviews were conducted with a diverse range of stakeholders, including district and school administrators and educators who hold an advanced teaching role or who directly receive support from an Advanced Teacher.

During ATR Project Evaluation Phase I, 18 leaders from 15 districts were interviewed via Zoom (n=16) for 20-60 minutes or via email (n=2) with the goal of understanding district implementation, perceptions of ATR impact, and conditions that support or challenge the initiative. In four of these interviews, district administrators invited external partners (n=4) to be present due to their instrumental support in ATR implementation.

During Phase II, the evaluation team conducted 18 school site visits (15 elementary, two middle schools, and one high school) across nine PSUs. Observational field notes were taken during key ATR-related activities, including professional learning community (PLC) meetings, "data dives," coaching sessions, small group instruction, and co-teaching and instructional modeling sessions. Additionally, the evaluation team conducted 51 individual or group interview sessions with 100 ATR participants, including district administrators (n=4), school administrators (n=19), Advanced Teachers (n=36), and educators directly supported by Advanced Teachers (n=41). These interviews ranged from 20 to 60 minutes in length and were audio recorded for transcription purposes.

School administrators were asked about program design, funding, perceived impact of the program on teaching and learning, impact of the program on addressing educational inequities, professional development for Advanced Teachers, and relevant contextual details that may affect program implementation. Advanced Teachers were asked about the application process for their ATR positions, professional development supports, typical daily schedule, perceived impact of the program on teaching and learning, and perceived impact of the program on educational inequities. Teachers who received direct support from Advanced Teachers were asked about their career pathways; nature, quality, and timing of support provided; perceived impact of the program on teaching and learning; and perceived impact of the program on educational inequities. Interview and focus group protocols can be found in Appendix A.

ATR Survey Data

To examine the implementation and impact of ATR, the evaluation team administered an online survey using Qualtrics to three groups of educators directly involved in the initiative: 1) teachers in advanced teaching roles (i.e., Advanced Teachers), 2) teachers supported by Advanced Teachers, and 3) ATR school and district administrators. The purpose of the survey was to solicit information from a representative sample of educators in order to understand the nature and scope of the activities of Advanced Teachers, including the challenges Advanced Teachers faced carrying out their responsibilities and the impact of the program on student achievement and the retention and recruitment of teachers.

Development of survey items was informed by the following: 1) the evaluation questions framing this report and listed in the previous section; North Carolina policy describing the goals of ATR and job responsibilities of Advanced Teachers; previous evaluations of ATR conducted by the Friday Institute; evaluations of a similar program conducted by Citkowicz, M., Brown-Sims, M., Williams, R., & Gerdman, D. (2017); and, a teacher leadership inventory (Boston Public Schools, 2020). The evaluation team also received feedback on initial drafts of survey items from BEST NC, a non-profit, non-partisan coalition of business leaders with extensive experience supporting ATR across the state.

Although the evaluation team invited all PSUs implementing ATR to participate in the survey, only 12 PSUs had at least one administrator or teacher complete the survey. Of those PSUs, the number of responses from administrators and teachers ranged from 1 to 115. In total, 258 educators responded to the survey, with a sample comprised of 63% (163) Advanced Teachers, 25% (64) teachers receiving support from Advanced Teachers, and 12% (31) school and district administrators. It should also be noted that 40% of respondents are from a single PSU (referred to as PSU-12). To help minimize bias in the results associated with this disproportionality, reported findings are disaggregated in cases where PSU-12's responses diverge dramatically

from the combined responses of other PSUs. A complete breakdown of survey respondents by demographics and PSU can be found in Appendix B, as well as two sets of analysis for items based on teachers' responses—one that includes PSU-12 and one that excludes PSU-12.

Finally, because PSUs were unable to provide detailed information on the number of Advanced Teachers and teachers receiving support from Advanced Teachers, it is unclear to what extent the sample of survey respondents are representative of the population of teachers, schools, and PSUs implementing ATR. Therefore, this survey is comprised of a nonrepresentative sample and results should be interpreted with caution.

NCDPI Administrative Records

The Educational Policy Initiative at Carolina (EPIC) provided longitudinal administrative data collected by the NCDPI and approved for use in this evaluation. These longitudinal data capture student-, educator-, and school-level data for all NC public schools in each year between 2009-10 and 2021-22. The 13-year panel captures eight years before most schools began implementing ATR (2009-10 through 2016-17), two years after ATR began statewide but before the COVID-19 pandemic began (2017-18 through 2018-19), and three years of data when schools were implementing ATR after the pandemic began (2019-20 through 2021-22). These rich datasets include student characteristics (e.g., gender, race, multilingual learner status), student outcomes (e.g., test scores), and teacher characteristics (e.g., degree attainment, years of experience), which can all be linked to specific schools in each academic year.

To examine school culture, EPIC also provided data from North Carolina's Teacher Working Conditions (TWC) survey, which are available in even years between 2011-12 and 2021-22. The TWC includes a rich set of items that ask for teachers' perceptions. Items used in this analysis were grouped into ten categories: 1) Availability of Time; 2) Availability of Resources; 3) Level Community Support and Involvement; 4) Expectations for Student Conduct; 5) Opportunities for Teacher Leadership; 6) Quality of School Leadership; 7) Quality of Professional Development (PD); 8) Level of Need for PD; 9) Amount of PD Received; and 10) Quality of Instructional Practice.

Two data sources were also used to augment these records: 1) PSU applications were collected from NCDPI's website for all 18 ATR programs awarded funding, including the 17 PSUs that implemented their ATR grants and one district that applied to the ATR program but has not yet implemented the program due to staffing shortages, and 2) the Common Core Data managed by the National Center for Education Statistics, which was used to add longitudinal data on school characteristics (e.g., Title I status, locale, and grade levels served).

Data Analysis

Qualitative Analysis

Two primary analytic methods were used to understand qualitative data from interviews, focus groups, and open-ended survey items: (1) content analysis (Schrier, 2012) for the evaluation of grant applications and (2) thematic analysis (Braun & Clarke, 2006) to identify common threads across interviews, field note data, and open-ended survey items. Content analysis is commonly used to read across multifaceted documentation towards simple reporting of commonalities and differences. Content analysis allows researchers to analyze data qualitatively and simultaneously quantify data (Gbrich, 2007). Thematic analysis, on the other hand, involves the search for common threads across an entire dataset and provides a rich and detailed account of data (Braun & Clarke, 2006). As a complementary set of methods, content and thematic analyses allowed the evaluation team to address how ATR is being implemented across participating districts and document stakeholder perceptions about ATR's various impacts.

During the first analytic phase, the evaluation team conducted a content analysis on all 18 awarded PSU applications to the ATR program, including the 17 PSUs that implemented their ATR grants and one district that applied to the ATR program but did not implement the program due to staffing shortages. Researchers used a priori codes, derived from current evaluation questions and prior evaluation findings (Stallings et al., 2020). This analytic phase generated a basis for comparison of ATR models across participating PSUs, inclusive of particularized program language, supplement, and teacher release details.

During the second analytic phase, the evaluation team used thematic analysis to examine interview data and field notes collected on school site visits with district and school administrators, Advanced Teachers, and teachers directly supported by Advanced Teachers. The evaluation team used a combination of a priori coding drawn from the evaluation questions and open coding (Saldaña, 2016) to afford a nuanced analysis of context as it related to implementation and impact of ATR in each participating PSU. To ensure accuracy, members of the evaluation team met weekly to review codes, collapse and refine codes as needed, and discuss themes. Additionally, district administrators were invited to engage in a process of member checking to ensure accuracy of district-level ATR model information.

Quantitative Analysis

Measures. The evaluation used several measures to assess student, teacher, and school outcomes. First, student-level scale scores on state-mandated end-of-grade (EOG) and end-of-course (EOC) exams were used to measure student achievement in ELA, math, and science. These test scores were standardized within subject, test, grade, and year to have a mean of zero and a standard deviation of one. This standardizing placed all scores on a similar scale across subjects and years. For reference, a one standard deviation (SD) increase in standardized scale scores is equivalent to a school moving from the 50th to the 84th percentile (i.e., a rather substantial increase).

To help put these SD units into the context of other interventions that have been implemented in educational settings, Lortie-Forgues and Inglis (2019) found an average effect size of about 0.06 SD among 141 randomized control experiments in education funded by the national Institute of Education Sciences. A 0.06 SD effect on test scores can be approximately interpreted as a one month gain in learning from third to fourth grade math (Hill et al., 2008). Note that outcomes measures comprise test scores from more than just third or fourth grade and that prior research finds student gains differ depending on multiple factors including subject and grade (Hill et al., 2008). Thus, this benchmark should be used only as a rough reference to help interpret effect estimates. In addition to test scores, the evaluation team also used measures of student characteristics as controls including gender, race, and indicators for whether the student has disabilities (SWD), is a multilingual learner (ML), is economically disadvantaged (ED), is academically gifted (AIG), and is a migrant student.

To measure teacher effectiveness, the evaluation team used standardized value-added measures from the SAS Education Value-Added Assessment System (EVAAS) and teacher observation scores from the NC Educator Effectiveness System (NCEES). Like student test scores, both EVAAS and NCEES scores are standardized within subject and year. In addition to standardized EVAAS and NCEES scores, the evaluation team also examined other characteristics that are potentially related to teacher effectiveness, including years of experience, and binary indicators for whether the teacher is alternatively licensed and whether they have a graduate degree. For models that examined teacher experience as outcomes, results were interpreted as differences in the number of years of experience. For models that examined binary indicators, the results were interpreted as a percentage point difference in the probability of either being alternatively licensed or having a graduate degree. In all teacher-level models, analyses included teachers' demographic characteristics (gender and race) as controls.

The North Carolina Teacher Working Conditions (TWC) survey, available in even years between 2011-12 and 2021-22, provided data as proxy for measuring school culture. The TWC includes a rich set of items that ask for teachers' perceptions of their school. Based on the TWC design, a method called factor analysis was used to derive ten standardized measures of school culture based on TWC as noted above. Except for Level of Need for PD, higher values in each factor correspond with a more positive view of the school. For example, higher values on "opportunities for teacher leadership" means that teachers are reporting more opportunities to lead in their school. For "level of need for PD," higher values correspond with more need, suggesting that teachers are reporting insufficient access to in-service development. All ten TWC factors were averaged across all survey respondents in each school. Because these factors were standardized, positive values mean the school performed above the state average, whereas negative values correspond to teacher perceptions below the state average.

Sample. The NCDPI administrative data was augmented with data that the evaluation team collected directly from PSU leaders, which details the academic years when each school in the PSU began implementing ATR. To help illustrate when each PSU began implementing ATR, Table 2 (following page) depicts a timeline of the first year when at least one school in each PSU can be observed implementing ATR. There are some PSUs that take a year to plan how they will implement ATR, and the evaluation team did not count this planning year as part of a PSU's implementation because it would be unrealistic to expect observable changes in student, teacher, or school outcomes while the PSU is planning (and not yet implementing) its approach to ATR. Thus, the beginning of ATR implementation is defined as the first year when teachers can be observed working in an advanced role, and the analytical approach is aimed at examining outcomes after implementation has begun. Note that individual schools may begin implementing ATR in any year after the PSU first begins implementation.

Table 2 also shows the year when each PSU began implementing ATR and the corresponding total number of years of implementation as of 2021-22. For example, the first school to implement ATR in Edgecombe County Public Schools began in 2017-18; therefore, the PSU has been implementing ATR for 5 years as of 2021-22. It should be noted that even though the PSU as a whole has been implementing ATR for 5 years, individual schools within Edgecombe may have adopted ATR after 2017-18, and therefore, these schools that began later will have been implementing ATR for fewer years. In terms of ATR implementation, there are several PSUs that are important to note. Charlotte-Mecklenburg Schools (CMS) began implementing an early version of ATR as far back as 2012-13 as part of CMS's Leadership and Investment for Transformation (Project LIFT) initiative. Thus, there are some CMS schools that began implementing the PSU's earlier version of ATR before statewide adoption of the ATR initiative in 2017-18.

Since the focus of the evaluation is on the statewide implementation of ATR, the analysis does not include schools in CMS that began implementing their earlier version of ATR before 2017-18. However, as noted in Table 2, CMS has by far the most experience with implementing ATR (up to 9 years) if the PSU's Project LIFT is taken into account. Also, Chapel Hill-Carrboro City Schools and Washington County Schools both started implementing ATR in 2017-18 but have since discontinued implementation. These two PSUs are not included in the analysis. Lincoln County and Mount Airy City began implementing ATR in 2022-23 and are not included in the analysis because the evaluation team only has data up to 2021-22. Thomasville City and Harnett County schools have received funding from the NCDPI to implement ATR but have not yet begun implementation, so these two PSUs are also not included in the analysis. Finally, it should be noted that Cabarrus County Schools has shown interest in ATR and may have implemented some aspect of ATR in some schools. However, Cabarrus schools are not included in the analysis because Cabarrus has not received funding to implement ATR from the NCDPI. Therefore, the analysis only includes ATR schools across 14 PSUs.

Table 2. Timeline of PSU Adoption of ATR Based on PSUs Included in Quantitative Analysis

PSU Name	First Year	Total Years of Implementation as of 2021-22	Using Opportunity Culture
Charlotte-Mecklenburg Schools	2017-18	5	Yes
Edgecombe County Public Schools	2017-18	5	Yes
Pitt County Schools	2017-18	5	No
Vance County Schools	2017-18	5	Yes
Guilford County Schools	2018-19	4	Yes
Bertie County Schools	2019-20	3	No
Lexington City Schools	2019-20	3	Yes
Hertford County Schools	2020-21	2	Yes
McDowell County Schools	2020-21	2	No
Winston-Salem/Forsyth County Schools	2020-21	2	Yes
Cumberland County Schools	2021-22	1	Yes
Halifax County Schools	2021-22	1	Yes
Nash County Public Schools	2021-22	1	Yes
Wilson County Schools	2021-22	1	Yes

Note. Charlotte-Mecklenburg Schools (CMS) began implementing an early version of ATR in 2012-13 as part of the PSU's Project LIFT initiative. Since the focus is on the statewide roll-out of ATR, analyses do not include schools in CMS that began implementing their earlier version of ATR before 2017-18. Chapel Hill-Carrboro City Schools and Washington County Schools both started implementing ATR in 2017-18 but have since discontinued implementation and are not included in the analysis. Lincoln County and Mount Airy City began implementing ATR in 2022-23 and are not included in the analysis because the evaluation team only has data up to 2021-22. Finally, Thomasville City and Harnett County Schools have not yet begun implementation, so these two PSUs are also not included in the analysis.

Analytic Models. The analytic approach to obtaining a causal estimate of the ATR impact relies on comparing a pre-post ATR difference in outcomes for ATR schools minus a corresponding pre-post difference for a set of comparison schools that have never implemented ATR. This pre-post approach allows us to account for schoolwide growth before and after schools begin implementing ATR. To establish a convincing comparison group of schools, the evaluation team identified schools in the same PSU (or in a very similar PSU) as the ATR school and that serve demographically similar students. Specifically, the evaluation team used only comparison schools with similar proportions of students by race/ethnicity, economically disadvantaged (ED) status, students with disability (SWD) status, and multilingual (ML) status as ATR schools. Thus, the results are based on comparing ATR schools with a matched group of similar comparison schools that have never implemented ATR.

Using this matched sample, the evaluation team applied two analytic approaches to obtain a causal estimate of ATR impact. First, the analysis used a comparative interrupted time series (CITS) model that compares trends in outcomes before a school begins ATR with trends after ATR implementation begins. The CITS model then compares these pre-post trends for ATR schools with the same pre-post trends for non-ATR comparison schools. The primary idea behind this approach assumes that the trends in ATR and comparison schools will not diverge unless implementing ATR has an effect that changes the trends in ATR schools. The CITS model has the advantage of being highly flexible, allowing us to test different modeling decisions. If results hold when different parts of the model are changed, for example, this provides evidence that implementing ATR had a robust effect on schools.

The evaluation team also applied an extension of the traditional CITS model, called a staggered difference-in-differences (DID) model. Recent methodological advances have highlighted issues in traditional CITS models that do not account for changes in policy when new cohorts of schools join at different times. In the context of ATR, schools may begin implementing the model in any academic year after their PSU adopts ATR. Table 3 illustrates that there could be five separate cohorts of ATR schools that start implementing the program in different years (between 2017-18 and 2021-22) and, therefore, have been implementing ATR for different lengths of time.

Table 3. Depiction of Five Separate Cohorts of Schools that Began ATR between 2017-18 and 2021-22

	2017-18	2018-19	2019-20	2020-21	2021-22
Cohort 1: Schools that began in 2017-18	Year 1	Year 2	Year 3	Year 4	Year 5
Cohort 2: Schools that began in 2018-19		Year 1	Year 2	Year 3	Year 4
Cohort 3: Schools that began in 2019-20			Year 1	Year 2	Year 3
Cohort 4: Schools that began in 2020-21				Year 1	Year 2
Cohort 5: Schools that began in 2021-22					Year 1

Note. Treatment years differ depending on when schools begin implementing ATR. For example, Year 1 of implementation is 2017-18 for cohort 1 and 2018-19 for cohort 2.

Because adoption of ATR occurs in different years for different schools, failure to account for this staggered adoption of the program could lead to biased impact estimates. To account for this issue, the analysis used a staggered DID approach developed by Callaway and Sant'Anna (2020). This staggered DID approach has the advantage of accounting for staggered treatment adoption and yields estimates that are interpreted similarly to the CITS results (i.e., a pre-post difference in ATR schools minus the same pre-post difference for comparison schools). However, the staggered DID results should be interpreted as differences in levels and not in trends, and these models are less flexible than the traditional CITS approach.

For full transparency, this report includes results from both the CITS and staggered DID approach. The CITS and staggered DID results are highly consistent and lead to similar conclusions, except for some differences in precision. Although both sets of results are shared in the report, it should be noted that current methodological recommendations tend to prioritize the validity of the staggered DID model.

Limitations of the Evaluation

Qualitative Analyses

The generalizability of the qualitative analyses is limited by the number of and selection process for data sources. Researchers invited all 18 ATR-implementing PSUs to engage in online informational interviews and host evaluation site visits. However, district leaders from only 15 PSUs agreed to participate in the online informational interviews. Moreover, given the number of interested PSUs and the evaluation scope and timeframe, site visits were limited to 18 schools across nine PSUs. Of the nine PSUs hosting site visits, two were implementing unique ATR models, while seven were utilizing Opportunity Culture (OC), a framework from third-party ATR vendor Public Impact.

Researchers also requested to visit ATR schools that varied in terms of grade-levels served, program design, and stage of implementation. However, PSU leaders ultimately selected school site visit locations, resulting in site visits being conducted at 15 elementary schools, two middle schools, and one high school. At each school site, researchers requested to interview and observe administrators, Advanced Teachers, and educators directly supported by Advanced Teachers. Decisions as to who, in what setting, and for how long were made by school administrators. Thus, qualitative findings represent only the views of some PSUs and schools implementing ATR so qualitative findings should be interpreted with caution.

Representativeness of ATR Survey Data

ATR survey results should be viewed as purely descriptive and not representative of ATR program participants as a whole. As noted above, the evaluation team invited all PSUs with an ATR program to participate in the survey; 13 out of 18 PSUs included in the evaluation had at least one administrator or teacher complete the survey. Of those PSUs, the number of responses from administrators and teachers varied widely, ranging from one response for one PSU to 115 responses for another PSU. Also, because PSUs were unable to provide detailed information on the number of Advanced Teachers and teachers they support, it is unclear to what extent the sample of survey respondents are truly representative of the population of teachers, schools, and PSUs participating in ATR. Moreover, responses are disproportionately from a single PSU, consisting of 40% of the respondents. Because of these limitations, ATR survey results should be viewed as purely descriptive and interpreted with caution.

Quantitative Analyses

Results examine outcomes and characteristics of students and teachers in ATR schools as a whole. Ideally, the evaluation would examine individual teachers in advanced teaching roles and connect them with the individual teachers whom they support. Although evaluators were able to obtain these data for some PSUs, not all PSUs provided sufficient data to assist with a more nuanced analysis. This limitation meant that throughout the report, the evaluation could only identify entire schools that are implementing ATR, instead of examining only the teachers who are part of the ATR model within each school. In schools where there are only a small number of Advanced Teachers supporting a small number of colleagues, the schoolwide approach would be less able to detect effects from these small numbers of teachers who are participating in the program.

School-level analyses include results for ELA, math, and science for grades 3-12, but some programs only target a subset of these subject areas and grades. As noted above, some schools only have a small number of Advanced Teachers making it unrealistic for them to reach all grade levels and subject areas. While quantitative analyses examine ELA, math, and science outcomes for all ATR schools and grade levels in which these data are available, some ATR schools only target a subset of these subject areas. Moreover, schools with a limited

number of teachers may also focus on a subset of grades within a school. In cases where schools use ATR in targeted grades or subjects, quantitative results cannot separate effects on the targeted grades and subjects from student achievement in other, non-targeted grades and subjects.

Kindergarten through second grade literacy and math outcomes are excluded from quantitative analyses. Roughly half of ATR programs in North Carolina are implemented in elementary schools. However, data used in quantitative analyses to examine student achievement outcomes are limited to EOG and EOG exams, which are administered in grades 3-12. Currently, the NCDPI does not routinely collect math assessments in grades K-2 and math assessments used by PSUs are not consistent nor are they readily available to researchers. While the NCDPI does collect longitudinal K-2 early literacy data through the mClass assessment, which includes DIBELS (Dynamic Indicators of Basic Early Literacy Skills) and other measures, mClass data were excluded from the analysis due to changes in the assessment and its administration over time.

Findings are reported as average outcomes across multiple schools and PSUs implementing ATR at the same time. These results could be masking substantial heterogeneity in the impact of ATR across different schools and PSUs. In essence, some schools and PSUs may be implementing ATR much more effectively than others, and pooled estimates cannot provide a definitive conclusion on the range of possible ATR effects. While qualitative findings shared in this report help to better understand implementation approaches across PSUs, and indeed highlights extensive variation across schools, not all PSUs provided sufficient data to assist with a more nuanced analysis. As noted in a previous ATR evaluation (Stallings et al., 2020) and as is true of any education initiative, the presence or absence of ATR alone does not guarantee certain outcomes.

The data capture, at most, five years of ATR implementation, two of which were substantially disrupted by the COVID-19 pandemic. There is no reason to believe that any detrimental pandemic-related influences would affect ATR schools differently from comparison schools, so comparing ATR and comparison schools remains a valid analytic approach. However, even without pandemic-induced disruptions, prior research has found that five years can still be an insufficient amount of time to fully implement and detect positive effects, especially in ELA student achievement. Therefore, it is possible that schools and PSUs need a longer time frame to implement, iterate, and improve their implementation of ATR before positive effects can be observed. This is especially important to consider given the finding that the positive effects of ATR are driven by the first cohort that has had a full five years to implement the model. The later ATR cohorts have not had five years of implementation experience, and they may need even more time to realize positive effects, particularly as they are still recovering and responding to the detrimental effects of the pandemic on students and educators.

Program Impact

The primary goal of this evaluation is to help the NCDPI and PSUs better understand the academic and instructional impacts of ATR programs, as well as their impact on the teaching profession. To that end, this section addresses the first overarching evaluation question: *What have advanced teaching roles and new compensation models accomplished?* Findings in this section are organized by four evaluation subquestions focused on program impact. Collectively, the findings suggest that ATR had a statistically significant impact on school-wide academic growth in math, but not in ELA, and has helped to mitigate academic disruptions caused by COVID. These academic improvements may be due to improvements in instructional quality reported by educators and significantly higher teacher value-added scores school wide. However, ATR did not significantly impact overall teacher turnover. Although ATR has become a tool used by PSUs to recruit and retain teachers, administrators and Advanced Teachers emphasized that ATR by itself does not ameliorate workforce challenges. Finally, there is evidence that ATR schools may be improving perceptions of teacher working conditions and that Advanced Teachers have helped to foster a sense of community in schools.

Student Achievement

To what extent does ATR improve academic outcomes, such as achievement in math, reading, and science?

Key Findings

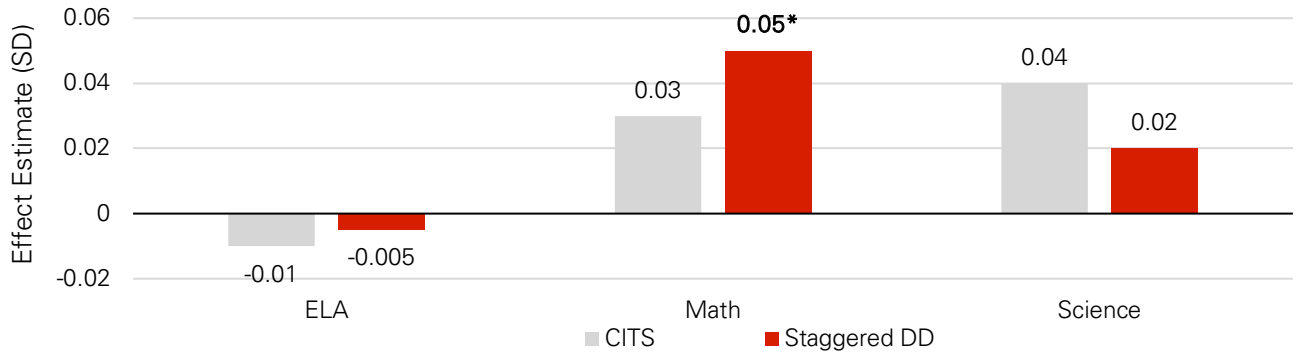
- **ATR had a statistically significant impact on school-wide academic growth in math, but not in ELA.** These results are largely driven by the first cohort of ATR schools and schools with several years of implementation. Although estimates of impact are positive in science, they are not statistically significant. Moreover, ATR had no impact on school-wide ELA scores.
- **Teachers and school administrators shared positive perceptions of the initiative's impact on student academic outcomes.** In addition, the majority of the teachers that receive support from Advanced Teachers reported improvements in academic achievement for students in their classes (81%), on their team (83%), and in their school (82%).
- **Administrators and teachers attributed academic growth to Advanced Teachers, helping to mitigate the impacts of COVID.** Educators cited a wide variety of assessment data as evidence of ATR's positive impact on student learning and frequently shared that Advanced Teachers have been instrumental in addressing COVID-related learning interruptions.

Student Achievement Gains as Measured by Standardized Testing

Student achievement in English Language Arts (ELA), math, and science was measured using standardized, student-level scale scores on state-mandated end-of-grade (EOG) and end-of-course (EOC) exams. To obtain a causal estimate of ATR's impact on student achievement, the model relies on comparing a pre-post ATR difference in outcomes for ATR schools minus a corresponding pre-post difference for a set of comparison schools that never implemented ATR but serve demographically similar students. Collectively, analyses of EOG and EOC scores found that ATR had statistically significant positive school-wide effects on end-of-year math assessments, a positive but statistically insignificant effect in science, and no effect on ELA. However, these effects are primarily driven by the first ATR cohort of PSUs and by schools that have had several years to implement the initiative.

ATR had a statistically significant positive effect on school-level math scores. Figure 1 (following page) illustrates results from both the comparative interrupted time series (CITS) and staggered difference-in-differences (DID) models. Both sets of models control for the full set of student covariates listed above. The positive effect in math can be interpreted to mean that the pre-post difference in math scores in ATR schools is 0.05 standard deviation (SD) higher than the same pre-post difference in non-ATR comparison schools. This effect size is roughly equivalent to nearly a month of additional learning between third and fourth grade math. This math effect estimate is similarly positive but not statistically significant when we use the CITS model, though we note that the CITS estimate is sometimes statistically significant in other models not shown here, depending on what control variables are included. In science, the estimates tend to be positive and appear to grow as schools gain experience implementing ATR over time. However, the results in science are not conclusive because they are not statistically significant. Overall, we conclude that ATR had null effects in ELA that are small in magnitude, positive effects in math that are often statistically significant, and potentially positive effects in science that are not statistically significant and therefore not conclusive.

Figure 1. CITS and Staggered DID Estimates on ELA, Math, and Science EOG and EOC Scores

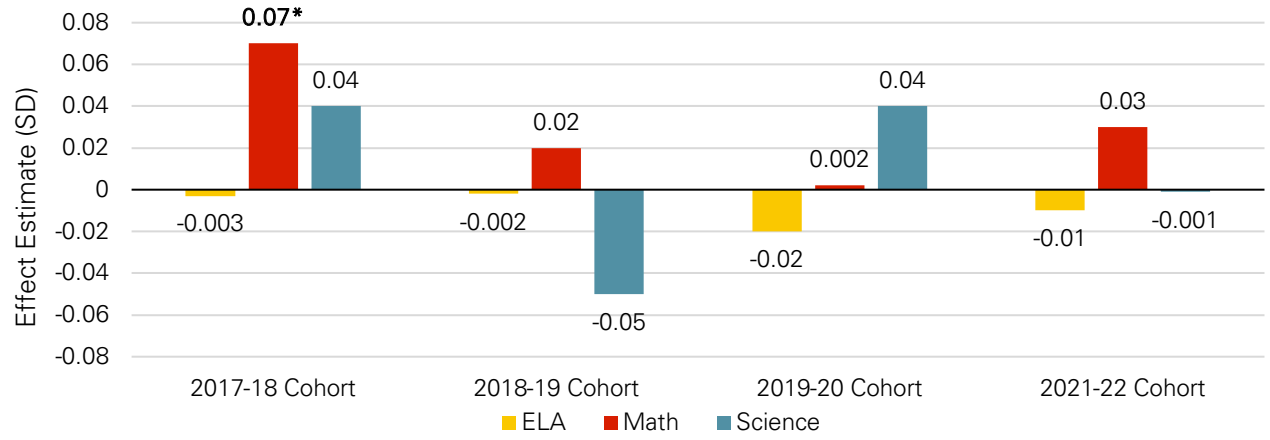


Note. + p<.1, * p<.05, ** p<.01, *** p<.001

To help further put these SD units into the context of other interventions that have been implemented in educational settings, Lortie-Forgues and Inglis (2019) found an average effect size of about 0.06 SD among 141 randomized control experiments in education funded by the national Institute of Education Sciences. Finally, a 0.06 SD effect on test scores can be approximately interpreted as a one month gain in learning from third to fourth grade math (Hill et al., 2008).

Positive effects in math are primarily driven by the first cohort of PSUs. Figure 2 below shows that positive effects in math are primarily driven by the first cohort of districts that began implementing ATR in 2017-18. It is important to highlight that the first ATR cohort has had the longest time to implement ATR (five years) and all of these schools come from one of four PSUs: Charlotte-Mecklenburg Schools (CMS), Edgecombe, Pitt, and Vance County Schools. The effect estimate in math is smaller in magnitude and not statistically significant in any of the other cohorts after 2017-18. In science, the results are inconclusive with estimates that are positive in the 2017-18 and 2019-20 cohorts, but negative or nearly zero in the 2018-19 and 2021-22 cohorts. None of the estimates in science are statistically significant. Finally, the null results on ELA and science hold when we examine each cohort separately. That is, none of the ATR cohorts produced positive effects in ELA, and all the estimates are statistically insignificant and very near zero in magnitude.

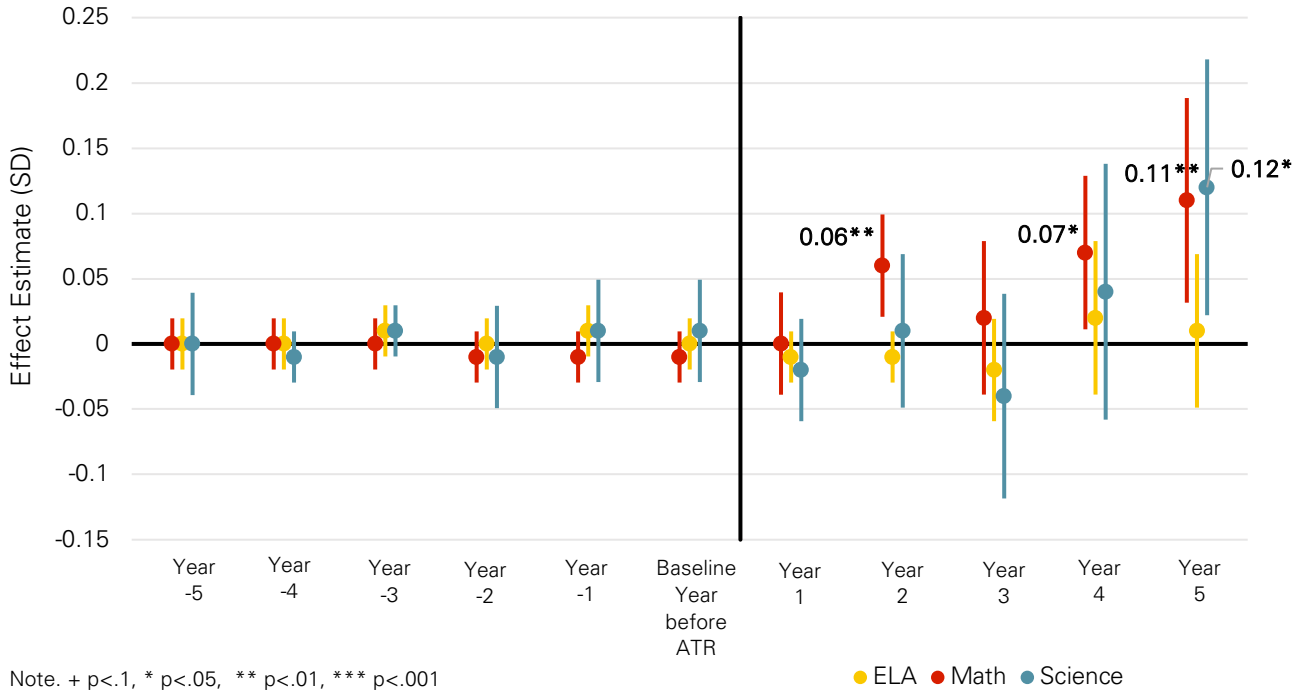
Figure 2. Effect Estimates by Cohort of ATR Schools



Note: Results for the 2020-21 cohort could not be estimated due to missing baseline test scores from 2019-20 as a result of the COVID-19 pandemic. + p<.1, * p<.05, ** p<.01, *** p<.001

Schools that have been implementing ATR for longer tend to produce larger effects in math. Figure 3 shows effect estimates for each of six years before and five years after schools began implementing ATR. First, estimates in each of the six pre-ATR years show that ATR and comparison schools were very similar to each other before ATR was put into place. This is strong evidence to support the analytic approach used because it only shows observed differences between ATR and comparison schools after ATR activities are actually put into place. In math, the effect is flat in year one of implementation, but it then trends upward after the first year, with statistically significant effects in years two (0.06 SD), four (0.07 SD), and five (0.11 SD). These results suggest that schools that have been implementing ATR for longer produce larger effects in math and science that are more likely to be statistically significant after at least one year of implementation. In contrast, even after five years, we do not observe significantly positive or negative effects in ELA.

Figure 3. Effect Estimates by Implementation Year



Note. + p<.1, * p<.05, ** p<.01, *** p<.001

Student Achievement Gains as Reported by Educators

Findings in this section are drawn from interviews and surveys inclusive of all PSUs participating in ATR through NCDPI-funded grants. Collectively, two broad themes emerged from these data: 1) teachers and school administrators believe that Advanced Teachers are having a positive impact on academic outcomes for classrooms, teams, and schools participating in ATR, and 2) educators at all levels cited a wide variety of assessment data as evidence of Advanced Teachers' positive impact on student learning.

Educators attributed positive academic growth to ATR, helping to mitigate the academic impacts of COVID. On surveys, approximately 89% of administrators agreed or strongly agreed that support from Advanced Teachers has led to improvement in students' academic achievement. In addition, the majority of the teachers that receive support from Advanced Teachers reported improvements in academic achievement for students in their classes (81%), on their team (83%) (e.g., PLC, grade-level, or subject-area teams), and in their school (82%). A full breakdown of survey responses on items related to student achievement can be found in Appendix B.

Survey results were consistent with findings from focus groups and interviews with administrators and teachers, who generally shared positive perceptions of the program's impact on student learning. For example, one teacher directly receiving support from an Advanced Teacher described the impact that ATR has had on student learning in her classroom, and in doing so, emphasized how Advanced Teacher support has contributed to improved academic outcomes for students. Teachers attributed this in part to students being excited to learn and work with Advanced Teachers. One experienced elementary school teacher who directly receives supports from an Advanced Teacher described how students who routinely receive differentiated small group instruction are "so excited to be pulled with them when the [Advanced Teachers] come and get them."

Another common topic that emerged during interviews was how the COVID-19 pandemic and ensuing interruptions to regular instruction have greatly impacted student achievement outcomes. Teachers and administrators often suggested that Advanced Teachers were helpful in ameliorating some of those concerns. For example, when asked about impacts that Advanced Teachers have on student learning, one administrator shared that their student growth data has increased each year since implementing ATR and that "even coming back after COVID, growth has continued to increase."

Administrators and teachers reported improvements in reading, math, and science. In addition to the perception that Advanced Teachers have a broad impact on student academic outcomes, educators cited in some instances the direct impact of ATR on academic performance in reading, math, and science. With respect to reading, one Advanced Teacher detailed the impact that co-teaching with another teacher has had on student reading outcomes by "teaching components that she does not have time to teach" and noted that the class exceeded growth last year. Another Advanced Teacher highlighted the school-wide impact on student reading outcomes, particularly as their school had 75% of students scoring below grade level coming out of COVID. They further added that their team has implemented strategies and tracked data using three separate reading assessments and their results have been positive.

In terms of student math and science academic outcomes, one high school administrator shared improvement in Math I pass rates and attributed this to their "dynamic" Advanced Teacher in math. In a different PSU, an elementary principal described the positive impact Advanced Teachers have had on third grade student achievement in math, attributing that in part to the Advanced Teacher pulling out students and working with them in small groups. The principal shared that in math the school "met student growth for the first time in a long time" on statewide accountability measures.

> "Last year we met growth for the first time in a long time… the push has been [for our Advanced Teacher to] pull kids and work with those kids… she's a dynamite math teacher!"
>
> - School Administrator

Advanced Teachers and teachers who directly receive science-focused support from Advanced Teachers believed a focus on sixth through seventh grade science instruction and student support influenced better academic outcomes for eighth grade students who were tested in science. Additionally, school administrators and Advanced Teachers shared in interviews that eighth grade science outcomes were being positively shaped by Advanced Teachers through the scale-up with teachers of student data-informed small group instruction.

Administrators and teachers cited both formative and summative assessment data as evidence of ATR's impact on student learning. During interviews and focus groups, educators commonly cited formative assessment data they used to evaluate ATR's impact, such as mCLASS, i-Ready, team-level common assessments, and district benchmarks. In addition to the aforementioned formative assessment data types, school and district leaders referenced EVAAS data as evidence of ATR's impact on student learning.

Generally, district administrators spoke confidently about the impact that Advanced Teachers have on student learning. For example, one ATR school leader described their use of EVAAS data across grade levels and subject areas and noted that, "We're doing significantly better in terms of growth index than the district." A district administrator expressed pride in their PSU-wide student success, which they attributed to the ATR program, sharing that last year they "did not have one elementary school that didn't meet growth. I think that speaks volumes in itself."

Several district administrators also further elaborated on factors they attribute to this growth, indicating their "data dives" revealed that years of experience in an advanced teaching role positively impacted student achievement. One district administrator referred to this as an implementation gap during which the Advanced Teacher needs to "get in the groove." Another district administrator reported that, while they haven't seen the strongest growth in classrooms supported by Advanced Teachers during year one, in year two and year three they tend to see improvements in student achievement.

At the school level, most administrators spoke confidently about the impact that Advanced Teachers have on student learning, though the types of data they draw on is context dependent. One school administrator reflected on missing EVAAS projections for a large percentage of her student population, making it a challenge to assess ATR impact at the school level. To address the challenge, she reported relying on formative assessment data, sharing that although "it's a little bit too early to tell as far as our growth data goes" because they have a highly transient student population without EVAAS projections; they did, however, see positive growth trends mid-year using i-Ready for benchmark assessments.

In interviews, educators highlighted the shared expectation that Advanced Teachers improve instruction and, therefore, increase student achievement. For example, one teacher, in her second year as an Advanced Teacher, linked continued Advanced Teacher status to positive growth in student achievement across an entire grade level. Advanced Teachers often described feeling motivated and empowered by the shared responsibility of increasing student achievement. In these cases, they referred to positive trends in intermittent data (e.g., district-level benchmarks and i-Ready data) and their capacity to inform school-wide change. At times, they conveyed feelings of anticipation and excitement about imminent state-level student achievement data, sharing that, "It's just really cool to have such power over the change in a school…we're really excited for our data to come back at the end of this year to see the impact that it's had on so many kids across so many classrooms."

Instructional Quality

How, and to what extent, does ATR improve the quality of classroom instruction, through factors such as increased teacher effectiveness and more effective use of technology?

Key Findings

- **Teachers in ATR schools have significantly higher average EVAAS scores.** The findings suggest that teachers in ATR schools tend to have higher average EVAAS scores than teachers in comparison schools, mostly driven by positive math EVAAS scores. Differences in teachers' NCEES scores, on the other hand, are no different in ATR schools relative to comparison schools.
- **ATR is growing teachers' understandings of *what* and *how* to teach more effectively.** Educators across the career spectrum cited multiple approaches Advanced Teachers have used to improve the quality of classroom instruction, including facilitating Professional Learning Communities (PLCs), co-teaching and instructional modeling, and implementing targeted small group instruction with students.
- **Though limited in focus, ATR teachers supported effective technology use in several ways.** Educators reported that Advanced Teachers served as critical leaders during COVID-19 emergency remote learning, have frequently led "data dives" with teachers to analyze student assessment data across multiple online platforms, and have incorporated technology, like video recording, into their instructional coaching.

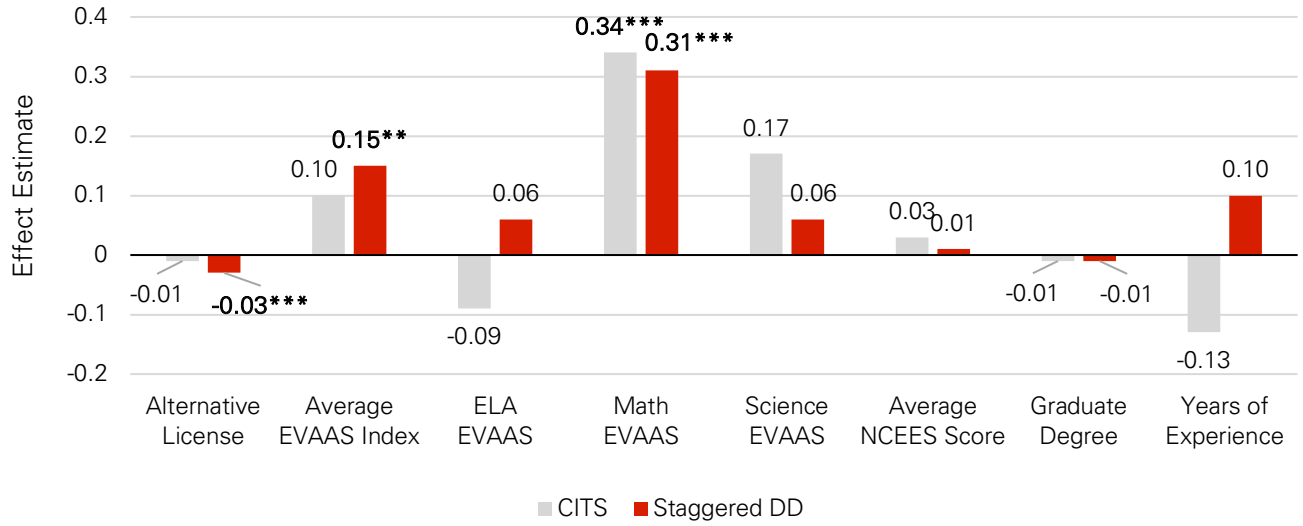
Instructional Quality as Measured by EVAAS and NCEES

To examine how the ATR model may have impacted the quality of classroom instruction, the evaluation examined the effects on the following teacher characteristics that are potentially indicative of teacher effectiveness: standardized EVAAS scores (overall and by subject), standardized NCEES scores (averaged across all NCEES standards), an indicator for whether teachers are alternatively licensed, an indicator for whether teachers have a graduate degree, and years of experience.

Teachers in ATR schools have significantly higher math EVAAS scores, but similar scores for NCEES. Figure 4 (following page) illustrates the CITS and staggered DID effect estimates on EVAAS, NCEES, and other teacher characteristics potentially indicative of high-quality classroom instruction. The findings suggest that teachers in ATR schools tend to have higher average EVAAS scores than teachers in comparison schools (mostly driven by positive math EVAAS scores). Furthermore, the estimates for both ELA EVAAS scores and years of experience are not statistically significant. The results in Figure 4 suggest that differences in teachers' NCEES scores, on the other hand, are no different in ATR schools relative to comparison schools, with coefficients that are nearly zero in magnitude and not statistically significant.

It is important to note that NCEES scores for teachers are based on ratings of performance along six professional teaching standards. While a teacher's rating on the sixth standard is determined by a student growth value as calculated by EVAAS, a teacher's overall ratings for standards 1-5 are determined at the end of the year by school administrators. The results also suggest that teachers in ATR schools are less likely to be alternatively licensed, but no more or less likely to hold a graduate degree.

Figure 4. CITS and Staggered DID Effect Estimates on Teacher Characteristics



Note. + p<.1, * p<.05, ** p<.01, *** p<.001

Together, these results provide moderate evidence of positive effects of ATR on teacher effectiveness, particularly as it pertains to math instruction. Specifically, increases in math EVAAS scores suggest that math teachers' instruction improved under ATR, supporting the student-level increases in math test scores (see above). Null effects on teachers' ELA EVAAS scores also align with null effects on students' ELA test scores (see above). Null effects on whether teachers hold a graduate degree are not surprising because ATR was not designed to target teachers' degree attainment. Rather, ATR is better understood as a strategy to improve teachers' in-service professional learning (through mentoring and coaching from Advanced Teachers). Besides developing teachers who are already in the building, it is important to note another way to improve average teacher effectiveness in a school is to change the composition of teachers. That is, implementing ATR may have helped these schools to either recruit more effective teachers or to push out ineffective teachers.

Instructional Quality as Reported by Educators

Through analyzing educators' interview responses and open-ended survey data, we found three themes that highlighted ATR's impact on the quality of classroom instruction: 1) educators across the career spectrum perceived ATR as having a positive impact on the quality of classroom instruction, 2) educators indicated Advanced Teachers are growing classroom teachers' understandings of *what* and *how* to teach more effectively and have helped them navigate social-emotional challenges typical to the teaching career, and 3) across PSUs and schools, educators reported a limited focus through ATR on more effective technology use.

Educators across the career spectrum perceived ATR as having a positive impact on the quality of classroom instruction. Given the multifaceted and ever-changing responsibilities that all teachers face, the supports provided through ATR to teachers with differing experience levels were widely recognized as essential for increasing teacher effectiveness. Moreover, these supports were valued by teachers across the entire career spectrum, including those with residency, emergency, or traditional licenses; beginning, mid-career, and career status teachers; and by teaching assistants, other Advanced Teachers, and school and district administrators. For example, one middle school principal highlighted ATR's value in supporting educators across the career spectrum, noting that it's not just beginning teachers, but even experienced teachers who value the additional help with data analysis or having an extra set of hands to pull out a small group of kids.

A key feature of many ATR programs was differentiating supports to grow educators based on their strengths, needs, and teaching contexts. One Advanced Teacher in an elementary school described how she adapts her approach toward improving the quality of classroom instruction given the characteristics of the teachers she supports. For example, she noted that for the beginning teacher she supports, she is present in the classroom more and spends more time modeling and co-teaching; for her more experienced teachers, however, she is more focused on "taking them where they're at… building them as a leader."

Finally, many Advanced Teachers also noted how they have grown in their own knowledge and practice via their role. An Advanced Teacher in a high school described how operating beyond the walls of her own classroom has increased her effectiveness through exposure to "different people's perspectives." She noted that when you're in your own classroom, "you always think about what you like or what you think is right." But once you get out of your classroom," she added, "it gives you a chance to look and see, 'Oh no. You can do [it] this way or you can tackle the situation in a different way.'"

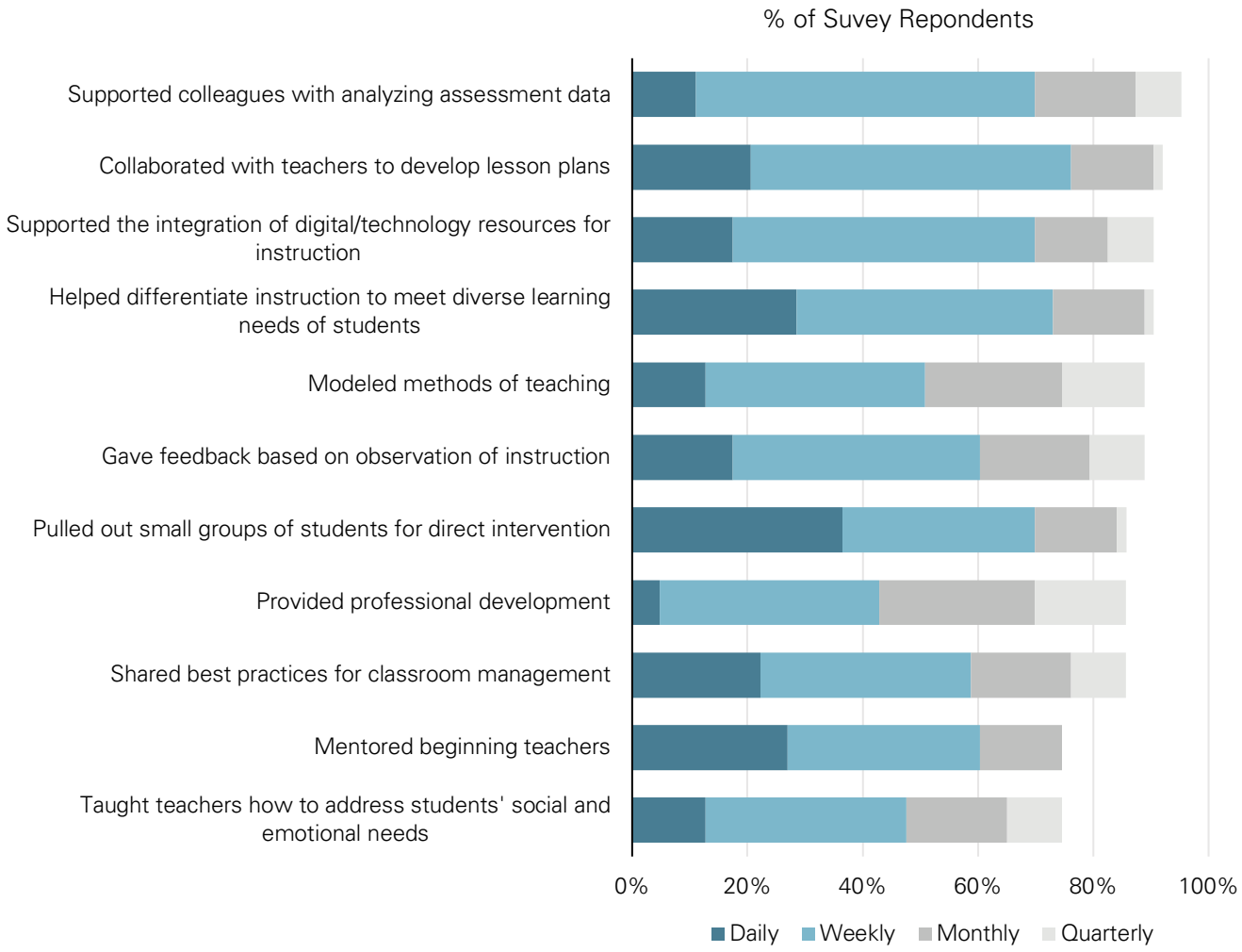
> "It's giving me a chance to know different people's perspectives. If you're in your classroom, you always think about what you like or what you think is right. But once you get out of your classroom, it gives you a chance to look and see, 'Oh no. You can do [it] this way or you can tackle the situation in a different way.'
>
> - Advanced Teacher"

Advanced Teachers are growing teachers' understandings of *what* and *how* to teach more effectively. During interviews, educators frequently indicated that ATR is growing understandings of *what* and *how* to teach more effectively, citing multiple mechanisms use by Advanced Teachers to improve the quality of classroom instruction, including, but not limited to:

- Facilitating PLCs that center on the analysis of student data;
- Co-planning instruction with teachers;
- Selecting and vetting instructional materials;
- Co-teaching and instructional modeling;
- Leading professional learning workshops and initiatives; and,
- Implementing targeted small group instruction with students.

As illustrated in Figure 5 below, survey responses from teachers supported by Advanced Teachers provide further evidence for these qualitative findings. For example, the large majority of respondents indicated that on a quarterly basis or more frequent basis, Advanced Teachers supported colleagues with analyzing assessment data (95%), collaborated with teachers on to develop lesson plans (92%), provided professional development (87%), modeled methods of teaching (88%), and pulled out small groups of students for direct intervention (85%).

Figure 5: Frequency in Which Advanced Teachers Provided Different Types of Instructional Support



ATR teachers supported effective technology use in several ways. Across PSUs and schools, educators reported a limited focus through ATR on more effective technology use; however, three distinct ways did surface in how the ATR program has indirectly leveraged more effective technology use in support of improved quality in classroom instruction. First, in some PSUs, Advanced Teachers led the way during COVID-19 emergency remote learning and have been instrumental in blended teaching and learning during the return to face-to-face instruction. An elementary principal described how the role and responsibilities of Advanced Teachers evolved at her school during emergency remote learning, noting that Advanced Teachers were still "coaching teachers while we were virtual," and assisted with checking lesson plans and supporting teachers across the district.

Second, across most schools, Advanced Teachers have led "data dives" during which they demonstrated how to analyze formative and summative student data across multiple online platforms (e.g., mCLASS and i-Ready). An

elementary teacher directly supported by an Advanced Teacher highlighted how her Advanced Teacher amplified her understandings of student data analysis and using data analyses to inform instruction.

Third, Advanced Teachers used video recordings in some districts to improve their coaching techniques and to draw their colleagues' attention to areas for instructional improvement. One elementary-level Advanced Teacher described the affordances of using video recordings as part of the teacher coaching cycle and found that video recording was a powerful way to have teachers reflect on their teaching. They noted watching recordings together with their teachers, identifying impactful behaviors, going back in the classroom to record what improvements the teacher made, and using that to compare instructional practices used.

Recruitment, Retention and Recognition

How, and to what extent, does ATR support the recruitment, recognition, development, and retention of high-quality classroom teachers?

Key Findings

- **Educators viewed ATR as a tool to support the recruitment of new teachers.** School administrators and teachers noted how ATR supported their ability to recruit new teachers and teachers recruited for ATR schools also more likely to have higher average EVAAS scores.
- **The presence of an ATR program did not affect overall teacher retention for schools as a whole.** Although ATR has become a tool used by PSUs to recruit and retain teachers, administrators and Advanced Teachers emphasized that ATR by itself does not solve workforce challenges.
- **Advanced Teachers overwhelmingly reported that ATR contributes to being recognized and valued for their expertise.** The overwhelming majority (92%) of Advanced Teachers agreed or strongly agreed that being an Advanced Teacher was an opportunity to be recognized for their expertise, and 84.9% agreed or strongly agreed that their role as an Advanced Teacher was valued by other educators.

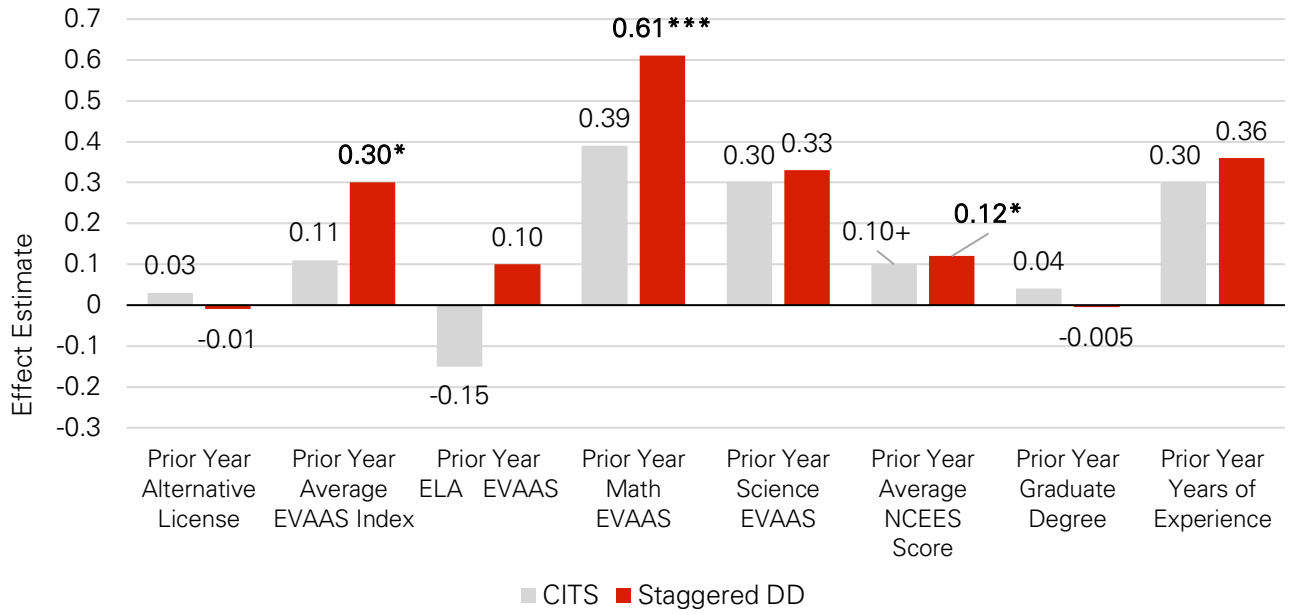
Teacher Recruitment & Recognition

The evaluation team examined teacher recruitment and recognition from both a qualitative and quantitative perspective. Collectively, the findings indicate that school administrators view the ATR program as an effective recruitment tool for new teachers, highlighting professional development and support benefits as a means to both attract and retain new talent. Moreover, teachers hired into ATR schools tend to have significantly higher average EVAAS scores, compared to those hired in comparison schools. Finally, the large majority of Advanced Teachers believe their role provides recognition for their expertise and they feel valued by other educators.

Educators viewed ATR as a tool to support the recruitment of new teachers. School administrators and teachers noted how ATR supported their ability to recruit new teachers by highlighting the professional development and support they would receive, which in turn was also intended to help retain teachers. Many school administrators mentioned that they advertise their ATR program as a recruitment tool and discuss the role of Advanced Teachers in their interviews. Some school administrators also noted that interviewees are often excited about the prospect of having Advanced Teacher support. An elementary school administrator, for example, reported that ATR is a piece they include in interviews with prospective candidates as well as at job fairs to help highlight the supports that teachers will receive, such as planning, co-teaching, and small group support.

Teachers recruited for ATR schools tend to have higher average EVAAS scores. Figure 6 below shows estimates of the ATR effect on prior-year teacher characteristics among teachers who transfer into ATR schools, relative to teachers who transfer into comparison schools. Of note is the finding that teachers hired into ATR schools tend to have higher average EVAAS scores, driven mostly by EVAAS scores in math and science, relative to teachers hired into comparison schools. Moreover, teachers hired into ATR schools also had higher average NCEES scores (0.10 – 0.12 SD) than teachers hired into comparison schools. The estimates also suggest that teachers hired into ATR schools had slightly more experience (about one-third of a year) than teachers hired into comparison schools, but this result was modest and not statistically significant. Together, these estimates suggest that part of the reason for improved average EVAAS scores among teachers in ATR is driven by the recruitment of teachers who already had higher EVAAS and NCEES scores. It is possible that higher levels of effectiveness among teachers hired into ATR schools are driven by the hiring of Advanced Teachers in these schools, but we do not have sufficient data across all PSUs to identify whether individual teachers have an advanced role.

Figure 6. CITS and Staggered DID Effect Estimates on the Prior-Year Characteristics of Teachers who are Hired into ATR Schools



Note. + p<.1, * p<.05, ** p<.01, *** p<.001

Advanced Teachers overwhelmingly report that ATR contributes to being recognized and valued for their expertise. The overwhelming majority (92%) of Advanced Teachers agree or strongly agree that being an Advanced Teacher is an opportunity to be recognized for their expertise, and 85% agree or strongly agree that their role as an Advanced Teacher is valued by other educators. Similarly, in interviews and focus groups, school administrators frequently expressed how the ATR program provides opportunities to recognize effective teachers through pay incentives and leadership titles. However, these factors may be less relevant to the colleagues of Advanced Teachers; only 50% believe the role of Advanced Teacher is valued in their school and roughly half (51%) would consider being an Advanced Teacher because it is an opportunity to be recognized for their expertise. Most colleagues would consider being an Advanced Teacher because they agree or strongly agree it would contribute to their professional growth (76%) and career satisfaction (62%).

Petree Elementary: A Spotlight on Advanced Teacher Recruitment

Summary: An elementary school principal shares her story about recruiting a staff of educators with tremendous leadership potential.

Alicia Bailey accepted the position as principal at Petree Elementary in March of 2019 with the goal to turn around the school in three short years. One of 44 elementary schools in Winston-Salem/Forsyth County Schools, Petree Elementary serves a majority minority student body of 362 Pre-Kindergarten (PK) to fifth grade students, over 95% of whom are economically disadvantaged. She leveraged PSU recruitment bonuses to recruit educators with tremendous leadership potential through the district's customized Opportunity Culture ATR model. Her recruitment pitch revolved around the culture of coaching:

"My selling point when I do interviews [is] 'Where do you want to go in this profession? How can I support you? I want to be your coach, so how can I support you? We want you to come here and to stay. And while you're here, we want to grow you and help you to be the best leader you can be.'"

The pitch has proven effective—Bailey hired three Multi-Classroom Leaders (MCLs) year one and added four more, one for each grade level, the second year. But a key challenge that many school principals share in designing ATR teams is developing a coverage plan that supports collaboration, allows for maximum flexibility and maintains instructional integrity. For Bailey, the decision to invest in Reach Associates, experienced instructional assistants with strong classroom management skills who earn a $3000 salary supplement and provide systematic instructional coverage for MCLs, was an important piece of the puzzle. She hired five Reach Associates, one for each grade level, and set out to ensure that they were fully supported as instructional leaders.

"[Reach Associates] are valuable to us. They add to what we do…They're more valuable than sharpening pencils and running copies. We want them to be a part of the data piece and the instruction piece."

Janie Martin is one of the Reach Associates that Principal Bailey recruited to join the Petree community. She described her elevated instructional role: "I am there and standing for her [MCL, Ms. Rover-Brown] when she has to go and push into other classrooms. She pushes into another classroom to pull out kids that are on the lower level and does one-on-ones with them. She walks out, and I walk right in…[because] I'm going to the PLT [Professional Learning Team] meetings. I know where we are. I know what standard we're working on. So there really is no difference to the kids."

Ms. Martin explained that while she "want[s] to step up in leadership. I don't think I ever want to become a certified teacher. I love backing her [Ms. Rover-Brown] up…I want these kids to excel. I want to be the best kindergarten class. We want to be the best kindergarten class." Ms. Rover-Brown added, "We are in this together, and…all we want to do is see these students have the opportunity to receive excellent teaching. And so every conversation that we have is surrounded around student achievement. It's just a common goal."

While the ATR program at Petree positions Reach Associates as invaluable members of each grade level, teachers in upper elementary grades had not ever had the opportunity to work with an instructional partner. When fifth grade MCL Laketha Ebrahim-Blackwell asked her grade K-2 colleagues about best practices for working with Reach Associates she walked away with the conviction that she should "coach this person the same way [she] coaches my certified teachers." She describes this change in her thinking as pivotal to growing student achievement and her thought process as:

"What are our must dos, and what can they not do? And let's look at that box of what they can do and how to expand that impact. So small group? Love it—They're so needed. And they also fill that gap when I need to pull out and observe other teachers; they're right there, and I know my students are still growing and getting what they need. So, a Reach Associate is not just a body…They have an accountability system built in as well. And they're aware of it."

Principal Bailey is proud of the progress that Petree Elementary has made: "We turned it [the school] around in two years! And a lot of that I really contribute [sic] to having the teacher leaders in the building because *everybody* in the building has a coach."

Teacher Retention

In general, educators viewed ATR as an important tool to support the development and retention of teachers across the career spectrum. School administrators and Advanced Teachers indicated that the program is an opportunity to extend teachers' careers in education and supports an in-house talent pipeline. While qualitative evidence suggests that ATR programs have been successful at retaining teachers directly impacted by the program, quantitative findings indicate that ATR has not improved retention rates for the participating schools as a whole. In addition, teachers who leave ATR schools are similar to teachers in non-ATR schools with respect to EVAAS, NCEES, and other characteristics associated with teacher efficacy. Finally, administrators and teachers emphasized during interviews and focus groups that ATR by itself does not solve education workforce challenges, such as recruitment and retention of highly effective teachers.

Advanced Teachers overwhelmingly agree that ATR contributed to their decision to stay in the profession. On surveys, the vast majority of Advanced Teachers agreed or strongly agreed that having this role as an Advanced Teacher has contributed to their intention to stay in the profession (90%) and to remain at their current schools (89%). In interviews and focus groups, Advanced Teachers mentioned the following benefits of ATR programs from their points of view: (1) ability to show leadership from the classroom because they support teachers and administration while still working with students; (2) ability to continue to grow as an educator; and (3) recognition as an effective teacher through pay incentive and title.

During interviews and focus groups, school administrators and Advanced Teachers expressed their appreciation for how the ATR program incentivized effective teachers to stay in the classroom, continuing or extending their reach with students while also providing leadership for teacher colleagues. Advanced Teachers, for example, frequently discussed the professional fulfillment that comes from supporting teachers and how taking on this new role has renewed their excitement towards working in education. In support of these findings, the overwhelming majority of Advanced Teachers who were surveyed either agreed or strongly agreed that being an Advanced Teacher contributes to their career satisfaction (94%), career differentiation and advancement (97%), and professional growth (94%). School administrators and Advanced Teachers also indicated that the program provides an opportunity to extend teachers' careers in education and supports an in-house talent pipeline.

While Advanced Teachers described how this new role has renewed their excitement towards working in education, they cited pay incentives and the associated job title as an important factor in their retention. On surveys, the majority of Advanced Teachers (78%) also agreed or strongly agreed that the additional compensation was sufficient given the required responsibilities associated with the advanced teaching position. One administrator, for example, shared that in a school at which they previously worked, teachers were often "pushed to take on leadership roles," but there was "no incentive for them. And people want money. Not that people do it for the money, but it's nice to have that."

ATR is viewed as an important tool to support beginning teachers and develop an in-house talent pipeline. When asked about teacher retention during interviews, district administrators most often mentioned impact on the retention of beginning teachers, especially with the growing numbers of educators with residency and emergency licenses. Both school administrators and teachers indicated the importance of working with a non-evaluative leader who supports teachers to believe that "somebody here has my back." One middle school teacher compared her first year teaching without Advanced Teacher support to her second teaching with Advanced Teacher support, stating that, "My first year, I felt like it was so much pressure on me… there was not enough support or motivation…I think I was just done with it until I got the help and support that I need."

> I honestly feel like it's kind of reignited my passion for teaching… when I finish modeling a lesson or when I finish co-teaching and I see a teacher doing something that I've coached them on… you get to see that impact across kids, so many kids… It feels good to see that impact. I've really enjoyed this role.
>
> - Advanced Teacher

In addition to supporting retention of beginning and Advanced Teachers, many school administrators noted that Advanced Teachers support their work. A few have expressed that having Advanced Teachers within their school has helped extend their career as a school administrator. One school administrator said, "I probably would not have stayed in the administrative role if I didn't have at least one or two [Advanced Teachers]."

The presence of an ATR program did not affect overall teacher retention for schools as a whole. While qualitative evidence suggests that ATR programs have been successful at retaining teachers directly impacted by the program, quantitative findings indicate that ATR has not improved the likelihood that teachers are retained in participating schools. To examine whether ATR has impacted teacher retention at schools as a whole, analyses examined teacher turnover from (1) whether teachers transfer to a different school; (2) whether teachers completely leave teaching in North Carolina public schools; or (3) turnover from either transferring or leaving. Overall, the effect estimates are not statistically significant at conventional levels and very nearly zero in magnitude, suggesting that ATR did not impact teacher turnover. Although the staggered DID estimate suggests a marginally significant (at the 10 percent level) increase in the probability of teachers transferring into another school; however, even this estimate (a two-percentage point increase) is quite modest.

Teachers who leave ATR schools are similar to teachers in non-ATR schools with respect to EVAAS, NCEES, and other characteristics. Another way the evaluation addressed the question of teacher retention was by examining how average teacher effectiveness could have actually improved in ATR schools because less effective teachers exited these schools. Because the impact of teacher turnover can vary depending on the characteristics (e.g., effectiveness) of teachers who exit, the analysis examined the characteristics of teachers who leave ATR schools, which includes teachers who either transfer to another school or who completely leave teaching in North Carolina public schools.

Although the CITS model found that teachers who exit ATR schools have significantly higher math EVAAS scores than teachers who exit comparison schools; the same estimate from the staggered DID model is much smaller in magnitude and not statistically significant. Likewise, analyses found a marginally significant result from the

CITS model suggesting that teachers who leave ATR schools have about a year less experience than teachers who leave comparison schools, but this result is again smaller in magnitude and not significant for the staggered DID model. All other teacher characteristics are not significantly different between teachers who leave ATR schools and teachers who leave comparison schools. Overall, there is no strong evidence to support the idea that teachers who leave ATR schools are different from teachers who leave comparison schools.

Not a Teacher Pipeline Panacea

School administrators and Advanced Teachers indicated that ATR by itself does not ameliorate workforce challenges. Although many district and school administrators and teachers see benefits of ATR towards teacher recruitment and retention, they also expressed that ATR has limitations and challenges that impact attractiveness and efficacy of the program. Specifically, educators identified the following limitations and challenges with ATR: (1) uncertainty around program longevity, (2) sustainable Advanced Teacher working conditions, (3) resistance among some veteran teachers, and (4) continued teacher shortage. First, administrators and Advanced Teachers mentioned the uncertainty of the positions from year to year. One elementary school administrator, for example, stated in their survey response that they needed, "Guarantee of continuation...that it [ATR] isn't a fad that'll go away." Moreover, school administrators often discussed how they use Title I funds for ATR position supplements; these funds vary from year to year. One elementary school administrator expressed during the interview that financial uncertainty was something she was facing with successive years of the program.

Second, many school administrators and teachers expressed concerns around the workload sustainability of the Advanced Teacher role. School administrators noted that their Advanced Teachers are their "worker bees," whose work ethics are assets to the school; however, this also leads to concerns about burnout. For example, one middle school Advanced Teacher shared the issue of time, stating that they teach a full schedule "while doing my best to address the needs of the beginning teachers in my building," but spend a lot of time outside of school hours working on their ATR responsibilities. Another elementary teacher directly supported by an Advanced Teacher expressed concern for her Advanced Teacher, noting that while the Advanced Teacher is very capable of managing all her responsibilities, "I can tell that as the years progressed, there is more stress in her face…I am worried about her."

Third, educators across a few districts mentioned that not all teachers are receptive to ATR coaching and that getting veteran teachers to buy into the ATR coaching model can be a challenge. Some schools noted this has led to teacher turnover in the first years of implementation. However, one district administrator argued that while the teacher retention piece is something they monitor, "not all teacher turnover is bad." Some school administrators shared that when their schools first implement ATR, there is a higher rate of turnover, in part because some teachers did not necessarily want to be coached and the program was not a good fit for them.

Finally, while most school administrators noted that they appreciate the support of the ATR program in the recruitment, development, and retention of teachers in their schools, they still have open positions that are not filled. One middle grades school administrator feels that although ATR is incentivizing teachers who are working very hard and continuing to look to grow students and that these students need that consistency, love, and support, they expressed that "I'm not sure ATR is the answer. I don't think that that's going to fix all of our problems."

School Culture

How, and to what extent, does ATR improve school culture?

Key Findings

- **Educators noted how Advanced Teachers fostered "togetherness" and provided teachers both academic and social-emotional support.** Advanced Teachers took on several leadership roles in schools, including coaching and mentoring other teachers. As a result, teachers across PSUs noted how they did not feel alone in their classrooms.
- **ATR programs emphasized a culture of continuous improvement.** A culture of continuous improvement was not only observed by evaluators and reported by educators at the school level, but also highlighted as an important characteristic of teachers' work in their classrooms.
- **Teacher Working Conditions survey estimates are not statistically significant but suggest positive associations between ATR and teacher perceptions of their school.** Collectively, results suggest that ATR may be improving perceptions of the professional development and support teachers receive and that teachers see these improvements in professional development as leading to stronger instructional practice in schools.

A Learning Community

Through analysis of educators' interview responses and open-ended survey data, the evaluation team identified three themes that highlighted ATR's impact on school culture: (1) ATR served as a catalyst in fostering "togetherness" and team effort, (2) ATR highlighted the importance of building trust among district and school administrators, and (3) ATR programs emphasized continuous improvement with all stakeholders.

Educators noted how ATR was a catalyst in fostering "togetherness" and team effort, while providing teachers both academic and social-emotional support. Advanced Teachers took on several leadership roles in schools, including coaching and mentoring other teachers. As a result, teachers across PSUs noted how they did not feel alone in their classrooms by being able to reach out to their school's Advanced Teacher for coaching and advice. Instead of ATR producing a rigid hierarchy of roles, the Advanced Teacher role of coaching produced more of a mentorship opportunity between teachers with one teacher describing their Advanced Teacher as someone who was "in the trenches with us."

The roles and expertise of Advanced Teachers catalyzed the "all in this together" mentality that, ultimately, was needed to help their students and improve learning in the classroom. In many schools working to implement ATR, school administrators wanted to embed this collaborative spirit from the very beginning by inviting teachers to participate in the program design process. As one school administrator shared, it was important for collaboration and co-creation to be at the forefront of program design to build that sense of trust and school buy-in. One example of this mentality was the way school administrators, Advanced Teachers, and teachers directly supported by an Advanced Teacher collectively utilized student data in service of school progress and goals. School stakeholders emphasized, to varying degrees, how student data provided an opportunity for administrators and faculty to learn from each other and function in a collaborative, cohesive environment.

Given the flexibility and customization that are hallmarks of ATR, Advanced Teachers also provided just-in-time social and emotional supports for teachers throughout the course of a school year. For example, one Advanced

Teacher shared that in addition to the types of academic support typically provided in this role (e.g., instructional planning, behavior management, data collection, professional development), she often found herself providing a lot of social and emotional support, noting that "these teachers are under a lot of stress and experience new, difficult situations that I have been through and where I can provide support and advice." It was also clear that teachers supported by Advanced Teachers appreciated this support. As one elementary teacher noted, "When you're having one of those days, and you're just like 'Why am I here?'," her Advanced Teacher is very quick to remind them of what's important and provide positive feedback and support. Another teacher shared that her Advanced Teacher recognizes how difficult teaching is and provides advice, motivational notes, thank you cards, and "encouragement to keep going."

ATR highlighted the importance of building trust as an important factor in positively impacting school culture. Establishing effective communication between district and school administrators trickled into creating a positive school environment. In describing the need to shift their Advanced Teachers' focus from upper grade levels to lower grade levels, one school administrator noted that it's important that district leaders understand the role of Advanced Teachers and the Advanced Teacher team and to "exercise a little bit of hands off" and trust in their principals and Advanced Teachers to know what's best for their teachers and students who are supported by Advanced Teachers.

In turn, school administrators placed a lot of trust in the experience of their Advanced Teachers and delegated leadership responsibilities, primarily in the areas of teacher mentoring and support. Many principals noted the importance of protecting their Advanced Teachers' leadership responsibilities to areas most supportive of curriculum and instruction. However, a few principals shared that their Advanced Teachers were also taking on responsibilities significant to the school's operations. For example, some Advanced Teachers supported the development, organization and coordination of whole school, non-instructional activities, including those focused on family engagement. Other Advanced Teachers were asked to coordinate school-level testing administration, appraise performance of teachers beyond those who they officially serve, and supervise student arrival and dismissal.

> "Really the biggest part that I feel [teachers I support] need is just having somebody that's in the trenches with them and can give them feedback in real time… somebody they can trust and vent to and then close their door and keep on going."
>
> - Advanced Teacher

Teachers supported by Advanced Teachers also frequently commented on this theme, citing the importance of not feeling like they were being formally evaluated, which opened up communication and trust among teachers. As one teacher being directly supported by an Advanced Teacher put it, "You don't always want to be watching your back to see if someone's coming in the door with a piece of paper with the checkoffs." Another stated, "It all goes back to trust because [my Advanced Teacher] has done walkthroughs and informal observations. And if I felt like she's going back telling the administration, I would hate it." Finally, another teacher added, "It's just for us. She's giving us feedback with the paper. And they may see it, but I don't feel like... we're getting critiqued every second." This formation of trust between teachers was recognized by school administrators and underscored the leadership roles Advanced Teachers took on.

ATR programs emphasized a culture of continuous improvement with all stakeholders. In a way, Advanced Teachers provided an intentional, in-house professional development opportunity for other teachers to adapt to the school and its needs. As one Advanced Teacher mentioned, "It is making sure that I am closing a [professional learning] gap somewhere…because I can't just come in and just teach." Additionally, there was some iteration with the way schools implemented their ATR programs; with some noting that if something did not work, there was time to change things and tailor it to get wanted and achievable results. The theme of continuous improvement was not only seen at the school level, but also as an important characteristic of teachers' work in their classroom. As one school administrator put it: "the teachers here have a different type of take on what's being done and they have a, 'we're going to make it work no matter what' [attitude]."

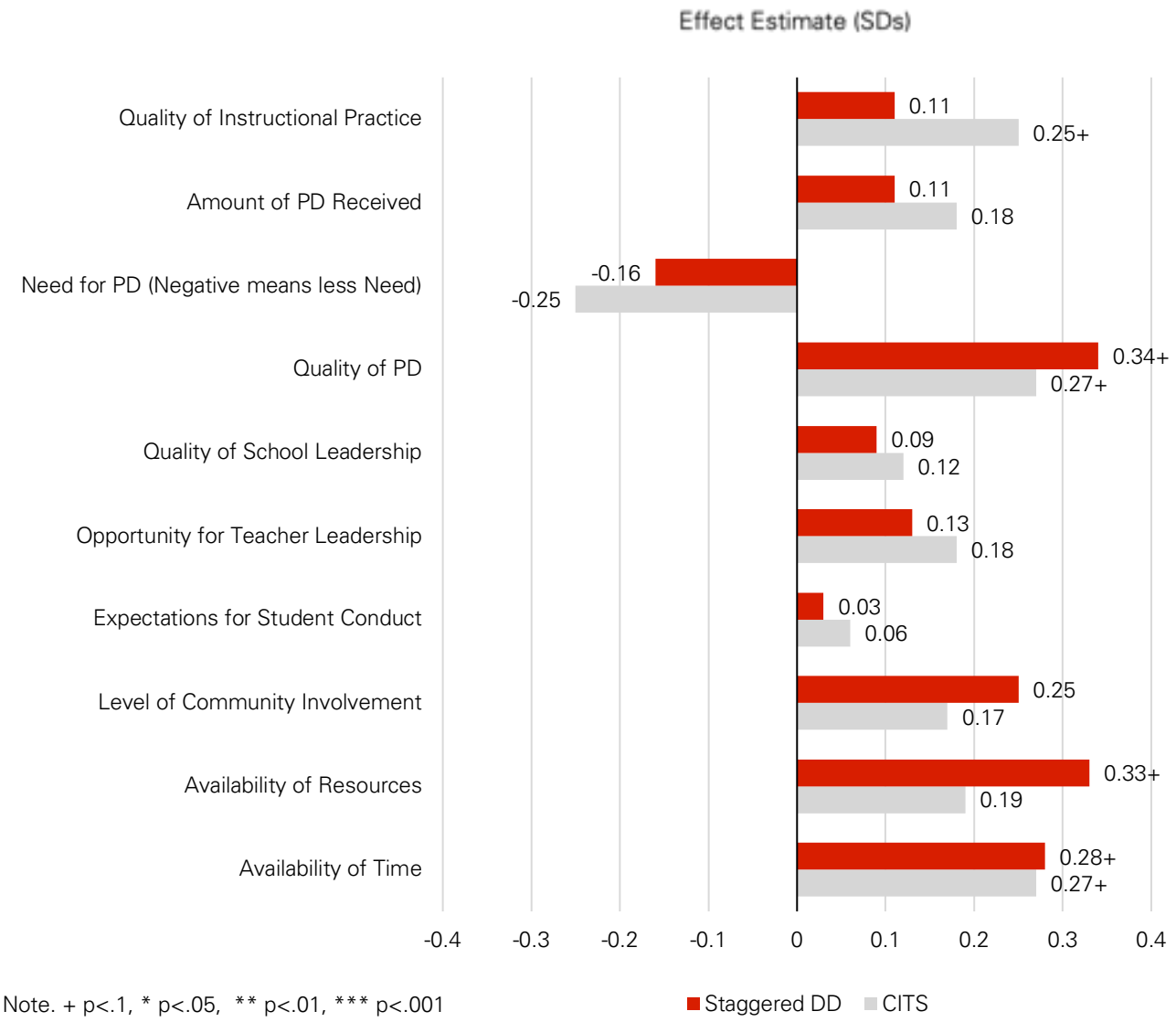
Teacher Working Conditions

To further examine school culture, the evaluation also used standardized measures derived from North Carolina's Teacher Working Conditions (TWC) Survey. These measures are average responses from all teachers in each school and year in which the survey is administered.

TWC estimates are not statistically significant but suggest positive associations between ATR and teacher perceptions of their school. As illustrated in Figure 7 (following page) none of the estimates are statistically significant at conventional levels, but all estimates point in the same direction: positive associations between ATR and teacher perceptions of their school. Results were also highly consistent between the CITS and staggered DID models. Moreover, the largest estimates are on quality of professional development. The results suggest that pre-post difference in teachers' perceptions of the quality of professional development they receive in their schools are 0.27 to 0.34 SD higher in ATR schools than similar pre-post differences in comparison schools. These estimates are marginally significant (at the 10 percent level). We also find some suggestive evidence that teachers in ATR schools are reporting greater availability of time and more positive perceptions of the quality of instructional practice in their schools.

Collectively, the findings suggest that implementing ATR may be improving teachers' perceptions of the professional development and support that they receive. It also suggests that teachers see these improvements in professional development as leading to stronger instructional practice in the school. These teacher perceptions align with the design of ATR, which aims to provide teachers with more support from an advanced role teacher to improve their instructional practice. However, we again emphasize that these results may be driven by respondents who are particularly satisfied with their school and, therefore, are more willing to fill out the TWC.

Figure 7. CITS and Staggered DID Estimates on Survey Factors Measuring Teacher Working Conditions



Note. + p<.1, * p<.05, ** p<.01, *** p<.001

Program Implementation

A secondary goal of this evaluation is to help the NCDPI and PSUs better understand how compensation models and advanced teaching roles are implemented and help identify factors that may be supporting or impeding their success. To that end, this section addresses the second overarching question guiding this evaluation: *What approaches and conditions are essential to implementing scalable and effective compensation models and programs for advanced teaching roles?* Findings in this section are organized by three evaluation subquestions focused on program implementation. Collectively, the findings suggest that 1) most PSUs have adopted a common ATR model, but implementation of PSU models varies widely across PSUs and school programs, 2) district- and school-level leadership have been instrumental in how models are implemented, but funding and class-size waivers are potential barriers to sustainability and scale, and 3) ATR programs serve a higher proportion of racially minoritized and/or economically disadvantaged students but could benefit from school-wide strategies to better support disadvantaged students and recruit marginalized educators to the program.

Program Comparisons

What are the similarities and differences in approaches to models and programs among PSUs, and what components differentiate those that have demonstrated significant impacts?

Key Findings

- **Opportunity Culture (OC) is the most common ATR model in North Carolina.** Among ATR grant recipients, 13 out of 17 PSUs currently partner with (or launched their initial ATR work via partnership with) Public Impact, a third-party vendor for ATR programs. However, PSUs not using OC produced larger positive effects on EOG/Cs than PSUs using OC.
- **There is extensive variation in implementation of ATR programs at the school level.** Even within PSUs that adopted a common model, like OC, there is extensive variation at the school-level on ATR job titles, roles, responsibilities, release time, and compensation. For example, administrators reported at least 23 unique job titles and salary supplements ranged from $1,500 to $20,750 annually.
- **While hiring protocols for Advanced Teachers were clear, evaluation protocols are still evolving.** Eligibility for the role is routinely informed by a combination of factors but unclear roster verification processes and/or missing EVAAS data pose a perennial challenge to administrators for effectively evaluating an Advanced Teacher's impact.

ATR Models

Through analysis of interview, focus group, and open-ended survey data, three general themes emerged that highlighted approaches essential to ATR implementation: (1) Opportunity Culture (OC), a framework from third-party ATR vendor Public Impact, is the most used ATR model in North Carolina, (2) there was extensive variation in Advanced Teacher titles, roles, and foci; compensation; and release schedules across PSUs and within schools, and (3) while hiring protocols for Advanced Teachers are clear, evaluation protocols for Advanced Teachers are murky.

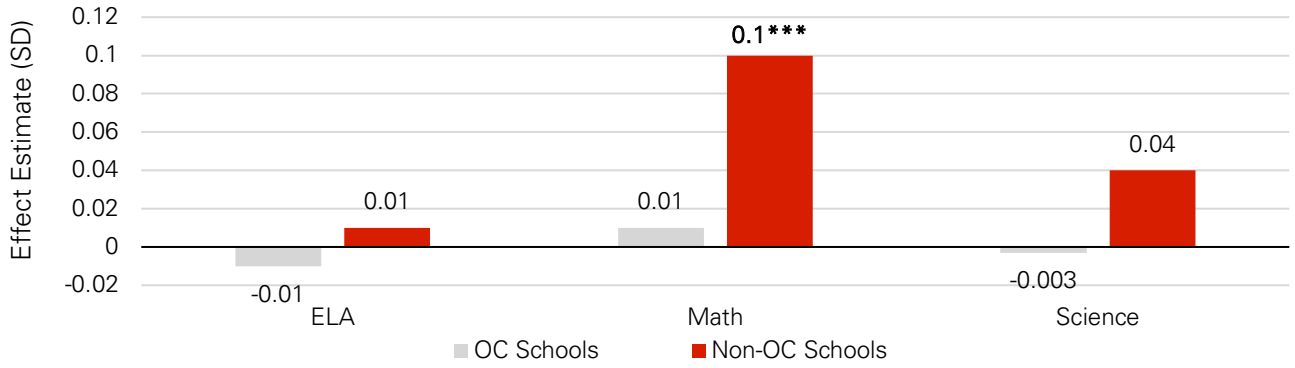
Opportunity Culture is the most common ATR model used by PSUs. Among ATR grant recipients, 13 out of 17 PSUs currently partner with (or launched their initial ATR work via partnership with) Public Impact. The OC model, a framework from third-party ATR vendor Public Impact, provides guiding principles, budgetary advice, recruitment materials, professional development materials/services, and an established list of professional roles and suggested salary differentials. School leaders personalized the OC model to meet PSU and school needs, including determining which job roles to utilize. One district administrator described their 8-9 month ATR planning process with the support of Public Impact as inclusive of the following:

- Working with their school-level teams to determine what ATR would look like in each individual school;
- Identifying a "high-yield teacher" to extend their reach, typically called the Multi-Classroom Leader;
- Taking each school through a design process with their OC teams based on the parameters set by the district; and,
- Identifying funding sources that they could utilize consistently year after year to support their individual schools.

Four districts have their own unique ATR models. These four models were developed in-house with support from external partners. One district administrator described their decision to design and implement a unique ATR program as a means to best support their PSU, sharing that the OC model did not fit their specific needs. The administrator added, however, that they do use "a lot of third-party support" to provide professional development and coaching for teachers and guidance for ATR at the district level. Of the four unique ATR district models, one positions Advanced Teachers to exclusively support beginning teachers, while the other three models use Advanced Teachers to support teachers across the career spectrum. Table 4 (following page) provides a broad comparison of ATR implementation components. A more detailed table comparing implementation across PSUs is included in Appendix D.

PSUs not using OC produced larger positive effects on End-of-Grade/Course assessments. As an extension to Evaluation Question 1a focused on student achievement, the evaluation further compared ELA, math and science scores for schools implementing OC models with those that are not using OC (i.e., Pitt, Bertie, and McDowell County Schools). Figure 8 below shows that across all three subjects, PSUs not using Opportunity Culture are producing positive effects that are larger in magnitude than PSUs that are using Opportunity Culture. However, the only estimate that is statistically significant is again in math.

Figure 8. Effect Estimate by Whether PSUs are Using Opportunity Culture



Note. + p<.1, * p<.05, ** p<.01, *** p<.001

There is extensive variation in implementation of ATR programs at the school level. Even within PSUs that adopted a common model, like Opportunity Culture, there is extensive variation in how these models are implemented at the school level. This is likely due in part to the high degree of autonomy that school administrators had over the implementation of ATR. For example, school administrators reported making decisions about ATR implementation since they had "close-to-the-ground knowledge" of the context and needs of their school. These decisions included, but were not limited to, the number of Advanced Teachers as well as their roles and foci. The number of Advanced Teachers per school ranged from one to seven and was determined in part by school priorities and available funding. Variation between schools within a single PSU was evident. For example, an elementary school in one PSU had seven Advanced Teachers while another larger elementary in the same PSU had two Advanced Teachers.

Educators reported that tailoring ATR to the specific needs and assets of a school was critical to its success. For example, one district administrator noted that the "schools that have been the most successful are those that have built the ATR roles into existing structures already in their building." They shared an example at one school where a highly effective math teacher was already doing work with the entire grade-level team in math. Building on this strength, the principal reported that this teacher was a natural fit for the Advanced Teacher role, and this provided a way to extend their impact.

Table 4. Comparison of ATR Implementation Approaches Across PSUs

PSU	Start Year	Schools (2022-23)	Model		Release Models			Job Role		Supplement range per year
			OC	Unique	None	Partial	Full	Additional Students	Supports Teachers	
Bertie	2018	6		✓		✓			✓	$3,000 - $5,000
Charlotte-Mecklenburg	2012	87	✓	✓	✓	✓	✓	✓	✓	$2,250 - $18,250
Cumberland	2020	10	✓			✓	✓	✓	✓	2% - 30% of salary
Edgecombe	2016	11	✓			✓	✓	✓	✓	$4,000 - $9,000
Guilford	2018	25	✓			✓	✓	✓	✓	$6,000 - $20,000
Halifax	2018	4	✓			✓		✓	✓	$800-$1,000/month
Hertford	2018	6	✓			✓	✓	✓	✓	2% - 30% of salary
Lexington City	2018	6	✓			✓	✓	✓	✓	15% - 30% of state salary
Lincoln	2021	6		✓	✓				✓	$3,000 - $5,000
McDowell	2020	14		✓	✓	✓			✓	$500/month + $1,600/summer
Mt. Airy City	2022	3	✓			✓	✓	✓	✓	$4,000 - $10,000
Nash	2021	5	✓			✓	✓	✓	✓	$1,600 - $20,750
Pitt	2016	38		✓		✓	✓		✓	$1,500 - $10,000
Thomasville*	2021	*	✓			✓	✓	✓	✓	2% - 30% of salary
Vance County	2016	6	✓			✓	✓	✓	✓	$5,000 - $13,000
Wilson	2020	14	✓			✓	✓	✓	✓	$2,400 - $18,000
Winston-Salem/Forsyth	2020	24	✓			✓	✓	✓	✓	$8,000 - $14,000

* In planning year

> "The individualized planning process for each of our schools was a crucial part of our success… Their plans weren't given to them by the district. They were created by the folks who are boots on the ground every day and based on their data and their needs."
>
> - District Administrator

Responsibilities and Compensation

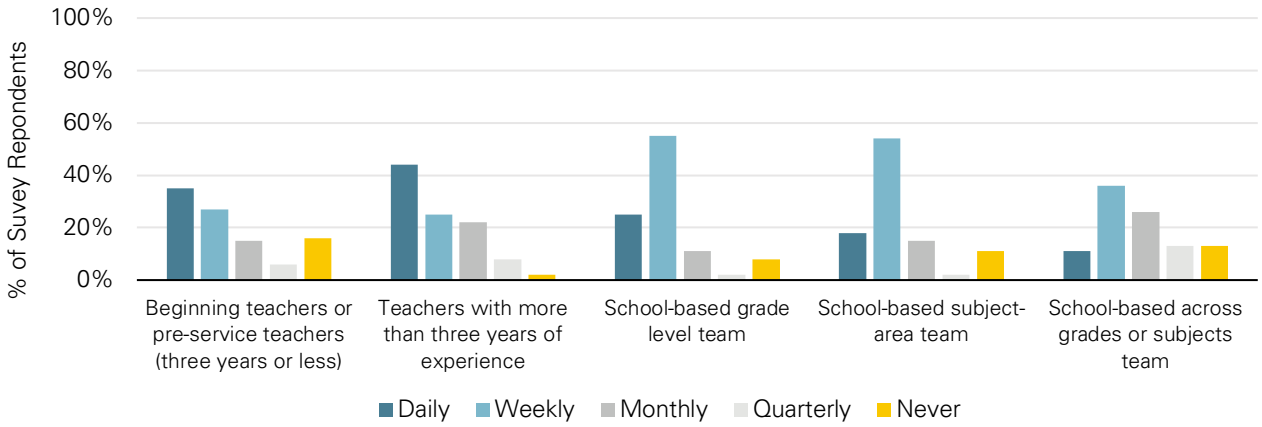
PSU and school administrators described two general categories of Advanced Teachers, with extensive variation in each. Teachers in Category 1 are those who teach more students. Teachers in Category 2 are those who directly support teachers. For the latter category, Advanced Teacher support may include small group instruction with students as well. Advanced Teachers in Category 1 — those who teach more students — were often called Expanded Impact Teachers or Team Reach Teachers. Typically, they took on between 33 - 65% more students in their classrooms.

On ATR grant applications, some PSUs anticipated use of blended learning models to accommodate the extended class sizes of Category 1 Advanced Teachers; however, site visit observations and interviews indicated that much of the extended instruction undertaken by these Advanced Teachers was happening in face-to-face settings. Typically, they supported teams of two to 10 teachers. In describing their Extended Impact Teachers, one elementary principal shared that while "they might not be great with adults, they can work with kids all day long." For example, the principal shared that one teacher at their school teaches three rotations of students. And, while her own kids are having lunch, recess, or working with a special instructional assistant, the Advanced Teacher is teaching reading to students in another grade level.

Advanced Teachers in Category 2 — those who directly support teachers — were often called Lead Teachers and Multi-Classroom Leaders. School administrators utilized a variety of organizing features in their ATR programs for supporting these teachers. Sometimes the organizing features were decided in collaboration with teacher representatives on a school-level ATR design team. Common organizing features included in ATR applications or described by administrators included an Advanced Teacher responsible for supporting beginning teachers, subject-area teams (e.g., ELA or math), grade-level teams, or all teachers within the school.

In addition to data analyzed from grant applications and administrator interviews, the evaluation team surveyed Advanced Teachers about the frequency in which they supported teachers across these organizing features. Figure 9 (following page) below helps to further illustrate how frequently Advanced Teachers in Category 2 work with different groups of teachers.

Figure 9. Frequency in Which Category 2 Advanced Teachers Support Different Groups of Teachers



Advanced Teacher job titles and compensation varied widely among PSUs. Within the two broad categories described above, there is extensive variation in both job titles and compensation. In fact, PSU administrators reported at least 23 unique job titles[1] for Advanced Teachers. These titles carry different levels of compensation across PSUs. While some PSUs provided a flat supplement, other PSUs provided salary supplements based on 2-30% of the Advanced Teacher's base state salary. Supplements ranged from $1,500 to $20,750 annually.

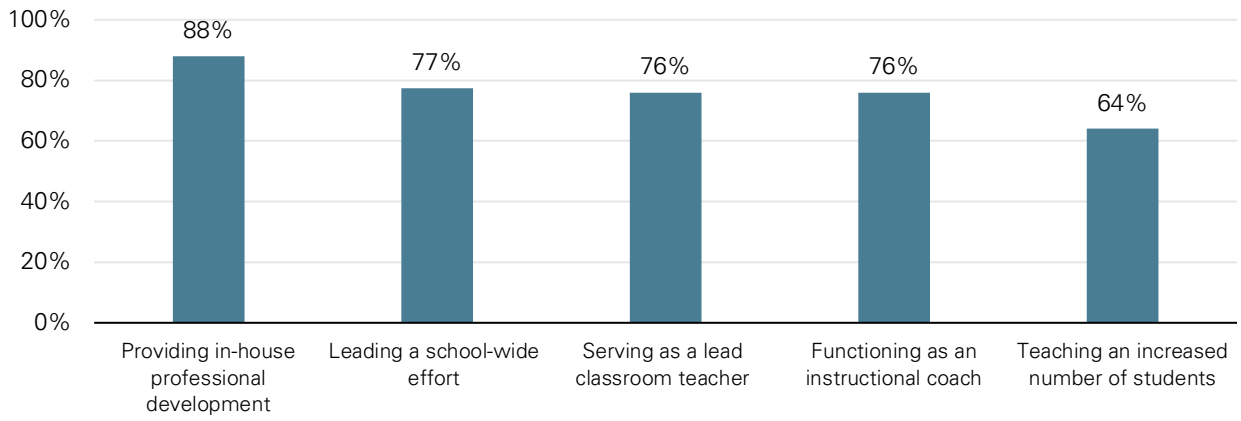
Many schools decided on these positions based on available funds, the abilities of available teachers, and student needs at the school. School administrators reported using a combination of funding sources to support their ATR programs. Some schools received 100% of their funding from the district with allotted numbers of Advanced Teachers. Other schools funded their Advanced Teachers through a combination of school-level Title I Funds, Restart Funds, and other monies, such as ESSER funds.

Advanced Teacher job responsibilities are well-aligned with those outlined in legislation. Figure 10 (following page) illustrates the frequency in which Advanced Teachers report engaging in the five job responsibilities outlined by legislation and described in the Introduction section. Of these five, Advanced Teachers were expected to perform at least one in their role. However, Advanced Teachers report that they engage, on average, in three of the job responsibilities specified by legislation. According to the Advanced Teachers, in particular, for those who teach an increased number of students (66%), many do so often – daily and weekly. When Advanced Teachers support other teachers (Category 2) and serve as team leaders (76%), they typically engage in that activity daily and weekly as well.

Many Advanced Teachers are leading school-wide data-driven instructional efforts (77%) typically at least once a month or quarter. Advanced Teachers provide in-house professional development to other teachers in their school (88%), doing so monthly and quarterly. Advanced Teachers also coach other teachers (76%), with about 21% doing so daily. Lastly, at least two thirds of Advanced Teachers (89%) report undertaking at least three job responsibilities. Only 4% of Advanced Teachers indicated that their jobs did not involve any of the responsibilities delineated in the ATR policy.

[1] Teacher Guide; Teacher Mentor; Expanded Impact Teacher 1; Expanded Impact Teacher 2; Expanded Impact Teacher 3; Multi-Classroom Leader 1; Multi-Classroom Leader 2; Team Reach Teacher; Master Team Reach Teacher; Multi-Classroom Leader; Expanded Impact Teacher; Multi-Classroom Leader 3; Lead Teacher; Peer Assistance Mentor; Master Teacher Leader; Extended Impact Teacher; Multi-Classroom Teacher; Facilitating Teacher; Collaborating Teacher; Equity Partner; Facilitating Mentor; Extended Impact Teacher 1; Extended Impact Teacher 2.

Figure 10. Percentage of Advanced Teachers that Perform Legislatively Prescribed Job Responsibilities



Across schools, the degree to which formalized plans for when and how frequently Advanced Teachers would perform these responsibilities varied extensively. In interviews and focus groups, some educators discussed intricate master schedules created to maximize teacher pairings and teacher and instructional assistant pairings. For example, an Advanced Teacher that supports teachers is paired with an Advanced Teacher that takes on more students, which, in turn, provides the release time for the first Advanced Teacher to support teachers. Other schools used extempore methods to meet emergent coverage needs (e.g., text messaging). Finally, some schools discussed the use of substitutes or strategic in-house coverage when needed to provide release time for their Advanced Teachers.

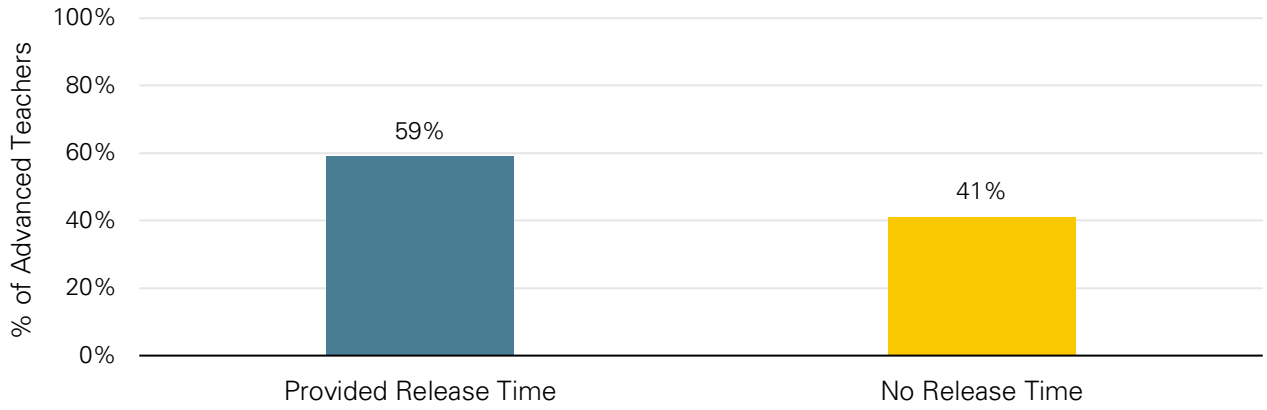
Across the board, stakeholders discerned Advanced Teachers from the "Instructional Coach/Facilitator" role previously used in some schools. Although serving as an instructional coach was one responsibility outlined in legislation, Advanced Teachers made a clear delineation between the instructional coaches and their roles, noting how ATR has allowed them to take a more hands-on approach to the school's curriculum and teaching methods, while also allowing them to maintain closer relationships with other teachers and students. For example, one Advanced Teacher who has served in both of these roles noted that as an instructional coach, "I felt like I was never in the classroom. So, my job was managerial at that time." She further added that there was very little "instruction" involved in her role as an instructional coach, but as an Advanced Teacher, "Now I feel like it's all about instruction, and I have more time in the classrooms."

Overall, Advanced Teachers' efforts are well-aligned with ATR policy, and Advanced Teachers are engaged in different types of activities designed to improve student achievement in their schools. Additionally, the results suggest that there are similar job responsibilities assigned across PSUs in the ATR program.

Release Time

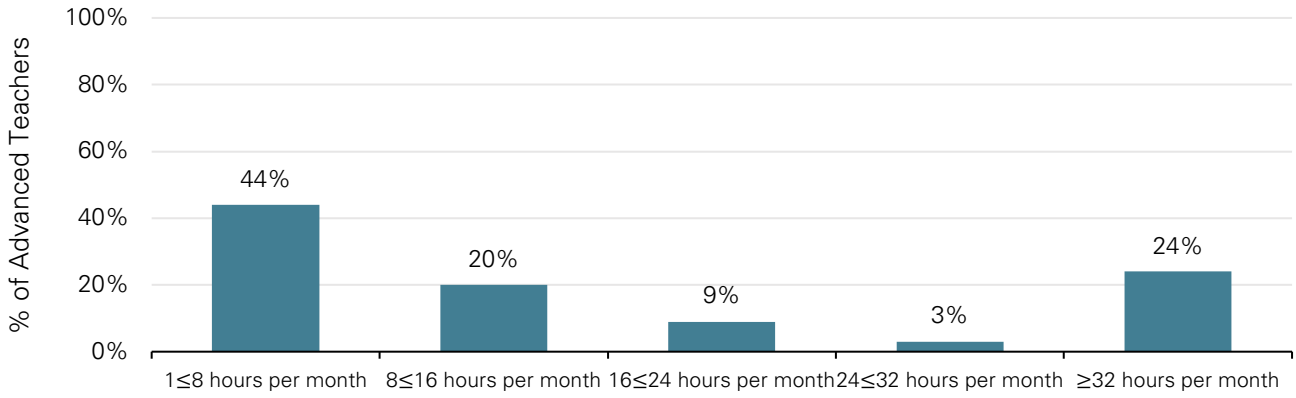
The majority of Advanced Teachers receive release time to support their role, but the amount varies widely across PSUs. Advanced Teachers were surveyed about whether they received "release time" for their role as an Advanced Teacher (i.e., released from instructional responsibilities to engage in your work as an Advanced Teacher). Figure 11 (following page) illustrates the results of Advanced Teachers from 11 of the 12 PSUs who responded to this survey item. Overall, the findings suggest that the majority of respondents (59%) are provided release time to engage in their work as an Advanced Teacher. However, one PSU is excluded from Figure 11 due to the large number of survey responses and because they stand out as the exception rather than the norm. In this PSU, 65% of teachers reported that they did *not* receive release time from their instructional responsibilities to engage in their work as an Advanced Teacher.

Figure 11. Proportion of Advanced Teachers Provided Release Time from Instructional Responsibilities



Both administrators and Advanced Teachers indicated that there is extensive variation in the amount of release time provided teachers. As illustrated in Figure 12, Advanced Teachers reported that their release time ranged from less than 4 hours a month to ≥ 32 hours a month. Of the 55 Advanced Teachers who reported receiving release time, approximately half (48%) of Advanced Teachers fell on the two extremes of this release time range. Approximately one-quarter of Advanced Teachers (24%) indicated receiving less than 4 hours a month and a roughly equal amount indicated at least 32 hours a month.

Figure 12. Frequency in Which Category 2 Advanced Teachers Support Other Teachers



During interviews and focus groups, Advanced Teachers and administrators provided additional context for how this release time was used. For the purposes of this report, release time is categorized as no release, partial release, and full release. Advanced Teachers with partial and full release used designated time to support other teachers and students at their schools. Advanced Teachers with no official release time who directly support teachers reported that they relied on common planning, extempore coverage, and outside of school hours to coach their assigned team of teachers. Some Advanced Teachers who exclusively teach more students operated with partial release to push in and lead small group instruction in other classrooms. Other Advanced Teachers with partial release who directly support teachers utilized release time to carry out those duties.

For Advanced Teachers with full release, their primary responsibility was supporting a team of teachers through coaching, mentoring, and providing targeted small group instruction with students. Designated release time was often correlated with roster sharing; PSU and school administrators explained that Advanced Teachers with full or partial release often shared Education Value-Added Assessment System (EVAAS) data with the teachers they were directly supporting.

Many school administrators favored a partial release time approach for Advanced Teachers. In PSUs that used the OC ATR model, Advanced Teachers with partial release were sometimes provided strategic coverage via a special instructional assistant called a Reach Associate, who received an additional salary supplement. Although Reach Associates were not considered Advanced Teachers, stakeholders described them as being integral to making the ATR program work. Reach Associates worked closely with Advanced Teachers throughout the year to develop a relationship grounded in distributed leadership and to maintain delineated roles and responsibilities. For example, one Reach Associate described their role as working closely with the kindergarten team during lessons and covering the classroom while the Advanced Teacher is out of the room, "so students can still get the best education even without the teacher in class."

The affordances and drawbacks of different types of release time for Advanced Teachers were often raised by educators. They described the benefits of partial release in that highly effective teachers remain in the classroom while also having time designated during their work day to support teachers. One school administrator explained the benefits of partial release with Advanced Teachers as still supporting high-quality instruction by coaching and supporting teachers on their team, but "this allows us to have a model classroom for all staff to observe, not just those he/she is coaching."

However, some Advanced Teachers shared the drawbacks of operating within a partial release approach. For example, one teacher noted that even though they have coverage with a special instructional assistant, "it is tough to leave our babies" and their instruction to others. Advanced Teachers with no release understood context-specific staffing constraints; however, they described how this approach limited the sustainability and success of their work.

> "Our particular model is a partial release, which means the [Advanced Teachers] still teaches their own classes. This allows us to have a model classroom for all staff to observe, not just those he or she is coaching."
>
> - District Administrator

Advanced Teacher Selection and Evaluation

While hiring protocols for Advanced Teachers were clear, evaluation protocols for Advanced Teachers are still evolving. Typically, eligibility for the Advanced Teacher role is determined through a combination of factors, which may include positive trends in EVAAS data, leadership experience, administrative recommendations, and participation in extensive application activities (e.g., completing micro-credentials, responding to coaching scenarios, and/or panel interviews). Most PSUs advertised the general position types and maintained a "pool" of qualified candidates that could be accessed by school administrators. For example, one district administrator shared their ATR hiring process, which was similarly described in interviews with administrators across other

PSUs and included several steps. First, a written essay and application were scored by district administrators. Second, interviews were conducted for those with passing scores. Third, the names of those who passed the interview were then released to principals. Finally, the principals conducted interviews to determine if they were a good match for the school and made their selection.

With respect to evaluating Advanced Teachers and determining continued eligibility, most district administrators reported that the development of this process was ongoing. An assortment of school-level data (e.g., student achievement, student behavioral data, teacher working conditions and teacher retention) were reported as being used to justify continued placement as an Advanced Teacher. Administrators emphasized the importance of requalification for Advanced Teaching roles but described difficulties in streamlining a fair and equitable process to do so. For example, one administrator noted that, "Once you're in the pool, you don't stay in there forever. You still have to prove that you're qualified for the role." They added that Advanced Teachers might pursue a micro-credential or some other form of certification, but they still have to show some data demonstrating their efficacy. However, administrators shared that unclear roster verification processes and/or missing EVAAS data posed a perennial challenge to effective evaluation of an Advanced Teacher's impact, thus making it difficult to fairly and fully evaluate their work.

Program Barriers and Supports

What school, district, and state-level conditions support or impede ATR program efforts?

Key Findings

- **District and school leaders have been instrumental in advocating for and shaping the design of ATR programs.** At the PSU level, it was common for one person to be responsible for coordinating ATR program design, implementation, and progress-monitoring efforts in collaboration with school administrators.
- **Some district and school administrators indicated that class-size flexibility is critical to implementation.** However, school administrators also noted waivers are "a double-edged sword" because even if PSUs no longer need the grant money to sustain the program, they still need the waiver to do this work.
- **Variable funding structures and ongoing teacher turnover limit the sustainability and impact of ATR.** School administrators see value in sustaining and scaling their ATR programs; however, under current funding structures there are often consequential trade-offs for staffing programs. In addition, Advanced Teachers sometimes need to provide emergency coverage, limiting the impact of ATR efforts.

Supporting Factors

Analysis of educator interview and open-ended survey data identified four key conditions supporting or impeding ATR implementation: (1) PSU- and school-level leadership have been instrumental in making decisions that ensure the viability of ATR, (2) variable funding structures and stipulations were a reported concern for most district and school administrators and some teachers, (3) stakeholders reported that ATR program efforts have been impacted by ongoing educator turnover, and (4) some district and school administrators indicated that class-size requirements impact the viability of ATR programs.

District- and school-level leadership have been instrumental with advocating for ATR programs and shaping their design. All currently participating PSUs indicated a desire to scale up their programs, and one PSU currently has 100% school involvement. In general, PSUs tended to favor school opt-in models and indicated that principal

commitment was instrumental to success. At the PSU level, it was common for one person to be responsible for coordinating ATR program design, implementation, and progress-monitoring efforts. For example, one district administrator shared that, "Initially, there's a large investment from district administration in making it all happen."

PSU leaders described taking an iterative approach to ATR design and implementation with school administrators, guided by considerations of district-wide and school-level needs (e.g., school feeder patterns, achievement data, and staffing). One district administrator, highlighting the value in strategically co-designing ATR programs with school administrators, noted that, "We talk to [interested principals] around what's your vision… how can you provide more access for all of your students and greater reach for your teachers?" They further shared that they help principals think through the processes of communication, scheduling, and support, and work with them to allocate their funding to have more ATR positions.

Though far less common, some PSUs reported that a PSU-level team collaborated on ATR efforts. Across most PSUs, however, leadership indicated that collaboration at the PSU level either supported or would support a more robust and sustainable ATR model. One PSU administrator described their coordinated ATR efforts within their district office, noting that: "It has been extremely helpful to have the Chief Financial Officer, the Communications Director, HR Director… having a team at the district level, and it being a very diverse team, cross categorical, was very helpful."

Some district and school administrators indicated that class-size flexibility is critical to implementation but requirements outside the grant program limit viability. PSU administrators emphasized how the ATR class size flexibility waiver was a "game changer" in recruitment conversations with potentially interested school administrators and for program implementation at the school level. Several PSU administrators described a practice of leveraging ATR class-size waivers in tandem with Restart flexibility to ensure viability at the school level and shared that it "cuts some of the red tape if I need to swap an allocation for an Advanced Teacher."

However, while many district and school administrators have become adept at leveraging funding flexibilities to ensure ATR longevity, they also noted concerns about class-size policies and, in particular, waivers that may end upon grant closure. One PSU administrator shared that several years into implementation, their PSU is dependent on continued ATR grant funding based primarily on the class-size waiver, indicating that, "The only concern I ever raised with some of the state-level policies is… needing to be within the grant to get the class-size waiver." They noted it's "kind of a double-edged sword" because even if you no longer need the grant money to sustain the program, you still need the waiver to do this work.

PSU administrators advocated for continued class-size waivers beyond the grant, noting the flexibility that they afford. Moreover, they shared confidence that larger class sizes, coupled with effective Advanced Teachers were beneficial to educators and students alike. One administrator, for example, noted that in past surveys and discussions with teachers, they indicated that they would rather have their Advanced Teacher coach and have a larger class size than not have the coach at all. They noted that the Advanced Teacher does so much for them, "helping with instruction and planning, data analysis part, and they might also pull a group to work with too."

Barriers to Sustainability and Scale

Variable funding structures and stipulations were a reported concern for most district and school administrators. District administrators expressed a desire to incorporate ATR in every school in their district; however, they understood this was not possible given current available funding. One district administrator mentioned that while they would like to expand to additional schools, it is not feasible based on the way ATR is currently funded. In fact, the idea of funding uncertainty has prompted school administrators to have to find

creative ways just to *sustain* their schools' current ATR programs.

School administrators and teachers also see value in maintaining and potentially growing their ATR programs; however, they recognize that under current funding structures there are often consequential trade-offs, including staffing sacrifices in other areas. One teacher directly receiving support from an Advanced Teacher, for example, noted: "The [ATR] positions we have now actually cut some things that we actually feel we need." For example, they shared having to cut instructional assistants for the classroom and, consequently, the support they provided for teachers and students.

A school administrator at a non-Title I school shared a similar sentiment, noting that, "We are not a Title I school so we did not necessarily have the funding for the positions. Because we know the value of ATR, we 'traded' traditional positions to cover the costs of our ATRs." In these instances, administrators held stronger beliefs in the value-add of Advanced Teachers as compared to other possible educational staff or supports but worried about maintaining those advanced teaching roles.

> "Based on the way that we have to fund ATR, we doubt very seriously we're going to be able to have additional schools. We have other schools that would like to be a part of it, but they're not going to be able to."
>
> - District Administrator

Educators reported that ongoing teacher turnover and time constraints limit the impact of ATR. While ATR has been seen as an overall positive program by administrators and teachers with helping school goals and culture, it is not immune to the current issues around educator shortages and retention in the state. For example, administrators and teachers frequently shared instances of Advanced Teachers needing to provide emergency coverage, impacting their intended role; this prioritization was seen as a direct offshoot of growing educator turnover by school administrators and teachers. The shortage extended to a dearth of substitute teachers as well. For example, one Advanced Teacher stated that the biggest challenge they have is, "Sometimes we have to cover classes, which I don't mind doing. But then, you're letting another teacher down, because you're not pulling their group or you're not meeting with them to plan." One teacher directly supported by an Advanced Teacher also noted that, "We were told that…a coach would come in and help us co-teach, pull small groups if we needed to…But I think because of the staffing issues, it's hard to implement that."

Both Advanced Teachers and teachers directly supported by Advanced Teachers also noted the time constraints Advanced Teachers had during the school day. Advanced Teachers needed to advocate and prioritize their efforts with school administrators with one Advanced Teacher noting a tension between getting in the classroom and coaching assigned teachers to impact student achievement and helping carry out non-academic but essential duties in the school. An elementary teacher who was directly supported by an Advanced Teacher also noticed how thinly stretched Advanced Teachers at their school were becoming and mentioned that Advanced Teachers

"still have their own set of kids that they have to support as well… so, if anything could happen to provide them with more time, so that way they can be more hands-on," that would be helpful in extending their impact.

Ideally, Advanced Teachers' time would be protected to carry out their designated responsibilities. However, current school staffing shortages have hindered that as most Advanced Teachers continue to support the typical-sized classrooms and number of students, possibly putting more pressure on Advanced Teachers to work overtime inequitable to their compensation. It also emphasizes the need to invest in more "homegrown" teachers for a thriving school culture. While seen as a step towards improving educational quality, having an ATR program does not diminish the need to hire more educators in schools. Addressing both quality and quantity of educators simultaneously may create an even more significant impact with students in schools.

Equitable Access

How can the design of ATR models and programs be improved to better address educational disparities among staff and students?

Key Findings

- **ATR schools tend to serve larger proportions of racially minoritized and economically disadvantaged students than the rest of the state.** ATR schools serve larger proportions of Black (48%) and Latino/a/x (19%) students relative to the average across the rest of the state (24% and 15%, respectively). ATR is also being implemented in schools that serve more economically disadvantaged students and multilingual learners than schools in the rest of the state.
- **Educators reported that ATR has improved access to highly effective teachers for students attending Title I and/or historically hard to staff schools.** Administrators and teachers also believe that having access to Advanced Teachers at their school has led to improvement in academic achievement for educationally disadvantaged students.
- **Administrators reported that ATR was a human resource strategy that supported PSU-wide equity goals.** However, educators indicated a need for school-wide strategies to prioritize students most impacted by educational disparities and for PSUs and schools to be more intentional and expansive in hiring practices.

Existing Efforts Towards Addressing Equity

Analysis of NCDPI administrative records, as well as educator interview and survey responses, highlighted three key approaches for how ATR is addressing educational disparities among students. First, ATR schools tend to serve larger proportions of racially minoritized and economically and educationally disadvantaged students than the rest of the state. Second, ATR has provided access to highly effective teachers for students attending schools that are Title I and/or historically hard to staff. Third, Advanced Teachers advocate for student needs and forward equity-centered approaches.

ATR schools tend to serve larger proportions of racially minoritized and economically disadvantaged students than the rest of the state. Table 5 (following page) compares the characteristics of ATR schools to all schools in the rest of the state. The table shows that ATR schools serve students with noticeably lower test scores than the rest of the state. For example, average ELA scores are -0.17 SD in ATR schools relative to the rest of state's average of -0.07 SD. Also, ATR schools serve larger proportions of Black (48%) students relative to the average in the rest of the state (24%). Conversely, ATR and comparison schools serve much fewer white students (26%)

than the average in the rest of the state (52%). Schools implementing ATR also serve more economically disadvantaged students and multilingual learners than schools in the rest of the state. Together, these demographic results suggest that ATR schools tend to serve larger proportions of racially minoritized and economically disadvantaged students than the rest of the state.

Table 5. Demographic Averages in ATR Schools and the Rest of the State in the Baseline Years Prior to ATR

	ATR Schools	All Schools	Difference
Student Test Scores			
ELA Standardized Scale Score	-0.17	-0.07	-0.1
Math Standardized Scale Score	-0.13	-0.08	-0.05
Science Standardized Scale Score	-0.15	-0.06	-0.09
Student Characteristics			
Black	48%	24%	+24%
Economically Disadvantaged (ED)	66%	49%	+17%
Latino/a/x	19%	15%	+4%
Multilingual Learner (ML)	10%	6%	+4%
Female	48%	48%	0%
Asian	2%	2%	0%
Migrant	<0.01%	<0.01%	<0.01%
Native American	1%	2%	-1%
Multiracial	3%	4%	-1%
Students with Disabilities (SWD)	13%	14%	-1%
Academically Gifted (AIG)	6%	10%	-4%
White	26%	52%	-26%

Note. Averages are pooled across all years before schools began implementing ATR.

Educators reported that ATR has improved access to highly effective teachers for students attending Title I and/or historically hard to staff schools. Educators reported that ATR was a human resource strategy that supported PSU-wide equity goals. For example, in describing their ATR implementation strategy, one district administrator shared that they recognized a need to try to attract the most qualified and the most effective teachers for schools that historically have been hard to staff and serve more students who are economically disadvantaged. District administrators also emphasized the importance of supporting Advanced Teacher retention at historically hard-to-staff schools in order to meet the goal of increasing student access to a high quality teacher. One administrator shared that at two of the highest need schools, they have three Advanced Teachers, and they were able to get all three of those positions filled in their first year of implementation. Equally important, they shared that the Advanced Teachers are still with those schools today.

Finally, educators were also asked on surveys the extent to which having Advanced Teachers at their school has led to improvement in academic achievement for educationally disadvantaged students (i.e., economically disadvantaged students, students with disabilities, English learners, unaccompanied youth, or students

experiencing homelessness, migrant students, and immigrant students). The large majority of administrators (93%), Advanced Teachers (89%), and teacher colleagues (78%) agreed or strongly agreed having Advanced Teachers in the school led to improvements in academic achievement for educationally disadvantaged students.

> Typically, we [implemented ATR] at our schools that are higher in poverty, most difficult to staff, most demographically diverse… We recognized a need to try to attract the most qualified and the most effective teachers to those schools so that they could improve student outcomes and perform at a higher level.
>
> - District Administrator

Advanced Teachers have the opportunity to advocate for student needs and to forward equity-centered approaches. In particular, many Advanced Teachers emphasized that coaching cycles, with either small groups of teachers or conducted one-on-one, were significant mechanisms for addressing educational disparities. Through these cycles, Advanced Teachers reported using a combination of observational data and reflection tools to help teachers develop inclusive, student-affirming pedagogy that was content focused. Foci of coaching conversations included (1) student participation patterns, (2) student behavior patterns, and (3) teacher discourse patterns. Conversations were intended to analyze biases and reframe deficit thinking.

In highlighting the importance of regular coaching sessions, one Advanced Teacher explained how, instead of conducting sessions with the entire school, she meets regularly with 10 to 12 teachers. These sessions provide an opportunity to get to know each other and discuss questions such as, "Are we meeting the needs of all learners outside of our personal biases…Do you believe that all of those 30 kids in your classroom can learn and grow?" She added that in order to grow the class, as the educator, teachers need to recognize that "there's not a student that comes in my presence that cannot grow and learn."

Advanced Teachers who described coaching sessions in relation to equity commonly linked teacher beliefs with student data and the selection of meaningful, high-yield strategies. For example, one Advanced Teacher summarized it as follows: "Having these conversations about data, and having conversations about how we build lessons, and why we are using high-yield strategies, allows you to add that equity piece."

Some school administrators reported that Advanced Teachers elevated concerns and advocated for marginalized students. One elementary-level school administrator, who was new to the school, shared examples of Advanced Teachers advocating for marginalized students by drawing awareness to trends in enrollment and lack of resources, thus helping him become better acquainted with his school context. Stakeholders emphasized the value of professional development that helps link academic goals with student experiences to further extend Advanced Teachers' opportunities and capacity for addressing educational disparities. One survey respondent called for continued professional development aimed at "understanding and advocating for students."

Douglas-Byrd Middle School: A Spotlight on Equitable Access to Effective Teachers

Summary: A middle school principal shares her story about staffing a historically hard-to-staff school.

When Dr. Christina DiGaudio began her tenure as principal of Douglas Byrd Middle in 2020, she knew that addressing long-standing challenges would require staffing innovations. Douglas-Byrd Middle School was a historically hard-to-staff school and, relatedly, faculty had grappled with consistently meeting the instructional needs of its student body, 100% of whom were characterized as economically disadvantaged.

With support from Ruben Reyes, Cumberland County Schools Associate Superintendent for Human Resources, and a close partnership with a Public Impact team, Dr. DiGaudio set out to design an Advanced Teaching Roles (ATR) program that would provide strategic support to her teaching staff—nearly 25% of whom were beginning teachers (BTs) with residency licensure. Dr. DiGaudio described their collective vision: "We want[ed] to make sure that teachers have the support that they need to try to reduce that number of teachers that are leaving the profession." She felt that a large team of Multi-Classroom Leaders (MCLs) with core subject expertise would move the needle on school culture and, consequently, teacher retention and student achievement. Moreover, she wanted MCLs to prioritize differentiated supports based on teacher needs:

"Teachers need this kind of continual support… especially when they're in their beginning stages of their career…For our more veteran teachers, it's more focused on the rigor, trajectory, and high yield strategies that we could use to make instruction more effective."

Three years into implementation, Dr. DiGaudio highlighted 2021-2022 Academic Growth Measures as proof of ATR's positive impact. Like many other ATR schools across North Carolina, Douglas Byrd Middle School exceeded expected growth in 2021-22 (87.6%). Dr. DiGaudio explained, "I really do credit the MCLs with that because they completely revamped how collaborative planning is being done at the school."

Douglas Byrd MCLs facilitate weekly data analysis meetings, model lessons, co-teach, and help teachers work through problems of practice as they emerge. They also coordinate regularly with the administrative team and work with instructional facilitators and district coaches to ensure that their supports do not overlap. They share in Dr. DiGaudio's excitement over recent growth scores, while also emphasizing how the program nurtures teacher leadership and, in some instances, career trajectories.

Eighth grade Math MCL Terry Shiver leads a team of three while also teaching four classes a day. Mr. Shiver explains that he hopes to provide math-focused, embedded support while also acknowledging the emotional work of teaching. Tiara May, a third year EC teacher and recent BT of the year, feels so supported by Terry Shiver's non-judgmental guidance that she one day aspires to be an MCL herself: "As long as I'm streamlined to the same grade level and subject, I can build on my skillset as an eighth grade math teacher then, in a few years, about five, that'll be like year eight for me…I could see myself [as an MCL] but only as long as I can maintain a strong MCL like I have now."

Justine Jones, an eighth grade ELA MCL, envisions teachers on her team as future Advanced Teachers: "I want my teachers to become those teachers that will pull somebody else up because there are so many people who leave the field of education because they don't have a sounding board. They don't have that support. In a school like this, you have to have that absolute support all the way around, or you will not make it."

Ms. Jones has had a palpable impact on her team of teachers. Courtney Jacobs was an elective teacher when she first met Ms. Jones. After a series of coaching sessions, Ms. Jacobs decided to take on the challenge of teaching a core tested subject, even though it required a master's degree: "Ms. Jones showed me I could be doing so much more… And looking at benchmark scores, I'm like, 'Oh my!' I'm like, 'Y'all, you're growing… It's going up.'"

Even with ATR, Douglas Byrd still grapples with unexpected vacancies. Recruiting qualified teachers to the classroom and supporting their growth is a perennial challenge that many school leaders face. Importantly, many Douglas Byrd Middle School teachers, who have the benefit of working closely with an MCL, express strong intentions to return to their classrooms in August 2023 and to continue growing in their professions.

Improving Equitable Access to ATR

Analysis of educator interview responses and open-ended survey data also identified two important ways in which the design of ATR models and programs could be improved to better address educational disparities among students and staff. First, Advanced Teachers and administrators reported that while their programs support the broader equity goals of ATR, they indicated a need for school-wide strategies to prioritize students most impacted by educational disparities. Second, although Advanced Teachers have the opportunity to advocate for student needs and to forward equity-centered approaches, Advanced Teacher recruitment can be amplified toward increased opportunities for marginalized educators.

PSUs reported that ATR supports the broader equity goals of the program but indicated a need for school-wide strategies to prioritize students most impacted by educational disparities. At the school level, the majority of ATR programs were driven by a talent pool, composed of in-school or in-district teacher talent. School administrators indicated that placement of Advanced Teachers was largely determined by their extant areas of expertise. In simplest terms, this means any given students' access to an Advanced Teacher is determined, in part, by chance.

At the school level, school administrators and Advanced Teachers described a need for support in designing and monitoring how the program can prioritize support for multilingual students, students who are economically disadvantaged, and students with learning differences. For instance, an elementary school administrator noted in a survey response that "further breakdown of data with ED [economically disadvantaged] students" would be an important addition to their team's common practice of "data dives." Another school administrator described their team's need to become more strategic, indicating that while they know Advanced Teachers are looking at student subgroups, "I think we need to be more intentional…We really need to dig deep on how are we impacting the Black students or the EC (exceptional children) students or the economically disadvantaged students…But being more intentional with the subgroups, like the EC students, I think we need to do a better job at that."

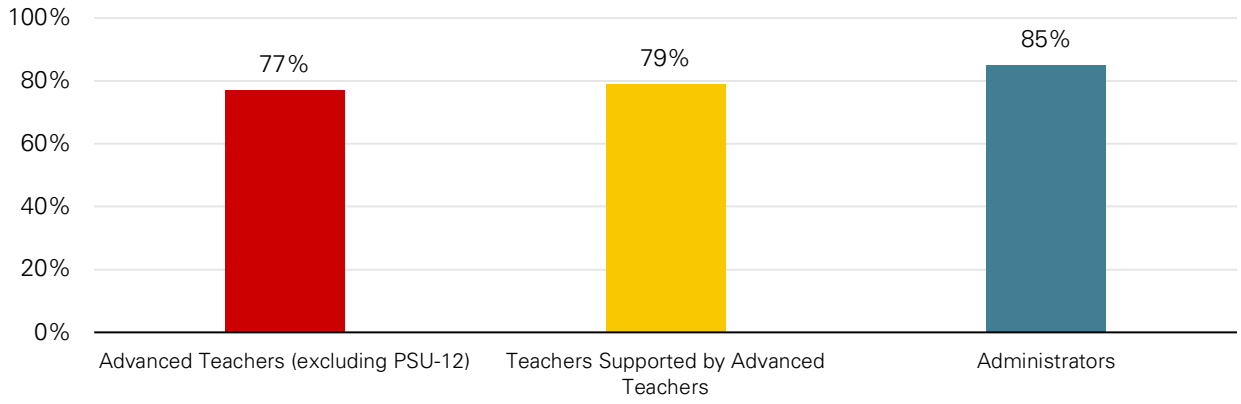
Similarly, numerous ATR survey respondents commented on the need to think more strategically about how to meet the instructional needs of multilingual students and students with exceptionalities. One Advanced Teacher suggested addressing student needs via targeted recruitment practices, noting that there could be "closer collaboration between the Advanced Teachers and other specialists (student services, exceptional children, English Language learners, etc.)."

> "ATR is something that we highlight in our equity plan that we have to submit to NCDPI each year under Federal Programs because we do believe it's a very effective strategy in [addressing] equity."
>
> - District Administrator

Most district administrators talked about equity broadly; however, one PSU, Pitt County, has forwarded a promising approach to addressing educational disparities through the design of Equity Partners. Though a relatively new role, Equity Partners help school-level ATR programs and staff center student needs through a Community of Practice (CoP) approach. Specifically, Equity Partners use improvement science to lead a group to address an inequity in a school. As one Equity Partner noted in survey data, CoPs have been instrumental in merging ATR initiatives with context-specific equity goals. They noted, "I meet with the CoP once a month and implement practices to help students with coping mechanisms in order to reduce our school's office referrals as related to our problem of practice." Equity Partners described CoPs focused on increasing enrollment in Advanced Placement classes, social factors impacting student engagement, and supports for multilingual learners.

Stakeholders noted that Advanced Teacher recruitment can be amplified toward increased opportunities for marginalized educators. On surveys, educators were asked the extent to which they agreed that teachers from diverse backgrounds are encouraged to apply for positions as Advanced Teachers. As illustrated in Figure 13, the majority of administrators (85%), Advanced Teachers (77% excluding PSU-12; 55% for all respondents), and teachers supported by Advanced Teachers (78%) agreed or strongly agreed teachers from diverse backgrounds are encouraged to apply for positions as Advanced Teachers. This general consensus regarding recruitment is likely due in part to PSUs reporting that they worked hard to hold interest meetings at the school level in order to communicate new staffing opportunities to teachers. Many Advanced Teachers also noted that they were informed of the opportunity to apply for their position, or strongly encouraged to apply, from a school administrator.

Figure 13. Percentage of Administrators who Agree that Teachers from Diverse Backgrounds are encouraged to Apply for Advanced Teaching Roles



However, educators noted that a key to improving the inclusivity of the ATR program would be intentional and expansive hiring practices. For example, an elementary school administrator commented on the need to "broaden the scope and advertise more. Better recruitment of teachers from diverse backgrounds." An Advanced Teacher at the secondary level highlighted how school administrators could make individualized invitations to staff from historically marginalized groups to apply for Advanced Teacher positions, as some teachers may not feel they are qualified for the role but truly are. They further added that, "Systemic racism leads to many marginalized individuals believing they are not qualified, or these positions are not for them when, in fact, they are." As ATR positions are a new way to think about the career ladder for teachers, both formal (e.g., interest meetings) and informal (e.g., conversations with school administrators) approaches for promoting and raising awareness of these positions will be instrumental in ensuring a robust and diverse talent pool.

Recommendations

The following recommendations are the result of a synthesis of all data collected as a part of the ATR evaluation and inclusive of surveys, interviews and focus groups, and administrative records provide by the NCDPI and PSUs. There are two types of recommendations provided below. First, there are several programmatic recommendations that emerged from implementation challenges and suggestions for improvement that were shared by educators across PSUs. Second, recommendations are also provided for addressing some of the limitations of this evaluation and for a deeper investigation of key findings shared in this report.

Improving ATR Programs

Clearly define and communicate the roles, responsibilities, and evaluation criteria associated with ATR positions. As detailed earlier in this report, there is extensive variation in the titles, roles, and responsibilities of Advanced Teachers. While some variation is consistent with high-quality staffing strategies that align the unique skills of staff with the specific needs of the school, several examples shared in this report extend beyond the intent of the ATR initiative. Moreover, educators expressed a need for clear definitions, expectations, and communication regarding the roles and responsibilities of Advanced Teachers. To help address this issue, the General Assembly could update legislation with a set of broad yet clearly defined guardrails for what constitutes an Advanced Teacher. In addition, the SBE and the NCDPI could develop explicit policies that are aligned with legislative directives and specify an appropriate range of competencies, responsibilities, and performance indicators for the primary types of Advanced Teachers. These policies should also provide sufficient flexibility for PSUs to leverage their existing strengths while also addressing the critical needs of each school. Finally, PSUs should clearly delineate any tiers within ATR positions and communicate the roles and responsibilities of Advanced Teachers so that all staff have a consistent understanding of each Advanced Teacher in their building.

Consider restructuring Advanced Teacher workloads and eliminating non-essential duties. As highlighted earlier in the report, Advanced Teachers were sometimes used to provide emergency coverage and to assist with school operational tasks. Educators also frequently stressed the need for more time for Advanced Teachers to support colleagues, including dedicated time for collaboration, co-teaching, and observing teachers. To help ensure that those in ATR roles can effectively carry out their responsibilities without feeling overwhelmed, consider: 1) designating a fixed percentage of the instructional day or week dedicated to ATR tasks, such as mentoring, co-teaching, or observation; 2) eliminating non-essential administrative tasks, meetings, and other duties that take away from core responsibilities; and 3) providing Advanced Teachers with tools, resources, and support to manage essential duties more efficiently.

Foster collaboration and ongoing professional development. Advanced Teachers indicated a desire for more time, resources, and structured opportunities for collaboration and their own professional growth, including networking with peers both within and beyond their schools. PSUs, the NCDPI, and third-party groups should consider exploring new approaches or expanding existing opportunities that facilitate regular collaboration among Advanced Teachers and between Advanced Teachers and the teachers they support. For example, PSUs could allocate specific times within the school week or month exclusively for Advanced Teachers to share best practices, challenges, and come up with collaborative solutions. The NCDPI and third-party groups could also facilitate connections with educators, experts, and researchers from outside the school or district to provide fresh perspectives, introduce new and effective approaches, and broaden the scope of learning and collaboration for Advanced Teachers.

Reevaluate compensation and funding approaches to ATR. Both administrators and teachers shared several challenges around funding and compensation for ATR, including perceived inadequacies in financial support, lack

of resources, and a mismatch between additional responsibilities and salary supplements. The within-budget funding strategy for providing additional compensation for Advanced Teachers also limits full PSU implementation and implementation in schools that have less funding flexibility. Moreover, while PSUs have taken advantage of special funding and staffing flexibilities to support their programs, doing so came with consequential "trade-offs," including staffing sacrifices in other areas such as teaching assistants. PSUs and the NCDPI should consider reviewing the compensation models and stipends for those in advanced teaching roles and investigate ways to provide teacher compensation funding for the ATR program to ensure its successful implementation and sustainability. This could involve advocating for recurring district funding or state teacher pay specifically for these roles, while continuing to leverage existing funds.

Explore approaches that support equitable access to ATR for students and staff. To help ensure that students have equitable access to effective teachers and that all effective teachers have an opportunity to pursue advanced teaching roles, consider first convening an advisory board of current North Carolina Advanced Teachers to explore how ATR design and implementation approaches can better address educational disparities. Second, explore ways that Multi-Tiered System of Supports and ATR might work in tandem to support student needs and establish guidelines for appropriate proportions of students with exceptionalities enrolled in any given class. Third, focus on how to make pathways available, attractive, and accessible for teachers from underrepresented groups, while also enhancing hiring protocols to include specific equity competencies. Finally, leverage District Equity Plans and School Improvement Plans to document and monitor how Advanced Teachers are helping to close school-level opportunity gaps.

Improving Evaluation Efforts

Systematize and stipulate common data reporting requirements across PSU grantees. Due to inconsistent ATR record keeping across PSUs, the evaluation team was unable to obtain important information about program implementation, limiting the ability to connect Advanced Teachers with the individual teachers and students whom they support. Therefore, in schools where there are only a small number of Advanced Teachers or where Advanced Teachers do not directly impact certain grade levels or subject areas, examining impacts at the school level on all tested grades and in all subject areas could be masking the direct impacts of ATR on student achievement. Moving forward, the evaluation team recommends requiring the collection and reporting of critical data points related to ATR implementation and using a standard data reporting protocol to minimize errors and assist PSUs in data collection. At minimum, PSUs should be able to identify Advanced Teachers in their schools and the individual teachers and students they support. In addition, the evaluation team recommends that the NCDPI partner with the SAS EVAAS team and education researchers to develop a quantitative measure of Advanced Teacher effectiveness to assist PSUs in their own evaluations of Advanced Teachers.

Conduct in-depth case studies of select ATR schools to further investigate program outcomes. The intent of this evaluation was to provide a comprehensive assessment of ATR implementation and impact across all PSU grantees and was therefore broad in scope. Evaluation efforts moving forward should continue to investigate the collective impact of ATR, but quantitative and qualitative efforts should shift toward the identification of exemplary ATR schools that have demonstrated consistently positive outcomes and conduct in-depth case studies of these schools. The aim of these case studies is to better understand why some ATR schools have had the anticipated impacts on student and teacher outcomes while others have not. Selection of specific schools for these case studies should be informed by the findings in this report and by priorities identified by the NCDPI and the North Carolina State Board of Education. For example, criteria for selection may include ATR cohort and years implementing ATR; models adopted by PSUs and their fidelity of implementation; or ATR schools that have demonstrated consistently positive growth among specific student subgroups or in subject areas such as math, ELA, or science.

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Appendices

Appendix A: Data Collection Instruments & Protocols

Advanced Teaching Roles Survey

Survey Blocks

Introduction – All respondents (7 Questions; Q1.1-Q1.7)

Location and Role – All respondents

Administrators – (21 Questions, Q3.1-Q3.21)

All Teachers – (8 Questions, Q4.1- Q4.28)

Advanced Teachers – (25 Questions, Q5.1 – Q5.25)

Teacher Colleagues – (13 Questions, Q6.1-Q6.13)

Introduction

Q1.1

The Friday Institute for Educational Innovation at North Carolina State University is conducting a study of the Teacher Compensation Models and Advanced Teaching Roles (ATR) program on behalf of the North Carolina Department of Public Instruction (NCDPI).

This survey is part of broader data collection efforts by the NC State research team. The purpose of this survey is to better understand the activities and impact of advanced teachers (ATs). An advanced teacher is a teacher in a local school who is paid additional compensation to extend their positive impact on student achievement.

At the district or school level, they may be referred to as "advanced teacher," "lead teacher," "mentor teacher," "extended impact teacher," "team reach teacher," "coach", or "multi-classroom leader". We use the terms advanced teacher (AT) for teachers in these roles.

Please note that your survey responses are kept confidential. Your name and identifying information will not be associated with your responses in any kind of reporting. Your participation in this study is completely voluntary. If you choose to participate you may choose to discontinue participation at any time.

For completing this survey, you will be entered into a random drawing for one of ten **$50 Amazon gift cards.**

Please click "Next" to answer two questions required by the NC State Institutional Review Board. You will then be directed to the consent form.

Q1.2 Are you 18 years of age or older? [Yes, No]

Skip To: End of Survey If Q1.2 = No

Q1.3 Do you currently reside in the United States of America? [Yes, No]

Skip To: End of Survey If Q1.3 = No

Q1.4 Consent Form

Q1.5 If you consent to complete this survey, click "Yes I consent" button to continue to the survey. [Yes, I consent, No, I do not consent]

Skip To: End of Survey If Q1.5 = No, I do not consent.

Location and Role

Q2.1 Please select your district and school from the dropdown list below.
If you are a district administrator, leave school blank. If you are a teacher who works across multiple schools, or your school is not listed, select "Other."
Q2.2 Please provide the name of your school(s).

Q2.3 Are you a school or district administrator? [Yes, No]

Q2.4 An advanced teacher is a teacher in a local school who is paid additional compensation to extend their positive impact on student achievement,

At the district or school level, they may be referred to as "advanced teacher," "lead teacher," "mentor teacher," "extended impact teacher," "team reach teacher," "coach", or "multi-classroom leader". We use the terms advanced teacher (AT) for teachers in these roles.

Are you in an advanced teaching role AND receive additional compensation for that role? (Yes, No)

Q2.5 Your school or district may be using a pre-defined model for Advanced Teaching, such as Opportunity Culture, or have designed a program to implement the Advanced Teacher Roles program.

What is the name of the model or program that your school uses to support advanced teachers?

[Opportunity Culture, I don't know, Other (please specify)]

Display This Question:
If Q2.3 = No
And Q2.4 = No

Q2.6 Does an advanced teacher provide support to you (e.g., provide professional development, co-teach, support analysis of data, modeled methods of teaching, pulled-out small groups for instruction)? [Yes, No]

Administrators

Q3.1 At what level is your position? [school, district]

Q3.2 An advanced teacher is local school teacher who is paid an additional salary supplement for additional activities. Advanced teachers extend their positive impact on student achievement and receive increased compensation for their leadership.

At the district or school level, they may be referred to as "advanced teacher," "lead teacher," "mentor teacher," "extended impact teacher," "team reach teacher," "coach", or "multi-classroom leader". We use the term advanced teacher (AT) for teachers in these roles and Advanced Teaching Role Program (ATR) to refer to the policy that funds these roles. [Yes, No]

Skip To: End of Survey If Q3.2 = No

Q3.3 What was your school's [district's] first year in the ATR program? [2013-2014 – 2022-2023, I don't know]

Q3.4 Please describe the main activities or goals of an advanced teacher in your school [district].

Q3.5 How much release time do advanced teachers in your school [district] receive in a typical **month** for their advanced teaching responsibilities?

- less than 4 hours per month
- 4 ≤ 8 hours per month
- 8 ≤ 12 hours per month
- 12 ≤ 16 hours per month
- 16 ≤ 20 hours per month
- 20 ≤ 24 hours per month
- 24 ≤ 28 hours per month
- 28 ≤ 32 hours per month
- ≥ 32 hours per month
- I don't know.
- Varies-please explain.

Q3.6 How much additional compensation (i.e., stipend or supplemental pay) do ATs in your school [district] receive per year to be an advanced teacher?

- less than $3000 per year
- $3000 ≤ $6000 per year
- $6000 ≤ $9000 per year
- $9000 ≤ $12000 per year
- $12000 ≤ $15000 per year
- ≥ $15000
- I don't know
- Varies-please explain.

Q3.7 How often do ATs in your school or district engage in these activities? [daily, weekly, monthly, quarterly, never, I don't know]

- Teaching an increased number of students

- Serving as a lead classroom teacher among a group of teachers
- Leading a school-wide effort to implement data-driven instructional models that include blended learning environments, utilizing digital learning and resources, and focusing on methods of improvement for school-wide performance issues.
- Providing in-house professional development
- Functioning as an instructional content area coach or a coach in another professional development area

Q3.8 To what extent do you agree with the following statement? [Likert 5-level agreement; I don't know]
Overall, the additional support teachers have received from advanced teachers has led to improvement in academic achievement for students in our school [district].

Q3.9 Is there anything you could point to as evidence of impact of advanced teachers on teachers' instructional practices or student achievement in your school [district]? If so, please describe.

Q3.10 How frequently did advanced teachers in your school [district] provide the following support? [daily, weekly, monthly, quarterly, never, I don't know]

- Collaborated with teachers to develop lesson plans
- Supported colleagues with analyzing assessment data
- Supported the integration of digital/technology resources for instruction
- Helped differentiate instruction to meet diverse learning needs of students
- Taught teachers how to address students' social and emotional needs
- Shared best practices for classroom management
- Modeled methods of teaching
- Gave feedback based on observation of instruction
- Provided professional development
- Mentored beginning teachers
- Developed curriculum
- Co-taught
- Pulled out small groups of students for direct intervention

Q3.11 Are there other types of support that advanced teachers in your school [district] provided? Please describe.

Q3.12 Of the different types of support that advanced teachers provided in your school [district], which was the most important to improving student achievement?

Q3.13 What challenges did your school [district] face in implementing the ATR program?

Q3.14 Think about the ATR program and activities of advanced teachers in your school [district]. What conditions at the school, district, or state would increase the effectiveness of the ATR program?

Q3.15 Think about the ATR program and the activities of advanced teachers in your school [district]. What school, district, or state conditions are necessary for the sustainability of the program?

Q3.16 What types of support did your school [district] provide advanced teachers to perform their job responsibilities? Check all that apply.

- job description
- handbook (a ready reference manual)
- professional development-leadership
- professional development-content knowledge (e.g., data use, instructional strategy, etc.)
- certificate/degree program
- coaching
- professional materials (i.e., resources to fulfill AT responsibilities)
- cohort meetings (i.e., meetings with other ATs in the district)
- opportunity to network with other ATs
- space/office supplies
- Other, please specify

Q3.17 What types of support do you need to help advanced teachers perform their job responsibilities in your school [district]?

Q3.18 To what extent do you agree with these statements? [Likert 5-level agreement; I don't know]

- Having advanced teachers in the school [district] has led to improvement in academic achievement for educationally disadvantaged students (i.e., economically disadvantaged, students with disabilities, English learners, unaccompanied youth, or students experiencing homelessness, migrant students, and immigrant students)
- Teachers from diverse backgrounds are encouraged to apply for positions as advanced teachers.

Q3.19 Think about the ATR program and the activities of advanced teachers in your school [district]. How could the ATR program be redesigned to improve the student achievement of educationally disadvantaged students (i.e., economically disadvantaged, students with disabilities, English learners, unaccompanied youth, or students experiencing homelessness, migrant students, and immigrant students)?

Q3.20 Think about the ATR program and the activities of advanced teachers in your school [district]. How could the ATR program be redesigned to better recruit advanced teachers from diverse backgrounds?

Q3.21 If you could change anything about the ATR program and the activities of advanced teachers, what would you change?

<u>All Teachers</u>

Q4.1 What is your general role? [teacher, teacher assistant, other-please specify]

Q4.2 What type of licensure do you have? [Lateral License, Residency License, Emergency License, Initial Professional License, Continuing Professional License, Other-please specify]

Q4.3 How many years have you been employed as a teacher in the school in which you are currently working (as a whole number... 1, 2, 3...) ? If this is your first year working in this school, enter "0".

Q4.4 How many total years have you been a teacher (as whole number... 1, 2, 3...) ? If this is your first year as a

teacher, enter "0".

Q4.5 In which grade band(s) do you teach? [Elementary, Middle, Secondary, Other]

Q4.6 In what type of school do you teach? [Traditional (includes traditional, modified, and year-round calendars), Magnet, Alternative, Early college /Dual Enrollment, Charter, Other (please specify)]

Q4.7 What subject areas do you teach? Select all that apply.

Elementary – multiple subjects (1)

Academically / Intellectually Gifted Education (2)

Dance (3)

Music (4)

Theatre Arts (5)

Visual Arts (6)

CTE and Career Pathways (7)

Agricultural Education (8)

Business, Finance, and Information Technology (9)

Career Development Education (10)

Family and Consumer Sciences Education (11)

Health Sciences Education (12)

Marketing and Entrepreneurship Education (13)

Technology Engineering and Design Education (14)

Trade & Industrial Education) (15)

Computer Science (16)

English Language Arts (17)

English Language Development (18)

Healthful Living: Health / Physical Education (19)

Information and Technology (20)

Mathematics (21)

Science (22)

Social Studies (23)

Special Education (24)

World Languages (25)

Q4.8 Which of the following best describes you?

- White or Caucasian
- Black or African American
- Hispanic or Latino/a/x
- American Indian
- Asian
- Native Hawaiian/Pacific Islander
- Biracial or Multiracial
- Other
- I prefer not to say.

Advanced Teachers

Q5.1 What is the title of your position with the Advanced Teaching Role program (ATR) or as an advanced teacher (e.g., reach teacher, multi-classroom leader, lead teacher, etc.)?

Q5.2 What was your first year as an advanced teacher at your current school? [2013-2014 – 2022-2023]

Q5.3 What do you do in your role as an advanced teacher?

Q5.4 In your role as an advanced teacher (AT), how frequently do you work with the following groups? [daily, weekly, monthly, quarterly, never, I don't know]
Beginning teachers or pre-service teachers (three years or less)

- Experienced teachers (veteran teachers with more than three years of experience)
- School-based-grade level team—e.g., PLC
- School-based-subject area team—e.g., PLC
- School-based across grades or subjects team—e.g., PLC
- Entire school
- Multiple schools (district-based)
- Yourself (i.e., your primary ATR responsibility is teaching more students than is typical)
- Other (please specify)

Q5.5 Do you receive "release time" for your role as an advanced teacher (i.e., released from instructional responsibilities to engage in your work as an advanced teacher)? [Yes, No]

Display This Question:

If Q5.5 = Yes

Q5.6 How much release time do you receive in a typical **month** for your role as an advanced teacher ?

- less than 4 hours per month
- 4 ≤ 8 hours per month

- 8 ≤ 12 hours per month
- 12 ≤ 16 hours per month
- 16 ≤ 20 hours per month
- 20 ≤ 24 hours per month
- 24 ≤ 28 hours per month
- 28 ≤ 32 hours per month
- ≥ 32 hours per month
- I don't know.
- Varies-please explain.

Q5.7 How much additional compensation (i.e., stipend) do you receive **per year** to be an advanced teacher?

- less than $3000 per year
- $3000 ≤ $6000 per year
- $6000 ≤ $9000 per year
- $9000 ≤ $12000 per year
- $12000 ≤ $15000 per year
- ≥ $15000
- I don't know
- Varies

Q5.8 How many hours in **a typical month** do you dedicate to planning for and carrying out your duties as an advanced teacher?

- less than 4 hours per month
- 4 ≤ 8 hours per month
- 8 ≤ 12 hours per month
- 12 ≤ 16 hours per month
- 16 ≤ 20 hours per month
- 20 ≤ 24 hours per month
- 24 ≤ 28 hours per month
- 28 ≤ 32 hours per month
- ≥ 32 hours per month

Q5.9 In your role as an advanced teacher, how often do you engage in these activities?

[daily, weekly, monthly, quarterly, never, I don't know]

- Teaching an increased number of students
- Serving as a lead classroom teacher among a group of teachers
- Leading a school-wide effort to implement data-driven instructional models that include blended learning environments, utilizing digital learning and resources, and focusing on methods of improvement for school-wide performance issues.
- Providing in-house professional development
- Functioning as an instructional content area coach or a coach in another professional development area

Q5.10 To what extent do you agree with the following statements? [Likert 5-level agreement, I don't know)
Overall, the additional support I provide in my role as an advanced teacher has led to improvement in academic achievement for...

- students in my class(es).
- students on my team (PLC, grade, subject).
- students in the school.

Q5.11 Is there anything you could point to as evidence of your impact in your role as an advanced teacher on teachers' instructional practices or student achievement? If so, please describe what comes to mind.

Q5.12 In your role as an advanced teacher advanced, how frequently did you provide these types of support?

[daily, weekly, monthly, quarterly, never, I don't know]

- Collaborated with teachers to develop lesson plans
- Supported colleagues with analyzing assessment data
- Supported the integration of digital/technology resources for instruction
- Helped differentiate instruction to meet diverse learning needs of students
- Taught teachers how to address students' social and emotional needs
- Shared best practices for classroom management
- Modeled methods of teaching
- Gave feedback based on observation of instruction
- Provided professional development
- Mentored beginning teachers
- Developed curriculum
- Co-taught
- Pulled out small groups of students for direct intervention

Q5.13 Are there other types of support that you, in your role as advanced teacher, provided? Please describe.

Q5.14 Of the different types of support that you provided in your role as advanced teacher, which was the most important to improving student achievement?

Q5.15 What challenges did you encounter in your role as an advanced teacher providing support for teachers?

Q5.16 To what extent do you agree with these statements? [Likert 5-level agreement; I don't know]

- I value my AT role as an opportunity to be recognized for my expertise.
- My work as an AT is meaningful and important.
- I feel that teachers in my school value me in my AT role.
- This role as an AT contributes positively to my career satisfaction.
- I value the AT role opportunity for career differentiation and advancement.
- This role as an AT contributes positively to my professional growth.
- The additional compensation for taking on the additional responsibilities of being an AT is sufficient given the responsibilities.
- Overall, this role as an AT contributes positively to my intention to stay in the profession.
- Overall, this role as an AT contributes positively to my intention to stay at my current school (in an non-administrative position)

Q5.17 Think about the ATR program and the activities of advanced teachers in your school . What conditions at the school, district, or state support would increase the effectiveness of the ATR program and ATs in your school?

Q5.18 What is hindering the ATR program and advanced teachers from being more successful in your school?

Q5.19 What types of support did you receive to assist you in your role as an advanced teacher?

Select all that apply.

- job description
- handbook (a ready reference manual)
- professional development-leadership
- professional development-content knowledge (e.g., data use, instructional strategy, etc.)
- certificate/degree program
- coaching
- professional materials (i.e., resources to fulfill AT responsibilities)
- cohort meetings (i.e., meetings with other ATs in the district)
- opportunity to network with other ATs
- space/office supplies
- Other, please specify

Q5.20 Of the support that you received to be an advanced teacher, which did you find the most helpful? Please explain.

Q5.21 What types of support did you need as an advanced teacher but were not provided?

Q5.22 To what extent do you agree with these statements? [Likert 5-level agreement; I don't know]

- Having advanced teachers in the school [district] has led to improvement in academic achievement for educationally disadvantaged students (i.e., economically disadvantaged, students with disabilities, English learners, unaccompanied youth, or students experiencing homelessness, migrant students, and immigrant students)
- Teachers from diverse backgrounds are encouraged to apply for positions as advanced teachers.

Q5.23 Think about the ATR program and the activities of advanced teachers in your school. How could it be redesigned to improve the student achievement of educationally disadvantaged students (i.e., economically disadvantaged, students with disabilities, English learners, unaccompanied youth, or students experiencing homelessness, migrant students, and immigrant students)?

Q5.24 How could schools and districts improve the recruitment of advanced teachers from diverse backgrounds?

Q5.25 If you could change anything about the ATR program and the activities of advanced teachers in your school, what would you change?

Teacher Colleagues

Q6.1 What year did you begin receiving support from an advanced teacher? [2013-2014 – 2022-2023, I don't know]

Q6.2 How many hours in a typical **month** do you receive support from an advanced teacher in your school?

- less than 2 hours per month
- 2 ≤ 4 hours per month
- 4 ≤ 6 hours per month
- 6 ≤ 8 hours per month
- ≥ 8 hours per month

Q6.3 To what extent do you agree with the following statements?
Overall, the additional support I received from the advanced teacher has led to improvement in academic achievement for...

- students in my class(es).
- students on my team (PLC, grade, subject).
- students in the school.

Q6.4 Is there anything you could point to as evidence of the impact of the advanced teacher on teachers' instructional practices or student achievement? If so, please describe.

Q6.5 How frequently did the advanced teacher(s) in your school provide the following supports?

[daily, weekly, monthly, quarterly, never, I don't know]

- Collaborated with teachers to develop lesson plans
- Supported colleagues with analyzing assessment data
- Supported the integration of digital/technology resources for instruction
- Helped differentiate instruction to meet diverse learning needs of students
- Taught teachers how to address students' social and emotional needs
- Shared best practices for classroom management
- Modeled methods of teaching
- Gave feedback based on observation of instruction
- Provided professional development
- Mentored beginning teachers
- Developed curriculum
- Co-taught
- Pulled out small groups of students for direct intervention

Q6.6 Are there other types of support that were provided to you by the advanced teacher? Please describe.

Q6.7 Of the different types of support that you received from the advanced teacher, which was the most

important to improving student achievement?

Q6.8 What challenges did you encounter receiving support from the advanced teacher?

- I would consider an advanced teaching role in the future because it is an opportunity to be recognized for my expertise.
- I would consider an advanced teaching role in the future because it is meaningful and important work.
- I would consider an advanced teaching role in the future because teachers in the school value advanced teachers.
- I would consider an advanced teaching role in the future because it will contribute positively to my career satisfaction.
- I would consider an advanced teaching role in the future because it is an opportunity for career differentiation and advancement.
- I would consider an advanced teaching role in the future because it can contribute positively to my professional growth.
- I would consider an advanced teaching role in the future because it includes additional compensation (e.g., stipend).
- Overall, the opportunity to be an advanced teacher in the future contributes positively to my intention to stay in the profession.
- Overall, the opportunity to be to be an advanced teacher in the future contributes positively to my intention to stay at my current school (non-administrative position).

Q6.10 To what extent do you agree with these statements? [Likert 5-level agreement; I don't know]

- Having advanced teachers in the school [district] has led to improvement in academic achievement for educationally disadvantaged students (i.e., economically disadvantaged, students with disabilities, English learners, unaccompanied youth, or students experiencing homelessness, migrant students, and immigrant students)
- Teachers from diverse backgrounds are encouraged to apply for positions as advanced teachers.

Q6.11 Think about the ATR program and the activities of advanced teachers in your school. How could it be redesigned to improve the student achievement of educationally disadvantaged students (i.e., economically disadvantaged, students with disabilities, English learners, unaccompanied youth, or students experiencing homelessness, migrant students, and immigrant students)?

Q6.12 Think about the ATR program and the activities of advanced teachers in your school. How could it be redesigned to better recruit advanced teachers from diverse backgrounds?

Q6.13 If you could change anything about the ATR program and the activities of advanced teachers, what would you change?

Focus Group and Interview Questions

Administrators

1. Can you tell me a little bit about how and when your school became involved in ATR? How is your school's approach to ATR similar or different from other schools in your district?[probe] In what ways does ATR make sense for your district/school context?
2. How would you characterize your role as an administrator in a school with ATRs?
3. What are the different ATR roles at your school? How did you determine those roles were important for your context? Can you describe what those roles entail? How did you determine who should fill those roles?
4. How are ATR teachers funded at your school? What were the tradeoffs in funding ATR teachers?
5. Supporting adults is inherently different from teaching children. What professional learning/development has been offered to support ATR teachers in their expanded roles?
6. What challenges to implementation are you noticing in your school context? How could the program be improved to address these challenges?
7. At your school, how have students been impacted by Advanced Teaching Roles? Which students do you see the program impacting directly?
8. How does the ATR program address any educational inequities in your school? [how are ATR teachers meeting the varied needs of students (e.g., those with greatest needs)]?
9. How as the ATR program supported professional growth (e.g., pedagogy, data analysis) among educators (i.e., beginning teachers, career teachers, lead teachers, administrators)?
10. Based on what you've observed or heard from your teachers, how has the program impacted the overall attractiveness of the teaching profession?
11. In what ways do you believe the program recognizes high-quality classroom teachers? How could the program be improved to better recognize high-quality classroom teachers?
12. Is the ATR program helping with teacher retention? If so, how? If not, why not? [*Interviewer: Differentiate between lead teachers and all other teachers.*]
13. Apart from what we've already discussed, in what other ways do you think this program has impacted your teachers' experiences in the classroom?
14. What do you believe has been the most valuable aspect of the Advanced Teaching Roles program for your teachers and school?

Advanced Teachers

1. How did you get involved with the Advanced Teaching Roles (ATR) program? Would you say that the process to become an ATR teacher is clear and available to all of your colleagues?
2. Can you describe a typical day in your ATR role? What challenges do you see emerging in your particular school or district context that impact your work as a "lead" teacher?
3. Do you have full, partial, or no release? Are you the teacher of record for the students of teachers whom you support? [Which students are included in your EVAAS report?]
    a. Is this a change for you? What is that change like?
4. As an ATR teacher, what supports (e.g. professional learning, admin support) have you received to develop your leadership and/or coaching competencies?
    a. Are there any additional supports that would contribute to your success in your Advanced Role?
5. How do you support other teachers in this role?
6. Would you say that this program has made you a better teacher? How so?
7. How, if at all, has your experience in your advanced teaching role changed your perception of the teaching profession?
    a. Has your participation made the teaching profession more or less appealing or satisfying to you?
    b. To what extent does the opportunity to advance in your career impact the overall appeal of the profession to you?
    c. In what ways does the salary supplement impact the overall appeal of the profession to you?
8. Does the program recognize high-quality classroom teachers? If so, in what ways?
    a. How could the program be improved to better recognize high-quality classroom teachers?
9. In what ways do you provide support to beginning teachers?
    a. Does this level of support mark a change in the support provided to beginning teachers in previous years? If so, how?
10. Apart from what we've already discussed, in what other ways has this program impacted your experience in the classroom?
    a. In what other ways has the program impacted your experience with other teachers?
    b. What has been the most valuable aspect of the advanced teaching roles program?
    c. Based on your perspective, what are some of the contextual factors that support or hinder the success of the ATR program in your school?

Teachers Receiving Support from Advanced Teachers

1. Introduce yourself, how long have you been teaching and what was your path into becoming a teacher?
    a. What is your role within the team? What does that entail?
2. Can you describe your experience with ATR at your school? What's going well? And, what, if any, challenges do you see emerging in your context?
3. In what ways have your experiences [with the lead teacher] at your school impacted your classroom instruction?
    a. Please share specific examples if possible.
4. How, if at all, has the program (advanced teaching roles and extra pay) changed your perception of the teaching profession?
    a. To what extent does the opportunity to advance in your career impact the overall appeal of the profession to you?
    b. In what ways does the salary supplement impact the overall appeal of the profession to you?
5. What does [lead teacher] do that helps you the most?
    a. Is it co-teaching, observing, student pulls?
6. Are you familiar with the process to become an advanced role teacher at your school/district? Does that process appeal to you? Why or why not?
7. One of the goals of the ATR programs is to recognize high-quality classroom teachers. How could the program be improved at your school to better recognize high-quality classroom teachers?
8. Apart from what we've already discussed, in what other ways has this program impacted your experience in the classroom?
    a. In what other ways has the program impacted your experience with other teachers?
    b. What has been the most valuable aspect of the advanced teaching roles program to your professional practice?

Observation Protocol

Date/Time:

Observer:

District:

School:

ATR Teacher and role:

Other teacher present: (if yes, describe role)

Grade:

Subject (if applicable):

Describe what instruction looks like and who is involved/what their roles are:

If observing an ATR teacher with expanded impact; i.e. larger class size or blended class, focus on teachers' approach to instruction

1. Content (what are they teaching)
2. Pedagogy (how are they teaching)
3. Use of technology

If observing an ATR teacher or team outside of instructional context; i.e., a PLC meeting or coaching meeting, focus on the interactions between teachers

1. What is the ATR Lead teacher doing?
2. What is the "other" teacher doing?

d. Topic of discussion/and any noticings about the 'coaching'.

Appendix B: Survey Results

Table 6. Characteristics of the Survey Respondents

	Total Teachers	Advanced Teachers	Teacher Colleagues	Administrators
Staff				
Position (n=258)				
Teachers	227	163	64	
School Administrators				29
District Administrators				2
Total		163 (63.18%)	64 (24.8%)	31 (12.02%)
Demographics				
Race/Ethnicity (n=247)				
White Caucasian	168 (68.02%)	122	46	
Black/African American	55 (22.27%)	27	28	
Hispanic/Latinx	3 (1.21%)	2	1	
American Indian	1 (.40%)	1	0	
Asian	3 (1.21%)	2	1	
Biracial/Multiracial	6 (2.43%)	5	1	
Other	1 (.40%)	0	1	
I prefer not to say	10 (4.05%)	3	7	
Total Years of Teaching Experience (n=238)				
0-3	22 (9%)	4	18	
4-7	36 (15%)	19	23	
8-11	55 (22%)	37	18	
12-15	30 (13%)	24	6	
16-19	29 (12%)	27	13	
≥20	66 (28%)	51	15	
Grade Band (n=252)				
Elementary	168 (67%)	103	65	
Middle	55 (22%)	43	12	
Secondary	29 (12%)	21	8	
Type of School (n=251				
Traditional	231 (92%)	152	79	
Magnet	7 (3%)	5	2	

Alternative	0 (0%)	0	0		
Early College /Dual Enrollment	5 (2%)	3	2		
Charter	0 (0%)	0	0		
Dual Language	1 (.4%)	1	0		
Global	2 (.8%)	2	0		
Restart	4 (1.6%)	1	3		
STEM	1 (.4%)	1	0		
PSUs					
PSUs (n=257)					
PSU-1	9	1	8	0	9
PSU-2	19	15	4	8	27
PSU-3	20	10	10	2	22
PSU-4	4	4	0	3	7
PSU-5	10	10	0	1	11
PSU-6	10	10	0	0	10
PSU-7	14	14	0	5	19
PSU-8	1	1	0	0	1
PSU-9	12	4	8	2	14
PSU-10	18	2	16	5	23
PSU-11	10	6	4	3	13
PSU-12	100	86	14	1	101
Total	227	163	64	30	

*Note. total numbers for each characteristic are not the same across because some respondents did not complete every item on the survey or the section excludes administrators. Additionally, the total percent for each section may not equal 100 because of rounding.

Table 7. Overall Improvement in Academic Achievement (Q 3.8 | Leader Respondents)

	Strongly disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Frequency	2	1	7	18	28
Percent	7.1	3.6	25	64.3	100

Table 8. Improvement in Academic Achievement (Q 5.10 | Advanced Teacher Respondents)

		Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree		Total	
		All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12
My Classes	#	6	2	1	1	10	6	53	23	76	36	146	68
	%	4.1	2.9	0.7	1.5	6.8	8.8	36.3	33.8	52.1	53.9	100	100
Team	#	5	2	1	0	11	7	60	22	74	41	151	72
	%	3.3	2.8	0.7	0	7.3	9.7	39.7	30.6	49	56.9	100	100
School	#	3	2	0	0	14	8	64	25	67	37	148	72
	%	2.0	2.8	0	0	9.5	11.1	43.2	34.7	45.3	51.4	100	100

Table 9. Improvement in Academic Achievement (Q6.3 | Teacher Colleague Respondents)

		Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree		Total	
		All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12
My Classes	#	2	2	2	2	8	7	13	9	37	28	62	48
	%	3.2	4.2	3.2	4.2	12.9	14.6	21	18.8	59.7	58.3	100	100
Team	#	1	1	2	2	7	5	15	11	35	28	60	47
	%	1.7	2.1	3.3	4.3	11.7	10.6	25	23.4	58.3	59.6	100	100
School	#	2	2	0	0	9	7	14	9	35	29	60	47
	%	3.3	4.3	0	0	15	14.9	23.3	19.1	58.3	61.7	100	100

Table 10. Advanced Teachers Improve Achievement for Educationally Disadvantaged Students (Q3.18 | 5.22 | 6.10 | All Respondents)

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Administrators	#	1	0	1	9	16	27
	%	3.7	0	3.7	33.3	59.3	100

		All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12	All	Exc-PSU-12
Advanced Teachers	#	5	1	3	1	11	6	72	33	51	32	142	73
	%	3.5	1.4	2.1	1.4	7.7	8.2	50.7	45.2	35.9	43.8	100	100
Colleagues	#	1	2	1	4	8	3	16	12	33	19	59	40
	%	1.7	5	1.7	10	13.6	7.5	27.1	30	55.9	47.5	100	100

Table 11. Activities of Advanced Teachers (Q3.10 | Leader Respondents)

Advanced Teachers Activities	Daily		Weekly		Monthly		Quarterly		Never		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Collaborated with teachers to develop lesson plans	2	7.4	23	85.2	1	3.7	1	3.7	0	0	27	100
Supported colleagues with analyzing assessment data	2	7.4	18	66.7	4	14.8	3	11.1	0	0	27	100
Supported the integration of digital/technology resources for instruction	3	12.5	13	54.2	5	20.8	2	8.3	1	4.2	24	100
Helped differentiate instruction to meet diverse learning needs of students	5	19.2	13	50.0	5	19.2	2	7.7	1	3.8	26	100
Taught teachers how to address students' social and emotional needs	1	4.0	12	48.0	5	20.0	5	20.0	2	8.0	25	100
Shared best practices for classroom management	4	15.4	15	57.7	4	15.4	3	11.5	0	0	26	100
Modeled methods of teaching	4	14.8	18	66.7	4	14.8	1	3.7	0	0	27	100
Gave feedback based on observation of instruction	4	14.8	16	59.3	3	11.1	4	14.8	0	0	27	100
Provided professional development	0	0	3	11.5	15	57.7	7	26.9	1	3.8	26	100
Mentored beginning teachers	6	22.2	15	55.6	4	14.8	2	7.4	0	0	27	100
Developed curriculum	2	8.0	5	20.0	7	28.0	8	32.0	3	12.0	25	100
Co-taught	1	3.8	10	38.5	5	19.2	4	15.4	6	23.1	26	100

Pulled out small groups of students for direct intervention	10	37.0	11	40.7	4	14.8	1	3.7	1	3.7	27	100

Table 12. Activities of Advanced Teachers (Q5.12 | Advanced Teacher Respondents)

Advanced Teachers Activities		Daily		Weekly		Monthly		Quarterly		Never		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
Collaborated with teachers to develop lesson plans	All	17	11.3	89	58.9	22	14.6	9	6.0	14	9.3	151	100
	Excludes PSU-12	13	17.6	47	63.5	7	9.5	4	5.4	3	4.1	74	100
Supported colleagues with analyzing assessment data	All	9	6.0	66	44.0	46	30.7	17	11.3	12	8.0	150	100
	Excludes PSU-12	4	5.4	34	45.9	22	29.7	10	13.5	4	5.4	74	100
Supported the integration of digital/technology resources for instruction	All	29	19.2	47	31.1	29	19.2	17	11.3	29	19.2	151	100
	Excludes PSU-12	14	18.9	28	37.8	14	18.9	9	12.2	9	12.2	74	100
Helped differentiate instruction to meet diverse learning needs of students	All	52	34.4	56	37.1	26	17.2	8	5.3	9	6	151	100
	Excludes PSU-12	31	41.9	28	37.8	11	14.9	3	4.1	1	1.4	74	100
Taught teachers how to address students' social and emotional needs	All	14	9.3	42	27.8	27	17.9	17	11.3	51	33.8	151	100
	Excludes PSU-12	9	12.2	26	35.1	13	17.6	8	10.8	18	24.3	74	100
Shared best practices for classroom management	All	21	13.9	55	36.4	37	24.5	14	9.3	24	15.9	151	100
	Excludes PSU-12	15	20.3	36	48.6	13	17.6	7	9.5	3	4.1	74	100

Modeled methods of teaching	All	17	11.4	38	25.5	38	25.5	21	14.1	35	23.5	149	100
	Excludes PSU-12	8	11.0	25	34.2	24	32.9	9	12.3	7	9.6	73	100
Gave feedback based on observation of instruction	All	9	6.0	38	25.3	10.9	24.7	8.6	19.3	10.9	24.7	44.2	100
	Excludes PSU-12	7	9.5	31	41.9	19	25.7	11	14.9	6	8.1	74	100
Provided professional development	All	3	2.0	11	7.3	44	29.1	46	30.5	47	31.1	44.5	100
	Excludes PSU-12	3	4.1	9	12.2	28	37.8	25	33.8	9	12.2	74	100
Mentored beginning teachers	All	42	12.4	33	9.7	21	6.2	13	3.8	42	12.4	151	100
	Excludes PSU-12	25	33.8	19	25.7	7	9.5	7	9.5	16	21.6	74	100
Developed curriculum	All	9	6.0	29	19.5	17	11.4	29	19.5	65	43.6	149	100
	Excludes PSU-12	6	8.1	15	20.3	10	13.5	19	25.7	24	32.4	74	100
Co-taught	All	16	10.6	32	21.2	21	13.9	19	12.6	63	41.7	151	100
	Excludes PSU-12	9	12.2	23	31.1	15	20.3	11	14.9	16	21.6	74	100
Pulled out small groups of students for direct intervention	All	55	36.4	44	29.1	12	7.9	9	6.0	31	20.5	151	100
	Excludes PSU-12	35	47.3	16	21.6	6	8.1	8	10.8	9	12.2	74	100

Table 13. Activities of Advanced Teachers (Q6.5 | Teacher Colleague Respondents)

Advanced Teachers Activities		Daily		Weekly		Monthly		Quarterly		Never		I don't know		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
Collaborated with teachers to develop lesson plans	All	13	21.7	33	55.0	8	13.3	1	1.7	3	5	2	3.3	60	100
	Excludes PSU-12	11	22.9	30	62.5	3	6.3	0	0	3	6.3	1	2.1	48	100

Supported colleagues with analyzing assessment data	All	6	10.0	36	60.0	10	16.7	5	8.3	0	0	3	5.0	60	100
	Excludes PSU-12	5	10.4	29	60.4	7	14.6	5	10.4	0	0	2	4.2	48	100
Supported the integration of digital/technology resources for instruction	All	11	18.3	30	50	8	13.3	5	8.3	4	6.7	2	3.3	60	100
	Excludes PSU-12	9	18.8	25	52.1	7	14.6	2	4.2	4	8.3	1	2.1	48	100
Helped differentiate instruction to meet diverse learning needs of students	All	17	28.3	26	43.3	10	16.7	1	1.7	5	8.3	1	1.7	60	100
	Excludes PSU-12	14	29.2	21	43.8	7	14.6	1	2.1	5	10.4	0	0	48	100
Taught teachers how to address students' social and emotional needs	All	7	11.7	21	35.0	10	16.7	6	10.0	7	11.7	9	15.0	60	100
	Excludes PSU-12	5	10.4	18	37.5	9	18.8	3	6.3	7	14.6	6	12.5	48	100
Shared best practices for classroom management	All	13	21.7	21	35.0	11	18.3	6	10.0	5	8.3	4	6.7	60	100
	Excludes PSU-12	10	20.8	19	39.6	7	14.6	4	8.3	5	10.4	3	6.3	48	100
Modeled methods of teaching	All	8	13.3	21	35.0	15	25.0	9	15.0	4	6.7	3	5.0	60	100
	Excludes PSU-12	6	12.5	17	35.4	11	22.9	8	16.7	4	8.3	2	4.2	48	100
Gave feedback based on observation of instruction	All	10	16.7	25	41.7	12	20.0	6	10.0	3	5.5	4	6.7	60	100

	Excludes PSU-12	7	14.6	22	45.8	7	14.6	6	12.5	3	6.3	3	6.3	48	100
Provided professional development	All	3	5.0	24	40.0	15	25.0	10	16.7	2	3.3	6	10.	60	100
	Excludes PSU-12	3	6.3	20	41.7	14	29.2	7	14.6	2	4.2	2	4.2	48	100
Mentored beginning teachers	All	16	26.7	20	33.3	9	15.0	0	0	3	.9	12	3.5	60	100
	Excludes PSU-12	12	25.0	17	35.4	6	12.5	0	0	2	4.2	11	22.9	48	100
Developed curriculum	All	7	11.7	25	41.7	8	13.3	4	6.7	5	8.3	11	18.3	60	100
	Excludes PSU-12	5	10.4	20	41.7	6	12.5	4	8.3	5	10.4	8	16.7	48	100
Co-taught	All	9	15.0	13	21.7	17	28.3	4	6.7	8	13.3	9	15.0	60	100
	Excludes PSU-12	6	12.5	10	20.8	16	33.3	2	4.2	7	14.6	7	14.6	48	100
Pulled out small groups of students for direct intervention	All	21	35.0	20	33.3	9	15.0	1	1.7	4	6.7	5	8.3	60	100
	Excludes PSU-12	20	41.7	15	31.3	7	14.6	1	2.1	3	6.3	2	4.2	48	100

Table 14. The Role of Advanced Teacher and the Recruitment and Retention of Teachers (Q5.16 | Advanced Teachers)

		Strongly Disagree		Disagree		Neither Disagree nor Agree		Agree		Strongly Agree		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
I value my AT role as an opportunity to be recognized for my expertise.	All	3	2.1	3	4.3	6	11.3	46	46.8	86	35.5	144	100

	Excludes PSU-12	1	1.4	1	1.4	4	5.5	17	23.3	50	68.5	73	100
My work as an AT is meaningful and important.	All	3	2.1	1	1.7	0	0	50	35.2	88	62.0	142	100
	Excludes PSU-12	1	1.4	0	0	0	0	20	27.8	51	70.8	72	100
I feel that teachers in my school value me in my AT role.	All	3	2.1	6	4.3	16	11.3	66	46.8	50	35.5	141	100
	Excludes PSU-12	0	0	3	4.1	8	11	29	39.7	33	45.2	73	100
This role as an AT contributes positively to my career satisfaction.	All	4	2.8	6	4.2	5	3.5	49	34.3	79	55.2	143	100
	Excludes PSU-12	1	1.4	2	2.8	1	1.4	18	25.0	50	69.4	72	100
I value the AT role opportunity for career differentiation and advancement.	All	5	3.5	3	2.1	5	3.5	42	29.2	89	61.8	144	100
	Excludes PSU-12	2	2.7	1	1.4	4	5.5	16	21.9	50	68.5	73	100
This role as an AT contributes positively to my professional growth.	All	4	2.8	2	1.4	3	2.1	42	29.4	92	64.3	143	100
	Excludes PSU-12	2	2.8	0	0	2	2.8	16	22.2	52	72.2	72	100
The additional compensation for taking on the additional responsibilities of being an AT is sufficient given the responsibilities.	All	7	4.9	24	16.7	12	7.7	57	30.1	44	54.5	144	100
	Excludes PSU-12	3	4.1	8	11.0	5	6.8	31	42.5	26	35.6	73	100
Overall, this role as an AT contributes positively to my intention to stay in the profession.	All	3	2.1	8	5.6	11	8.3	43	39.6	78	30.6	143	100

	Excludes PSU-12	1	1.4	4	5.5	2	2.1	16	21.9	50	68.5	73	100
Overall, this role as an AT contributes positively to my intention to stay at my current school (in a non-administrative position)	All	4	2.8	5	3.5	14	9.8	39	27.3	81	56.6	143	100
	Excludes PSU-12	2	2.7	3	4.1	3	4.1	15	20.5	50	68.5	73	100

Table 16. ATR Models (Q2.5 | All Teachers)

ATR Model	All PSUs	Excluding PSU-12
Opportunity Culture	133 (47%)	130 (76.9%)
Other (please specify)	44 (15%)	8 (4.7)
Adaptive Schools	1	0
Advance Teacher Roles	4	2
Collaborating Teacher	1	0
Community of Practice	13	0
Department of Excellence and Equability in Leadership	4	0
PIVOT-Professional, Innovative, Versatile, Open-Minded, Talented Yet Teachable	2	2
Equity Partners	2	0
Facilitating Teacher/Mentor	7	0
Lead Teacher	2	2
Mentoring Program	1	1
Multi-Classroom Teacher	3	0
Unnamed	2	1
R3-Recruit, Retain, Reward Program	1	0
STEM	1	0
I don't know.	109 (38%)	31 (18.3%)
Total	286 (100%)	169 (100%)

Table 17. Advanced Teachers Job Duties (Q3.7 | Leader Respondents)

	Daily		Weekly		Monthly		Quarterly		Never		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Teaching an increased number of students	13	46.4	5	17.9	0	0.00	2	7.1	8	28.6	28	100
Serving as a lead classroom teacher	14	51.9	4	14.8	2	7.4	2	7.4	5	18.5	27	100
Leading a school-wide effort	4	14.8	14	51.9	4	14.8	2	7.4	3	11.1	27	100
Providing in-house professional development	1	3.6	4	14.3	10	35.7	11	39.3	2	7.1	28	100
Functioning as a coach	13	46.4	11	39.3	1	3.6	2	7.1	1	3.6	28	100

Table 18. Advanced Teachers Job Duties (Q5.9 | Advanced Teacher Respondents)

		Daily		Weekly		Monthly		Quarterly		Never		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
Teaching an increased number of students	All	41	27.0	22	14.5	13	8.6	5	3.3	71	46.7	152	100
	Excludes PSU-12	23	31.5	15	20.5	7	9.6	3	4.1	25	34.2	75	100
Serving as a lead classroom teacher	All	35	22.6	34	21.9	22	14.2	8	5.2	56	36.1	155	100
	Excludes PSU-12	24	32	15	20.0	10	13.3	8	10.7	18	24.0	75	100
Leading a school-wide effort	All	10	6.5	23	14.8	32	20.6	38	24.5	52	33.5	155	100
	Excludes PSU-12	4	5.3	17	22.7	16	21.3	21	28.0	17	22.7	75	100
Providing in-house professional development	All	3	1.9	7	4.5	48	31.2	47	30.5	49	31.8	154	100
	Excludes PSU-12	3	4.0	6	8.0	31	41.3	26	34.7	9	12	75	100
Functioning as a coach	All	32	20.8	18	11.7	18	11.7	18	11.7	68	44.2	154	100
	Excludes PSU-12	24	32.0	15	20.0	10	13.3	8	10.7	18	24.0	75	100

Table 19. Total Number of Job Responsibilities: Descriptive Statistics (Q5.9 | Advanced Teachers)

Job Responsibilities	All Advanced Teachers	Excludes PSU-12
N	152	73
Mean	3.07	3.88
Median	3.00	4.00
Mode	3.00[a]	5.00
Std. Deviation	1.60	1.33
Minimum	0	.00
Maximum	5	5.00

a. Multiple modes exist. The smallest value is shown.

Table 20. Total Number of Job Responsibilities: Frequency Distribution (Q5.9 | Advanced Teachers)

Number of Job Responsibilities	All Advanced Teachers		Excluding PSU-12	
	Frequency	Percent	Frequency	Percent
.00	12	7.9	3	4.1
1.00	22	14.5	3	4.1
2.00	14	9.2	2	2.7
3.00	37	24.3	15	20.5
4.00	30	19.7	19	26.0
5.00	37	24.3	31	42.5
Total	152	100.0	73	100.0

Table 21. Whom Do Advanced Teachers Support (Q5.4 | Advanced Teachers)

		Daily		Weekly		Monthly		Quarterly		Never		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
Beginning Teachers	All	55	35.5	40	25.8	24	15.5	10	6.5	26	16.8	155	100
	Excludes PSU-12	34	44.7	19	25.0	7	9.2	6	7.9	10	13.2	76	100
Experienced teachers (veteran teachers with more than three years of experience)	All	68	43.6	39	25.0	35	22.4	11	7.1	3	1.9	156	100
	Excludes PSU-12	37	48.7	20	26.3	15	19.7	3	3.9	1	1.3	76	100
School-based-grade level team—e.g., PLC	All	38	24.5	85	54.8	17	11.0	3	1.9	12	7.7	155	100
	Excludes PSU-12	21	27.6	44	57.9	6	7.9	1	1.3	4	5.3	76	100
School-based-subject area team—e.g., PLC	All	27	17.5	84	54.5	23	14.9	3	1.9	17	11	154	100
	Excludes PSU-12	15	20.0	41	54.7	9	12.0	2	2.7	8	10.7	75	100
School-based across grades or subjects team—e.g., PLC	All	16	10.4	56	36.4	40	26.0	21	13.6	21	13.6	154	100
	Excludes PSU-12	9	12.0	27	36.0	16	21.3	10	13.3	13	17.3	75	100
Entire school	All	9	5.8	14	9.1	83	53.9	24	15.6	24	15.6	154	100
	Excludes PSU-12	6	8.0	9	12.0	39	52.0	13	17.3	8	10.7	75	100
Multiple schools (district-based)	All	2	1.3	5	3.2	30	19.5	53	34.4	64	41.6	154	100
	Excludes PSU-12	2	2.6	2	2.6	16	21.1	34	44.7	22	28.9	76	100
Yourself (i.e., your primary ATR responsibility is teaching more students than is typical)	All	73	47.7	21	13.7	8	5.2	3	2.0	48	31.4	153	100
	Excludes PSU-12	42	56.0	9	12.0	4	5.3	3	4.0	17	22.7	75	100

Table 22. Advanced Teachers Release Time (Q3.5 | Leader Respondents)

Release Time	All Administrators	
	Frequency	Percent
Less than 4 hours per month	2	6.9
4 ≤ 8 hours per month	4	13.8
8 ≤ 12 hours per month	2	6.9
12 ≤ 16 hours per month	2	6.9
16 ≤ 20 hours per month	2	6.9
20 ≤ 24 hours per month	2	6.9
≥ 32 hours per month	7	24.1
Varies	6	20.7
I don't know.	2	6.9
Total	29	100.0

Table 23. Release Time: Yes or No (Q5.5 | Advanced Teachers)

Release Time	All PSUs		Excluding PSU-12	
	Frequency	Percent	Frequency	Percent
Yes	55	35.3	45	59.2
No	101	64.7	31	40.8
Total	156	100.0	76	100.0

Table 24. Typical Monthly Average of Release Time (Q5.6 | Advanced Teachers)

Release Time	All Advanced Teachers		Excludes PSU-12	
	Frequency	Percent	Frequency	Percent
Less than 4 hours per month	13	23.6	8	17.8
4 ≤ 8 hours per month	11	20.0	8	17.8
8 ≤ 12 hours per month	6	10.9	5	11.1
12 ≤ 16 hours per month	5	9.1	5	11.1
16 ≤ 20 hours per month	1	1.8	1	2.2
20 ≤ 24 hours per month	4	7.3	3	6.7
24 ≤ 28 hours per month	1	1.8	1	2.2
28 ≤ 32 hours per month	1	1.8	1	2.2

≥ 32 hours per month	13	23.6	13	28.9
Total	55	100.0	45	100.0

Table 25. Yearly Stipend for Advanced Teacher Role (Q3.6 and 5.7 | Leader and Advanced Teacher Respondents

Compensation	All Administrators		Advanced Teachers			
			All		Excluding PSU-12	
Less than $3000 per year	1	4.0%	62	40.0%	7	9.2%
$3000 ≤ $6000 per year	4	16.0%	36	23.2%	20	26.3%
$6000 ≤ $9000 per year	3	12.0%	9	5.8%	8	10.5%
$9000 ≤ $12000 per year	10	40.0%	32	20.6%	25	32.9%
$12000 ≤ $15000 per year	4	16.0%	12	7.7%	12	15.8%
Varies	3	12.0%	4	2.6%	4	5.3%
Total	25	100.0%	155	100.0%	76	100.0%

Table 26. Supports for Advanced Teachers (Q3.16 and 5.19 | Leaders and Advanced Teacher Respondents)

Supports	Administrators (n=26)		Advanced Teachers (n=140)		Advanced Teachers- Excludes PSU-12 (n=70)	
	#	%	#	%	#	%
Job description	19	73	74	53	44	63
Handbook (a ready reference manual)	5	19	21	15	11	16
Professional development-leadership	19	73	90	64	43	61
Professional development-content knowledge (e.g., data use, instructional strategy, etc.)	21	81	82	59	41	59
Certificate/degree program	4	15	12	9	10	14
Coaching	20	77	77	55	32	46
Professional materials (i.e., resources to fulfill AT responsibilities)	11	42	61	44	30	43
Cohort meetings (i.e., meetings with other ATs in the district)	19	73	97	69	50	71
Opportunity to network with other ATs	20	77	87	62	45	64

Space/office supplies		12	46	32	23	25	36

Table 27. Total Types of Support Provided to Advanced Teachers (Q3.16 and 5.19 | Leaders and Advanced Teacher Respondents)

Total Types of Support	Mean	SD	Mdn	Mode	Min	Max
Administrators (n=26)	5.77	2.72	6	8	1	10
Advanced Teachers (n=140)	4.52	2.40	5.00	5	1	10
Advanced Teachers-Excluding PSU-12 (n=70)	4.73	2.46	4.50	3	1	10

Table 28. Teachers From Diverse Backgrounds Encouraged to Apply for Advanced Teacher Roles (Q3.18, 5.22, and 6.10 | All Respondents)

Teachers from Diverse Backgrounds Encouraged to Apply to be AT			Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Administrators		#	1	0	3	11	11	26
		%	3.8	0	11.5	42.3	42.3	100.0
Advanced Teachers	All	#	5	1	19	57	54	136
		%	3.7	.7	.7	14	41.9	39.7
	Excl. PSU-12	#	1	1	14	26	29	71
		%	1.4	1.4	19.7	36.6	40.8	100
Colleagues	All	#	2	4	5	16	24	51
		%	3.9	7.8	9.8	31.4	47.1	100
	Excl. PSU-12	#	2	4	3	12	`19	40
		%	5	10.0	7.5	30.0	47.5	100

Appendix C: Qualitative Findings and Illustrative Quotes

Table 29. Student Achievement Illustrative Quotes

Finding	Illustrative Quotes
Educators reported positive academic impacts on student growth.	"One of the things that I currently do is I'll take [the] district average for EVAAS data that the state provides. And I usually won't even do this weighted, as a weighted average. I'll just go through and find out all the grade levels and contents that I have folks in. What was the growth data overall, and again, when you have so many, you can use a bigger average because it'll kind of wash out the outliers. And then determine from there, hey, are we on par? Are we above? Are we below? And again, so far from what I've gathered, **we're doing significantly better in terms of growth** index than the district." – District Administrator
Educators cited the ATR program as helpful in mitigating the academic impacts of COVID.	"Student growth data has increased each year since implementing [ATR]. **Even coming back after COVID, growth has continued to increase.** Our overall school growth score has increased by 30.2 points since 2016-2017." – Advanced Teacher "The [Advanced Teachers] help fill in the gaps. And it's like students are getting double the help. I'm pulling them there, she's pulling them. That's double the help. Breaking in that gap a little bit more and catching the areas that they [are] struggling in and helping them better. And to me, my kids love going to her. So they're like, "Oh, I get it from you and I get to go to her." And it's like whatever I'm working on, she's working on. And **it's helping them a lot because with COVID, they fall so far behind**." – Advanced Teacher
Administrators and teachers reported improvements in math, science and reading.	"Our focus as a school has been to increase literacy and get the students on grade level or above as we had 75% below grade level coming out of COVID. Our team has implemented strategies and tracked data using three separate reading assessments…**Our results are positive, and we continue to work on the strategies that we see are getting results.**" – Advanced Teacher "[The Advanced Teacher is] a dynamic math teacher! Last semester… **we tested 13 kids in Math I and had 10 kids that passed** out of 13. And that's great with any school system, especially in [our district]." – School Administrator "I really was excited because not a lot of schools will use a science [Advanced Teacher]… And what's different for me, we have six through eighth here. **My main focus is sixth and seventh grade because if we build sixth and seventh, then you automatically see the growth at eighth**. So, we start at the bottom going up, and I provide support to eighth grade." – Advanced Teacher

Table 30. Instructional Quality Illustrative Quotes

Finding	Illustrative Quotes
Educators across the career spectrum perceived ATR as having a positive impact on the **quality of classroom instruction**.	"**Teachers need this kind of continual support. Absolutely**. Especially when they're in the beginning stages of their career, but even a 10- or a 12-year teacher. Who wouldn't want the help with data analysis? Who wouldn't want a second set of hands to pull out a small group of kids so that you could focus on a larger group?" – School Administrator "My beginning teacher, I'm in there more. I'm modeling more. I'm co-teaching more. A more advanced [experienced] teacher, I'm taking them where they're at and, "What can we do to take you to the next level?" Or, 'What can you now start leading?', to build them as a leader, as well… **you have to differentiate for them. Otherwise, you're wasting their time**." – Advanced Teacher
Advanced Teachers are growing teachers' understandings of *what* and *how* to teach.	"On Mondays, we look at data, because I'm trying to help them understand their data and how to implement it back into their classrooms. And then on Wednesdays we're planning. I'm truly trying to **help them dig deeper in the standard,** "What does the standard actually mean?" And go up the depths of knowledge…I help them look at the [vertical] alignment of what they are actually teaching…because I've worked in all the elementary schools." – Advanced Teacher "I observe, both via classroom visits and video sessions, and support my teachers with next steps in the coaching cycle. I plan student reading and ELA events and incentives… **I am the school's point person for anything LETRS and support this school wide**." – Advanced Teacher
ATR teachers supported **effective technology use** in several ways.	"They [Advanced Teachers] were still **coaching teachers while we were virtual**, and they actually had to check lesson plans…The district shifted them, and they helped teachers across the district. All the [Advanced Teachers] did." – School Administrator "I found that video recording was powerful. I can go in there and jot something down. But if we can pull it [the recording] back up and **watch it together and name those behaviors that are causing an impact**, that actually was much better. After that, I get a chance to go back in [the classroom] one more time—same [instructional] standard—and see what improvements [the teacher made]. I'm also going to record that so that we can have that comparison conversation." – Advanced Teacher

Table 31. Teacher Recruitment, Recognition, and Retention Illustrative Quotes

Finding	Illustrative Quotes
Educators viewed ATR as a tool to support the **recruitment** of new teachers.	"It is a piece that **in interviews with new people, I have sat here and talked multiple times with them about the supports that they will receive and they're excited about it.** At job fairs…they were using it as a recruiting tool on their own, I didn't ask them to do it. They were out there saying, 'No, but you're going to get the support here. They'll work with you with planning, they'll work with you with co-teaching, they pull students in small groups. They do all of these things. You're not by yourself with this. We can help you. No, you may not have ever taught before, but we can help you.' So, it is truly a recruiting tool that I have used." – School Administrator
Although educators see the benefits of ATR for teacher recruitment and retention, they also expressed that **ATR by itself does not solve workforce challenges**.	"I'm not sure ATR is the answer. **I don't think that that's going to fix all of our problems. But it is incentivizing my teachers who are working very hard** and continue to look to grow students here at our school need that consistency and that love and support. And so even though the job's hard, at least they have a little more incentive to keep doing it." – School Administrator "You're going to have people who decide this [teaching] isn't the career that they want, for reasons that aren't [ATR] support. **Teachers leave for a plethora of reasons, financial, whatever**. So, I don't want to say that anything's going to solve all of it." – School Administrator
Advanced Teachers overwhelmingly reported that ATR contributes to being **recognized and valued for their expertise**	"I wanted to do more leadership type things, but I didn't want to leave the classroom. It's so hard, because usually to have leadership opportunities, you have to move up, but I wasn't ready. Maybe at some point in my life I would, but right now, I still wanted to remain in the classroom. So, **it was the ability to do some leadership type things while still working with kids every day**." – Advanced Teacher "I honestly feel like it's kind of reignited my passion for teaching, actually… when we finish modeling a lesson or when we finish co-teaching and we see a teacher doing something that we've coached them on, it so, it's just like the kids, when you see that light bulb go off for a teacher, it's like when the light bulb goes off for a kid. And so, you get to see that impact across kids, so many kids, and I think, yeah, it also lets me see schools, public education through a different lens, because I see a whole school approach now versus just my classroom. And it's exciting. I mean, **I really like having some authority and some say in how things are done because it feels good. It feels good to see that impact.** So, I've really enjoyed this role." – Advanced Teacher

Table 32. School Culture Key Findings and Illustrative Quotes

Finding	Illustrative Quotes
Educators noted how Advanced Teachers **fostered "togetherness"** and provided teachers both academic and social-emotional support.	"The key piece is it's [ATR is] **a strong team effort**. So, it's not like everybody is on an island. It's a team, a strong team." – School Administrator "Sometimes I think that's [Advanced Teacher support is] the main thing that gets us through is having each other's back and having them to feed off of. And when you're having one of those days, and you're just like "Why am I here?" They're very quick [to say], "You're doing a great job. Look at the things you are doing." I can't tell you how many times they've told us that…So, just **having that support, I think keeps us going**." – Advanced Teacher "She provides motivational notes, thank you cards, encouragement to keep going. **She recognizes how difficult teaching is and sympathizes with us.** She provides advice (her experiences) and trust. She provides reminders, calendars, and communicates well with us. She is available 24/7." – Teacher Supported by an Advanced Teacher
ATR highlighted the **importance of building trust** as an important factor in positively impacting school culture.	"Really the biggest part that I feel that they [teachers directly receiving support from Advanced Teachers] need is just having **somebody that they can trust,** that's in the trenches with them and can **give them feedback in real time**…They just need somebody they can trust and vent to and then close their door and keep on going." – Advanced Teacher "… trying to work with the teams and getting them to have trust and respect and then they get buy-in because **if they don't trust or respect you, they're not going to listen to anything that you say**…then the consistency I mean he [supported teacher] gets blue every single time and then finally they're like, "How are you doing this?" – Advanced Teacher
ATR programs emphasized a **culture of continuous improvement.**	"Being able to handle and accept when things are not right, we have to **learn to take constructive criticism** when we're faced with children's lives. Because that's a big part [of ATR], which is the instructional coaching position that comes in." – Advanced Teacher "[ATR] has strengthened what we plan for. 'Let's analyze the data a bit further. Where do we need to take these kids?' Now I feel like it's more of a team, more of a family. We learn from each other. Where before it's just like, 'Here you are, here's your stuff. You teach by manual. And that's how we do it.' Where now, **we pull from everywhere and whatever works and whatever we can do to reach the most kids**." – Teacher Supported by an Advanced Teacher

Table 33. Program Implementation Key Findings and Illustrative Quotes

Finding	Illustrative Quotes
Opportunity Culture (OC) is the most common ATR model in North Carolina.	"We started out with Opportunity Culture. [Our school administrator] allowed us to go to schools that had already established it…And just **really wrapping our minds around the work**. What was happening? What was the role of an [Advanced Teacher]? And as we filled in what the role looked like there, we then took that back to our school and had conversations about what it would look like at our school." – Advanced Teacher "We went through a planning process that was about eight, nine months of planning in terms of the district. What the model would look like from a district perspective…Concurrent to that, our schools were working with their school level teams, **building what Opportunity Culture would look like in each of those individual schools.** And so the majority of our schools have focused on identifying a high yield teacher to extend their reach, typically called the Multi Classroom Leader within the Opportunity Culture framework. Once the district went through the design process at the district level, each school went through a design process with their OC teams." – District Administrator
There is **extensive variation in implementation** of ATR programs at the school level.	"In one school, the [ATR] focus is in fourth and fifth grade. They need math based on their data, whereas in another school it may be reading and so forth… the other thing that I think is a difference is **some of our schools, just the roles within Advanced Teaching Roles that each of our schools have**. Some of our schools have all full release [Advanced Teachers], meaning those [Advanced Teachers] are not assigned to a class of record. And then one of our middle schools has all partial release [Advanced Teachers] ... so it's individualized." – District Administrator "**Schools that have been the most successful, are those that have built the ATR roles into existing things and structures already in their building**. Where they've already had a math teacher that was already doing a lot of work with the entire grade level in math. So, it was just natural where you just need to teach all the kids math. You're the most highly effective teacher, you have the most results. So, guess what? You're going to be a lead teacher in math." – District Administrator
While hiring protocols for Advanced Teachers were clear, **evaluation protocols are still evolving.**	"I don't know exactly where is the bar for, do I get to come back another year as an [Advanced Teacher] or not?" – Advanced Teacher "Once you're in the pool, you don't stay in there forever. You still have to prove that you're qualified for the role, and something hasn't changed in that. **So, when they go through the requalification, which is on a different timeline than the initial application**, a powerful process, they still have to turn in documentation… you might take a microcredential, you still have to show some data…" – School Administrator

Table 34. Program Barriers and Supports Key Findings and Illustrative Quotes

Finding	Illustrative Quotes
District and school **leaders have been instrumental** in advocating for and shaping the design of ATR programs.	"I think that that was **a crucial part of our success**, the individualized planning process for each of our schools, and the fact that each school's implementation of advanced teaching roles is based on their data and their needs and a group of educators from that school made those decisions. So just that individualized approach. Their **plans weren't given to them by the district. They were created by the folks who are boots on the ground** every day based on their data and their needs." – District Administrator "In the long run, it has been extremely helpful to have the chief financial officer, the communications director, HR…Having **a team at the district level, and it being a very diverse team cross categorical was very helpful.**" – District Administrator
Some district and school administrators indicated that **class-size flexibility is critical** to implementation.	"From a district level, part of the initial attraction [of ATR]...and I think **it probably attracts a lot of district level leadership in K-3,** it's the class size flexibility. By and large we've still maintained [class size]...where it has helped is if we're up right on that bubble when you go to 22. It's like, "Well, we've got the ATR flexibility there." – District Administrator
Variable funding structures and ongoing **teacher turnover** limit the sustainability and impact of ATR.	"Based on the way that we are having to fund ATR, **we doubt very seriously we're going to be able to have additional schools.** We have other schools that would like to be a part of it, but because of the way that we're having to fund it, they're not going to be able to." – District Administrator "Our whole thing is budget, because [ATR] has to come within what we already have as a budget. And **the [ATR] positions we have now actually cut some things that we actually feel we need**. [For example,] we do not have [special instructional assistants] in our halls, so we are it for our kids." – Advanced Teacher "It's just, **there's a shortage [of substitute teachers]. If it gets down to it, sometimes we have to cover classes**, which I don't mind doing. But then, you're letting another teacher down, because you're not pulling their group or you're not meeting with them to plan. That is the absolute biggest challenge I have." – Advanced Teacher "We were told that...a coach would come in and help us co-teach, pull small groups if we needed to. And that sounded great, an extra [set of] hands to help out. But I think **because of the staffing issues, it's hard to implement** that. And it's hard for her [the Advanced Teacher] to do her title, really." – Teacher Supported by an Advanced Teacher

Table 35. Equitable Access Key Findings and Illustrative Quotes

Finding	Illustrative Quotes
Educators reported that ATR has **improved access to highly effective teachers** for students attending Title I and/or historically hard to staff schools.	"Typically, we [implemented ATR] at our schools that are **higher in poverty, most difficult to staff, most demographically diverse**. And so what we recognized was a need to try to **attract the most qualified and the most effective teachers** to those schools so that they could obviously improve student outcomes and perform at a higher level."— District Administrator "**Two of our highest need schools**, they have three [Advanced Teachers] and they were able to get all three of those positions filled in their first year of implementation. And those people are still with those schools today."— District Administrator "We were implementing [ATR] at the **majority of our Title I schools**, and so I just felt strongly there had to be a differential in the pay in order to **recruit the best [Advanced Teachers] at our highest need schools**." – District Administrator
Administrators indicated a **need for school-wide strategies to prioritize students** most impacted by educational disparities.	"There could be **closer collaboration between the Advanced Teachers and other specialists** (student services, exceptional children, EL, etc.). Recruiting teachers who have expertise in these areas to become Advanced Teachers could also be beneficial. – Advanced Teacher "I know the Advanced Teachers are looking at subgroups. I think we need to be more intentional…**We really need to dig deep on how we are impacting Black students or EC students or economically disadvantaged students**… But being more intentional with the subgroups, like the EC students, I think we need to do a better job at that." – School Administrator
Advanced Teacher recruitment can be amplified towards **increased opportunities for marginalized educators**.	"First, they would have to hire Beginning Teachers from diverse backgrounds. Then, they would eventually have the diverse [Advanced Teachers]. I think in our district, there is mostly a homogeneous population, so not hiring diverse teachers is partly, if not mostly due to there just not being a lot of diverse people who apply." – Advanced Teacher "School leaders can ask teachers in their building who may not feel they are qualified but truly are. Systemic racism leads to many marginalized individuals believing they are not qualified, or these positions are not for them when in fact they are." – Advanced Teacher

Appendix D: Comparison of PSU Implementation Models

Table 36. PSU Implementation Model Components

PSU	Start Year	Model	Number of ATR Schools as of 2023	Total Program Cost from State (years active)	Release Models Used	Job Titles	Role Summary and Supplement Pay
Bertie	2018	Unique	6	$842,000 (2018-2025)	Partial	Teacher Guide Teacher Mentor	Provides school-based coaching and PD; $3,000 + performance-based supplement up to $2,000 Supports Beginning Teachers district-wide; $3,000 + performance-based supplement up to $2,000
Charlotte-Mecklenburg	2012	OC Project LIFT: 2012-2019 Success by Design: 2013-2019 Teacher-Leader	87	Total from the state: $2,645,131 (2016-2022) Total from state and CMS: $5,712,131 (2016-2025)	No Release, Partial, Full	Expanded Impact Teacher 1 (student-focused) Expanded Impact Teacher 2 (teacher-focused) Expanded Impact Teacher 3	Serves as teacher of record for a typical student load and expands impact with 25-35% more students or leads PLC; $2,250 annually Serves as teacher of record for a typical student load and as a model instructor for other teachers to observe; Peer Evaluator; Beginning Teacher Mentor; Committee Lead (ILT, SLT); PD Leader; IEP Liaison; MTSS Support; $4,500 annually Serves as teacher of record for a minimum of 50% of the school day; two of the following options: (a) teaches 25-35% more

Pathway: 2019-Present	(student-focused)	students (b) coaches up to two teachers (c) leads PLC; $6,750 Non-Title I, $9,000 Title I
	Expanded Impact Teacher 3 (teacher-focused)	Serves as teacher of record for a minimum of 50% of the school day; one of the following options: (a) serves as model classroom for other teachers to observe (b) evaluates peers (c) mentors beginning teachers (d) leads committee (ILT or SLT) (e) leads PD (f) MTSS (g) IEP Liaison; $6,750 Non-Title I, $9,000 Title I
	Multi-Classroom Leader 1	Leads team of up to 6 teachers; may lead MTSS; may temporarily fill emergency vacancies; leads whole content areas, grade levels, and/or beginning teachers; leads PLC meetings; leads data tracking and reloop/review plans; $11,250 Non-Title I, $16,000 Title I
	Multi-Classroom Leader 2	Leads team of up to 10 teachers; may lead MTSS; may temporarily fill emergency vacancies; leads whole content areas, grade

							levels, and/or beginning teachers; leads PLC meetings; leads data tracking and reloop/review plans; $13,750 Non-Title I, $18, 250 Title I
Cumberland	2020	OC	10	$331,000 (2020-2025)	Partial and Full	Multi-Classroom Leader 1	Leads team of 2-5 teachers and teaches; 15-20% of state salary
						Multi-Classroom Leader 2	Leads team of 6-8 teachers and teaches; 25-30% of state salary
						Team Reach Teacher	Expanded reach to impact more students; 2-5% of state salary
						Master Team Reach Teacher	Expanded reach to impact more students; 8-12% of state salary
Edgecombe	2016	OC	11	$1,002,210 (2016-2025)	Partial and Full	Multi-Classroom Leader (MCL)	Leads team of 1-4 teachers and teaches; MCL1=$6000; MCL2=$9000;
						Expanded Impact Teacher (EIT)	Expanded reach to impact 33% more students; EIT1=$4000; EIT2=$6000
Guilford	2018	OC	25	$1,397,950 (2017-2024)	Partial and Full	Multi-Classroom Leader 1	Leads team of 2-3 teachers and teaches; $10,000

						Multi-Classroom Leader 2	Leads team of 4-5 teachers and teaches; $15,000
						Multi-Classroom Leader 3	Leads team of 6-8 teachers and teaches; $20,000
						Expanded Impact Teacher 1	Expanded reach (33% more students);$6000
						Expanded Impact Teacher 2	Expanded reach (50% more students); $8000
						Expanded Impact Teacher 3	Expanded reach (66% more students); $10,000
Halifax	2018	OC	4	$638,000 (2018-2025)	Partial	Multi-Classroom Leader 1	Leads team of 1-2 teachers and teaches; +$1000 per month
						Expanded Impact Teacher 1	Expanded impact with at least 50% more students; +$800 per month
Hertford	2018	OC	6	$925,000 (2018-2025)	Partial and Full	Multi-Classroom Leader 1	Leads team of 2-5 teachers; 15-20% of state salary
						Multi-Classroom	Leads team of 6-8 teachers; 25-30% of

						Leader 2	state salary
						Team Reach Teacher	Teaches on a team led by a multi-classroom leader; collaborates with colleagues; 2-5% of state salary
						Master Team Reach Teacher	Assists MCL II with leadership of the team; 8-12% of state salary
Lexington City	2018	OC	6	$929,554 (2018-2025)	Partial and Full	Multi-Classroom Leader 1	Leads team of 2-5 teachers and teaches; 20% of state salary
						Multi-Classroom Leader 2	Leads team of 6-8 teachers and teaches; 30% of state salary
						Expanded Impact Teacher 1	Expanded reach (33% more students); 15% of state salary
						Expanded Impact Teacher 2	Expanded reach (50% more students); 20% of state salary
Lincoln	2021	Unique (Lincoln County Schools Advanced Teaching Roles	6	$1,167,500 (2021- 2025)	No Release	Lead Teacher	Instructional leadership role over a classroom or multiple classrooms facilitating instructional activities; $5000
						Peer Assistance Mentor	Instructional leadership role over teachers facilitating discourse and monitoring the learning outcomes of students assigned to

		Program)					that teacher's classroom; $3000
McDowell	2020	Unique (Lead from Within)	14	$1,014,240 (2020- 2025)	Partial and No Release	Lead Teacher	Conducts PLCs, mentors teachers and supports professional development for staff; helps with Beginning Teacher Program; presents at school, county, state and national conferences; participates in conferences and earns micro-credentials through Bloomboard to increase professional knowledge; $500/month+$1,600/summer
Mt. Airy City	2022	OC	3	$849,864 (2021-2025)	Partial and Full	Master Teacher Leader	Leads teachers within a focus area aligned with their strengths-based leadership/area of expertise across departments and school sites. $10,000
						Multi-Classroom Leader	Leads team of 2-5 teachers within a department/content area and teaches with partial release. $10,000
						Extended Impact Teacher	Teaches additional students during their planning period or in addition to primary role often in middle or high schools; $4,000 per semester
Nash	2021	OC	5	$1,130,571 (2021-2025)	Partial and Full	Multi-Classroom Leader 1	Leads team of 2-3 teachers; $8,000+Title I Tiered Stipend (Tier I = $6000; Tier II = $3000; Tier III = $1000)+Teacher Attrition Stipend (Over 15% = $1250; 10%-14.999% = $1000; 5%-9.999% = $750)
						Multi-	Leads team of 4-6 teachers; $10,000+Title I

						Classroom Leader 2	Tiered Stipend (Tier I = $6000; Tier II = $3000; Tier III = $1000)+Teacher Attrition Stipend (Over 15% = $1250; 10%-14.999% = $1000; 5%-9.999% = $750)
						Multi-Classroom Leader 3	Leads team of 7-8 teachers; $13,500+Title I Tiered Stipend (Tier I = $6000; Tier II = $3000; Tier III = $1000)+Teacher Attrition Stipend (Over 15% = $1250; 10%-14.999% = $1000; 5%-9.999% = $750)
						Team Reach Teacher	Extends reach to impact more students as part of an MCL Team; [Elem: $2800 or Sec:$1600/section]+Title I Tiered Stipend (Tier I = $2000; Tier II = $1000; Tier III = $500)+Teacher Attrition Stipend (Over 15% = $1250; 10%-14.999% = $1000; 5%-9.999% = $750)
						Master Team Reach Teacher	Extends reach to impact more students as part of an MCL Team and assists MCL with leading larger team; [Elem: $5600 or Sec: $1600+$1600/section]+Title I Tiered Stipend (Tier I = $2000; Tier II = $1000; Tier III = $500)+Teacher Attrition Stipend (Over 15% = $1250; 10%-14.999% = $1000; 5%-9.999% = $750)
Pitt	2016	Unique (R3 - Recruit, Retain,	38	$19,098,905 (2016- 2025)	Partial and Full	Multi-Classroom Teacher	Co-teach, co-plan, co-assess across multiple classrooms (2-6); $10,000 supplement
						Facilitating	Work with a team of 2-4 teachers to co-plan

		Reward)				Teacher	and lead action research influencing the learning in multiple classrooms; $5,000 supplement
						Collaborating Teacher	Collaborate on Action Research Project with Facilitating Teacher; $1,500
						Equity Partner	Use improvement science to lead a group to address an inequity in the school; $2,500
						Facilitating Mentor	Facilitate the work of the Beginning Teacher Mentors at every school to address the onboarding, support and needs of Alternative Licensure and Beginning Teachers; $1,800
Thomasville	2021	OC	N/A	$500,000 (2021-2025)	Partial and Full	Multi-Classroom Leader 1	Leads team of 2-5 teachers and teaches; 15-20% of state average salary
						Multi-Classroom Leader 2	Leads team of 6-8 teachers and teaches; 25-30% of state average salary
						Team Reach Teacher	Expanded reach to impact more students; 2-5% of state average salary
						Master Team Reach Teacher	Expanded reach to impact more students; 8-12% of state average salary

Vance County	2016	OC	6	$898,000 (2016-2025)	Partial and Full	Multi-Classroom Leader 1	Leads 2-3 teachers and teaches; 7,000
						Multi-Classroom Leader 2	Leads 2-3 teachers and teaches; 10,000
						Multi-Classroom Leader 3	Leads 6+ Teachers; $13,000
						Expanded Impact Teacher 1	Teaches 33 more students; $5,000
						Expanded Impact Teacher 2	Teaches at least 50% more students; $7,000
						Expanded Impact Teacher 3	Teaches at least 66% more students; $9,000
Wilson	2020	OC	14	$674,000 (2020-2025)	Partial and Full	Multi-Classroom Leader 1	Leads team of 2-3 teachers and teaches; $7000+Title I Tiered* Stipend (Tier I = $6000; Tier II = $3000; Tier III = $1000)
						Multi-Classroom Leader 2	Leads team of 4-5 teachers and teaches; $9000+Title I Tiered* Stipend (Tier I = $6000; Tier II = $3000; Tier III = $1000)
						Multi-Classroom	Leads team of 6-8 teachers and teaches; $12000+Title I Tiered* Stipend (Tier I =

						Leader 3	$6000; Tier II = $3000; Tier III = $1000)
						Team Reach Teacher (Elementary)	Expands reach to impact more students; $2400+Title I Tiered Stipend (Tier I=$2,000; Tier II=$1,000; Tier III=$500)
						Master Team Reach Teacher	Supports one teacher and expands reach to impact more students; $5600+Title I Tiered Stipend (Tier I=$2,000; Tier II=$1,000; Tier III=$500)
							*Tier Categories
							Tier 1 - equal to/greater than 75% poverty
							Tier 2 - 55-74% poverty
							Tier 3 - less than 55% poverty
Winston-Salem/Forsyth	2020	OC	24	$954,479 (2020-2025)	Partial and Full	Multi-Classroom Leader 1	Leads team of 2-5 teachers and teaches; $12,000
						Multi-Classroom Leader 2	Leads team of 6-8 teachers and teaches; $14,000
						Extended Impact Teacher 1	Expanded reach to impact more students; $8,000
						Extended Impact Teacher 2	Expanded reach to impact more students; $10,000

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