A Model for Examining Teacher Preparation Curricula for Inclusion

By Jewell E. Cooper, Stephanie Kurtts, Ceola Ross Baber, & Ada Vallecorsa

Jewell E. Cooper and Ceola Ross Baber are faculty in the Department of Curriculum and Instruction and Stephanie Kurtts and Ada Vallecorsa are faculty in the Department of Specialized Educational Studies at the University of North Carolina at Greensboro, Greensboro, North Carolina. Vallencorsa is the Associate Dean of Operations and at the time of the study Baber was an Associate Dean and Director of the Teachers' Academy.

There is an increasing need for highly qualified teachers as described by the current legislation in No Child Left Behind (2002). Since this legislative mandate has been enforced, recent initiatives have signaled teacher education programs to examine performance standards in demonstrating preparation of effective teachers for diverse learners. The total number of children with disabilities served over the past eight years has increased at an average of 3.4% each year (Katsiyannis, Zhang, & Conroy, 2003; U.S. Department of Education, 2003). With over 6,000,000 children receiving services across the country, the increased need for well-prepared teachers is critical. Data on increasing teacher shortages in special education (U.S. Department of Education, 2003; Veneri, 1999), as well as a number of studies have amplified various aspects of this dilemma, including causes and possible remedies (Billingsley, 2004; Boe, Cook, Bobbitt, & Terhanian, 1998; Brownell, Bishop, & Sindelar, 2005; Counterpoint, 1999; Menlove, Games, & Galzberg, 2004).

The issue of accountability for all children looms at the forefront. Related to this issue are the specific roles of teachers, the knowledge base for teaching, the nature of teaching, and the ways in which teaching should be assessed (Goos & Moni, 2001; Valli, Raths, & Rennert-Ariev, 2001). These fundamental dimensions may become even more significant when we examine competencies necessary for all teachers to develop effective teaching behaviors for working with children with special needs in inclusive learning environments (Council for Exceptional Children, 2004). With this in mind, the purpose of this paper is to share: (a) a process for creating an inclusion survey for teacher education faculty; (b) results from administration of this survey in one university setting; and (c) examples of how outcomes of the survey were used to assist teacher education faculty in their own preparation for ensuring that their students meet state and professional standards required for teaching students with disabilities.

Related Literature

The 2004 amendments to The Individuals with Disabilities in Education Act (IDEA) continue to challenge colleges of teacher education in the methods by which they prepare special education and general education teachers (Council for Exceptional Children, 2004; U.S. Department of Education, 2005). The amendments emphasize that children with disabilities must meet the same content standards as other students do, and special education teachers must know how to align curriculum, instruction, and assessment in ways similar to general education teachers. Similarly, general education teachers must become more cognizant of the special education curriculum and ways to implement it. Teacher education for general educators must present and assess knowledge and examples of differentiated instruction, then "promote the necessary individual adaptation methods and practice opportunities in these skills" (Shade & Stewart, 2001, p. 40).

While the inclusion of students with disabilities in the general classroom has been widely supported (Kamens, Loprete, & Slostad, 2000; Mastropieri & Scruggs, 2001) and the demand for inclusive educational settings has grown (Buell, Hallam, Gamel-McCormick, & Scheer, 1999; Thurlow, 2000; Yell & Katsiyannis, 2004), there is evidence to suggest that both inservice and preservice general education teachers do not believe they are completely prepared for the inclusion of students with identified disabilities (DeSimone & Parmar, 2006; Ford, Pugach, & Otis-Wilborn, 2001; Hamre, 2004; Pavri, 2004; Singh, 2002; Yellin, Yellin, Claypool, Mokhtari, Carr, Latiker, Risley, & Szabo, 2003). For example, Buell, Hallam, Gamel-Mc-Cormick, and Scheer (1999) found that special education teachers rated their ability to positively affect students, understanding of inclusion, self-efficacy in serving students in inclusion classrooms, need for continuing professional development and knowledge of resources to promote inclusion higher than general education teachers. The general education teachers in the study stated that they needed continuing

professional development in such areas as program modification, assessment of student progress, adaptation of the curriculum management of student behavior, development of Individualized Education Plans (IEPs) and utilization of assistive technology.

In their study of teacher candidates' beliefs regarding inclusive settings for students with mild disabilities, Garriott, Miller, and Snyder (2003) found that approximately half of the teacher candidates believed they had the ability to teach students with disabilities in regular classrooms. They also perceived that inclusive classroom settings would provide positive effects on the learning outcomes and self-esteem of students with disabilities. The other half, however, shared concerns about feeling unprepared for providing necessary individualized instructions and learning environments in regular classrooms where they must simultaneously teach other students. This can result in tensions or dilemmas between beliefs and actions because teachers' beliefs about their own knowledge and skills to effectively teach students with disabilities in regular classrooms can significantly influence various aspects of their teaching (Cook, 2002; Garriott, Miller, & Snyder, 2003).

Confusion regarding roles and responsibilities also arise when both general education and special education teachers hold different knowledge, beliefs, and philosophy about appropriateness of inclusive education for students with disabilities (DeSimone & Parmar, 2006; Klingner & Vaughn, 2002). While inclusion as a philosophy seems to have been widely welcomed, these changing roles and responsibilities of general and special education teachers as collaborative practitioners seem to have created conflicts in developing a mutual vision to effectively teach students with disabilities in inclusive settings.

Providing teacher candidates with knowledge and skills to meet the diverse needs of students through collaborative work thus becomes an essential component of teacher preparation programs (Hutchinson & Martin, 1999; Sindelar, Bishop, Brownell, Rosenberg, & Connelly, 2005; Yellin, Yellin, Claypool, et al., 2003). Indeed, this is a critical period for teacher candidates to take advantage of opportunities to engage in dialogues, exchange values, and share experiences and concerns through course work and teaching practices (Cook, 2002; Ford, Pugach, & Otis-Wilborn, 2001; Garriott, Miller, & Snyder, 2003; Kohler-Evans, 2006; Kurtts, Hibbard, & Levin, 2005; Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007).

Kozleski, Pugach, and Yinger (2002) have offered five recommendations to support a culture of evidence in an effort to better prepare general education teachers and special education teachers to work with students with disabilities. They are to:

(a) renew the teacher education curriculum to establish a shared language that supports the collaboration of general and special education teachers; (b) establish collaborative clinical experiences for general and special educators; (c) ensure competence of new teachers to work effectively with students with disabilities; (d) support of ongoing development of new teachers during their first 3 years of teaching and (e) establish a process for shared governance of teacher education

that reflects the collective responsibilities of teacher educators, content specialists, and practicing teachers. (p. 5)

Consistent with the true meaning and commitment of IDEA '97, these recommendations support and invite the collaboration of general and special education teachers to successfully educate all of the nation's P-12 children. This also applies to those who are preparing individuals who will teach these children. With this invitation and the recognition that all children deserve highly qualified teachers who have been well prepared to meet their diverse needs, and who can create the most equitable learning environments, it is imperative that *all* teacher educators assess their individual and collective teacher education practice, recognize where they can improve, and actively and intentionally do something about it.

Methodology

Context of the Study

This study examined how one teacher education program is attempting to meet the needs of the field by ensuring that graduates have the knowledge, skills, and competencies to teach students with disabilities in inclusive classroom settings. As such, faculty assessed how instruction in their teacher licensure courses assists in the development and implementation of inclusion competency areas and related key competencies (these are discussed in a later section).

Our university offers over 30 teacher education programs through several departments in the School of Education (SOE), College of Arts and Sciences (CAS), School of Health and Human Performance (HHP), School of Human Environmental Studies (HES), and School of Music (SOM). Two Departments in the SOE have responsibility for undergraduate and graduate teacher education. The Department of Curriculum and Instruction (CUI) offers programs in elementary and middle grades as well as initial and advanced licensure programs in secondary (9-12) content areas. The Department of Specialized Education Services (SES) offers undergraduate and graduate programs in special education. Birth-kindergarten as well as K-12 art, dance, health education, music education, physical education, and theatre are offered in departments in the aforementioned academic units outside of the SOE.

Development of the Survey

The initial conception of the survey developed in response to a need voiced by superintendents of our partnership school systems. The superintendents essentially stated that they would like to see general education teachers, as a whole, become more knowledgeable of and more skilled in strategies for teaching children who have been identified with learning differences as well as other struggling students. As a result, our SOE dean established the Inclusion Task Force to address this issue. Task force membership included representatives from (1) our teacher preparation programs, (2) the university's office of disability services, and (3) our professional development

school partners. In addition to these members, both of our SOE Associate Deans were members of the Task Force, with the Associate Dean of Operations who is also a professor in the SES Department serving as Chair. We developed an online survey with three purposes in mind. We wanted to know: (a) to what extent faculty were including key inclusion competencies in course content and assessment; (b) how faculty rated their own inclusion knowledge and skills; and (c) what resources faculty felt they needed in order to more effectively integrate inclusion across program area.

Prior to the first Inclusion Task Force meeting, the chairperson culled the literature on the preparation of general education teachers to meet the needs of exceptional children in regular classrooms. She also examined teaching standards as they related to teaching exceptional children from the following professional organizations: Council for Exceptional Children (CEC), the National Council for the Accreditation of Teacher Education (NCATE), the National Board of Professional Teaching Standards (NBPTS), and the state Department of Public Instruction (DPI). From her review, and in collaboration with Task Force members, she created five broad inclusion competency areas and twelve key competencies that should be addressed in teacher preparation programs. Three recognized national experts who were prominent in the field of exceptional children as professors, researchers, and authors in the area of inclusive classrooms, provided input on the selected competency areas. The Task Force distilled and revised the competency areas based on feedback from the experts. The resulting five inclusion competency areas are: (a) knowledge of children with disabilities; (b) effective instructional strategies to work with children with disabilities within and across disciplines; (c) appropriate classroom management skills and behavioral interventions; (d) methods of formal and informal assessment; and (e) effective communication and collaboration skills with families and other professionals. The twelve key competencies related to these five broad areas are listed in Table 1.

To further inform our process, two subcommittees composed of Task Force members were formed. One subcommittee was charged with creating more concrete descriptors for each competency area selected. For example, *legal requirements and issues*, the second key competency for general educators shown in Table 1, was further described as "legislation that mandates services for students with disabilities, such as the requirement that all children being served under IDEA must have an IEP." These descriptors could be electronically accessed as the respondents completed the online survey. The descriptors were reviewed and revised by the full Task Force. The subcommittee also created a rating scale and open-ended items to be included on the survey. The other subcommittee concerned itself with resource issues and researched models of best practice.

Data Collection and Analysis

Task Force members, in conjunction with staff from the Teachers Academy, our teacher education administrative and licensure arm, identified all of the required li-

Table I
Key Inclusion Topics or Competencies

Competencies for Special Educators	Competencies for General Educators
North Carolina standard course of study	I. Identification and placement procedures
Classroom organization and management practices	2. Legal requirements and issues
3. Collaborating with parents and professionals	3. Formal and informal assessment strategies
4. Adapting instruction for large/small groups	4. Procedures for IEP and IFSP development
5. Analyzing instructional contexts and methods	5. Instructional modification/ accommodation strategies
6. Statewide assessment policies/procedures	6. Responding to student behavior
7. Instructional methods for reading/language arts	7. Instructional methods for students with disabilities
8. Instructional methods for science, mathematics, and social studies	8. Transition issues and concerns
9. Patterns of human development/learning	9. Professional roles and responsibilities
10. Instructional resources for general education	10. Collaborating with parents and professionals
II. Evaluation methods for general education settings	II. Instructional resources and assistive technology
12. Student directed learning strategies for general education settings	

censure courses in core/subject areas. From there, we located as many instructors as possible who taught these courses during the previous two-year period. All sections and all faculty who taught the courses were included. With assistance from the Office of Institutional Research, personnel department, and professional contacts, we contacted as many of the instructors as possible via email. Faculty were notified of the survey, replete with directions, and its deadline for completion. As the deadline approached, reminder email messages were sent to faculty who had not completed the survey. In total, 242 surveys were sent to faculty. We achieved a 30% return rate.

There were three significant limitations in the execution of the survey that should be noted. Despite our heroic efforts, we did have problems locating some faculty (i.e., teaching assistants and lecturers). There had also been a change in the course numbers for a few courses. Finally, we could only provide a snapshot over a two-

year period. Changes and updates could have taken place in some of the courses. Furthermore, there was no response from some important classes; therefore, we did not have a full picture of what is actually happening in those particular courses. This paper is limited to the examination of the core courses of the following programs as examples of how results were reported for each program: Birth-Kindergarten, Elementary Education, and Secondary Education licensure courses. These courses are listed by program area in Table 2.

Table 2 Teacher Licensure Core Courses by Program Area

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Birth-Kindergarten-Initial (Special Education)
ELC 381 - The Institution of Education
HDF 211 – Life Span Development in the Human Environment
HDF 302 – Infant and Child Development in the Family
HDF 410 – Cultural Variations in Families and Children
HDF 41 I – Individual Variations in Child Development
HDF 425 – Infant and Toddler Programs: Foundations and Methods
HDF 435 – Preschool/Kindergarten Curriculum
HDF 441 - Young Children's Learning Environments
HDF 452 - Child Observation and Assessment
SES 240 – Communication Development in Children
SES 242 – Introduction to Exceptional Children: Early Years
SES 425 – Infant and Toddler Programs: Foundations and Methods
SES 435 – Preschool/Kindergarten Curriculum
SES 441 – Young Children's Learning Environments
SES 460 - Home-School Partnerships for Students with Exceptional Needs
                                    Elementary Education
CUI 250 - Teaching as a Profession
CUI 346 - Children's Literature and Instructional Media
CUI 350 - Internship I: Inquiry in Teaching and Learning
CUI 360 - Elementary Social Studies Education
CUI 370 - Science Education in the Elementary School
CUI 375 - Internship II: Inquiry in Teaching and Learning
CUI 400 - Internship III: Inquiry in Teaching and Learning
CUI 420 - Reading Education
CUI 46 I - Student Teaching and Seminar: Elementary Grades
ELC 381 - The Institution of Education
ESS 341 – Teaching Elementary School Physical Education
HDF 302 - Infant and Child Development in the Family
MUS 361 – Music for the Classroom Teaching
PSY 121 - General Psychology
                                     Secondary Education
CUI 450 - Psychological Foundations of Education
CUI 470 - Reading Education for Secondary and Special Subject Teachers
CUI 545 - Diverse Learners
ELC 381 - The Institution of Education
HEA 201 – Personal Health
PSY 121 - General Psychology
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The survey included both quantitative and qualitative feedback from faculty members. Quantitative data consisted of a Likert scale for responses addressing the extent to which faculty include the key inclusion topics or competencies in course content and the extent to which those topics or competencies are assessed. In addition, a rating scale was used to ask faculty to describe (a) their own knowledge and skill level to prepare licensure candidates to work with students with disabilities in general education settings and (b) the extent to which their own knowledge base and skill level reflect current best practices for effectively teaching students with disabilities in general education settings. Descriptive statistics were used to analyze these two sets of data.

For qualitative interpretation, the authors read and reread responses to the open-ended questions, seeking patterns or themes across the data set. Two authors paired up to do a content analysis of data targeted to meet the objectives of the study in order to confirm or disconfirm their partner's inductive interpretation of these data and compare their inductive interpretation (Mertens, 1998). For example, both of these authors recognized between 18 and 22 comments indicating that faculty desired more professional development on how to serve the educational needs of university teacher candidates in order to better prepare them for the student with disabilities who would need instructional accommodations. Next, lists of themes and patterns were noted in memos that were exchanged and subsequently discussed between researchers working with the same data sources. Reliability between these two authors addressing the themes and patterns emerging from the open-ended questions was over 90% agreement (Creswell & Plano Clark, 2007). The third and fourth authors audited and confirmed preliminary findings by comparing them to the patterns in the data used to answer the research question with over 95% agreement. Generalizations were determined through analysis, discussion, and further analysis in order to specifically identify the frequency of comments that supported the four emerging themes.

The categories that evolved from the analysis and emerged in further discussions by the authors were those that seemed to best describe the information from the open-ended questions (Creswell, 2007; Creswell, 2003). As such, the comments from the open-ended questions, resulting in identified themes, represented information that was interesting and informative to the authors as well as being potentially interesting to the School of Education faculty members and are addressed in our discussion of the results of our study (Creswell & Plano Clark, 2007).

Results

Survey

It is important to note that the results of each program's responses to the survey were meant to inform that specific program of the extent to which key competencies were addressed in content and assessment activities of the identified core

courses for those programs. Therefore, survey response outcomes were provided to department chairs and program coordinators and each of these individuals decided independently as to how they would use the information. Thus, these data were not aggregated across all of the teacher education programs offered at our university. We have provided sample survey results from these programs: Birth-Kindergarten (see Figures 1 and 2), Elementary Education (see Figures 3 and 4) and Secondary Education (see Figures 5 and 6). The first figure for each program indicates the extent to which the competencies are covered in course content while the second figure indicates the extent to which the competencies are addressed in course evaluation activities. Courses with the darkest shading had the most emphasis on the competencies being taught and the extent to which they were assessed; courses with the medium shading had the least emphasis. For example, the Birth-Kindergarten program appears to be addressing the key competencies to a greater extent than Elementary Education and Elementary Education seems to be addressing them to a greater extent than Secondary Education. All programs are addressing the key competencies to a greater extent in course content than in course evaluation activities. Data from the survey allow programs to determine where competencies are being adequately addressed, where areas of overlap occur, and which competencies are receiving limited coverage. Such information can serve as an effective tool for guiding specific program changes and needs.

Rating Scale

The data from the rating scale were used to help us determine the faculty perceptions of their own knowledge and skill level as related to preparing teacher candidates to work with students with disabilities in general education settings and how well that knowledge base and skill level reflects current best practices. These results are shown in Table 3. Across the respondents from general education and special education faculty, over 38% describe themselves as either having a "fairly extensive or excellent" knowledge and skill base for preparing teacher candidates to work with students with disabilities in general education settings, while 25.4% described themselves as "generally adequate." Approximately 37% of the faculty surveyed described their knowledge and skill base for preparing teacher candidates to work with students with disabilities in general education settings as "somewhat or extremely limited."

In response to the item asking to what extent faculty knowledge base and skill level reflected current best practice in teaching students with disabilities in general education classrooms, over 55% of respondents felt their knowledge and skills "fairly or extremely well" reflected best practices and 18% of faculty felt their knowledge and skill base "somewhat" reflected best practice. Approximately 26% of faculty reported that their knowledge base and skill level reflected current best practices for teaching students with disabilities in general education classrooms either very little or not at all.

SES 460 Inclusion Competency Survey: Knowledge and Skill Areas for Special Educators Core Courses for Birth-Kindergarten SE S 441 SE S 435 SE S 245 SE S 242 SE S 240 Figure 1. Inclusion Competency Survey: Birth-Kindergartten—Initial (Special Educators) Extent to which Topic is Emphasized in Course Content HDF 452 HDF 441 HDF 435 HDF 425 HDF 411 HDF 410 HDF 302 HDF 211 Moderate coverage (1.5-3.49) EL C 381 Extensive coverage (>3.5) Limited coverage (0-1.49) 12. Student directed learning strategies for general education 2. Classroom organization and Collaborating with parents 10. Instructional resources for 7. Instructional methods for 8. Instructional methods for 1. North Carolina standard 11. Evaluation methods for 4. Adapting instruction for 5. Analyzing instructional science, mathematics, and general education settings 6. Statewide assessment management practices contexts and methods Patterns of human development/learning Key Inclusion Topic reading/language arts policies/procedures large/small groups general education and professionals course of study social studies settings

Figure 2 Inclusion Competency Survey Birth-Kindergartten—Initial (Special Educators)

rigure 2. Inclusion Competency Survey: Birth-Kindergartten—Initial (Special Educators) Inclusion Competency Survey: Knowledge and Skill Areas for Special Educators Core Courses for Birth-Kindergarten	tency Survey	Surve) 7: Knov	r: Birth vledge	-Kinde and Sk	irgartte cill Area	en—In as for (itial (Sp Special	ecial b Educa	ducate tors C	ors)	ourses	for Bi	rth-Kir	ndergai	rten
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K av Inclusion Tonic	ELC 381	HDF 211	HDF 302	HDF 410	HDF 411	HDF 425	HDF 435	HDF	HDF 452	SES	SES	SES 425	SES 435	SES 441	SES
1. North Carolina standard	-		200	2		67	2	Ē	201	24.7	71.7	77.	P.		2
2. Classroom organization and														П	
3. Collaborating with parents					ı				Г						
4. Adapting instruction for															
large/small groups									Ī						
5. A nalyzing instructional contexts and methods															
6. Statewide assessment															
policies/procedures															
7. Instructional methods for															
reading/language arts															
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science, mathematics, and															
social studies															
9. Patterns of human development/learning															
10. Instructional resources for															
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general education settings									Ī						
12. Student directed learning															
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Limited coverage (0-1.49))-1.49)														
M oderate coverage (1.5-3.49)	(1.5-3.49	•													
Extensive coverage (>3.5)	(>3.5)														

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Figure 3. Inclusion Competency Survey: Elementary Education—Initial (General Educators) Inclusion Competency Survey: Knowledge and Skill Areas for General Educators Core Courses for Elementary Education

ntent	CUI ELC ESS HDF MUS PSY 461 381 341 302 361 121											
onr se C	CUI 420											
og In C	CUI 400											
phasize	CUI 375											
isem	CUI 370											
n Topic	CUI 360											
o whic	CUI 350											
Extent to which Topic is Emphasized in Course Content	CUI 346											
ш	CUI 250											
	K ey Inclusion Topic	 Identification and placement procedures 	2. Legal requirements and issues	3. Formal and informal assessment strategies	4. Procedures for IEP and IFSP development	5. Instructional modification/ accommodation strategies	6. Responding to student behavior	7. Instructional methods for students with disabilities	8. Transition issues and concerns	Professional roles and responsibilities	10. Collaborating with parents and professionals	11. Instructional resources and assistive technology

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L imited coverage (0-1.49) Moderate coverage (1.5-3.49)

Extensive coverage (>3.5)

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Figure 4. Inclusion Competency Survey: Elementary Education—Initial (General Educators) Inclusion Competency Survey: Knowledge and Skill Areas for General Educators Core Courses for Elementary Education	ncy Sur ⁄ey: Kno	vey: Ele wledge	ementa and SI	ry Educ cill Area	cation– as for (—Initia Genera	l (Gene	eral Edu ators C	acators ore Co	s) ourses	for Ele	mental	ry Educ	ation
	Extent	to whic	th Topi	Extent to which Topic is Addressed in Course Evaluation Activities	dressed	in Cou	ır se E v	aluatior	ι Activi	ties				
K ey Inclusion Topic	CUI 250	CUI 346	CUI 350	360 360	CUI 370	CUI 375	CUI 400	CUI 420	CUI 461	ELC 381	ESS 341	H DF 302	MUS 361	PSY 121
 Identification and placement procedures 														
2. Legal requirements and issues														
3. Formal and informal assessment strategies														
4. Procedures for IEP and IFSP development														
5. Instructional modification/ accommodation strategies														
6. Responding to student behavior														
7. Instructional methods for students with disabilities														
8. Transition issues and concerns														
Professional roles and responsibilities														
10. Collaborating with parents and professionals														
11. Instructional resources and assistive technology														

Limited coverage (0-1.49) Moderate coverage (1.5-3.49) Extensive coverage (>3.5)

Figure 5. Inclusion Competency Survey: Secondary Education—Initial Inclusion Competency Survey: Knowledge and Skill Areas for General Educators Core Courses for Secondary Education	Education— III Areas for	–Initial General Edu	cators Core	Courses fo	r Secondary	Education
Extent to which Topic is Emphasized in Course Content	Popic is Emp	ohasized in C	our se Conte	ent	-	
K ey Inclusion T opic	CUI 450	CUI 470	CUI 545	ELC 381	HEA 201	PSY 121
1. Identification and placement procedures						
2. Legal requirements and issues						
3. Formal and informal assessment strategies						
4. Procedures for IEP and IFSP development						
5. Instructional modification/accommodation strategies						
6. Responding to student behavior						
7. Instructional methods for students with disabilities						
8. Transition issues and concerns						
9. Professional roles and responsibilities						
10. Collaborating with parents and professionals						
11. Instructional resources and assistive technology						

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Limited coverage (0-1.49)

Moderate coverage (1.5-3.49)

Extensive coverage (>3.5)

Note: Does not include subject-specific courses

Figure 6. Inclusion Competency Survey: Secondary Education—Initial Inclusion Competency Survey: Knowledge and Skill Areas for General Educators Core Courses for Secondary Education	y Education- kill Areas for	—Initial General Ed	ucators Cor	e Courses fc	or Secondary	Education
Extent to which Topic is Addressed in Course Evaluation Activities	is Addresse	d in Course l	Evaluation A	ctivities		
K ey Inclusion T opic	CUI 450	CUI 470	CUI 545	ELC 381	HEA 201	PSY 121
Identification and placement procedures						
2. Legal requirements and issues						
3. Formal and informal assessment strategies						
4. Procedures for IEP and IFSP development						
5. Instructional modification/ accommodation strategies						
6. Responding to student behavior						
7. Instructional methods for students with disabilities						
8. Transition issues and concerns						
9. Professional roles and responsibilities						
10. Collaborating with parents and professionals						
11. Instructional resources and assistive technology						

Extensive coverage (>3.5)

Note: Does not include subject-specific courses L imited coverage (0-1.49) M oderate coverage (1.5-3.49)

Table 3 Faculty Rating Scale

Item I

Please describe your own knowledge and skill level relative to preparing licensure candidates to work with students with disabilities in general education settings.

Skill Level	Ν	PCT (%)
Extremely Limited	7	9.9%
Somewhat Limited	19	26.8%
Generally Adequate	18	25.4%
Fairly Extensive	21	29.6%
Excellent	6	8.5%
TOTAL	71	100%

Item 2

To what extent do you feel your knowledge base and skill level reflect current best practices for effectively teaching students with disabilities within general education settings?

Skill Level	Ν	PCT (%)
Not at All	4	5.6%
Very Little	15	20.8%
Somewhat	13	18.1%
Fairly Well	25	34.7%
Extremely Well	15	20.8%
TOTAL	72	100%

Open-ended Questionnaire

The open-ended questionnaire addressed the types of training and experiences that would assist faculty in better preparing their teacher candidates to meet the needs of students with disabilities in general education settings. Content analysis of responses identified four emerging themes.

The first theme to emerge was the opportunity to seek funding to assist faculty in acquiring or developing knowledge and skills needed to prepare their teacher candidates to effectively meet the needs of students with disabilities in general education settings. The next theme to become apparent was how information concerning knowledge and skills needed to prepare their teacher candidates to effectively meet the needs of students with disabilities in general education settings could be clearly defined and connected to professional standards.

The third theme to surface was how to create collaborative professional development activities between teacher education faculty across disciplines. Finally, the identification of university-wide resources for addressing inclusive education practices was the last theme to emerge.

Funding for the development of faculty knowledge and skills. The first theme appeared to address faculty concerns about funding available for staff development in acquiring knowledge and skills for current and best practices in teaching students with disabilities in general education classrooms. Eighteen comments out of 45 specifically addressed the need for funding for faculty development. Faculty commented on opportunities to attend professional special education conferences, campus-wide workshops bringing in regionally and nationally recognized professionals in the field of special education, and course releases to work in the field with their own students in inclusive classrooms. As one faculty member suggested,

I would like to have the time to spend with teachers in the 'real world' who are successfully integrating children with disabilities in their general education class-rooms. To do this would require available funds to allow me a course release-at this point my department would need some type of external funds to allow this experience to happen for me.

Connections to professional standards. The issue of meeting diverse learner needs and how to prepare teacher candidates to differentiate instruction continues to be an important professional standard for both general education and special education teachers. Faculty identified this issue in 16 comments. Faculty must be able to align the learning outcomes, or student objectives, of their teacher preparation courses to professional standards that are part of state and national accreditation boards. Assessing how teacher candidates will be prepared to meet these standards was reflected in several faculty comments. One comment was as follows:

...if faculty were more familiar with how to clearly connect the assignments and projects in their courses to reflect competency in meeting diverse learner needs, which would certainly include students with disabilities, these competencies would be assessed more frequently and possibly carry more weight. NCATE (National Council for Accreditation of Teacher Education) assessment procedures are requiring us to do this anyway-hopefully communication with other faculty across disciplines will help us with these decisions concerning our students and how they are prepared to work with children with disabilities.

Collaborative professional development activities. This recurring theme stood out in almost a third of the faculty responses. Many faculty expressed that their knowledge and skills pertaining to teaching students with disabilities in general education classrooms was limited and they would invite the opportunity to work with others to increase their own knowledge and skills. The survey indicated this concern as well. One faculty member's comment reflected this theme.

The School of Education needs structured interactions between CUI (Curriculum and Instruction) and SES (Specialized Education Services) faculty members to create a preservice program that prepares elementary as well as sped. (special education) majors for their shared responsibilities. Then we could tackle middle grades, high school (secondary), and K-12 programs. For example, at (a field-based

site) ...preservice elementary and sped. teachers co-teach in their practicum site so that they understand this service delivery model.

This concern was similarly addressed by another faculty member:

If this is a School of Education priority (and it should be), then we should have a collaborative project in which several faculty and a school(s) are working together to make it come to fruition. Perhaps an inclusive PDS (professional development school) needs to be developed—and an inclusive PDS team that is not just SES majors.

Identification of university-wide resources. This theme was reflected in over one-fourth of the 45 specific comments of faculty. Faculty were concerned with what resources were available on campus, such as assistance with the use of assistive technology tools and instructional materials that could be accessed to teach teacher candidates how to adapt instruction for students with disabilities. As one faculty member commented,

I would benefit greatly from knowing where resources are such as copies of IEPs to use as examples and examples of modified lessons for students with particular disabilities. Information on universal design and training in the various adaptive devices for using technology with students with specific disabilities would be helpful.

Discussion

The importance of preparing highly qualified teachers for diverse and inclusive classrooms continues to be of critical importance to teacher education faculty. The use of our survey has provided the faculty in our teacher education programs with valuable information to help them assess what they are doing to prepare both preservice special and general education teachers for teaching students with disabilities. The survey serves as a vehicle for learning where specific changes may be needed within programs. By sharing the outcomes of the survey with our Council of Program Coordinators, individuals who oversee all program licensure areas on our campus, faculty were able to discuss their areas of strengths and needs to improve program delivery for to teaching diverse learners. They were also able to identify their own professional development needs in order to accomplish this goal.

The critical need for funding to provide faculty professional development opportunities and the needed materials and resources to assist them as they develop their own skills and competencies as teacher educators in meeting the educational needs of children with disabilities has been at the forefront of several School of Education initiatives. For example, a School of Education collaborative effort has resulted in a \$500,000.00 U.S. Department of Education grant to the Departments of Curriculum and Instruction and Specialized Education Services to improve both programs' teacher education activities in meeting the educational needs of students with disabilities. While we are in the first year of planning for program improvement with this grant, we have already enhanced course delivery in our early field

experiences and the accompanying seminar by providing a co-teaching model in which general and special education faculty provide supervision and instruction. In addition, we have planned for staff development opportunities to improve a secondary education professional development school initiative that includes an interdisciplinary approach to teacher preparation and collaborative practice. This project will ensure that both teacher candidates and teacher educators will benefit from the funding. Outcomes from our survey were used to support our grant proposal.

Another important aspect of the self-assessment survey is how the information gained can help teacher education faculty align the assignments and projects they have teacher candidates create with professional standards. Most if not all accreditation organizations, both at the national and state levels, require documentation that specific standards on teaching diverse student populations and differentiating instruction to meet individualized student needs are demonstrated. By providing faculty the opportunity to examine competencies needed to document identified standards, there are more opportunities to ensure successful accreditation by nationally recognized organizations.

Outcomes from the self-assessment survey showed that faculty welcome collaborative professional development activities. Collaboration between general education and special education faculty results in shared resources and can provide education faculty opportunities to engage in dialogue about how different disciplines can ensure their teacher candidates are prepared for increasingly diverse student populations. For example, our teacher education program has now created a dual major in elementary education and special education. This is an excellent opportunity for faculty in these areas to collaboratively provide the knowledge and skills that will enable our teacher candidates implementing instruction that ensures the success of *all* students in inclusive classrooms. Similarly, outcomes from the self-assessment survey suggested we needed to reconsider how our secondary teacher candidates will receive the information they need to successfully implement inclusive practice. The response to this concern has been the creation of a secondary interdisciplinary professional development school model. Content area teacher candidates, social work interns, school counseling interns, and principal interns, as well as other teacher licensure program interns will be completing field-based experiences together, along with their internship supervisors, at a new high school. In addition, teacher education faculty are providing staff development activities for the teams of both inservice and preservice professionals at the high school.

As university teacher education programs are able to identify resources that can assist faculty in integrating content into methods courses addressing inclusive practice and differentiation of instruction, there is greater opportunity for faculty to increase their own knowledge and expertise. Resources are critical to improve faculty skills and knowledge relative to effective instruction for students with disabilities, as was clearly indicated by faculty comments. Outcomes from the self-assessment survey provided the impetus for development of an assistive technology classroom

where staff and faculty can be trained to use tools and devices to accommodate the diverse educational needs of all students. The assistive technology classroom has provided many staff development opportunities for our teacher educators.

Although our study had limitations in terms of being a self-assessment of core courses in teacher education programs at one university and the findings can not be generalized, the process used to develop and implement the survey can be applied in other settings to provide valuable insights for faculty in other teacher education programs. In our case, outcomes from the self-assessment survey led to specific program changes and improvements. Use of a similar self-assessment process elsewhere can be an equally valuable tool to guide program planning and ensuring that programs provide a meaningful experience for teacher education students. By (a) interpreting the use of the inclusion survey findings to faculty, (b) explaining how competencies identified in the inclusion survey are represented throughout methods coursework, and (c) identifying key resources needed to implement teacher preparation for inclusive practice, teacher education faculty can be assisted in their pursuit to prepare both general and special education teachers for effectively teaching in inclusive classrooms.

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