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RUNNING HEAD: UNIVERSITIES' ROLE IN ASSISTING STATES

The Universities' Role in Assisting States in Obtaining Highly Qualified Teachers

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Abstract

The Virginia Department of Education solicited proposals from colleges and universities with approved programs in special education to provide coursework and activities for teachers to gain competencies required for special education endorsements. The department was specifically interested in innovative delivery formats that addressed special education personnel needs while being responsive to the demands of working professionals. Liberty University was one of the eligible applicants of this grant as they offered courses through distance learning for teachers across the Commonwealth to complete the requirements for standard special education licensure. The grant funds provided by the Commonwealth of Virginia and support offered by an on-site mentor, as well as university faculty, ensured that each individual in the Commonwealth public school special education system had the opportunity to become a highly qualified practitioner.

Universities' Role in Assisting States in Obtaining Highly Qualified Teachers

While a shortage of special education teachers already existed, the requirements of No Child Left Behind (NCLB) increased the challenge for state departments to locate highly qualified special educators (Brownell, Sindelar, Bishop, Langley, & Seo, 2002). Over the past decade state departments of education have attempted to assist local public school systems in filling numerous vacant positions. Teachers and career switchers have been given the opportunity to obtain teaching positions by receiving a conditional or provisional license. For example, the Virginia Department of Education reported over 4,000 positions held by non-endorsed personnel (Table 1). The number of reported shortages has nearly tripled since 1999 with the number of positions filled by unendorsed individuals dominating this increase (Virginia Department of Education, 2002).

Teaching Shortages in Virginia

In Virginia, the number of highly qualified staff was greater in regular education than in special education (Table 1). The most critical shortage areas in Virginia were special education, earth science, mathematics, and foreign language (Tables 2 and 3).

Table 1 – Virginia's Statewide Supply of Instructional Personnel 2001-2002

Number of Teachers, Administrators, and Other Instructional Personnel	Number of Classroom Teachers Employed	Number of Teaching Positions Held by Non-endorsed Personnel
94,236	88,609	4,136

Table 2 – Virginia's Critical Shortage Areas

CRITICAL SHORTAGE TEACHING ASSIGNMENTS	School Year 2000-2001		School Year 2001-2002 (as of 1 Oct 2001)			
	Total 2000-2001 FTEs	FTE Positions Filled by Unendorsed Individuals	Total 2001-2002 FTEs	FTE Positions Filled by Unendorsed Individuals	Total FTE Unfilled Positions	Number of Position Vacancies with Three or Fewer Qualified Applicants
Aggregation of endorsement areas						
Special Education	11,301.1	753.5	13,113.4	1,094.2	82.0	239.0
Vocational Education	4,398.7	158.0	4,937.3	214.7	20.4	55.1
Mathematics	3,532.1	134.5	3,798.6	174.3	9.0	46.0
Foreign languages	2,048.2	73.3	2,303.2	121.2	14.0	43.0
Reading specialist	1,403.2	45.0	1,722.8	68.0	10.0	31.0
Science - earth science	824.0	49.0	875.7	56.6	4.0	26.0
Middle school (Grades 6-8)	5,458.5	123.3	5,891.4	116.3	2.0	25.0
Library media preK-12	1,777.8	39.1	1,974.8	58.1	9.0	23.0
English	4,163.4	77.0	4,526.0	135.2	5.0	12.0
Science - chemistry	492.1	24.5	583.6	25.1	2.0	12.0
Music education -instrumental preK-12	894.8	16.5	1,004.3	32.6	2.0	10.0
Music education -vocal/choral preK-12	1,137.1	22.1	1,334.0	49.7	5.0	9.0
Science - biology	1,245.8	37.5	1,507.0	59.0	2.0	7.0
Science - physics	266.5	10.0	289.4	23.5	0.0	7.0
English as second language preK-12	721.6	40.6	1,023.7	142.3	9.0	5.0

Table 3 – Virginia's Critical Shortage Areas in Special Education

PRIMARY TEACHING AND/OR ADMINISTRATIVE ASSIGNMENT (Endorsement Areas)	Total 2000-2001 FTEs	Positions Filled by Unendorsed Individuals	Total FTEs by area 2001-2002	Positions Filled by Unendorsed Individuals	Total FTE Unfilled Positions	Number of Vacancies with three or Fewer Qualified Applicants
Special education - severely profound disabilities K-12	460.8	96.0	478.5	115.2	6.0	88.0
Special education - emotional disturbance K-12	1,573.8	116.6	1,899.8	164.2	23.0	53.0
Special education - hearing impairments preK-12	229.9	15.6	252.1	21.5	0.0	46.0
Special education - early childhood special education	1,066.3	75.6	1,139.6	114.0	0.0	29.0
Special education - speech-language disorders preK-12	1,095.7	50.0	1,250.7	76.6	9.0	26.0
Special education - learning disabilities K-12	5,271.3	341.9	6,363.4	507.1	28.0	16.0

NCLB mandates challenged the practice of hiring teachers who hold conditional or provisional licenses to fill the vacant positions. The shortages in Virginia (Tables 1-3) were reported prior to the reauthorization of IDEA in November 2004, which required that any

teachers in self-contained subject areas meet content requirements, such as passing a state-approved assessment, in order to be highly qualified. Virginia's public schools faced a great dilemma to both recruit and retain highly qualified teachers. State departments observed that the designation of "qualified" or "nonqualified" did not guarantee that teachers would stay in their positions. On the other hand, studies indicated that well trained special educators were more likely to stay in their positions (Gersten, Keating, Yovanoff, & Hariness, 2001). State departments and higher learning institutions sought ways to offer training to these teachers in a format that was flexible for working teachers in order to prepare and retain highly qualified teachers.

One of Virginia's first priorities was to ensure that all contractual employees had completed the requirements for a conditional license. These requirements included minimum assessment scores (for Praxis I, ACT, or SAT) as well as completion of the required course work for two competencies: the legal aspects of teaching special education and the characteristics of students with disabilities. In order to assist schools in finding employees with the minimum of the conditional license, the Virginia Department of Education issued grants to assist professionals in completing these requirements. Grants included test preparation workshops to assist students in achieving the cut scores for Praxis I and grants to various universities to provide courses that met the minimum competencies of legal issues and characteristics. An overview of the grants awarded by Virginia for professionals to obtain a conditional license included:

1. Praxis I Test Prep – Workshops offered by Old Dominion University on campus and at off-site programs

2. Special Education Minimum Competencies Coursework offered by Virginia Commonwealth University, Norfolk State University, Radford University, Liberty University, and Lynchburg College

A second priority for Virginia was to ensure that teachers who currently held a conditional license would complete the remaining competencies to be fully licensed in the endorsement area in which they were teaching. Table 4 provides the number of conditionally licensed special education teachers in Virginia.

Table 4 – Number of Employees with a Conditional License in Virginia in 2003-2004

Disability	# Statewide
Visual Impairments	11
Hearing Impairments	24
Emotional Disturbance	1213
Mental Retardation	674
Learning Disabilities	1954
Early Childhood SPED	179
Severe Disabilities	126
Speech Language Disorders	155
TOTAL	4336

In order to address the number of teachers with a conditional license, the state department offered funds to teachers to support their attendance at the college or university of their choice. In addition, the state offered grant monies to colleges and universities so they could offer the

coursework for these teachers to complete the competencies required to become fully licensed. The Virginia Department of Education distributed the scholarship monies among the various state regions and to the regions with the highest need. Table 5 represents the number of teachers with a conditional license within each region in the state.

Table 5 – Number of Conditionally Licensed by State Regions

Region 1	569
Region 2	924
Region 3	232
Region 4	1149
Region 5	308
Region 6	164
Region 7	199
Region 8	158
State Programs	38
Private Schools	683

Diversity was another factor to be considered in teacher recruitment, enabling schools to hire a diverse staff who could address the diverse needs of their students. Virginia had an extremely diverse workforce, from the urban settings of Norfolk, Northern Virginia and Richmond, to the rural systems in the western and south side of the state. Data collected from the Virginia Department of Education indicated a more severe teacher shortage in the rural school districts, with a greater number of teachers hired that were not highly qualified. On the

basis of indicated need, higher learning institutions were solicited to provide programs that could be offered in rural settings. Grant monies designated according to regions met the needs in both urban and rural settings. Certain grants also addressed specific shortage areas in special education.

Distance learning formats provided an opportunity for universities to offer course work for high needs areas in various settings (Ndahi & Ritz, 2001). The use of distance education to train special education personnel has continued to expand rapidly over the past 25 years. It has become an important delivery model for pre-service and in-service teacher education (Ludow, 2003).

Request for Proposals from the Virginia Department of Education

The Virginia Department of Education solicited proposals from colleges and universities with approved programs in special education to provide coursework and activities for teachers to gain competencies required for special education endorsements in emotional disturbance, learning disabilities, and/or mental retardation. Proposal guidelines specified innovative delivery formats that addressed special education personnel needs while being responsive to the demands of working professionals. The following depicts a sample of the grants that were available throughout the state of Virginia:

1. Commonwealth Special Education Endorsement Program (CSEEP) – Old Dominion University
2. Project TEACH (Teachers of Exceptional Adolescents and Children) - College of William and Mary
3. Project CME (Collaborating Master Educators) – College of William and Mary

4. Enhancing Success of Special Education Students in the Demographically Diverse Schools of Southwest VA – Radford University
5. Special Education Endorsement Programs (George Mason University, Liberty University, Old Dominion University, Virginia Commonwealth University)
6. Pathways: Personnel Preparation for Paraprofessionals – Old Dominion University
7. Specific area grants (vision, hearing, severe and profound, leadership, etc.) are also offered at various universities and colleges.

Several of the programs were offered in a distance delivery format. Over the past decade distance education has been a viable option for many institution and school systems (Lombardi, Bauer, Peters, & O'Keefe, 1992; Caro, McLean, Browning, & Hains, 2002). These programs offered the flexibility that is needed to recruit and retain a diverse workforce. As technology options were enhanced and the availability of technology increased, these programs offered more choices and became increasingly innovative. Two major components enabled these programs to maintain their integrity and vigor: collaboration with local public schools (Smith & Edelen-Smith, 2002) and program assessment of the preparation programs (Conderman, Katsiyannis, & Franks, 2001). With collaboration and assessment of these innovative distance programs, institutions of higher education have assisted state departments and local school systems in recruiting and retaining a diverse and highly qualified workforce of special educators.

The Virginia Department of Education required that the grants monies offered to universities be used to provide “real world” assignments and activities designed for immediate classroom application to reflect tasks that teachers implement in the special education instructional setting. The coursework, activities, and field experiences were designed in a variety of settings, demonstrating specific competency requirements. In addition a quality mentor

program was required, managed by the institution of higher education to provide school-based mentors endorsed in special education for program participants holding special education conditional licenses.

Description of a Grant Program – Liberty University

Liberty University was one of the eligible applicants of these grants as they offered courses through distance learning for teachers across the Commonwealth to complete the requirements for standard special education licensure. The participants of the scholarship grant funds were special educators holding a valid conditional license who were employed in those areas by public school divisions in Virginia or potential educators pursuing special education licensure who had documentation of an employment offer by a public school division in Virginia. Liberty University was awarded funding to offer scholarship monies to candidates to complete the required minimal competencies for the conditional license and additional renewable funding to offer scholarship monies for conditionally licensed teachers to complete the required competencies to be fully licensed.

With distance delivery and electronic components already developed, field tested, and refined, the program offered quality education and training with a minimum of inconvenience to teaching schedules or family structures. The opportunity to participate in coursework with grant funds provided by the Commonwealth of Virginia and supported by an on-site mentor, as well as university faculty, ensured that each individual in the Commonwealth public school special education system had the opportunity to become a highly qualified practitioner.

Liberty University's distance delivery was defined as the integration of a set of video-taped lessons in which the instructor taught a group of potential and practicing educators with an online module through which the participant engaged in dialog with the instructor and fellow

classmates. This approach provided a vehicle for participants to experience a wide selection of leaders in the field of special education, parent panels, and clinical faculty. Within the 120 days of the distance delivery semester, participants followed the course chart to view each videotaped lesson, conducted the corresponding research, and completed the projects and assignments. Projects and research were submitted electronically through the online module. Research assistance was supported through the University's Library and Information Resource Center in which one full-time librarian was assigned to support the needs of the distance education component. The distance delivery course sections were available for activation at least once each month. Systematic evaluation of the program indicated comparable levels of student satisfaction with the residential and distance delivery systems.

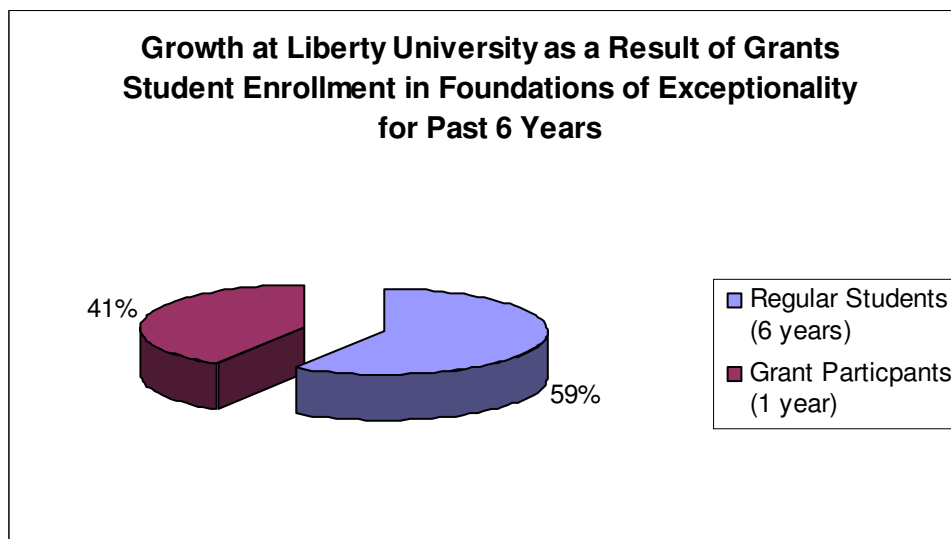
The assessment and monitoring of a distance delivery program was critical for its success (Meyen, Aust, Bui, & Isaacson, 2002). In working on these grants, it was decided that the following data would be collected to determine the success of courses in distance delivery format.

1. Recruitment efforts,
2. Participants' mastery of knowledge and skills,
3. Participants' implementation of that knowledge and skill in the classroom setting,
4. Participants' course evaluations and reflections,
5. Mentors' mastery of mentoring knowledge and skills, and
6. Mentors' and administrators' perception of program impact.

Recruitment Efforts

Data collected on recruitment efforts is critical in the verification of growth that has been experienced in the institution's special education program as a result of these grants. The following chart demonstrates this growth.

Chart 1 – Liberty University's Growth as a Result of Grants



Participants' Mastery of Knowledge and Skills

Participants' mastery of knowledge and skills and participants' implementation of that knowledge and skill in the classroom setting is also vital to measuring the success of any program. Liberty University has maintained a rigorous program while offering the flexible schedule of distance delivery formats. As a result, course assessments, monitoring and feedback are the same for distance and residential courses congruent with research findings for other programs (Caywood & Duckett, 2003). Data collected from the knowledge and skills of the participants demonstrates this continued effort. There were 37 completed courses in the first year of the grant for the teachers who already held a conditional license. In addition, 22 students

completed the foundational course to meet the minimal requirements for the conditional license. Of the 59 completed courses, 47 were completed successfully, 4 were still in progress, and 8 were not completed successfully. The completion rate demonstrates both the success of the candidates as well as the rigor of the program.

Participants' Course Evaluations and Reflections

Evaluation of the learners' reflection of both the face-to-face and distance professors is vital, as it represents the different types of instructional situations and interactions used to engage and motivate learners from a distance (Mertera-Gutierrez, 2002). The participants' course evaluations and reflections echoed similar results in both settings. Participants rated positive teaching behaviors as having been demonstrated "frequently" or "almost always" and negative teaching behaviors as "rarely" or "almost never" observed. Participant satisfaction reflected in the course evaluations was provided as an effective indicator of project success. While the results and comments were very favorable, a few students also stated that their course work was difficult to complete.

Responses to the surveys indicated that:

- ◆ Students were satisfied with the course experience and that the learning environment was conducive to success.
- ◆ Students perceived the courses as challenging learning experiences.
- ◆ Participants perceived the faculty and staff as helpful, courteous experts.

Mentors' Mastery of Mentoring Knowledge and Skills

The mentor program was an addition to the distance delivery format that was created specifically to meet the stipulations of the grant. An online course module was developed for the training and evaluation of the mentor participants in the program. The online module also served

as a communication tool for the grant administrator and professors to interact with the on-site mentors. The training consisted of quizzes, PowerPoint lessons and assessment based on *Virginia's Guidelines for Mentor Programs*. The activities depicted in Table 6 were required by all of the mentors in the grant programs. One difficulty encountered was inconsistent availability of web access for mentors throughout the state. The graduate assistant worked with the mentors to ensure their completion of the training program and evaluations.

Table 6 – Mentor Training Guide for Liberty University

Steps	On-line Lessons	On-line Evaluations
1.	Blackboard Training	
2.	Guidelines for Mentor Teacher Programs	Complete quiz 1
3.	Teacher Criteria and Performance Indicators Sample Teacher Evaluation Forms	Complete quiz 2
4.	Complete the Pre-Evaluation of your assigned teacher candidate (both on-line and a hard copy)	Pre-Evaluation of Teacher Candidate
5.	Development and Use of Individualized Education Plans	
6.	Keys to Collaboration & Behavior Management	
7.	Review any other information that would be useful for you (links, optional lessons, etc.)	
8.	Complete the Post-Evaluation of your assigned teacher candidate (both on-line and a hard copy)	Post-Evaluation of Teacher Candidate
9.	Complete the evaluation of Liberty University's program	Complete Liberty's Evaluation

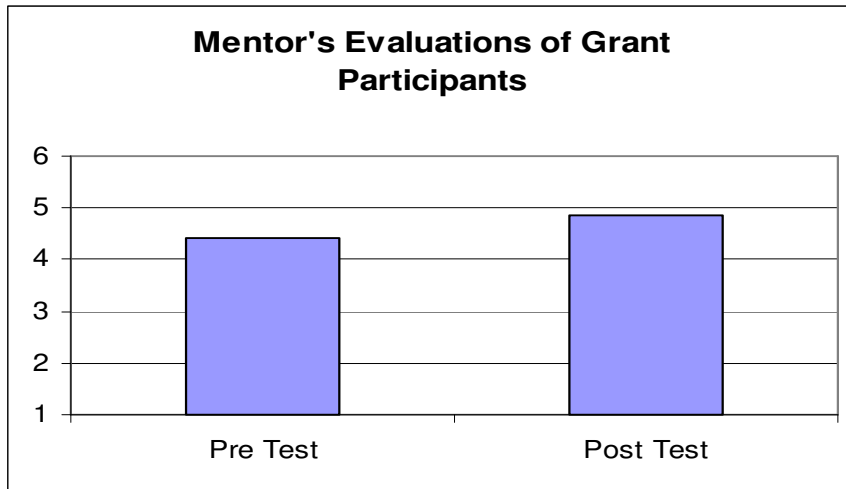
Mentors' and Administrators' Perception of Program Impact

Table 7 depicts the mentors' perceptions of their assigned teacher candidates prior to taking a course and after completion of a course and Chart 2 summarizes the Table.

Table 7: Results from Mentors Pre and Post Assessments
Number of Mentors Completed = 8

Questions		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Teacher candidate demonstrates a broad base of general knowledge and professional knowledge.	PRE	88%	13%	0%	0%	0%
	POST	100%	0%	0%	0%	0%
2. Teacher candidate integrates skills for effective classroom communication	PRE	88%	13%	0%	0%	0%
	POST	100%	0%	0%	0%	0%
3. Teacher candidate plans effective instruction based on knowledge of content area and state and national curriculum goals.	PRE	65%	25%	13%	0%	0%
	POST	88%	13%	0%	0%	0%
4. Teacher candidate models personal integrity and sensitivity to human needs.	PRE	88%	13%	0%	0%	0%
	POST	100%	0%	0%	0%	0%
5. Teacher candidate enhances success of all learning, providing for students with special needs and diverse backgrounds.	PRE	88%	13%	0%	0%	0%
	POST	60%	40%	0%	0%	0%
6. Teacher candidate manages classroom climate and procedures, motivates students, and maximizes learning.	PRE	88%	13%	0%	0%	0%
	POST	88%	13%	0%	0%	0%
7. Teacher candidate uses a variety of assessment strategies, aligns assessment with standards and uses assessment to improve student learning.	PRE	63%	38%	0%	0%	0%
	POST	88%	13%	0%	0%	0%
8. Teacher candidate selects and uses appropriate technology and resources to support instruction.	PRE	38%	63%	0%	0%	0%
	POST	75%	25%	0%	0%	0%
9. Teacher candidate seeks opportunities for reflective practices, collaboration with peers and supervisors, and involvement in professional organizations.	PRE	83%	17%	0%	0%	0%
	POST	75%	25%	0%	0%	0%
10. Teacher candidate articulates a personal philosophy of special education based on the foundations of individuals with disabilities.	PRE	58%	38%	15%	0%	0%
	POST	75%	25%	0%	0%	0%
11. Teacher candidate understands the etiology and characteristics of students with disabilities.	PRE	63%	38%	0%	0%	0%
	POST	75%	25%	0%	0%	0%
12. Teacher candidate understands the impact of multiple disabilities and relates levels of support to needs of the individual.	PRE	50%	50%	0%	0%	0%
	POST	88%	13%	0%	0%	0%
13. Teacher candidate selects and uses instructional strategies and materials according to characteristics of children with disabilities.	PRE	75%	25%	0%	0%	0%
	POST	88%	13%	0%	0%	0%
14. Teacher candidate creates a safe, equitable, positive, and supportive learning environment in which diversities are valued.	PRE	100%	0%	0%	0%	0%
	POST	100%	0%	0%	0%	0%
15. Teacher candidate uses strategies and resources to enhance communication skills of individuals with disabilities.	PRE	63%	38%	0%	0%	0%
	POST	88%	13%	0%	0%	0%
16. Teacher candidate identifies and prioritizes areas of the general curriculum and accommodations for individuals with special needs.	PRE	50%	50%	0%	0%	0%
	POST	88%	13%	0%	0%	0%
17. Teacher candidate chooses and administers assessment instruments appropriate to individuals with special needs.	PRE	63%	25%	13%	0%	0%
	POST	75%	13%	13%	0%	0%
18. Teacher candidate collaborates to integrate individuals into various settings with family members, school personnel and community members.	PRE	50%	50%	0%	0%	0%
	POST	75%	25%	0%	0%	0%

Chart 2 – Mentors' Pre and Post Evaluations of their Assigned Teacher Candidates



Mentors were also asked their perception of the University's program. The data collected was very favorable with no negative responses. The results of this evaluation are provided in Table 7.

Table 8: Mentor Evaluation of Liberty University SSET Grant

Questions	Positive Response	Neutral	Negative Responses
1. The course/s challenged the participant to think	100%		
2. The course/s the participant participated in encouraged him/her to ask questions, disagree, express opinions, etc.	100%		
3. There was always someone available from the university to answer your questions about the grant.	67%	33%	
4. The participant appeared to have renewed enthusiasm about special education after having participated in a course/s.	83%	17%	
5. The course/s has caused the participant to reflect on why they wanted to become a teacher.	67%	33%	
6. The course/s has caused the participant to reflect on the learning needs of individual students.	100%		
7. This course has given the participant insight into the attributes of effective teaching.	100%		
8. The course/s has provided the participant with a stimulus for growth as a leader in education.	100%		
9. The course/s has enabled the participant to plan for and to enhance the success of diverse learners.	100%		

In summary, with a shortage of special education teachers and the increased demands of government requirements for teachers, state departments must find ways to obtain highly qualified special educators (Brownell, Sindelar, Bishop, Langley, & Seo, 2002). The

collaboration of State Departments of Education with Institutions of Higher Education is a necessity for accomplishing this goal. The Virginia Department of Education has developed competitive grants for their Institutions of Higher Education to offer course work for special education teachers in a flexible format. Liberty University has provided a model for such programs in which it maintains the rigor of a graduate program while providing flexibility to meet the needs of a diverse workforce.

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