

A Review of the OSEP 325T Program Redesign Projects: Analysis, Synthesis, and Recommendations



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Background and Purpose of the Study

The U.S. Department of Education Office of Special Education Programs (OSEP) is dedicated to improving results for infants, toddlers, children, and youth with disabilities ages birth through 21 by providing leadership and financial support to assist institutions of higher education (IHEs), states, and local districts. During a 5-year period, OSEP supported efforts to revise and enhance special education teacher preparation programs. The purpose of the OSEP-funded 325T grants was to redesign and restructure teacher preparation programs to ensure that program graduates will meet state and federal requirements as highly qualified teachers (HQTs) in special education and will implement evidence-based practices (EBPs). The primary focus was to redesign teacher preparation to improve outcomes for students with high-incidence disabilities (HIDs) within schools and districts not meeting federal targets for adequate yearly progress (AYP). Seventy-two IHEs received awards for funding under the 325T competition during the period of grant awards (see Table 1). Appendix A features a complete listing of awards and project details.

Table 1

Number of Study Institutions of Higher Education by Cohort and Year

Cohort	Year	IHEs	Funding level/year
1	2006-2007	22	Up to 100,000
2	2007-2008	20	Up to 100,000
3	2008-2009	12	Up to 100,000
4	2009-2010	9	Up to 300,000
5	2010-2011	9	Up to 300,000
Total		72	



The extensive work done as a result of the 325T projects contributed to the U.S. Department of Education’s decision to fund a national center informed by the outcomes of the 325T projects. The Collaboration for Effective Educator Development, Accountability, and Reform (CEEDAR) Center (ceedar.org) provides technical assistance (TA) to state departments of education (SEAs), IHEs, and local education agencies (LEAs) to increase alignment in professional learning systems to enhance learning opportunities for teachers and leaders. As part of the CEEDAR Center’s knowledge-development activities, the CEEDAR Center leadership team selected researchers familiar with the 325T grant projects (two researchers were recipients) to identify salient lessons learned to reform teacher preparation among the 325T grantees in response to the federal priority (U.S. Department of Education, 2012), which called for (a) key strategies to restructure preparation programs, (b) examples of interdepartmental collaboration to improve preparation in core academic subjects, (c) professional development (PD) strategies to increase faculty use of existing high-quality resources on EBPs, (d) strategies to integrate EBPs into preparation curricula and extended field experiences, and (e) effective methods for evaluating program outcomes. This information, used in conjunction with other research and sources of data, has informed and will continue to inform TA products and services provided by the CEEDAR Center. Through this study, the rich experiential knowledge of the 325T project personnel at the IHEs has provided insights related to contextual factors, barriers, and facilitators to reform. The team addressed the following research questions (RQs):

- RQ1: How did 325T grantees address their project goals?
- RQ2: What factors facilitated the revision and enhancement of the personnel preparation programs?



-
- RQ3: What impediments did grantees experience while revising and enhancing their programs?

Method

The research team solicited input from all 325T project directors about their efforts and outcomes related to program redesign. To gain their perspectives, researchers employed a sequential (i.e., QUAN/QUAL) mixed-methods design (Onwuegbuzie & Teddlie, 2003), which included

- the administration of a survey to all project directors and
- interviews with a purposive sample of project directors.

Prior to each phase of data collection, the researchers obtained approval from the Institutional Review Board (IRB) at the University of Florida.

Participants

For the quantitative phase of the study, researchers contacted personnel from all 72 funded (active or closed) 325T projects and invited them by email to participate in this study. The 325T grantees represented a diverse cross section of the country, institution type, program size, and project focus (see Appendix A). Public and private IHEs in urban, rural, and suburban communities in every region of the continental United States and Hawaii housed the projects. Institutions ranged in size from fewer than 5,000 students to more than 50,000 students. Projects focused on increasing preparation in EBPs at the elementary and secondary levels with various secondary emphases (e.g., science, technology, engineering, and mathematics [STEM]; literacy; urban schools; culturally responsive pedagogy; dual licensure) and different professional outcomes for completers (e.g., bachelor's degree, master's degree, initial certification, postbaccalaureate certification).



For the qualitative phase of the study, the research team conducted semi-structured interviews of a purposive sample (Miles & Huberman, 1994) of 12 project directors. The sampling boundaries that defined the selection process for participants included project directors to represent the following aspects of the study: (a) each cohort, (b) each region of the country, and (c) varied institutional sizes.

Instruments

Survey. The survey—a combination of Likert-type and open-ended questions—addressed enhancement efforts for teacher preparation programs. Content for the survey aligned with the stated program components from the 325T competition as outlined by OSEP. Using these 325T constructs and evaluation components, researchers developed the 325T Program Improvement Grants Best Practices Review Survey (see Appendix B). Researchers asked participants to respond to items organized in three sections.

Section I. A series of 69 statements incorporated a Likert-type rating scale for respondents to indicate the extent to which they agreed that their project

- had been aligned with state licensure requirements (9),
- improved their program’s organizational structure and instructional delivery (7),
- improved curriculum and course content (9),
- improved support for teacher candidates (11),
- developed and implemented a comprehensive program evaluation (17),
- found program components to be useful (7), and
- identified factors that were challenging and/or barriers to full implementation (9).

Section II. A set of three open-ended questions addressed resources that supported project goals, project accomplishments, and additional comments.



Section III. A demographic profile included institution size, setting, focus of training, and year of initial funding.

Survey review. After the development of the survey, an external consultant with expertise in statistical analysis and survey research reviewed the instrument for face validity. After revisions, the researchers sent the draft survey to OSEP personnel for review and approval. The approved survey was uploaded into Survey Monkey, an electronic survey software program for dissemination and data collection. The survey was first administered to a pilot sampling of seven project directors for feedback regarding clarity of questions and time required for completion. Feedback from participants in the pilot sample revealed that no survey revisions regarding the logistics for completion or content were needed.

Interviews. Based on preliminary analysis of the survey results, the research team developed a semi-structured interview protocol. Researchers designed the protocol—OSEP 325T Best Practice Review and Lessons Learned Interviews—to gather information across a variety of topics regarding the implementation of the 325T projects (see Appendix C). The 11 prompts included topics pertaining to roles and responsibilities, processes for revision work, resources, changes in pedagogy, barriers to completion, and sustainability.

Procedures

Phase 1: survey. Researchers emailed a cover letter with a link to the online survey to 72 project directors. Researchers asked the project directors to complete the survey in 2 weeks. After the initial 2 weeks, a second email was sent to all 72 project directors as a reminder to complete the survey within the next 2 weeks. The third and final email request was sent asking for completion in 1 week.



Phase 2: interviews. As previously described, the research team recruited 12 individual participants to ensure representation of IHE characteristics across all funded projects nationally. One of the sampling boundaries was purposive representation from each cohort. Therefore, each of the five cohorts, representing the 5 years of funding, was represented in the sample. It should be noted, however, that at the time of the study, many participants had not completed full implementation of their approved project plans, particularly program evaluation, dissemination, and sustainability. The researchers introduced the study via email communication and then orally reviewed information regarding the intent to ensure full understanding and consent to participate prior to each interview. Three members of the research team each conducted telephone interviews with four project directors ($n = 12$). Given some professional familiarity with the participants, the interviews were conducted with conversational comfort and trust. Each interview, which lasted between 35 and 75 min, was audio recorded for transcription and analysis. The interviewers also took notes during the interviews for verification of responses (Creswell, 1997).

Data Analyses

Survey. The research team employed verification strategies during the data analyses for assuring reliability and validity of the findings (Morse & Richards, 2002).

Multiple-choice questions. Researchers compiled descriptive analyses for each of the multiple-choice questions of the survey.

Open-ended questions. For open-ended questions, researchers independently reviewed printed transcriptions of the responses. For each issue/question, researchers reviewed the responses for common ideas and themes (Strauss & Corbin, 1990). The team developed and analyzed an initial list of categories using guidelines suggested by Miles and Huberman (1994)



for data analysis and reduction. Researchers strategically designed a plan to maximize collaborative analysis. Neilsen (2012) explained the benefits of such a process:

Collaborative analysis performed by a (small) group of researchers may well create the advantage to the researchers informing, influencing, and justifying through a dialogue with each other how they can arrive at a joint analysis. Differences in perceiving the data can then be view[ed] as an opportunity for learning rather than merely a source of reduced reliability. (p. 6)

Interviews. Verbatim transcriptions of the interviews were imported as media files into Dedoose, a collaborative, cross-platform application for the management, integration, and analysis of qualitative data (Lieber & Weisner, 2013). Data from the interviews were coded using coder-determined chunks of discourse, referred to as *excerpts*—meaningful segments of interview information. Two of the researchers independently read and coded each transcript. Codes were analyzed and applied by coder, transcript, and excerpt. Each researcher could locate the specific codes and findings of content by an individual coder, including which codes were excerpts of text, the frequency of the code’s use, and the co-occurrence of certain codes. When the second reviewer coded a completed transcript, the reviewer read the entire manuscript, reviewing each coded excerpt to determine agreement of coding.

Themes and trends were identified through an iterative process to determine agreement on the identification of codes, subcodes, and excerpts to ensure trustworthiness of the data (Guba & Lincoln, 1981). After coding subsamples of data sets using the defined categories, researchers reviewed validity of data codes and themes through comparisons of responses and resolution of differences in coding until 100% agreement across all phases of analysis was obtained before proceeding to the next level of analysis. Reviewers assigned additional subcodes for individual



excerpts when necessary. The second stage of analysis included the aggregation of data (Miles & Huberman, 1994) and the development of data summaries. This second review used an interleaving coding process (Nielsen, 2012), which also served as quality control to ensure coding of all data. A synthesis of findings was developed, verified, and found to be explicit and grounded. Conclusions from the data analyses were reported (Miles & Huberman, 1994).

Survey Results

This section features the results of the survey, including participant demographics, quantitative findings, and qualitative findings.

Demographics

Of the 72 project directors, 45 completed the survey for an overall return rate of 62.5%. Descriptive analyses revealed characteristics of the respondents' institutions. The team collected and disaggregated data by individual questions, cohort, type, and size of the institution. Respondents represented each of the five funded cohorts, with Cohort 2 (2007-2008) having the highest participation (i.e., 33% of total responses).

Participants from rural, suburban, and urban settings responded; 57.5% were employed at urban IHEs, and 22% represented historically black colleges or universities (HBCU). Reported areas of focus for teacher education reform were similar, with slightly more graduate programs (i.e., 55%) than undergraduate programs (i.e., 52%). It should be noted that participants could select multiple programs. See Appendix D for information regarding the demographic information provided by the respondents.

Quantitative Analysis

Descriptive analyses of the multiple-choice questions of the Participant Survey: 325T Program Improvement Grants Best Practices Review Survey were completed. See Appendix E



for tabular displays of results across domains and questions. Participants most strongly agreed to questions directly related to program improvement of course enhancements and assessments, which indicated that across the five domains (i.e., licensure standards, organizational structure and instructional delivery, curriculum and course content, student support, and program evaluation), they felt most accomplished in Domain C: Curriculum and Course Content. Additionally, they reported implementation of enhancement activities from content revisions within syllabi to continual program improvement. Almost all respondents (i.e., 98%) agreed and strongly agreed that redesigned syllabi reflected revised and current state certification requirements and standards to ensure that graduates met the requirements as HQTs. All respondents (i.e., 100%) strongly agreed and agreed that multiple courses now included EBPs to meet the needs of students with HIDs. Implementation of EBPs extended into clinical learning, and 97% of respondents reported enhancements in clinical experiences. Within the domain of program evaluation, all respondents (i.e., 100%) reported that data were systematically collected, analyzed, and used within continual program improvement efforts.

Responses to questions related to additional collaborative educational partners varied. Within the domain of active participation within state networks, 75% of respondents reported the existence of active policy networks of IHEs within their states. Although 73% of respondents reported input to policy development, only 50% of respondents reported organizational structures to sustain IHE input into policy development.

The organizational structure and instructional delivery included multiple faculty and courses. All respondents (i.e., 100%) strongly agreed and agreed that multiple courses were enhanced during implementation of the 325T projects. However, related to structures to sustain



and continually enhance organizational delivery through collaborative research, less than 60% strongly agreed or agreed.

The respondents reported the highest levels of agreement and strong agreement across each of the questions in the domain of improvement in both curriculum and course content. Ninety-five percent of respondents reported indicators including course content with EBPs, inclusive practices, and IRIS Center modules (i.e., Individuals With Disabilities Act [IDEA] 2004 and Research for Inclusive Settings). The IRIS Center is a federally-funded technical assistance and dissemination (TA&D) center established to provide products on EBPs for initial preparation and PD. Visit <http://iris.peabody.vanderbilt.edu/> to learn more. Fifty-eight percent reported collaboration with faculty in arts and sciences.

Within the domain of improved student support during the transition from pre-service courses to clinical experiences, respondents reported 97% agreement regarding extended clinical learning and field experiences, but they reported collaborative structures with much less agreement. For example, only 35% of respondents reported regular meetings for beginning teachers, and less than 50% of respondents reported new teacher mentoring systems.

All respondents (i.e., 100%) agreed that data are systematically collected, analyzed, and used to inform continual program improvement and address program goals. In addition, 98% of respondents agreed that results from ongoing data collection inform proposed changes to programs. However, these data sources do not appear to include information regarding faculty knowledge of EBPs (as reported at 70%) and P-12 student data (as reported at 56%) at the same levels of agreement.

Multiple sources reported program support to initiate and sustain the completion of 325T project goals and activities with varying levels of agreement. Several examples are resources for



other federal projects (i.e., 95%); meetings with other grantees at national professional meetings (i.e., 90%); and contacts with OSEP project personnel (i.e., 80%).

The last section addressed perceived challenges and barriers to full implementation of the goals and activities of the 325T program improvement grant; 56% of respondents identified with agreement that a change in personnel was the greatest challenge, and 46% of respondents reported legislative and policy revisions as another challenge to 325T program improvement efforts. In contrast, only 5% of respondents identified lack of technical support.

Qualitative Analysis

Given the results reported on the survey, an analysis of open-ended responses of the 325T Program Improvement Grants Best Practices Review Survey was conducted using the most-often-reported activities as the framework for data analyses. Organizational structure and instructional delivery, including EBPs, and the use of data within program evaluation were two domains that had 100% agreement levels reported by survey respondents. Subsequent analyses of the open-ended responses evidenced the following themes and specific examples.

Content revision and enhancements. As reported, all respondents (i.e., 100%) strongly agreed and agreed that multiple courses were enhanced during implementation of the 325T projects within the domain of organizational structure and instructional delivery. Numerous respondents expanded upon these content enhancements and revisions through collaboration among teams of educators, including university and school districts, general and special educators, educators focused on courses and clinical experiences, and undergraduate and graduate faculty. Specific content exemplars during the revision and enhancement process included inclusive practices, culturally responsive teaching (CRT) practices, differentiated instruction, Universal Design for Learning (UDL), and evidence-based instructional practices.



Readily available access to professional resources, tools, and strategies is essential. Respondents reported the value and use of information from federally funded resources such as the IRIS Center, Monarch Center, Center for Applied Science Technology (CAST), National Comprehensive Center for Teacher Quality (NCCTQ), Doing What Works (DWW), What Works Clearinghouse (WWC), Positive Behavior Intervention Supports (PBIS), and Response to Intervention (RtI) websites.

The structure of co-teaching as a delivery model for content was a theme within the process of content revision and enhancement. Examples cited co-teaching teams of multiple age levels and content areas. Another theme in content revision was the developmental progression and continuum of knowledge acquisition and demonstration across multiple settings from initial course awareness of knowledge through demonstration of knowledge within clinical experiences and internships. Although there were some examples of demonstration of EBPs and student data collection in the K-12 settings, this theme emerged more as a barrier within the program evaluation domain (see subsequent sections).

The use of data within program evaluation. As reported, all respondents (i.e., 100%) strongly agreed and agreed that data are systematically collected, analyzed, and used to inform continual program improvement and address program goals. Qualitative analyses of the open-ended responses found themes related to scope, innovative practices, and barriers to implementation. Processes for data collection and use appear to have been designed and implemented to ensure the inclusion of performance data reflective of the special education program (e.g., teacher candidate performance and perspectives, instructor performance and perspectives, clinical supervisor expertise, student data such as P-12 performance patterns). The scope of the program evaluation efforts reported initial levels of support to active participation



by multiple stakeholders across the enhanced programs. For example, one respondent stated, “Evaluation partners have supported our program evaluation efforts.”

New assessment instruments were created to examine teacher candidates’ knowledge across time within some restructured programs (e.g., creation of pre- and post-program culminating experiences). Only a few respondents, however, indicated creation systems for program evaluation that aligned with other state and national accreditation processes. One respondent stated, “We created a joint NCATE [National Council for Accreditation of Teacher Education] assessment system that will meet ACEI [Association for Childhood Education International] and CEC [Council for Exceptional Children] standards with key projects in those courses.” Most respondents described program evaluation efforts and revisions (e.g., admissions criteria including written statements, grade point average [GPA], letters of recommendation, and interview results; program accomplishments such as performance-based assessments and internship evaluations; exit criteria including capstone assignments, theses, and comprehensive exams; and follow-up measures of satisfaction with employers and graduates) within their immediate sphere of influence (i.e., their IHEs).

A major reported theme was the use of instructional data to determine student progress throughout programs to guide instruction (e.g., case studies, action research) and program improvements aligned with data sources needed for continual improvement and accreditation. Although mentioned by only a few respondents, the need to collect student data from the school districts was reported as both necessary and as a perceived barrier. As one respondent wrote, “The second challenge is one faced by most 325T projects. That challenge is trying to collect K-8 student performance data for our program completers to determine the efficacy of our teacher preparation program.”



Alignment of curriculum and pedagogy. Vertical alignment within the special education teacher preparation program and alignment with other content disciplines to meet revised and current state and professional competencies were clearly defined themes. Attention was given to EBPs that foster inclusive education (e.g., co-planning, co-teaching, UDL, differentiated instruction, strategy instruction, cooperative learning, accommodations). Close alignment with course content and clinical/internship experiences and expectations was a priority. One respondent clarified by stating, “The revision process (curriculum mapping, course revisions, and implementation) and the impact on faculty understanding of how/when concepts are introduced and how content is spiraled through the program has been invaluable.” Respondents also discussed considerations for planning for dual licensure options.

Clinical experiences. Extended clinical learning, field experiences, and supervised practica through partnerships with diverse school districts emerged as effective practices. Respondents also described strategic outreach and planning, including support and mentoring to staff members in clinical settings and new teachers, as effective practices. One respondent clarified, “The 325T project served a need for refining and improving the clinical practices within our program. Individuals often missed in our program are our cooperating teachers and university supervisors. And these individuals are powerful influences to our teacher candidates.”

Professional development. Respondents consistently described effective PD as integral to deepening educators' content knowledge and skills to provide effective instruction and assess student progress. Newly revised expectations and competencies require learning, resources, and support for university and school faculty (e.g., expertise in culturally responsive pedagogy, EBPs, content-specific information, co-teaching). Thoughtfully planned, supported, and aligned



PD is essential. Respondents cited examples, including professional learning communities (PLCs), shared information from experts in the field, book studies, and lesson studies.

Collaboration. Collaboration across multiple stakeholders, including teacher candidates, colleagues within the program, colleagues across departments, colleagues at other IHEs, partners in school districts, and colleagues at SEAs, emerged as a prominent theme. Critical components included providing support for collaborative structures and collaboration across disciplines resulting in revised courses.

State licensure. Although respondents overwhelmingly reported that their programs met state HQT requirements, they did not always feel integral to the process. They desired systems to ensure closer networking relationships with SEAs and calls for involvement to co-construct policy as opposed to involvement that focused only on responding to policies and mandates.

Sustainability. Developing external and internal organizational structures was often viewed as a difficult but necessary step. Once structures were established, respondents hoped to sustain opportunities to provide IHE input into state policy as well as collaboration within and across IHE departments as part of continual program improvement efforts.

Interview Results

The survey findings informed the development of the semi-structured interview protocol. The researchers designed questions to gain more insight into the extent to which project goals were met, what lessons were learned throughout the revision process, and which processes facilitated implementation. Twelve project directors participated (i.e., Cohort 1 = 2, Cohort 2 = 4, Cohort 3 = 2, Cohort 4 = 3, and Cohort 5 = 1).

The interviews yielded 143 pages of transcripts and 1,286 applications of 25 codes and subcodes. Researchers expected the greater frequency of some codes because of the nature of



the questions (e.g., project goals). Table 2 shows the weight or frequency of each code. The following themes emerged: (a) collaboration, (b) invaluable resources, (c) awareness of challenges at multiple levels, and (d) impact and sustainability concerns.



Table 2

Code Application

Code	Frequency
Project roles and responsibilities	10
Principal investigator	31
Coordinator	23
General education faculty involvement	39
Liberal arts faculty involvement	15
Project goals	145
Sustainability factors	79
Impact/outcomes	46
Process	160
Collaboration	60
Change/transformation through collaboration	84
Resistance/reluctance to collaboration	29
SEA involvement	45
LEA involvement	35
Institutional/program leader involvement	46
Individual faculty engagement	18
External resources/consultation	16
325T project personnel	16
Department of Education resources	92
Project-specific resources	72
Institutional resources	15
Programmatic challenges	66
Macro-level challenges	52
Institutional challenges	48
Project-specific challenges	44



Collaboration

Respondents described various aspects of collaboration. In some instances, some reported that collaboration was already a vital part of the professional work within their settings; other participants discussed that collaboration was a challenge and a stated goal for their projects. Working with colleagues within programs and across programs was central to change efforts, and this often involved program leaders, department chairs, and deans. One faculty member stated that collaboration and ongoing dialogue were necessary because “you can’t change one program without impacting all other programs.”

The themes of shared contributions and collaboration were evident in the work of the 325T projects. One interviewee shared that “program change is overhaul on all levels, and everyone needs to be involved.” From the initial syllabi review to the planning, revision, and evaluation phases, project directors viewed their collaborators as necessary among numerous individuals involved in the process. Faculty in different education programs were involved in the early stages of redesign efforts. One project director described a specific process:

On the core team that we put together, there was representation from kind of every area. So, there were people whose expertise is in special education, people whose expertise is in reading, and people whose expertise is in ESOL [English for Speakers of Other Languages] and general education . . . we met once a month to discuss how things were going with the project and what our next steps were and what we were going to work on . . . then disseminated that to other faculty.

It is worth noting that program improvement and collaboration seemed to meet the least resistance when project directors could capitalize on existing structures (e.g., allocated time during regular faculty meetings) and link to other requirements (e.g., alignment with college



goals, changes to state certification, upcoming accreditation reviews). In some instances, a co-principal investigator (PI) on the project was a dean or department chair, which provided some influence over programmatic changes and engendered buy-in within and across departments. Individual faculty members and cooperating teachers were engaged through PD opportunities related to the content focus of the program enhancement efforts, which was viewed by one project director as “strengthening ourselves while we are strengthening the program.” That commitment to PD led the project director to initiate a newsletter on EBPs to disseminate information to students, faculty, recent graduates, and cooperating teachers.

Interdisciplinary relationships were cultivated to meet a range of goals, including strengthening teacher candidates’ STEM content expertise. To illustrate, one interviewee described “an early childhood-type math course to three math courses with pedagogy interwoven.” Another team engaged STEM faculty to incorporate design-based problem solving, which is prevalent in engineering, to enhance the science and math pedagogy of its graduates. Relationships also focused on very practical needs such as technology infrastructure. One grantee collaborated with computer science faculty to develop and maintain an electronic portfolio system and lesson-plan creator.

External partnerships were forged across institutions in some areas. Faculty, especially those in small programs, developed consortia with other 325T grantees in their states. Some were already part of state-organized higher education groups. They saw these as invaluable support systems and opportunities to further develop ideas. One project director shared,

The collaboration I think is the best part of the grant. The five institutions have such a good relationship now with the faculty members that, irrespective of if the grant continues, we know that we are there for each other for support.



Despite the overarching theme of collaboration, participants described barriers to collaboration with various educational stakeholders. One project director shared,

By far, the greatest area of resistance actually to change has been with special education faculty. Our Introduction to Special Education course, which really does not need to be a characteristics class anymore, continues to be a characteristics class rather than a class that kind of orients all students to a more multi-tiered idea of instruction and education.

This sentiment echoes Brownell, Sindelar, Kiely, and Danielson's (2010) assertion that we rethink special education preparation so that special educators enter the field prepared for the complexities they will face. Indeed, as statewide frameworks of multi-tiered system of supports (MTSS) have been put in place to ensure systemic, continual improvement of data-based problem solving and decision making across all levels (National Center For Learning Disabilities [NCLD], 2014), pre-service special education must be ready to prepare special educators to collaboratively lead in these environments.

Additionally, leadership support within the colleges, universities, and SEAs was described as critical, especially during faculty participation and policy change. At times, institutional and program leadership support within the universities was passive rather than active. In addition, most interviewees stated that program and policy revisions were mandates rather than collaborative discussions for input and decision making. Although interviewees described their programs as meeting revised state and national competencies, many described the communication as more reactive than proactive collaboration with university administrators and personnel with SEAs. A common theme that emerged was the need to develop, implement, and sustain systems of proactive collaboration to develop, implement, and evaluate policy and program improvement. Conversely, involved leaders were often connected to the work and



served as advocates and liaisons with state agencies (e.g., connecting SEA licensure offices with program revisions).

Invaluable Resources

There was consensus among the 325T project directors that without the external funding through the 325T grants, the described program revisions would have been slow to progress or would not have been completed at all. Especially within this time of budgetary constraints, the external funds from a federally funded grant project provided both the necessary financial resources and external emphasis that served as a catalyst for necessary program reforms. Funds were primarily used to provide course release to faculty, which provided time for faculty to collaborate and complete curriculum review, resource identification, planning, and redesign. Further, many project directors believed that this support provided an incentive for faculty to participate and have, as one participant shared, “the time and space so that we could really think outside the box.”

In some cases, rather than releasing personnel from courses, funds were used to support administrative staff members such as project coordinators or outreach specialists; this became prevalent in Cohort 4 (2009-2010). Coordinators were employed within programs that were large or had an intensive research focus. One project director reviewed the roles of the coordinator that included monitoring data, managing daily activities, and ensuring that faculty felt supported. The project director said, “It really took having one person whose responsibility was to solely work on this project to move it forward.”

Project funds supported external consultants with knowledge and experience to facilitate faculty PD in content areas (e.g., literacy); critical issues (e.g., culturally responsive pedagogy); and assistance with the reform process. One project director noted, “Hearing from a colleague



who has walked the talk of dual licensure provided just the shot in the arm that our faculty needed.” Department of Education resources provided other PD opportunities and consultants. Each interviewed grantee spoke highly of the IRIS Center resources and discussed the use of the resources and modules within course redesign, especially related to EBPs. One project director said, “Almost in all of our classes, we incorporated some of the IRIS modules . . . we published a paper on incorporating UDL into one of our methods classes.” When we asked directors about the use of other Department of Education investments, they described resources such as DWW, WWC, Monarch Center, and other TA&D centers.

The researchers also asked participants about their use of the National Center Clearinghouse on Teacher Quality (NCCTQ) innovation configurations (ICs). Project directors used these tools to varying degrees and in a variety of ways. Some project directors extensively used the ICs to review their entire programs for gaps and redundancies. Those who were most confident about their use of the ICs took the time to align other efforts, such as state certification and accreditation requirements, with college frameworks prior to using the ICs. This demonstrated their value and clarified their purpose for their colleagues. As faculty received training (via webinars and the Project Directors’ Conference), they were inclined to use portions such as the rating scales for documenting EBPs. Still, others found this resource to be useful for simply starting conversations about why the redesign was necessary, but some, particularly in the first cohort, did not use them at all.

Respondents also shared that a number of the webinars the project officers organized provided useful information and opportunities to learn from their colleagues. Several project directors noted that they shared information consistent with project goals with other faculty in their colleges. One interviewee described various topics of PD: “Collaboration was one of those,



assessment was another area, bilingual special education was another area, UDL was another area . . . and so we offered PD workshops on Fridays related to the topics.”

Project funds provided materials, software, and tools that faculty and teacher candidates could use to accomplish stated project goals and outcomes. One faculty member noted that being able to purchase assessments that pre-service teachers could practice using in university classrooms and then in the clinical settings was important for their learning. Additionally, faculty members purchased common devices and resources for courses and assessment of instructional technology and assistive technology (AT) implementation.

Finally, each interviewee discussed time as a necessary resource. Interviewees described the critical need for time allocations through reassigned time for project personnel, time added with the employment of a project coordinator, or rededicated time through retreats and meetings. Equally important, interviewees were thoughtful about their spending, and they wanted to use project funds in ways that would have long-term use and impact, including leveraging resources across projects and from within their IHEs.

Awareness of Challenges at Multiple Levels

When asked about barriers, respondents discussed challenges at multiple levels—from micro-level issues (e.g., program faculty) to macro-level challenges related to state and federal policy and the economy in general. Some faculty members were resistant to change related to program improvement. In some cases, projects were designed to respond to requirements related to certification and licensure (i.e., HQT) and SEA initiatives (e.g., RtI).

Specific contextual variables that hindered redesign efforts were similar to results reported in other studies. Unsupportive administrative structures, lack of leadership, and differences in faculty members’ knowledge and views have been reported by previous studies as



hindrances (McKenzie, 2009; Miller & Stayton, 2006). This research identified similar hindrances, including limited communications with relevant SEA units, which often led to a lack of knowledge, clarity, and readiness to implement policy changes. In some instances, changes in leadership (e.g., department chair or dean) within the institution hindered progress if the project was initiated during another leader's tenure. Resistance from faculty to engage in the reform efforts and/or change particular courses was a common barrier that faculty felt could be an ongoing issue but one they did not see as insurmountable. Also, a lack of appropriate field placements with knowledgeable mentors was not commonplace but was described as potentially problematic to program coherence for teacher candidates; mentor training was a primary focus of at least one project.

At the program and institutional levels, expenditures met program needs and stated goals within each institutional context. For example, institutional issues, especially for small schools, included lack of infrastructure. One respondent noted, "We did encounter a lot of institutional barriers, so everything from how to set up a grant account to how to manage our budget were challenges." Another concern was having few partner schools that could provide appropriate field placements and teacher mentors for teacher candidates. Strong partnerships with LEAs were viewed as essential to teacher preparation and program evaluation.

Respondents expressed a desire for more meaningful engagement with the SEA. Interactions reportedly varied from passive attendance to a lack of interaction. One interviewee stated, "The assistant state superintendent attended several of the partnership meetings, which were conducted monthly. The meetings presented the grant activities and gave an update." Another interviewee discussed that in her state, "higher education is not really involved in the decision making . . . it is happening to us, not with us."



Previous barriers to program redesign, however, included time, incentives, and lack of knowledge among faculty (McKenzie, 2009; Miller & Stayton, 2006) and were not described as hindrances to current program redesign efforts. Federal funding was provided and used for reassigned time, personnel, and vetted resources available from multiple federal sources. These issues, however, impacted sustainability of redesign efforts to be proactively solved to sustain the work at the same level. As federal funding from the 325T awards was finite, much of initial revision work helped participants to identify additional factors to ensure sustainability. Project personnel leveraged institutional resources (e.g., technology infrastructure, learning systems, existing collaborative structures); policy mandates and structures; and other external funds from the SEA or U.S. Department of Education to develop sustainability. For example, systems of course and program revisions and alignments, as well as evaluation methods, were developed and connected to institutional accountability and reporting systems such as NCATE and state accreditation.

Impact and Sustainability Concerns

A common theme from the directors was the discussion of accomplishments and the relationships they developed with colleagues from across the country. Specifically, programs were revised to be more rigorous and evidence based. Systems for data collection to measure outcomes were developed for continual improvement. One participant described receiving “accolades from local systems that our candidates are entering the field more like second-year teachers.” Teacher candidates’ feedback was also reported as positive:

We have a group within the School of Education that does evaluations of programs, and they come in and do a survey and a focus group with students who are completing their



student teaching and getting ready to graduate. And we have gotten some amazing detailed feedback about things that are going well, things that we may need to work on. Evaluation efforts focused internally on the course work as well as on aspects of the field experience. In order to strengthen the field experiences, another project developed tools to evaluate sites as appropriate placements for field experiences or readiness to become a professional development school (PDS).

Faculty members were concerned that project accomplishments, such as initial PD efforts, may not be sustained after funding ceases. However, PD was a catalyst for program changes that have been infused within the institutions as well as within partnering districts. For example, one participant said, “We have adopted a UDL format lesson plan across the curriculum. All special education, elementary, and secondary courses began a UDL-based lesson planning format, which was definitely not easy at all.” At the school level, one grantee explained that to ensure sustainability, incentives for ongoing involvement in PD were needed. Therefore, it was important “to work with the school districts to see if there was a way that teachers could get recertification credit for their involvement in needed PD.”

Leveraging support from the college made an even greater impact. One project used funds to build a comprehensive system to track graduates; this system was later taken over and expanded college wide. Another respondent described a center that was a result of the program redesign:

We opened a tutoring center for our candidates to support them in their reading competency assessment, which is required of special education teachers in this state, as well as to provide . . . writing support. And the third prong is that for those students who want to do the math/science [specialization], we have a math/science tutor who supports



them in the content that they are required to know for the assessment that they must take to get into the secondary program.

Another example of sustainability involved a number of projects that created PD for mentor teachers. One project almost exclusively focused on preparing mentors with the same knowledge and skills candidates would enter the classroom needing to see and practice. One project director shared, “We are setting up online training modules, and our university is allowing us to use a blackboard-type system that we use for online learning.” Another participant asserted that without the 325T funding, “we would never have been able to develop such a highly trained cadre of mentor teachers.”

Within Cohorts

There were more similarities than differences across projects; however, some within-cohort intricacies were important in the evolution of the 325T competitive grant priorities. The interviews with Cohort 1 grantees showed a clear focus on EBPs with an emphasis on providing in-field supports for teacher candidates in the form of mentors and assistance for candidates and graduates through an online platform hosted by the university. The two participants from Cohort 1 indicated that they did not use the ICs for revision but talked about aligning to EBPs and state standards.

Cohort 2 participants seemed to experience the most transitions that were potentially influenced by the change in federal administration. They talked about needing to revise their programs in light of state-level requirement changes and NCATE accreditation. Cohort 2 shared an increased focus on collaboration and internal and external PD. These grantees took advantage of the TA&D network of centers (i.e., IRIS, Monarch Center, DWW, and NCCTQ) and other offerings (St. Cloud Co-Teaching) to foster sustainability by either bringing in trainers or



sending faculty to trainings (faculty would return and then train others). Finally, this cohort talked about their evaluation efforts, including the initial syllabi review, ongoing evaluation of course implementation for consistency and integrity across instructors and time, seeking input from recent graduates and practitioners, and conducting case studies of recent graduates.

The participants from Cohort 3 also extensively used the resources, particularly the IRIS Center, made available through the TA&D network. They revealed challenges to collaboration with college and state leadership and saw this as a barrier that impeded their progress and potential for expansion. These interviewees discussed using the ICs and believed they were most useful when they adapted them and aligned them to standards and accreditation requirements.

Cohort 4 project directors were grateful for the increased funding, which seemed to address some concerns of earlier cohorts. Participants indicated that being able to hire more staff (e.g., full-time project coordinator, field experience coordinator, academic advisor, field mentors); provide more PD to more stakeholders; and offer stipends made their work move much more quickly. Along with discussing a better-defined core staff, they discussed more regular meetings. Additionally, the funding opportunity seemed to coincide with state budget cuts, revisions to state standards, and new teacher evaluation measures (e.g., edTPA). Program evaluation systems were also greatly discussed (e.g., tracking system, site evaluation tool, exit surveys).

Finally, Cohort 5 was in the early stages of program reform. The grantee interviewed discussed the importance of having the chair involved to overcome faculty resistance to reform. She felt confident that the changes made would be sustained; however, she had concerns about recruitment and scaling up.



Project funds spent on faculty PD, infrastructure, and resources were viewed as investments in the ongoing development of the collaborations and program. Faculty knowledge and skills translated into shared expertise that benefited teacher candidates across a variety of program areas. However, there were concerns about continuing the work with faculty whose buy-in was tenuous or for needs that became apparent later during the reform process.

The project goals, although varied, focused on preparing qualified teachers skilled in EBPs. Their collective experience and wisdom suggested that collaboration at multiple levels is critical and can alleviate some of the challenges these participants faced. Further, ongoing communication and shared vision can influence higher education across an entire state or change a culture within a college or school of education. The effect of the economy on funding has necessitated leveraging resources as much as possible, but this can happen only through collaboration. A project director summed it up: “We have been trying to work very collaboratively with all of the existing structures and processes so that they can be sustained over time.”

Discussion

The following three research questions guided key recommendations:

RQ1: How Did 325T Grantees Address Their Project Goals?

- Grantees developed goals and sometimes revised them based on contextual factors such as policy changes, changes in leadership, and feasibility. Changing program, university, school district, state, and national landscapes called for flexibility between initial planning and implementation.
- Grantees instilled communication and collaboration structures early and ensured that they were ongoing. In situations in which grantees encountered resistance, direct



conversations, including enhanced explanations and explicit clarification of the rationale behind actions, helped to bring colleagues on board, and, in other circumstances, grantees worked around them.

- Desired outcomes were at the forefront for program enhancements. Above and beyond the projects, teacher quality was a constant focus for the programs.
- Smaller programs relied more heavily on consortia that were either in place within the state or developed as a result of several 325T projects within a state.
- Having a team (e.g., PI, coordinators, other supports) to manage different aspects of the work, including collaborating with faculty with varying expertise, was important.

RQ2: What Factors Facilitated the Revision and Enhancement of the Program?

- Collaboration with faculty in the college, university, across the state, and with other 325T project directors was essential. Grantees established and adhered to regular, ongoing meeting schedules to ensure that the goals were addressed.
- Ensuring active participation from leadership within IHEs (e.g., deans, associate deans, chairs serving as co-PIs) allowed project directors to leverage resources and gave them a more active voice within their institutions and, in some instances, within their states.
- 325T funds were critical to program enhancement and were primarily used to fund personnel. For example, project coordinators were hired to complete and monitor the details of program enhancements (e.g., improve field experiences by developing and/or offering mentor PD).
- Course releases were made possible for faculty. Time reassignment dedicated to the goals and activities of the projects were essential to program enhancements.



Although critical to all projects, this was most critical for small programs at teaching-focused institutions that required substantial course loads.

- Funds were also used to provide PD for faculty by either sending faculty to PD and conferences or hiring consultants.
- The U.S. Department of Education resources provided necessary content for program enhancements such as IRIS Center modules, DWW resources, and materials garnered by successive 325T cohorts housed on the National Center to Inform Policy and Practice in Special Education Professional Development (NCIPP) website (ncipp.org). Faculty took advantage of PD from TA centers such as Monarch Center and CAST. Grantees described the OSEP Project Directors Conference and 325T webinars as valuable networking opportunities.
- Leveraging institutional resources (e.g., technology infrastructure, learning systems, existing collaborative structures) and other external funds from the SEA or the U.S. Department of Education increased sustainability of projects.

RQ3: What Impediments to Program Revision and Enhancement Were Experienced?

- Limited communications with relevant SEA units led to a lack of knowledge, clarity, and readiness to implement policy changes.
- In some instances, changes in leadership (e.g., deans, department chairs) within the institution stalled progress if the project was initiated during another leader's tenure.
- Resistance from faculty to engage in the reform efforts and/or change courses was a common barrier faculty believed could be an ongoing, but not insurmountable, issue.



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- A lack of appropriate field placements with well-trained mentors was commonplace and problematic for teacher candidates to observe and practice the EBPs they were learning in courses.
 - Even though grantees knew the 325T awards were time-limited awards, faculty had concerns about sustaining the work at the same level once their funding ended. In addition, much of their initial revision work helped to identify additional needs and goals that would likely extend beyond their grant periods.

Limitations

Findings in this report are based on survey and interview data collected from recipients of the OSEP 325T program enhancement projects funded to redesign and restructure teacher preparation programs to ensure that program graduates will meet state and federal requirements as HQTs in special education and implement EBPs. As with any study, the researchers must acknowledge limitations. This study is conditioned by three primary limitations. First, this study solely relies on self-reports and the perceptions of a sample of 325T grantees. Thus, the researchers can only draw conclusions about what the project directors reported as their accomplishments and challenges, not about actual project results.

The next limitation consideration pertains to the focus of the investigation. This study is a benchmark for tracking teacher preparation reform, and survey and interview prompts were designed to align with the federal priority (i.e., strategies used to restructure preparation programs, inter-departmental collaboration, PD strategies to increase faculty use of EBPs, strategies to integrate EBPs, and effective methods for evaluating program outcomes); hence, the scope of questions and probes were limited.



Last, this research was limited to using a purposeful sample: project directors in teacher preparation programs funded by the OSEP 325T projects during a particular period. Contextual factors may impact findings under otherwise similar circumstances.

Implications and Recommendations

Implications and recommendations were generated with the primary goal of informing the TA that the CEEDAR Center provides and being applicable to the broader teacher education audience. It is likely that some of the IHE faculty who collaborate with the CEEDAR Center will have experience with reform and will be aware of the complex work that lies ahead. The research team hopes the following lessons learned will provide a solid foundation for continued efforts and collaboration with partners beyond those included in the documented experiences.

A critical and comprehensive review of the curriculum and individual courses is essential and may be more than is required for accreditation purposes. Program and course curriculum redesign efforts should be undertaken with a strategic focus on EBPs that result in consistent positive results when experimentally validated (Cook, Tankersley, & Landrum, 2009; Odom, Brantlinger, Gersten, Horner, Thompson, & Harris, 2005). Effective special educator preparation should deliver a “conscious blending of theory, disciplinary knowledge, subject-specific pedagogical knowledge and practice” (Brownell, Ross, Colon, & McCallum, 2005, p. 243). Cornelius and Nagro (2014) maintained that the use of EBPs will ensure that special education pre-service teachers “learn methods that have shown to be effective through empirical research” (p. 134), resulting in teachers who are better able to positively impact student achievement. Guided by the seminal work of Gersten and colleagues (2005) and Horner and colleagues (2005), the CEC (2014) developed a framework for categorizing the evidence base of practices in special education. These standards for EBPs in special education identify quality



indicators essential for methodologically sound, trustworthy intervention studies “to enable special education researchers to determine which have the minimal methodological features to merit confidence in their findings” (p. 2).

Garnering buy-in from general and special education faculty related to EBPs is important for comprehensive program reform (Pugach, Blanton, & Correa, 2011). Nearly a decade ago, Pugach (2005) advocated for seamless preparation, explaining, “This work can be enriched immeasurably if it is conducted in joint fashion, in teams comprised of teacher educators from special and general teacher education, across content areas and multicultural education” (p. 578). However, although the number of collaborative teacher preparation programs has increased, little evidence describing the collaborative work and enhancements exists. A key step in the process is understanding the context, including both the current realities and future directions (Brownell, Griffin, Leko, & Stephens, 2011). Given the shifting landscape in which education is enacted, the call for collaboration across disciplines is an effective strategy to improve student outcomes. Teacher educators are encouraged to engage in the essential first step of critical self-study at the higher education level, including institutional and program factors as well as individual propensity for engaging in purposeful collaboration. Strategic and respectful relationships with local school districts are essential for continually examining the design of field experience structures, internship opportunities, and teacher evaluation processes in order to maximize this potential impact on teacher preparation. Partnering in meaningful ways, so that all stakeholders are valued and committed, is increasingly complex but necessary if the accountability demands to ensure improved learning outcomes for all students are to become a reality. Collaboratively beginning with the end in mind increases the likelihood of meeting goals.



Resources must be allocated for faculty time and collaboration processes (e.g., course reassignments, meetings, technology and PD needs). Existing human and fiscal resources must be maximized because external funding for program enhancements are not always available. Leveraging resources across programs, colleges, and even institutions in some instances, is essential. Regular communication and collaboration are essential and must be carefully planned and consistently implemented for progress to continue. Friend and Cook (2013) reinforced this message for those engaged in complex teacher reform: “Collaboration has assumed a prominent role in twenty-first century society” (p. xvii). Collaboration with faculty in the college and university, within states, and with other 325T project directors was described at varying levels of engagement. Involvement between and across individuals underscores the importance that all key players (e.g., SEA entities, administrators and faculty from different departments and colleges in IHEs, personnel within school districts) share the vision and responsibilities for developing and meeting project goals. It is critical to closely work with SEAs, especially as teacher effectiveness is operationalized and measured. Teacher educators should be involved in conceptualizing new regulations. Issues such as statewide teacher evaluation systems have a profound effect on teacher education curricula revisions.

PD efforts must be ongoing, differentiated, sequenced, and sustainable.

Darling-Hammond, Chung Wei, Andree, Richardson, & Orphanos (2009) stressed that professional learning efforts warrant improvement for effective teaching practices and student outcome gains to be realized. Project directors have learned that identifying, delivering, and evaluating PD is a process, and the process is not always clear or prescriptive. Program and course revision are filled with ambiguity, and educator expertise spans a wide continuum. Consensus from interview participants calls for dedicated time for collaborators to sift through



the many complexities, contradictions, and changes; this is not simply helpful but essential (Pugach et al., 2011).

Given the limited collaborative structures that were reportedly in place for new teachers (e.g., regular meetings and mentoring systems), we concur with other calls for the creation and delivery of effective mentoring programs for new special educators (Billingsley, Griffin, Smith, Kamman, & Israel, 2009; Duffy & Forgan, 2005). Whitaker (2001) prioritized five critical issues facing novice special educators: (a) learning/practice transfers, (b) preparedness for the demands of the job, (c) reluctance to seek support, (d) resource inadequacies, and (e) the mismatch of expectations and a sense of accomplishment. Other complex logistical and relationship dynamics in mentoring new special education teachers, including mentor and mentee contacts, pairing relationships, a non-evaluative mentor role, and the mentees' understandings of the mentoring process, have been identified (Griffin, Winn, Otis-Wilborn, & Kilgore, 2003). The research is clear: Special educators are more likely to remain in the profession when induction supports are in place (Boe, Cook, Sunderland, 2008; CEC, 2009; Fantilli & McDougall, 2009).

Finally, a plan for sustaining efforts among key educational stakeholders must be considered from the beginning. Sugai, Anderson, and McNulty (2012) maintained that engaging in educational reform calls for a commitment to the science of implementation. Partnering in meaningful ways (i.e., all partners have important and complementary roles) is increasingly complex but necessary given the accountability demands to ensure improved learning outcomes for all students. Beginning with the end in mind increases the likelihood that goals will be met. A plan for sustaining efforts must be considered from the beginning. This work is tension filled, complex, and emotional as it calls into question long-held beliefs about what has always been



done and a realization of personal limitations while trying to support others (e.g., educators, policymakers, families, communities) in their work. This work is not linear, and it is never finished; it requires ongoing dialogue; collaboration; and clear, shared visions. Contextual factors affecting teacher pre-service education (e.g., p-K-12 student achievement, teacher effectiveness ratings, ratings of university programs) are complex, and although collaborative teacher education research and practice pose enormous challenges within the larger context of stakeholders (Brownell et al., 2011), all educators have a duty to realize that it is time to move beyond rhetoric and take action to truly work together across disciplines to prepare teachers who are highly effective in working with all learners through continued collaboration.

In conclusion, this initial research and its findings often pose additional questions to answer. Given that there were specified criteria and outcomes across 325T projects established by OSEP, initial research parameters defined a comprehensive framework, inclusive of all participants, to determine overall effectiveness, accomplishments, and impediments. From these results, as in most research, next phases of research may be framed to address various themes and findings. This second frame will uncover, confirm, or qualify the basic processes or constructs of the initial study (Miles & Huberman, 1994).

Future investigations could examine selected artifacts and documented processes that were created and identified as individual project accomplishments, including exemplars of evaluation efforts, templates for program review, and representative models for managing collaborative planning. Given the increase in funding provided for later cohorts with a heightened focus on evaluation, future studies should examine what was learned in those situations. Additionally, given that multiple projects were still underway when this research took place, next steps call for an in-depth look at project revisions that have sustained over time.



We hope that this study will be followed up with grantees after the full cycle of projects reaches completion and is replicated at a larger scale to include teacher preparation programs that did not receive funding to continually understand the complexity of teacher preparation reform. We recognize the critical relationships of important stakeholders (i.e., general education colleagues, school district partners, family and community members, and state departments of education) and much more can be learned by collaboratively exploring micro- and macro-level teacher reform issues with these allies. The field will benefit from knowledge of how varied groups develop, implement, and sustain systems of proactive collaboration to develop, implement, and evaluate program improvement.



References

- Billingsley, B. S., Griffin, C. C., Smith, S. J., Kamman, M., & Israel, M. (2009). *A review of teacher induction in special education: Research, practice, and technology solutions* (NCIPP Doc. No. RS-1ES). Retrieved from University of Florida National Center to Inform Policy and Practice in Special Education Professional Development website:
http://ncipp.education.ufl.edu/files_5/NCIPP%20Induction%20Exc%20Summ.pdf
- Boe, E. E., Cook, L. H., & Sunderland, R. J. (2008). Teacher turnover: Examining exit attrition, teaching area transfer, and school migration. *Exceptional Children, 75*, 7-31.
- Brownell, M. T., Griffin, C., Leko, M. M., & Stephens, J. (2011). Improving collaborative teacher education research: Creating tighter linkages. *Teacher Education and Special Education, 34*(3), 235-249. doi:10.1177/0888406411404570
- Brownell, M. T., Ross, D. D., Colon, E. P., & McCallum, C. L. (2005). Critical features of special education teacher preparation: A comparison with general teacher education. *The Journal of Special Education, 38*, 242-252. doi:10.1177/00224669050380040601
- Brownell, M. T., Sindelar, P. T., Kiely, M. T., & Danielson, L. C. (2010). Special education teacher quality and preparation: Exposing foundations, constructing a new model. *Exceptional Children, 76*(3), 357-377. doi:10.1177/001440291007600307
- Cook, B. G., Tankersley, M., & Landrum, T. J. (2009). Determining evidence-based practices in special education. *Exceptional Children, 75*(3), 365-383.
- Cornelius, K. E., & Nagro, S. A. (2014). Evaluating the evidence base of performance feedback in preservice special education teacher training. *Teacher Education and Special Education, 37*(2), 133-146. doi:10.1177/0888406414521837



-
- Council for Exceptional Children. (2009). *What every special educator must know. Ethics, standards, and guidelines* (6th ed.). Arlington, VA: Author. Retrieved from <http://www.cec.sped.org/content/navigationbmenu/professionaldevelopment/professionalstandards/>
- Council for Exceptional Children. (2014). *Standards for evidence-based practices in special education*. Arlington, VA: Retrieved from www.cec.sped.org/~media/Files/Standards/Evidence%20based%20Practices%20EBP%20Final.pdf
- Creswell, J. W. (1997). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Darling-Hammond, L., Chung Wei, R., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Stanford, CA: National Staff Development Council and The School Redesign Network at Stanford University. Retrieved from <http://learningforward.org/docs/pdf/nsdcstudy2009.pdf>
- Duffy, M. L., & Forgan, J. W. (2005). *Mentoring new special education teachers. A guide for program developers*. Thousands Oaks, CA: Corwin.
- Fantilli, R. D., & McDougall, D. E. (2009). A study of novice teachers: Challenges and supports in the first years. *Teaching and Teacher Education*, 25(6), 814-825.
- Friend, M., & Cook, L. (2013). *Interactions: Collaboration skills for school professionals* (7th ed.). Boston, MA: Pearson.



-
- Gersten, R., Fuchs, L. S., Comton, D., Coyne, M., Greenwood, C., & Innocenti, M. S. (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional Children, 71*, 149-164. doi:10.1177/001440290507100202
- Griffin, C. C., Winn, J. A., Otis-Wilborn, A., & Kilgore, K. L. (2003). *New teacher induction in special education*. (COPSSE Document Number RS-5). Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education. Retrieved from <http://copsse.education.ufl.edu/copsse/docs/RS-5/1/RS-5.pdf>
- Guba, E. G., & Lincoln, Y. S. (1981). *Effective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approaches*. San Francisco, CA: Jossey-Bass.
- Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional Children, 71*, 165-179. doi:10.1177/001440290507100203
- Individuals With Disabilities Education Act, 20 U.S.C. § 1400 (2004).
- Lieber, E., & Weisner, T. S. (2013). Dedoose (Version 4.5) [Software]. Los Angeles, CA: SocioCultural Research Consultants. Retrieved from <http://www.dedoose.com>
- McKenzie, R. G. (2009). A national survey of preservice preparation for collaboration. *Teacher Education and Special Education, 32*, 379-393.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Miller, P. S., & Stayton, V. D. (2006). Interdisciplinary teaming inn teacher preparation. *Teacher Education and Special Education, 29*, 56-68.



Morse, J. M., & Richards, L. (2002). *README FIRST for a user's guide to qualitative methods*. Thousand Oaks, CA: Sage.

National Center for Learning Disabilities. (2014). Multi-tiered system of supports/Response to Intervention. Retrieved from <http://nclد.org/disability-advocacy/where-we-stand-policies/multi-tier-system-supports-response-intervention>

Neilsen, P. A. (2012, June). *Collaborative coding of qualitative data* [White paper]. Kristiansand/Grimstad, Norway: University of Agder.

No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008).

Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. H., Thompson, B., & Harris, K. R. (2005). Research in special education: Scientific methods and evidence-based practices. *Exceptional Children*, 71(2), 137-148. doi:10.1177/001440290507100201

Onwuegbuzie, A. J., & Teddlie, C. (2003). A framework for analyzing data in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 351-383). Thousand Oaks, CA: Sage.

Pugach, M. C. (2005). Research on preparing general education teachers to work with students with disabilities. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on Research in Teacher Education* (pp. 549-590). Mahwah, NJ: Lawrence Erlbaum.

Pugach, M. C., Blanton, L. P., & Correa, V. I. (2011). A historical perspective on the role of collaboration in teacher education reform: Making good on the promise of teaching all students. *Teacher Education and Special Education*, 34, 183-200. doi:10.1177/0888406411406141

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research*. Thousand Oaks, CA: Sage.



Sugai, G., Anderson, S. B., & McNulty, K. (2012, July). *Scaling up, across and beyond*. Paper presented at the OSEP Project Directors' Conference, Washington, DC. Retrieved from https://www.osep-meeting.org/2012conf/largegroup/Mon_ScalingAcrossBeyond/sugai.htm

Whitaker, S. D. (2001). Supporting beginning special education teachers. *Focus on Exceptional Children*, 34(4), 1-8.



Appendix A

325T Project Descriptions

INSTITUTION		Cohort 1 (2006-2007)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
<p>University of Cincinnati</p> <p>More than 30,001/5,446</p>	Rural	No	<p>Revise its K-12 pre-service special education teacher preparation program to prepare graduates to address content knowledge, standards, and assessments; use evidence-based practices (EBPs); and provide effective educational services to students with high-incidence disabilities (HIDs). (Undergraduate)</p>
<p>University of Oregon</p> <p>20,001-30,000/about 1,500</p>	Urban	No	<p>Review and redesign its teacher preparation program through the converging research findings on effective practices for organizing schools and delivering special education and related services to ensure that graduates meet the highly qualified teacher (HQT) requirements. (Undergraduate)</p>
<p>Saginaw Valley State University</p> <p>10,001-20,000/2,433</p>	Suburban/Rural	No	<p>Enhance the undergraduate special education teacher preparation programs to ensure that special education graduate teachers can meet HQT requirements of the No Child Left Behind Act of 2001(NCLB, 2008) and Individuals With Disabilities Act (IDEA, 2004) and use EBPs across the content areas to improve the achievement of K-12 students with disabilities. (Undergraduate)</p>



INSTITUTION		Cohort 1 (2006-2007)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
San Jose State University Foundation More than 30,001/2,183	Urban	No	Restructure a pre-service special education teacher preparation program to develop a dual or blended mild/moderate disabilities teacher credential with elementary and secondary education to prepare HQTs of students with HIDs. (Undergraduate and Certificate)
Arizona State University More than 30,001/2,532	Urban	No	Redesign the graduate program in special education to develop a newly merged program in elementary education and special education. The new program will better prepare and retain graduates to serve students with HIDs in the neediest areas of Arizona, especially in Phoenix. (Graduate)
Indiana University, IUPUI More than 30,001/3,240	Urban	No	Renew and improve the dual-license program in the School of Education at Indiana University—Purdue University to prepare HQTs of K-12 students with disabilities. (Certificate only)
San Francisco State University 20,001-30,000/1,174	Urban	No	Restructure and redesign the Level I credential program to prepare HQTs in pedagogical and content-area competence and ensure that graduates can meet the individual needs of K-12 students with HIDs. (Certificate only)
Trustees of Indiana University More than 30,001/1,666	Urban	No	Redesign the current graduate-level certification and master's program in special education at Indiana University to produce HQTs who can improve the outcomes of students with HIDs. (Graduate and Certificate)



INSTITUTION		Cohort 1 (2006-2007)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
Florida International University More than 30,001/3,162	Urban	No	Redesign a special education teacher preparation program to ensure that graduates meet HQT requirements of NCLB (2008) and IDEA (2004) and ensure that they have the necessary knowledge and skills to serve K-12 students with HIDs and improve the students' outcomes. (Undergraduate)
University of South Florida More than 30,001/3,058	Urban	No	Enhance the initial special education certification programs for HIDs, one at the undergraduate level and one at the graduate level, to develop graduates' competencies at the elementary and secondary levels and ensure highly qualified teaching for K-12 students with HIDs. (Initial Teacher Certification, Undergraduate, and Graduate)
University of North Carolina at Greensboro 10,001-20,000/1,816	Urban	No	Continue to develop, implement, and improve (with evaluation) a model teacher licensure program for HIDs aiming to produce highly qualified special education teachers with licensure in special education, general curriculum, and general elementary education (K-6). (Certificate only)
East Carolina University 20,001-30,000/4,450	Urban	No	Redesign the current special education preparation program for graduates to have either the initial license (i.e., undergraduate or add-on license) or the initial and advanced license (i.e., MAT in special education) for students with HIDs and help improve the outcomes of those students from rural and low-wealth areas. (Undergraduate, Graduate, and Certificate)



INSTITUTION		Cohort 1 (2006-2007)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
University of Colorado at Denver 10,001-20,000/1,329	Urban	No	Revise and improve the existing special education generalist licensure program to create a new special education specialist licensure program to provide new special education teachers with necessary knowledge and skills to culturally and linguistically diverse (CLD) students with disabilities. (Licensure)
University of Washington More than 30,001/1,154	Urban	No	Restructure a pre-service teacher preparation program with the integration of evidence-based interventions to prepare HQTs and improve outcomes for children with HIDs in elementary suburban and urban settings. (Undergraduate)
Vanderbilt University 10,001-20,000/1,637	Urban	No	Restructure the program in the area of HIDs to prepare highly qualified special education teachers to use effective and empirically based instructional methods within their first 3 years of teaching. (Undergraduate)
Granite State College Less than 5,000/3,162	Urban	No	Increase the number of certified teachers in the area of HIDs (e.g., learning disability [LD], emotional/behavioral disability [EBD], and intellectual disability [ID]) to improve the quality of education services to those students with HIDs in high-poverty and rural schools. (Certificate only)



INSTITUTION		Cohort 1 (2006-2007)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
University of Northern Iowa 10,001-20,000/1,174	Urban	No	Refine the existing K-12 special education program to equip graduates with necessary knowledge and experiences and prepare them to be highly qualified in serving children with HIDs. (Undergraduate)
University of Texas at Austin More than 30,001/2,945	Urban	No	Improve the quality of the High-Incidence Undergraduate Teacher Preparation program to ensure that graduates have the essential knowledge and skills to effectively teach students with HIDs, including those from CLD backgrounds. (Undergraduate)
Portland State University 20,001-30,000/1,180	Urban	No	Increase the number of highly qualified educators who (a) are undergraduate and returning students, (b) have content-area and multiple-subjects undergraduate majors, and (c) want to become special educators. The graduates will receive the master's level special education teaching licensure at both elementary and secondary levels and will be capable of improving outcomes for children with HIDs. (Licensure)
California State University, Dominguez Hills 10,001-20,000/at least 297	Urban	No	Refine the K-12 special education teacher preparation programs to ensure that graduates can meet HQT requirements and are capable of providing high-quality educational services to students with HIDs. (Undergraduate)



INSTITUTION		Cohort 1 (2006-2007)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
University of Toledo 20,001-30,000/944	Urban	No	Revise and restructure the current K-12 special education teacher preparation program to be consistent with best practices in special education and prepare teachers of mild/moderate disabilities to meet HQT requirements. (Undergraduate)
Utah State University 20,001-30,000/1,030	Suburban	No	Restructure the on-campus and distance mild/moderate special education teacher preparation program to ensure that graduates have the evidence-based knowledge and skills to teach and provide instruction in core content areas to K-12 students with mild/moderate disabilities. (Undergraduate)



INSTITUTION		Cohort 2 (2007-2008)	
University/College of Education	Setting (Rural/ Suburban/ Urban)	HBCU/ HIS/OM	Focus
California State University, Chico 10,001-20,000/2,800	Urban	No	Restructure the special education program to prepare highly qualified secondary special educators to improve the quality of services, results, and opportunities for their students with HIDs within a vast, rural, high-poverty region. (Undergraduate)
James Madison University 10,001-20,000/1,200	Urban	No	Restructure the M.Ed. in Special Education (K-12) into the Resilient Informed Special Educators (RISE) program to recruit and prepare highly qualified educators to serve CLD students with disabilities. (Graduate)
Boise State University 20,001-30,000/2,300	Urban	No	Restructure a special education teaching certification program to a 2-year online postbaccalaureate program for (a) bachelor's graduates who want to be certified in special education and (b) certified teachers who need an endorsement in special education to improve the quality of and support for rural students with disabilities. (Undergraduate)
University of Southern Maine 10,001-20,000/650	Suburban	No	Integrate or merge general education and special education pre-service teacher education programs by embedding Universal Design for Learning (UDL) and culturally responsive pedagogy principles and practices into all initial certification programs to prepare teaching candidates to more effectively teach students with HIDs. (Teacher Initial Certification)



INSTITUTION		Cohort 2 (2007-2008)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
Virginia Commonwealth University More than 30,001/about 2,000	Urban	No	Improve a special education licensure program to prepare qualified special educators to teach academic content (i.e., general education curriculum) to students with HIDs. (Graduate)
Valdosta State University 10,001-20,000/774	Urban	No	Improve and restructure the existing dual certification program in the departments of special education and early childhood education to prepare candidates to meet the needs of students with disabilities in the general education curriculum. (Undergraduate and Teacher Initial Certification)
University of Texas of the Permian Basin Less than 5,000/NA	Urban	No	Provide a high-quality training program for pre-service teachers who will have dual certification in special education for Grades 4-8 and 8-12 as well as in the specific content areas of mathematics, English/language arts, science, and social studies/history. In addition, the English as a Second Language (ESL) certification component will be included to meet the needs of CLD students with HIDs. (Undergraduate and Certificate)
University of Central Florida More than 30,001/5,319	Suburban	No	Enhance existing initial certification programs to prepare HQTs of students with HIDs, including CLD students. The major focus areas will be math and science instruction in co-taught and resource settings within urban middle schools that have not yet met adequate yearly progress (AYP) targets. (Teacher



INSTITUTION		Cohort 2 (2007-2008)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
			Initial Certification and Undergraduate)
North Carolina Agricultural & Technical State University 5,001-10,000/1,100	City	Yes/HBC	Redesign the elementary and special education teacher program to improve the quality of K-12 special education teachers to ensure that graduates can meet HQT requirements under IDEA (2004) and are well equipped to serve students with HIDs in urban classrooms and communities. (Undergraduate and Teacher Initial Certification)
University of Alabama, Birmingham 10,001-20,000/839	Urban	No	Restructure the initial special teacher preparation program through collaboration between general and special education faculty to prepare elementary and secondary regular classroom teachers to instruct students with special needs in their classrooms. (Undergraduate and Teacher Initial Certification)
University of St. Francis Less than 5,000/at least 288	Suburban	No	Enhance special education teacher education math and science curricula at five member colleges and universities of the Associated Colleges of Illinois (ACI; i.e., University of St. Francis, Aurora University, Dominican University, Lewis University, and Eureka) to prepare highly qualified special education teachers under IDEA (2004) in Illinois. (Undergraduate and Graduate)



INSTITUTION		Cohort 2 (2007-2008)	
University/College of Education	Setting (Rural/ Suburban/ Urban)	HBCU/ HIS/OM	Focus
Wright State University 10,001-20,000/ about 2,400	Suburban	No	Redesign a 4-year undergraduate program to prepare special education teachers who will become highly qualified intervention specialists in two content areas to better serve students with HIDs in Grades 5-9. (Undergraduate)
University of Kansas Center for Research 20,001-30,000/ 2,000	Urban	No	Redesign and restructure an undergraduate and graduate teacher preparation program to address the shortage of highly qualified special educators of students with HIDs in Kansas, the surrounding region, and the nation. (Undergraduate and Graduate)
Muskingum College Less than 5,000/NA	Rural	No	Revise current undergraduate and graduate Intervention Specialist: Mild/Moderate programs to ensure that graduates meet HQT requirements, teach at least two content areas to students with disabilities in Grades 7-12, and effectively implement EBPs. In addition, recruitment of underrepresented groups and retention of special education teachers will be a focus. (Undergraduate and Graduate)
University of Maryland More than 30,001/1,941	Suburban	No	Redesign K-12 special education teacher preparation programs to ensure that graduates meet HQT requirements under NCLB (2008) and IDEA (2004) and better serve students with HIDs. (Undergraduate)



INSTITUTION		Cohort 2 (2007-2008)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
University of Nevada, Las Vegas Board of Regents 20,001-30,000/1,075	Urban	No	Improve and enhance the quality of its special education generalist licensure programs to ensure that graduated special educators can successfully teach and retain students in high-poverty schools. (Undergraduate and Certificate)
Radford University 5,001-10,000/2,077	Urban	No	Design and improve a 5-year, pre-service preparation program to ensure that graduates meet HQT standards and meet the needs of students with HIDs from all backgrounds. (Graduate)
University of Northern Colorado 10,001-20,000/2,458	Suburban	No	Prepare 40 master's-level intervention specialists for RtI implementation. Graduates will have opportunities to specialize in the areas of content knowledge, EBPs, instructional coaching, and teacher leadership for scientifically based instruction and services. (Graduate)
George Mason University More than 30,001/4,327	Suburban	No	Revise the teacher licensure certification program with the inclusion of mentorship and EBPs across core content classes to prepare HQTs with the necessary skills, content knowledge, and evidence-based strategies to teach students with disabilities to access the general education curriculum. (Graduate)
Loyola Marymount University 5,001-10,000/1,113	Urban	No	Restructure and redesign the Mild/Moderate Level I Alternative Certification (Intern) Credential Program to ensure that graduates have evidence-based pedagogical knowledge and the content knowledge to meet HQT



INSTITUTION**Cohort 2 (2007-2008)****University/College
of Education****Setting
(Rural/
Suburban/
Urban)****HBCU/
HIS/OM****Focus**

requirements under NCLB (2008)
and IDEA (2004). (Certificate only)



INSTITUTION		Cohort 3 (2008-2009)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
California University of Pennsylvania 5,001-10,000/1,077	Rural	No	Revise the special education teacher preparation programs through collaboration with math and science content specialists to ensure that graduates meet the HQT requirements and use evidence-based interventions and expertise to teach math and science to middle students with mild/moderate disabilities from all backgrounds. (Undergraduate)
Georgia College and State University 5,001-10,000/at least 382	Urban	No	Integrate academic content components and EBPs in the undergraduate and graduate special education initial training programs to address HQT needs of rural middle Georgia and the needs of students with HIDs. (Undergraduate and Graduate)
The College of William & Mary 5,001-10,000/397	Suburban	Yes/Native American	Redesign the master's degree in the general education program for candidates who seek licensure in special education general curriculum and better prepare them to address the diverse needs of elementary or secondary students accessing the general curriculum. (Graduate)



INSTITUTION		Cohort 3 (2008-2009)	
University/College of Education	Setting (Rural/ Suburban/ Urban)	HBCU/ HIS/OM	Focus
University of North Carolina at Charlotte 20,001-30,000/ 3,000	Suburban	No	Revise the initial undergraduate and graduate licensure programs to increase the number of general and special education teachers collaboratively working in natural environments with students with HIDs. Graduates can have either special education general curriculum licensure with a dual license in elementary education or a minor in Teaching English as a Second Language. (Undergraduate, Graduate, and Certificate)
University of South Carolina at Spartanburg 5,001-10,000/1,007	Urban	No	Restructure the special education certification program in the area of LD to prepare HQTs in the content areas (i.e., reading, mathematics, social studies, and science) as well as in culturally responsive practices. (Undergraduate and Certificate)
SUNY Fredonia 5,405/718	Rural	No	Redesign a merged special and general education undergraduate teacher preparation program addressing the needs of children with HIDs (i.e., LD, ED, and mental retardation).



INSTITUTION		Cohort 3 (2008-2009)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
Bank Street College of Education Less than 5,000/at least 215	Urban	No	Restructure and expand the existing special education teacher preparation program to Grades 7-12 to align special education instructional strategies with general curriculum course content. Graduates will be better prepared to serve middle and high school students with HIDs from diverse cultural, ethnic, racial, linguistic, and socioeconomic backgrounds in New York City public schools. (Undergraduate)
University of Nevada, Reno 10,001-20,000/617	Urban	No	Improve the number and quality of pre-service teachers who complete its Integrated Teacher Education Program (ITEP). The content preparation of pre-service teachers will be improved to better prepare the graduates to serve students with disabilities, including those from CLD backgrounds. (Undergraduate)
University of Southern Mississippi-Hattiesburg 10,001-20,000/2,500	Urban	No	Restructure the pre-service special education program to provide candidates with training in both special and general education content areas at the undergraduate and graduate (initial licensure) levels to ensure that graduates are highly qualified in teaching students with HIDs in a variety of areas. (Undergraduate, Graduate, and Certificate)



INSTITUTION		Cohort 3 (2008-2009)	
University/College of Education	Setting (Rural/ Suburban/ Urban)	HBCU/ HIS/OM	Focus
Cleveland State University 10,001-20,000/ 2,264	Urban	No	Enhance the current special education program to prepare undergraduate and graduate first-licensure intervention specialists to meet the state of Ohio criteria for highly qualified status at the elementary level and for two content areas at the secondary level. (Undergraduate, Graduate, and Certificate)
Chestnut Hill College Less than 5,000/NA	Suburban	No	Integrate additional courses and practicum experiences into all elementary, middle, and secondary general education programs to ensure that graduates can meet the needs of students with HIDs as well as those from diverse cultural backgrounds. (Undergraduate)
Johns Hopkins University 20,001- 30,000/1,650	Urban	No	Expand and enhance the existing graduate-level initial special education teacher certification programs with a focus on secondary content areas to prepare HQTs. (Graduate and Certificate)



INSTITUTION		Cohort 4 (2009-2010)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
Research Foundation of State University of New York, New Paltz 5,001-10,000/1,229	Rural	No	Redesign and enhance the existing graduate program in Childhood Special Education and Adolescent Special Education to ensure that graduates meet HQT requirements in IDEA (2004) and effectively serve students with HIDs through skills in EBPs and practical experiences in high-needs schools. (Graduate)
University of Washington, Tacoma Less than 5,000/NA	Urban	No	Redesign the existing dual-track, K-8 teacher certification program so that it is aligned with state efforts to increase a school district's ability to implement an RtI model of service. HQTs will receive special dual licensure in general and special education delivery. (Undergraduate and Certificate)
University of Miami 10,001-20,000/872	Suburban	No	Restructure the existing undergraduate special education teacher preparation program to prepare teachers to instruct and support students in diverse and inclusive classroom settings at the elementary and secondary levels. The graduates will receive both new dual tracks of elementary and secondary education. (Undergraduate)
State University of New York College at Cortland 5,001-10,000/at least 1,010	Suburban	No	Transform the existing Childhood Education and Inclusive Special Education teacher preparation programs and provide dual-certification options for graduates who will meet HQT requirements in IDEA (2004) and effectively serve students with HIDs who are increasingly placed in inclusive classrooms. (Undergraduate and Certificate)



INSTITUTION		Cohort 4 (2009-2010)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
The College of Saint Rose Less than 5,000/1,392	City/Urban	No	Develop a 5-year, dual-degree teacher education program (Bachelor of Arts/Master of Science in Education) to prepare with the knowledge and skills to teach a core academic subject area in high-needs urban classrooms to students with HIDs. (Undergraduate and Graduate)
California State University, Fullerton More than 30,001/845	City/Urban	Yes/HIS	Redesign and improve the education specialist credential program in mild/moderate disabilities by overhauling course work and classroom training experiences to prepare special education teachers to have the content knowledge consistent with state teaching requirements. (Certificate)
Pace University 10,001-20,000/849	Urban	No	Improve and restructure the teacher education program to prepare teachers to teach high school students with and without disabilities. Graduates will be dually certified adolescent and special educators in Grades 7-12 and will better serve students with HIDs from diverse cultural, racial, linguistic, and socioeconomic backgrounds in urban and suburban schools. (Undergraduate and Certificate)
University of New Orleans 10,001-20,000/1,308	Urban	No	Redesign the initial special education certification programs to ensure that graduates meet HQT requirements of NCLB (2008) and IDEA (2004) and enhance educational outcomes for students with HIDs. (Initial Certification)



INSTITUTION**Cohort 4 (2009-2010)**

University/College of Education	Setting (Rural/ Suburban/ Urban)	HBCU/ HIS/OM	Focus
Research Foundation of SUNY, the University of Albany 10,001-20,000/1,452	Suburban	No	Improve and restructure the special pre-service teacher preparation programs to ensure that graduates meet HQT requirements in IDEA (2004) as well as the New York teacher certification requirements. Graduates will be prepared to teach students with disabilities in Grades 7-12. (Undergraduate)



INSTITUTION		Cohort 5 (2010-2011)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
University of Florida More than 30,001/1,732	Suburban	No	Redesign the on-campus Unified Elementary ProTeach master's degree program, which leads to dual certification in elementary education and K-12 special education. The purpose is to ensure that graduates meet the needs of students with CLD backgrounds and improve outcomes of students from or in high-needs schools on high standards for learning in core academic subjects. (Graduate and Certificate)
University of Pittsburgh 20,001-30,000/1,047	Urban	No	Revise and redesign the current special education program (Grades pre-K-8) to produce a new dual certification master's program in both special education and a content area with a secondary focus in education and secondary content areas. This is to ensure that graduates can implement EBPs for students with HIDs and work in high-needs schools. (Graduate and Certificate)
University of South Carolina, Columbia 20,001-30,000/3,000	City/Urban	No	Restructure the special education pre-service master's degree program for preparing teachers of students with HIDs and high needs (i.e., low achievement and diverse racial, cultural, linguistic, and economic backgrounds) in K-12 classrooms within rural, urban, and suburban areas across the state. (Graduate)
University of Wisconsin, Milwaukee 20,001-30,000/2,639	Urban	No	Redesign and restructure the special education teacher preparation program at the elementary and middle school levels. The new urban, cross-categorical certification postbaccalaureate program will have multiple pathways such as a fifth



INSTITUTION		Cohort 5 (2010-2011)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
			year at UWM for dual certification, regular education teachers returning for dual certification, and special-education-only certification for career changers. (Graduate and Certificate)
California State University, Northridge (CSUN) More than 30,001/1,705	Urban	No	Restructure the existing personnel preparation program in mild/moderate disabilities to provide a clinically based model of teacher preparation. Graduates will either receive a preliminary and clear education specialist credential in mild/moderate disabilities or a dual certification in specialist credential and elementary or secondary education. (Undergraduate and Certificate)
Montclair State University 10,001-20,000/2,208	Suburban	No	Restructure its existing postbaccalaureate MAT dual-certification program to prepare middle and secondary educators through three interdisciplinary strands of teacher preparation: (a) inclusive pedagogy, (b) intensive content-area preparation in mathematics or science, and (c) integrative STEM (iSTEM) education. (Graduate and Certificate)
University of Hawaii 10,001-20,000/1,550	Urban	No	Redesign the existing dual undergraduate elementary and special education teacher preparation program to prepare HQTs to effectively serve high-needs children with and at risk for HIDs. (Undergraduate)



INSTITUTION		Cohort 5 (2010-2011)	
University/College of Education	Setting (Rural/Suburban/Urban)	HBCU/HIS/OM	Focus
Fordham University 10,001-20,000/997	Urban	No	Implement a new integrated teacher preparation program in special and childhood education to better prepare highly qualified, dually certified general and special education teachers to provide rigorous and accessible services for students in Grades 1-12 with HIDs in urban schools. (Graduate and Certificate)
Canisius College 5,001-10,000/at least 201	Urban	No	Enhance the dual certification in special education programs (i.e., bachelor's and master's degrees) and elementary education programs to ensure that candidates can effectively serve students with HIDs and high needs in urban settings. (Undergraduate, Graduate, and Certificate)

Notes

- HIDs, referring to mild/moderate disabilities, include students with LDs, emotional disorders (EDs), and IDs.
- The size of an institution, such as a college of education (COE), changes every semester; the numbers cannot be guaranteed with 100% accuracy.
- Some universities or colleges have separate COEs and some do not; therefore, COE size refers to either the COE or the college including schools of education.
- NA means the size of the COE cannot be found through a combination of Internet, phone, or email efforts.



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- The focus area is based on the abstract of the project from the directory of OSEP 325T projects and the projects' websites, if any. The accuracy cannot be guaranteed if the actual implementation is different from the description in the directory abstract or websites.



Appendix B

Participant Survey: 325T Program Improvement Grants Best Practices Review Survey

Purpose: The purpose of this survey is to gather input from the Office of Special Education Programs (OSEP) 325T grantees to be used for continued enhancement of teacher preparation programs.

Rationale: The Collaboration for Effective Educator Development, Accountability, and Reform (CEEDAR) Center, an OSEP technical assistance and dissemination (TA&D) center (H325A120003), is seeking information regarding systems reform, including the revision of special education preparation programs. The experiential knowledge of the 325T project personnel at the various institutions of higher education will provide important contextual input to inform continued decision making and future technical assistance (TA) efforts.

Directions: For each of the following questions, please select the answer that best reflects your experiences with your 325T project work. The survey should take no more than 30 minutes to complete.



1. For each of the following statements, indicate the extent to which you agree or disagree that your 325T project has been aligned with your state’s licensure or certification requirements to meet the highly qualified teacher (HQT) requirements of section 602(10) of IDEA. (Select one response for each)

	Strongly Agree	Agree	Disagree	Strongly Disagree
Enhanced program meets our state’s HQT requirements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced program includes revised and current state standards.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Syllabi reflect current state standards.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meeting with state education agency (SEA) representatives occurs at least annually.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Input to state policies regularly provided before policy revision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Active network of institutions of higher education (IHEs) within state re: educational policies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Networks have affected educational policies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Active network of 325T recipients within state re: educational policies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organizational structures to sustain IHE input to policy development have been created.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



2. For each of the following statements, indicate the extent to which you agree or disagree that your 325T project has improved your program’s organizational structure and instructional delivery. (Select one response for each)

	Strongly Agree	Agree	Disagree	Strongly Disagree
Multiple courses focused on service delivery to students with high-incidence disabilities (HIDs) were revised.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faculty in core academic courses collaborated in revision process of multiple courses focused on service delivery to students with HIDs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Field-based experiences are in diverse settings not making adequate yearly progress (AYP).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regular meetings of program faculty across departments and units, including arts and sciences, occur.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support for faculty development for collaborative structures (e.g., co-teaching, professional learning communities [PLCs]) is provided.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaborative research agendas across departments and units to study results of collaborative programming exist across departments and units.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organizational structures to sustain collaboration among departments and units are being developed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



3. For each of the following statements, indicate the extent to which you agree or disagree that your 325T project has improved curriculum and course content. (Select one response for each)

	Strongly Agree	Agree	Disagree	Strongly Disagree
Course content and syllabi includes EBPs in literacy, behavior, instructional strategies, and inclusive strategies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Course content and syllabi includes IRIS modules.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Course content and syllabi include competencies and skills to meet the needs of culturally and linguistically diverse (CLD) students and English language learners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curriculum coherence is evident across department and unit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regular meetings regarding curriculum resources (e.g., print, electronic) are held among faculty across departments and units.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General and special education faculty include topics of disabilities, diversity, inclusive practices, and similar topics within courses across departments and units.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structures to support continual, permanent dialogue between arts and sciences and education regarding content have been created.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programs reflect a strong content and pedagogical content knowledge to prepare all teachers in content.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programs and courses for preparing all teachers reflect a strong emphasis on preparing teachers for inclusive practices and universal design.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



4. For each of the following statements, indicate the extent to which you agree or disagree that your 325T project has improved student support for teacher candidates in your program. (Select one response for each)

	Strongly Agree	Agree	Disagree	Strongly Disagree
Extended clinical learning, field experiences, or extended supervised practica are provided, as needed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A new teacher mentoring program has been created.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A new teacher mentoring program has been implemented.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regular meetings for beginning teachers are part of our program's outreach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our program regularly collaborates with employers of new teachers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our program has regular communications with members of school district stakeholders to identify support structures for induction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our program conducts follow-up surveys and communications with new teachers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data and feedback from new teachers inform induction support from our institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specific measures (e.g., observation instruments, portfolios) have been collaboratively developed to support new teachers during induction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Permanent faculty members consistently have responsibilities for mentoring processes and programs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structures have been created to support mentoring and induction process among school districts and my IHE.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



5. For each of the following statements, indicate the extent to which you agree or disagree that your 325T project has developed and implemented comprehensive program evaluation. (Select one response for each)

	Strongly Agree	Agree	Disagree	Strongly Disagree
Data sources have been identified that address goals of project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data are systematically collected, analyzed, and used to inform continual decisions about impact of 325T project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
P-12 student data are collected, analyzed, and used to inform continual decisions about impact of 325T project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data about faculty knowledge of EBPs are systematically collected for continual improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data about use of faculty knowledge of EBPs are systematically analyzed for continual improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data about faculty knowledge of EBPs are systematically used for continual improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data about faculty use of EBPs are systematically collected for continual improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data about faculty use of EBPs are systematically analyzed for continual improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data about faculty use of EBPs are systematically used for continual improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data about teacher candidate/beginning teachers' knowledge of EBPs are systematically collected and used for continual improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



	Strongly Agree	Agree	Disagree	Strongly Disagree
Data about teacher candidate/beginning teachers' use of EBPs are systematically collected and used for continual improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data are collected and analyzed about the quality of services provided by program graduates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Results from ongoing data collection inform and validate proposed changes to program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data are collected on teacher candidates' competencies in state-approved professional standards.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structures have been created to support continual program improvement process based upon multiple data sources from school districts and programs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



6. Sustaining program innovation was a key component of the 325T Program Improvement Grants. Please rate your perceived degree of usefulness of each of the following program components as it relates to supporting implementation and continuation of your program enhancements. (Select one response for each)

Monthly webinars	Very useful	Moderately useful	Minimally useful	Not useful
Meetings with project officers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
325T sessions (e.g., OSEP, CEC, TED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support-other 325T colleagues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Resources-other federal projects (e.g., NCIPP, Doing What Works [DWW], National Center on RtI)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information via list serve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



7. To what degree has each of the following factors been a challenge and/or barrier to full implementation of all goals and activities of 325T Program Improvement Grants?

	Very problematic	Moderately problematic	Minimally problematic	Not problematic
Legislative and/or policy revisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SEA revisions to curriculum standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes in personnel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of school district participation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of university administrative support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of collaboration among university partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of technical support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of access to program evaluation data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



8. Name and describe resources (e.g., personnel, websites, projects, other OSEP centers) that have guided and supported your efforts to accomplish 325T project goals and objectives.

9. Name and briefly describe THREE accomplishments related to the goals and activities of the 325T project.

10. Do you have any further comments regarding the 325T project and programs within your institution?

11. What is the size of your institution?

- Under 5,000
- 5,001-10,000
- 10,001-20,000
- 20,001-30,000
- Over 30,001



12. In what year were you awarded the 325T grant?

- Cohort 1-2006-2007
- Cohort 2-2007-2008
- Cohort 3-2008-2009
- Cohort 4-2009-2010
- Cohort 5-2010-2011
- Cohort 6-2011-2012

13. What best describes your institution's setting?

- a. Rural
- b. Suburban
- c. Urban

14. Is your university a Historically Black College/University (HBCU), Hispanic-Serving Institution (HSI), or other Minority-Serving Institution (OMI)?

- d. Yes
- e. No

15. What best describes your focus of program enhancement for the 325T?

- f. Undergraduate
- g. Graduate
- h. Certificate only
- i. Initial Teacher Certification
- j. Other (Please state)_____



Appendix C

OSEP 325T Best Practice Review and Lessons Learned Interviews/Interview Protocol—325T Review and Verification

Sample Interview Script for Telephone Interviews

Hello. My name is _____. I am assisting in the knowledge development phase of the work of the CEEDAR Center at the University of Florida. This includes documenting best practices and lessons learned from the 325T projects funded by OSEP. As a 325T grantee, you are being asked to contribute to the knowledge development that will inform the CEEDAR Center’s technical assistance (TA). Our conversation should take no more than 45 minutes and will be audio recorded for transcription. Your individual responses will be kept confidential.

I really appreciate that you have taken time out of your busy schedule to talk with me about your initiatives related to the 325T program. Our goal is to learn from the process and continue to assist other programs to improve, and your feedback is greatly appreciated. Information from this interview will be summarized and aggregated with information from other interviewees to provide important feedback related to the goals of the 325T program. Furthermore, results from this research will be presented for review by the CEEDAR Center’s principal investigators (PIs), compiled in a report to the Office of Special Education Programs (OSEP), and may be submitted to scholarly research journals for publication and/or presented at national professional organization venues.

The questions will focus on your process for completing the goals and objectives of your 325T programs, what you found, and how that information was used to inform continued program improvement within your college or university. Please feel free to openly express your



opinions. We are seeking honest feedback that will be helpful to our colleagues. There are no anticipated risks to you as a participant in this interview. Given your consent and permission, I will record the interview to capture all that you have to say. When the interview is completed and the data are transcribed, any audio recordings will be erased. All gathered data will be stored in a locked filing cabinet. Your responses will remain confidential, and no interviewee will be identified. A code will be used for identification and will replace your name.

Participation in this interview is not associated with any form of compensation. There is no benefit to you for participating in this interview. You may choose to not respond to any or all of the questions without an explanation. You may withdraw or decline to participate in this interview without any consequences at any time for any reason.

If you have any questions about participants' rights, you can direct those to the UF-IRB Office. You have all of this information in the Informed Consent form, which was electronically sent to you.

Do I have your permission to record our conversation?

If yes, turn on tape recorder and continue as follows:

Again my name is _____. Today is _____, and I am speaking with _____ from _____ University/College. I have just turned on the recorder and would like for you to verify I have your permission to tape our conversation now that I am recording.

As I mentioned, I am recording the discussion so that I do not miss anything you have to say. Do you have any questions before I begin?

Pause



Interviewer Protocol

Interviewer: _____ **Interviewee:** _____ **Date:** _____

Please see script for specific directions and procedures (need audio recorder).

1. Please describe your role in the 325T project.
2. Describe, briefly, the overall goals for the 325T project at your institution.
3. Talk to me about the process you went through to revise your program.
 - a. What are some of the things that worked well?
 - b. What challenges did you experience? How did you overcome them?
4. Who was involved in the 325T reforms/revisions and in what ways?
 - a. Please describe the participation of your institution's general education faculty with the activities of your 325T project. Specifically, how were general education, liberal arts, and leadership education faculty involved?
 - b. Please describe the participation of your institution's administrators with the activities of your 325T project. Specifically, how were IHE leaders (e.g., deans, chairs, program area leaders) involved and how integral was their involvement?
 - c. Please describe the participation of state department collaboration and/or input with the activities of your 325T project.
5. How were other OSEP resources (e.g., TA Center products and services, IRIS modules, NCCTQ innovation configurations [ICs,] webinars) used in the process?
 - a. Please provide examples of this use.
 - b. Did you and your colleagues use the ICs in your 325T program development, evaluation, and/or revision?
 - c. If so, please describe.



-
6. In what ways has your pedagogy for preparing teachers changed or improved?
 - a. What specific practices would you consider best practices or essential?
 7. How did funding make this work possible or more feasible?
 8. To what extent will the work continue after the project ends?
 - a. Please describe any recommendations or concerns you have for project sustainability.
 9. Please describe any additional initiatives or resources that facilitated the completion of goals and activities of the 325T project at your institution.
 10. Please describe any barriers to the completion of goals and activities of the 325T project at your institution.
 11. As we have talked, have any other thoughts come to you regarding your 325T project and programs within your institution?

Thank you very much for allowing me to talk with you today. Your time is sincerely appreciated, and your comments have been extremely helpful. Is it OK if I contact you for clarification on any of our conversation?

Turn off audio recorder.

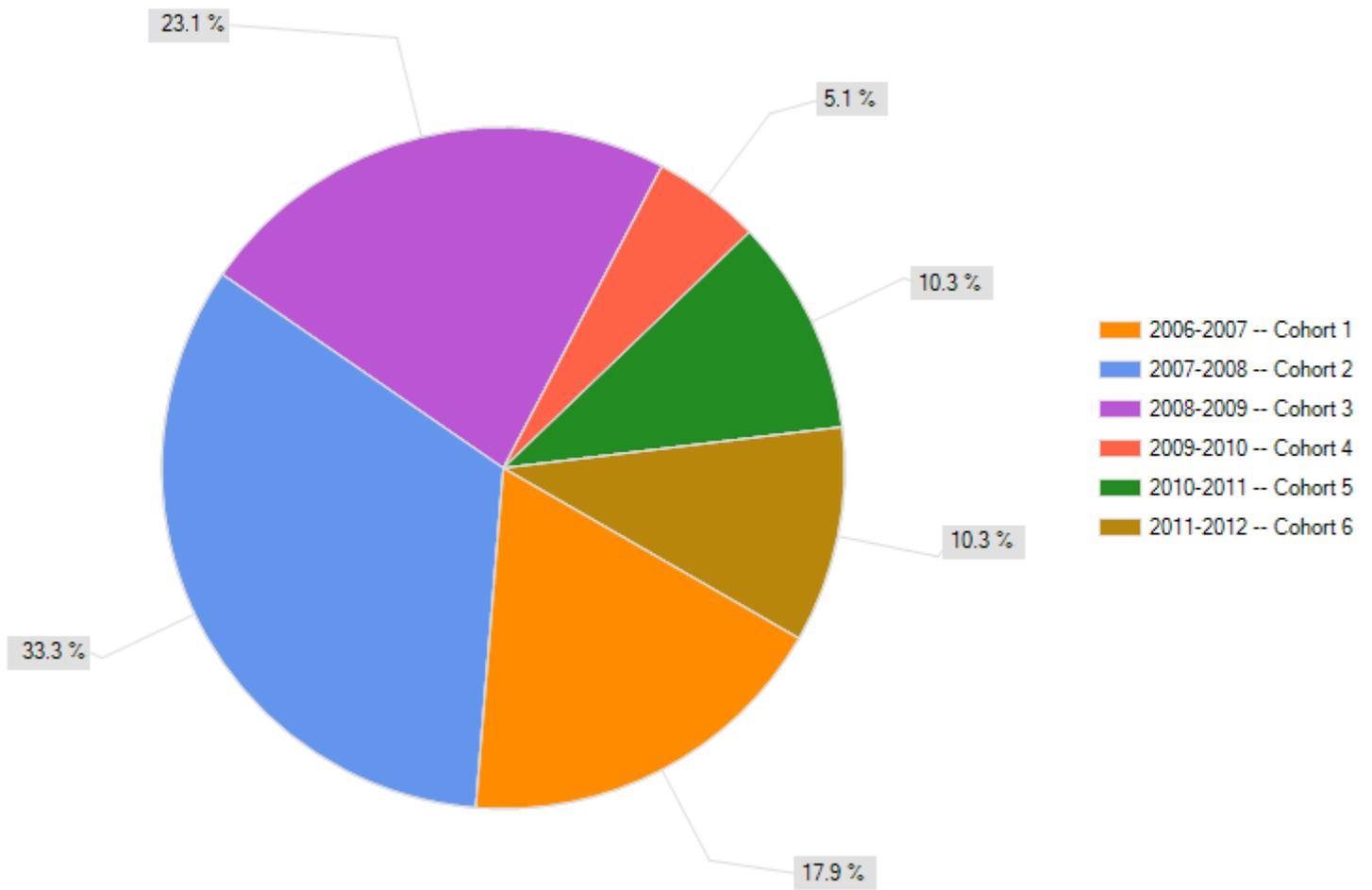
Thank the interviewee again, and then say goodbye.



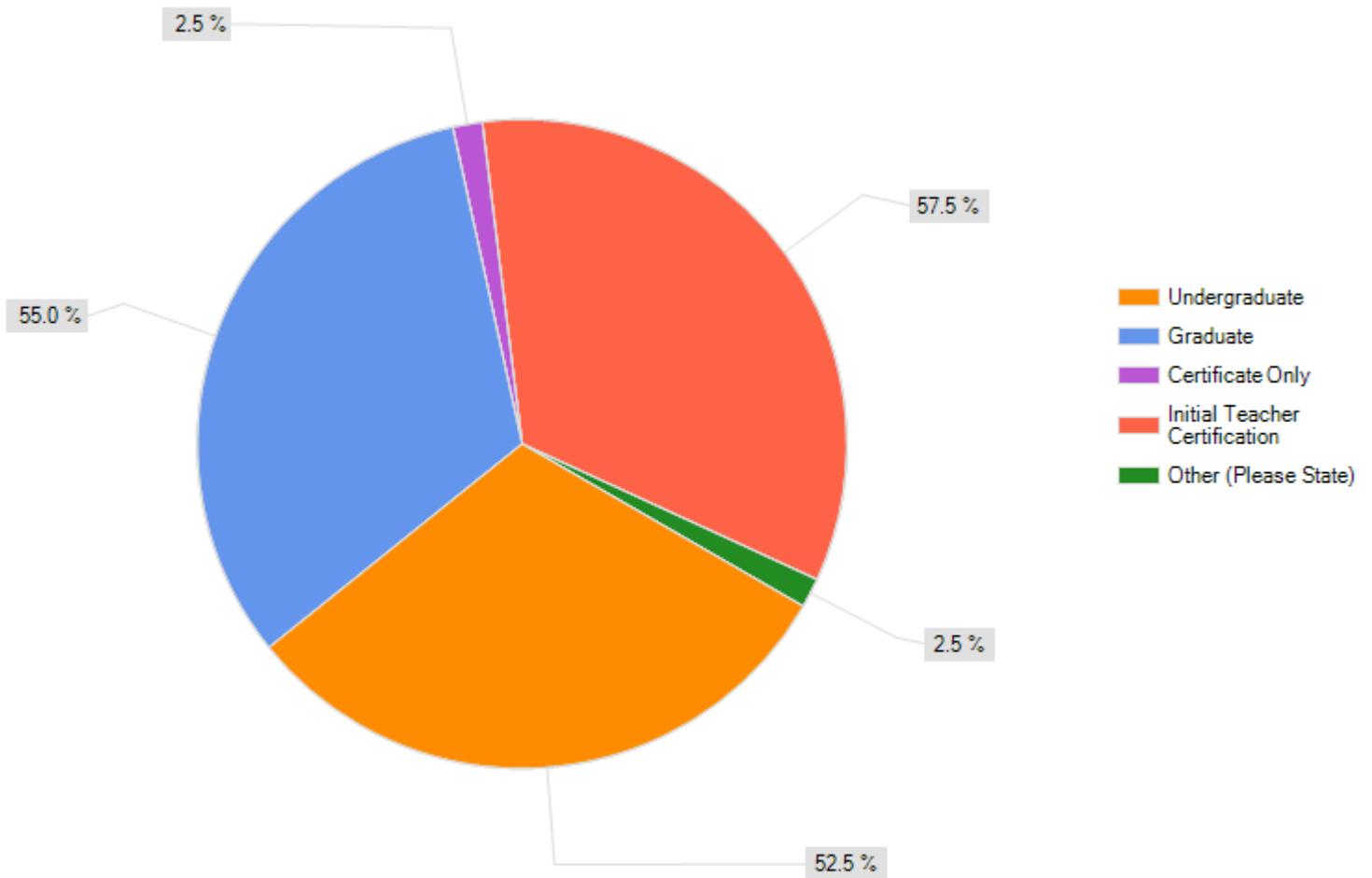
Appendix D

Demographics of 325T Survey Respondents

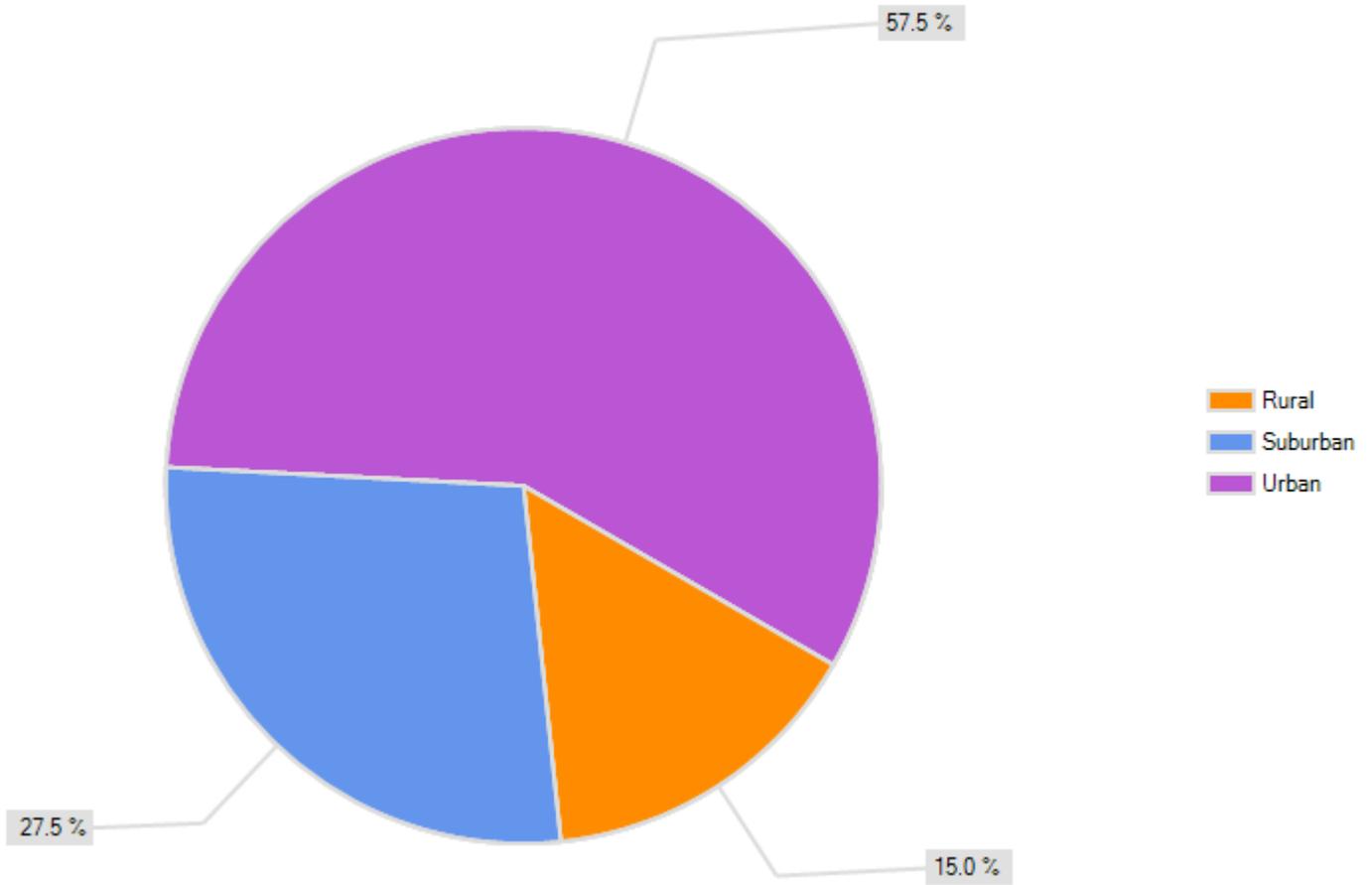
In what year were you awarded the 325T Grant?



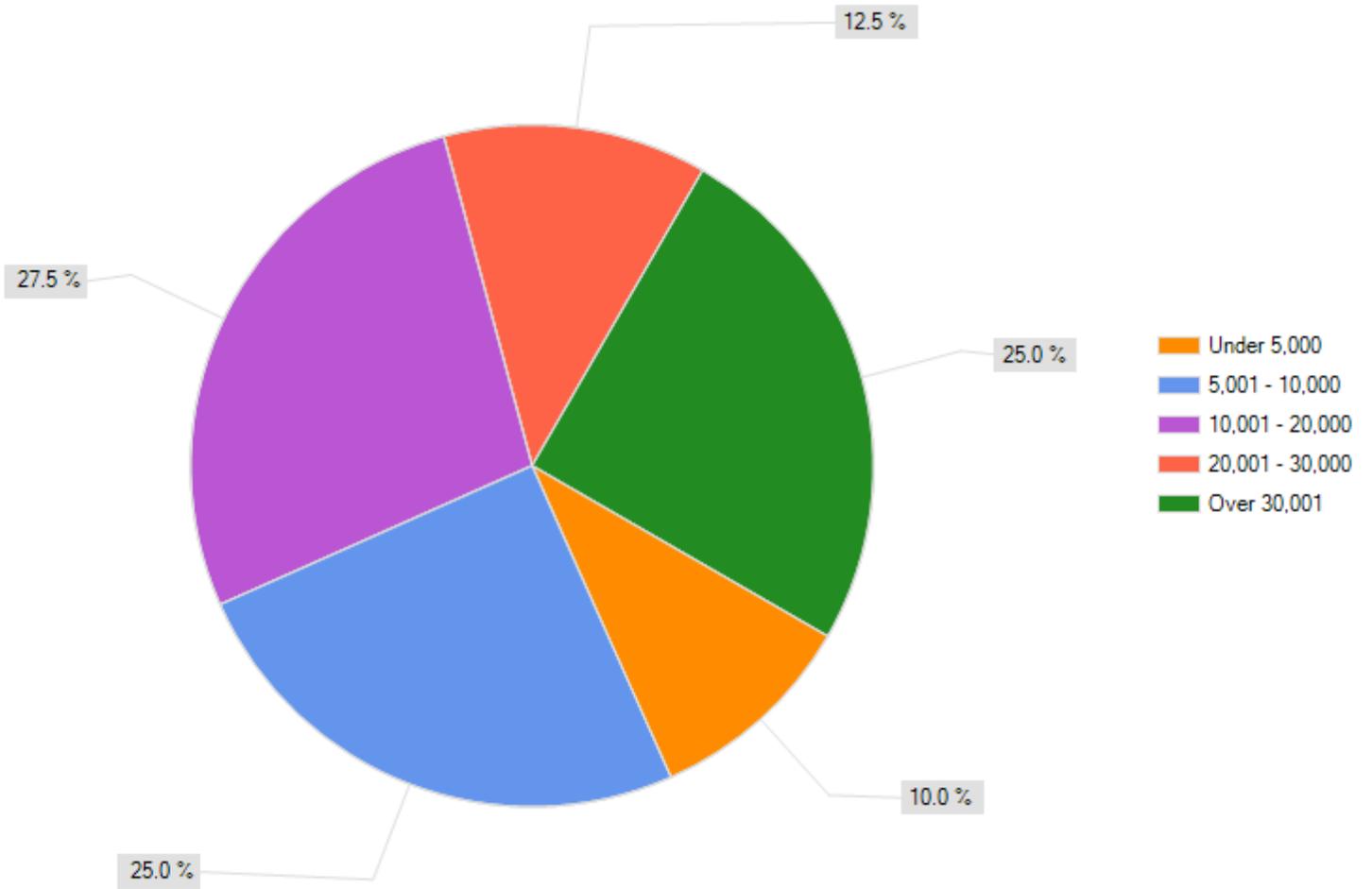
**What best describes the focus of the 325T program at your institution?
(Select all that apply)**



Which best describes your institution's setting?



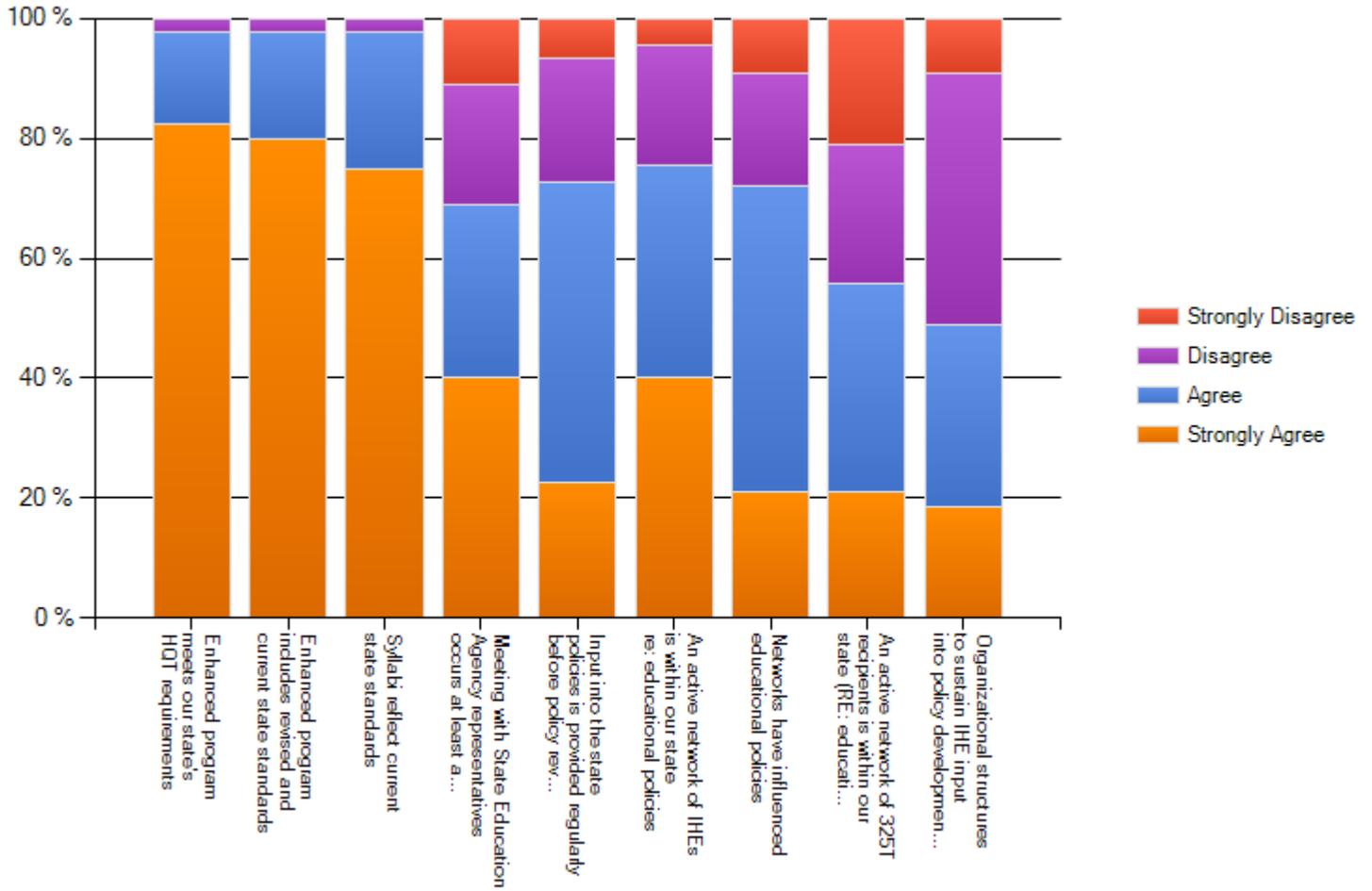
What is the size of your institution?



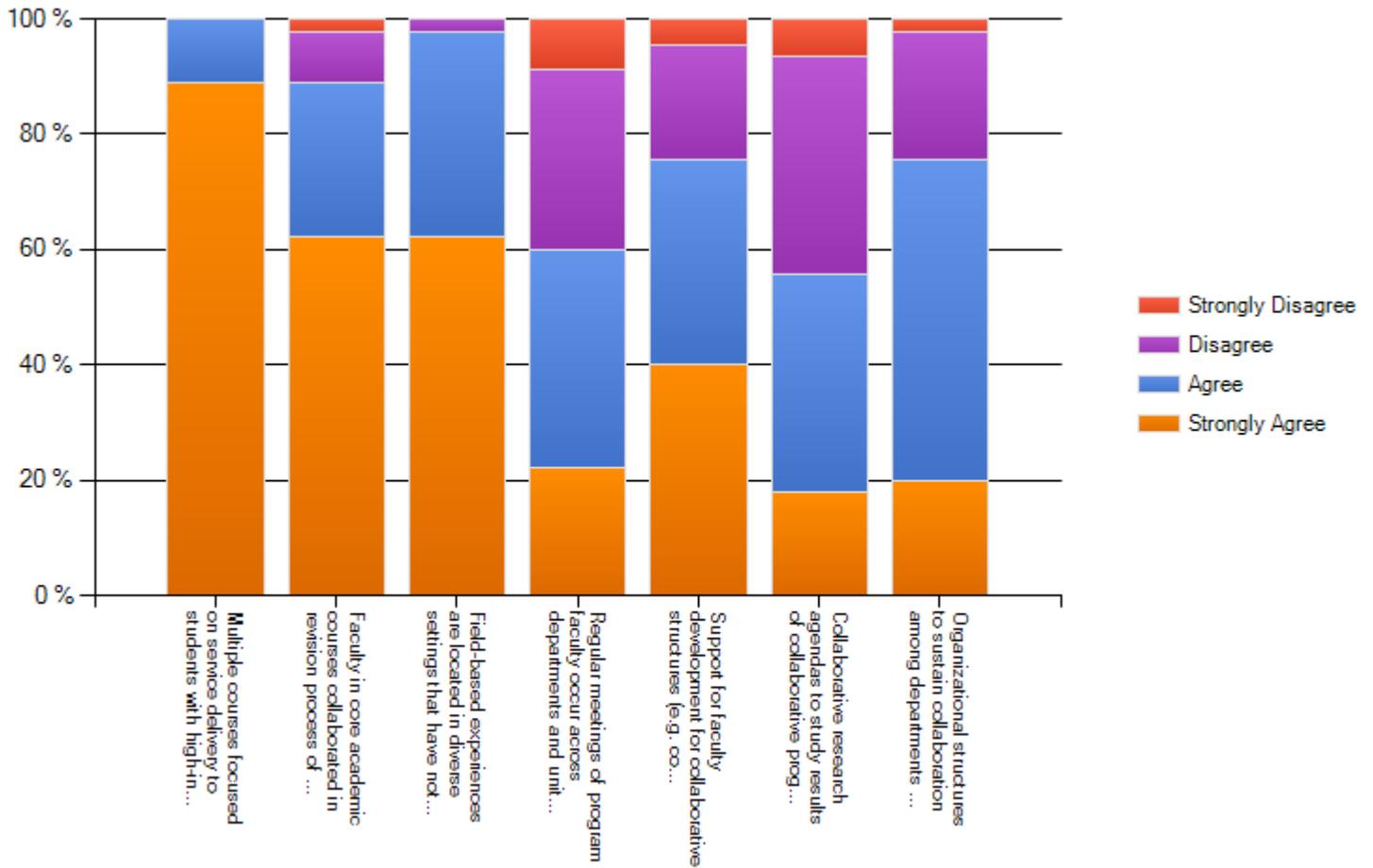
Appendix E

Data Across Domains and Questions: Results of Survey

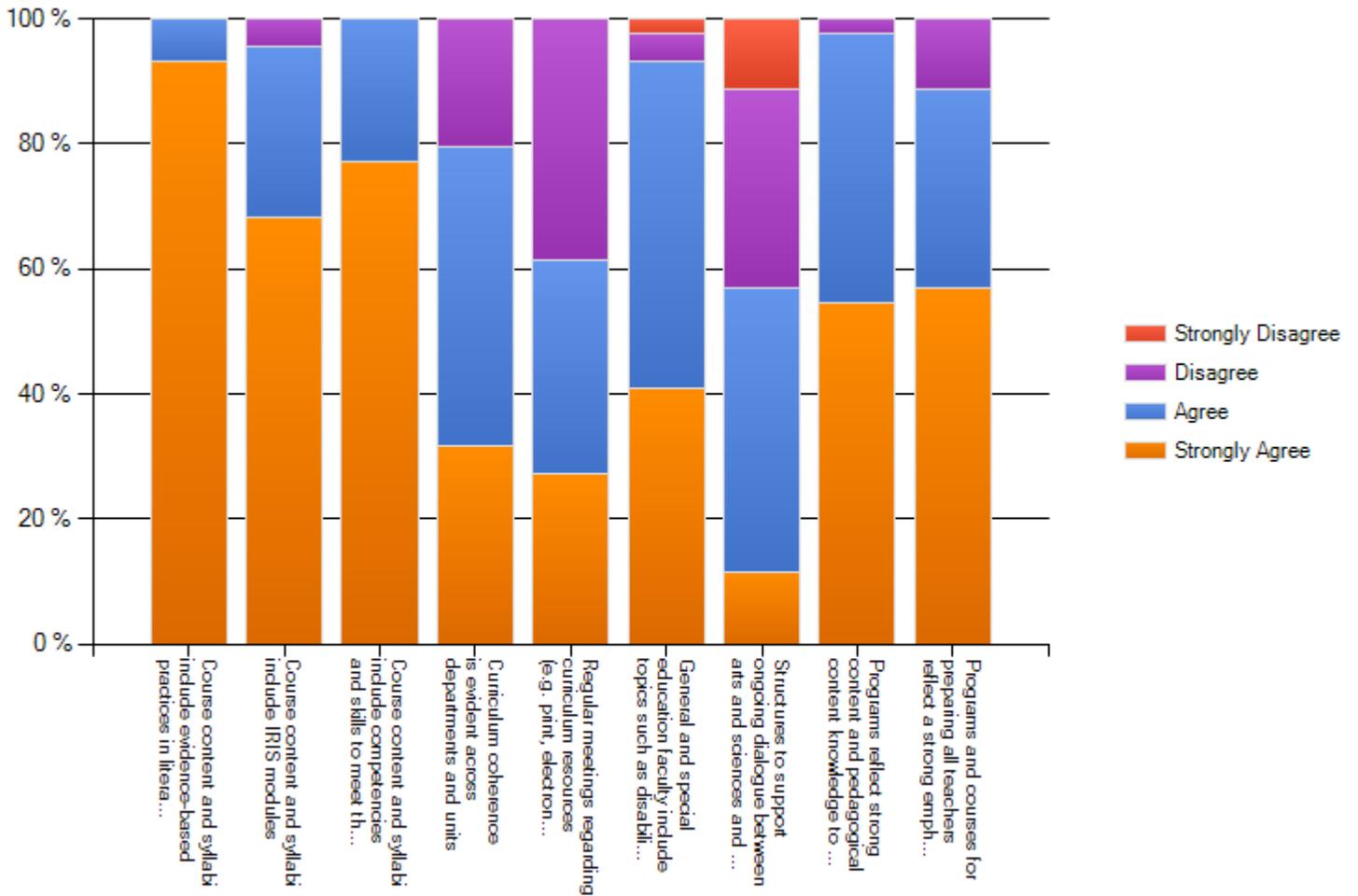
For each of the following statements, indicate the extent to which you agree or disagree that your 325T project has been aligned with your state’s licensure or certification requirements to meet the highly qualified teacher (HQT) requirements of section 602(10) of IDEA. (Select one response for each)



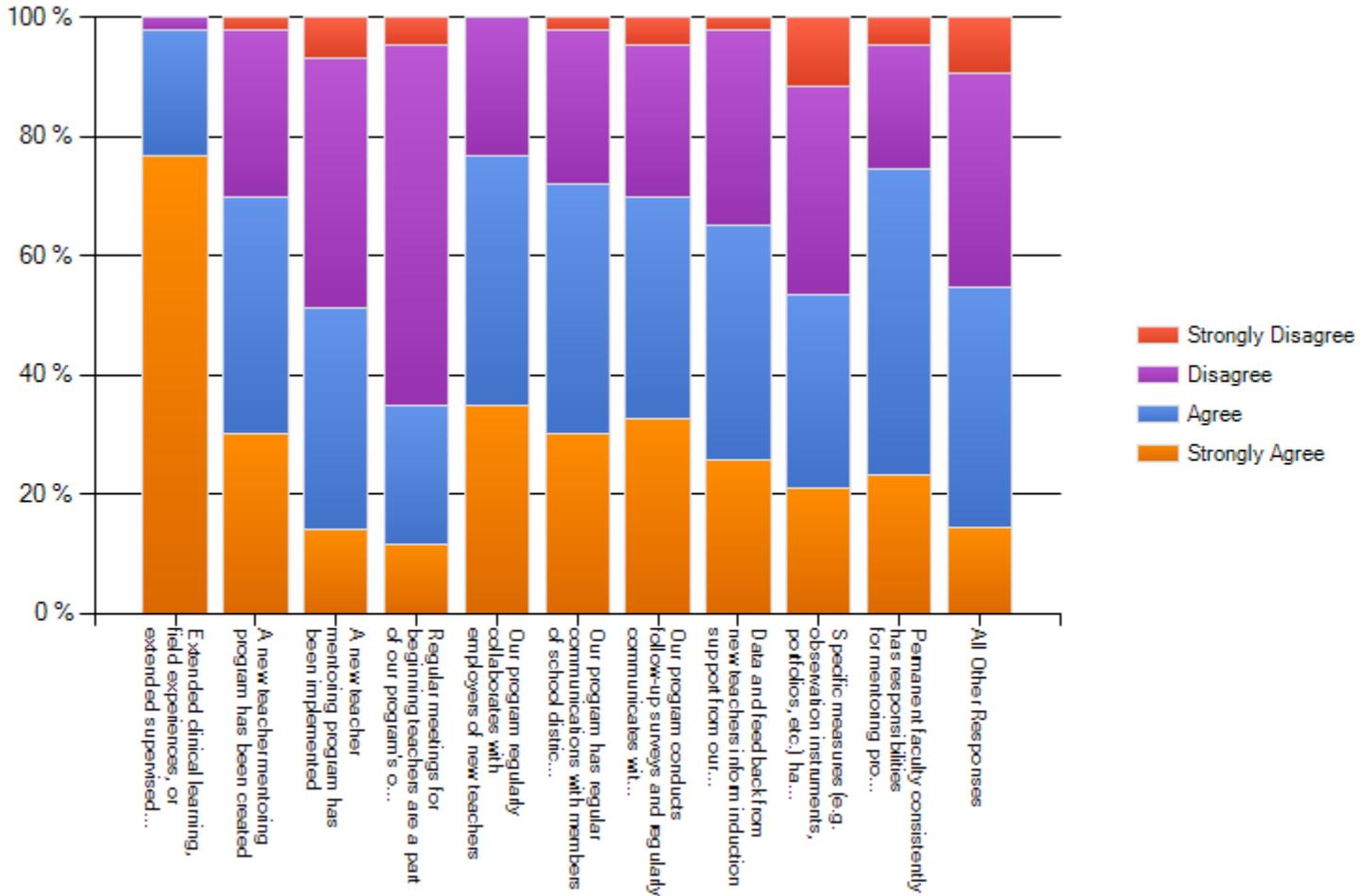
For each of the following statements, indicate the extent to which you agree or disagree that your 325T project has improved your program’s organizational structure and instructional delivery. (Select one response for each)



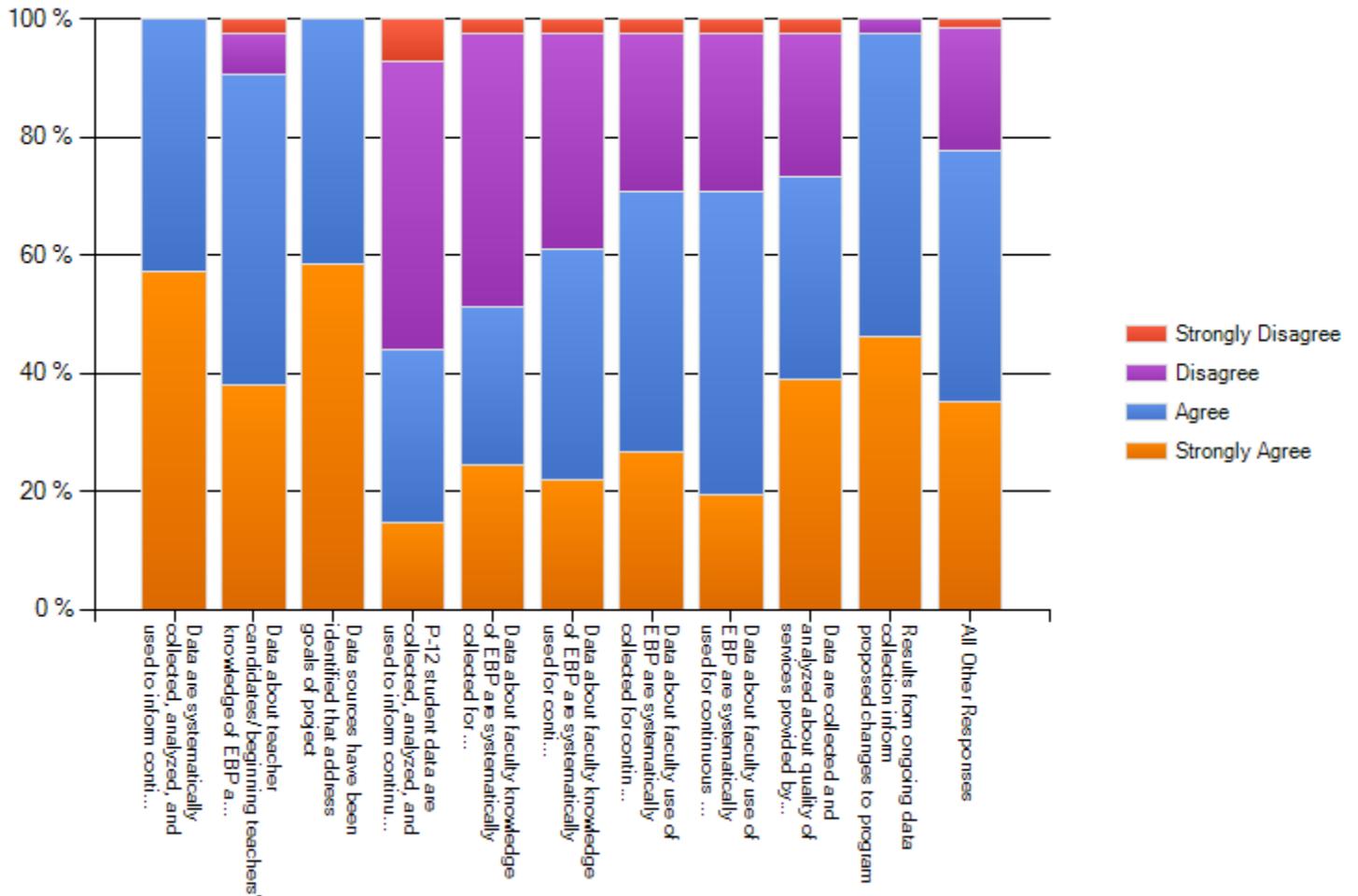
For each of the following statements, indicate the extent to which you agree or disagree that your 325T project has improved curriculum and course content.
(Select one response for each)



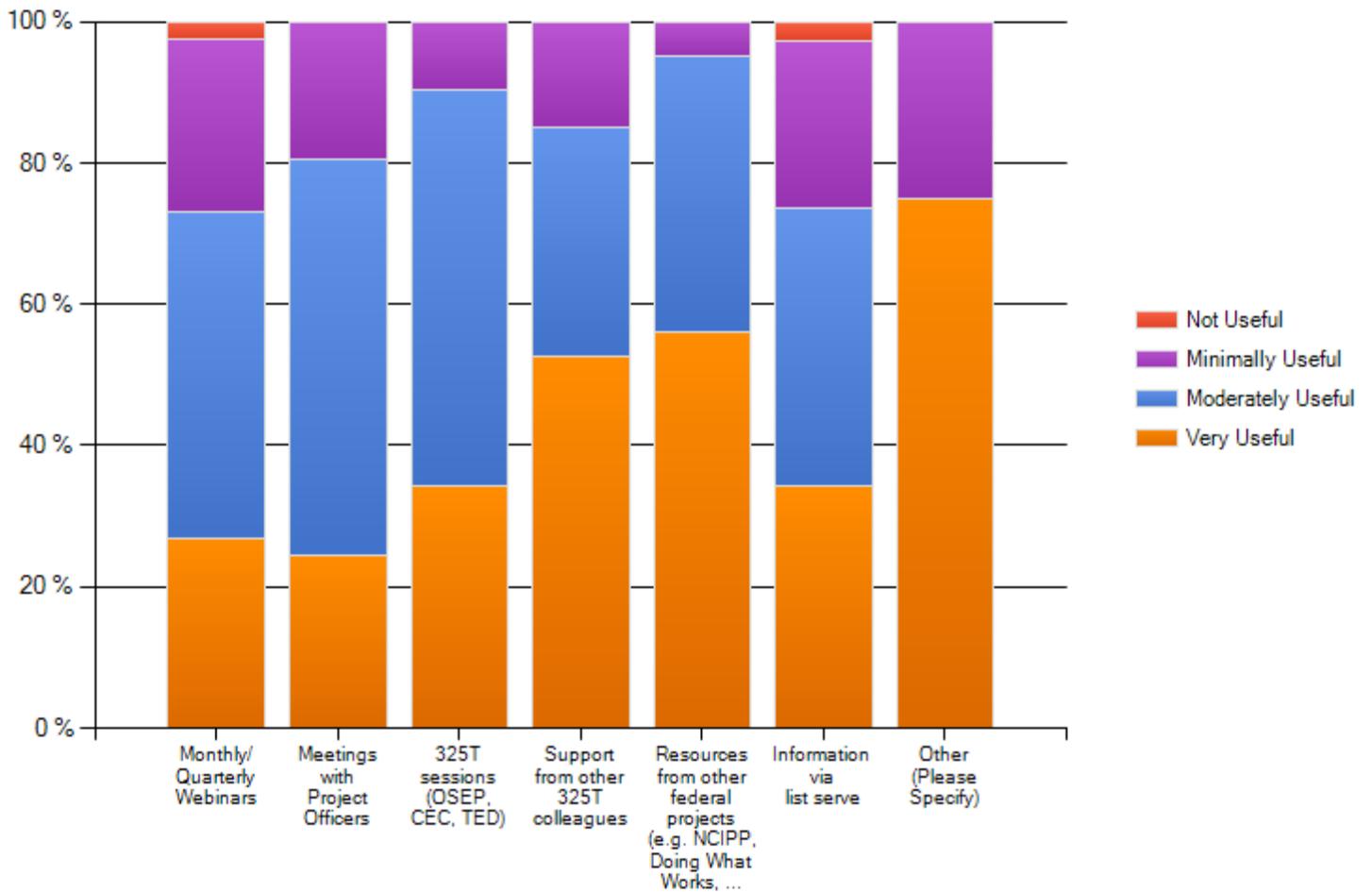
For each of the following statements, indicate the extent to which you agree or disagree that your 325T project has improved student support for teacher candidates in your program. (Select one response for each)



For each of the following statements, indicate the extent to which you agree or disagree that your 325T project has developed and implemented comprehensive program evaluation. (Select one response for each)



Sustaining program innovation was a key component of the 325T Program Improvement Grants. Please rate the perceived degree of usefulness of each of the following program components as it relates to supporting implementation and continuation of your program enhancements. (Select one response for each)



To what extent has each of the following factors been a challenge and/or barrier to full implementation of all goals and activities of your 325T program improvement grants?

