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Kirk Swortzel: [kswortzel@ais.msstate.edu](mailto:kswortzel@ais.msstate.edu)

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## TEACHER PREPARATION FOR DIVERSITY: A NATIONAL STUDY OF CERTIFICATION REQUIREMENTS

**Karen H. Jones**

and

**Rhonda S. Black**

**The University of Georgia**

### Abstract

This study examines state certification requirements for regular and vocational teachers regarding students with disabilities, disadvantages, and multicultural backgrounds. Certification offices of the Department of Education of every state and the District of Columbia responded. In addition, the perceptions of State Vocational Special Needs Supervisors toward these certification requirements, and their states' methods of support for vocational teachers are reported. Discussion and conclusions are presented.

### TEACHER PREPARATION FOR DIVERSITY: A NATIONAL STUDY OF CERTIFICATION REQUIREMENTS

National thinking, exemplified by legislation, has changed to reflect the need for equal accessibility to educational programs for students from special populations. As a result, vocational and regular education teachers are seeing increasing numbers of students with special needs in their classrooms. Special needs students include those students with disabilities, disadvantages and minority backgrounds. "Minority youth are considered a special population group, not because of their skin color or religious affiliation or cultural beliefs, but rather because of the lack of opportunities and support historically made available to them" (Rojewski & Miller, 1991, p. 25).

Demographic changes are affecting the current and future student population. Nearly one of every five children under the age of 18 lives in poverty (Leidenfrost, 1993) and by the year 2001, half of *all* children will have spent a portion of their childhood living in poverty (Conference Board, 1987). Thirty percent of students in grades K to 12 are educationally disadvantaged due to poverty, cultural obstacles, or linguistic barriers (Apolloni, Feichtner, & West, 1991). Approximately 10 percent of children in school have been diagnosed with a disability which requires special education services (Maddy-Bernstein & Rojewski, 1992). In fact, the number of students with special needs in the general school population is greater than at any time in our nation's history (Maddy-Bernstein & Rojewski, 1992).

What does this mean for the educator? It means that regular and vocational teachers are going to have students with very diverse learning needs in their classrooms. For example, seventy percent of students with disabilities will spend a substantial part of the school day in a regular classroom (Lakin & Reynolds, 1983; Ysseldyke & Algozzine 1990). Seventy-eight percent of students with disabilities who took vocational courses in their most recent school year took at least one of those courses in a regular education setting (Wagner, 1991). Students with disadvantages, disabilities, and limited English proficiency represent 20% of the students enrolled in vocational education (Phelps & Johnson, 1991).

Several authors have reported the need for vocational and regular educators to receive more practical experience and information about students with special needs in their preservice training programs (Crisci, 1981; Eagle, Choy, Hoachlander, Stoddard, & Tuma, 1987; Sarkees & West, 1990; Vier, 1990). According to Retish and Greenan (1991), regular education teachers "indicate that they have neither the time nor the skills to teach mainstreamed special needs students" (p. 29). Too often, regular education teachers lack knowledge and skills to meet the needs of students from special populations due to a lack of training in specific intervention strategies during their preservice coursework (Wood, 1989). This is also true for vocational teachers.

Vocational education personnel generally prepare to work with students *without* disabilities, and insufficient emphasis is given to training in strategies to enhance the successful inclusion of students *with* disabilities (Okolo & Sitlington, 1988; Sarkees & West, 1990; Vier, 1990). In one study, vocational educators stated that their preservice training was inadequate with regards to teaching students with special learning needs (Rojewski, 1990). According to HingMcGowan (1994), vocational teachers feel overwhelmed by the diversity of their students and feel unprepared to address that diversity.

Reports such as these indicate that, historically, teachers have *not* been adequately prepared to work with students with disabilities, disadvantages, or multicultural backgrounds in their classrooms. According to Dirx, Spurgin, Lavin, and Holder (1993), the two topics perceived to be least understood by all vocational content area teachers are (a) the needs of special populations, and (b) multicultural education. University teacher education programs and state certification departments must consider research findings and collaborate to develop better preservice programs in these areas. Garibaldi (1992) stated "the professional preparation of preservice teachers must include additional academic knowledge related to diversity and multicultural contexts that can be incorporated into their professional education curricula" (p. 24).

The above literature illustrates that the student population is becoming more diverse (including students with disabilities, disadvantages, and multicultural backgrounds) and that teachers do not feel prepared to address that diversity. Therefore, the purpose of this study was to determine: (a) the certification requirements in each state for regular and vocational teachers regarding students with disabilities, disadvantages, and multicultural backgrounds, and (b) the perceptions of state vocational special needs supervisors concerning the adequacy of their state's certification requirements.

## **Method and Results**

Two separate questionnaires were developed to address the research questions. The questionnaires were sent to each state and the District of Columbia following a panel review to establish validity.

### **Questionnaire 1**

The first questionnaire, regarding regular and vocational teacher certification requirements, was sent to the certification division of each department of education. With one additional mailing and several followup telephone calls, a 100% response rate was achieved (N=51). Responses were checked against two documents to establish their reliability ([NASDTEC Manual, 1991](#); [Tryneski, 1993-1994](#)).

Results indicated that 23 states required regular educators to take one or more classes on the needs of exceptional students, while only 21 of the states required the same from vocational educators. (Note: The District of Columbia is treated as a state.) Most states did not require a *specific* course in the needs of students with exceptionalities, disadvantages, or multicultural backgrounds. However, many respondents stated that these topics were included in the general teacher education curriculum at state approved colleges/universities. Information concerning the amount of time devoted to these topics or how adequately these topics are covered was not provided. Please refer to Table 1 for the number of states and types of certification requirements.

**Table 1. CERTIFICATION REQUIREMENTS OF REGULAR AND VOCATIONAL SECONDARY EDUCATORS REGARDING PREPARATION FOR TEACHING:**

	# OF STATES REQUIRING SKILL OR COMPETENCY TEST ONLY	# OF STATES REQUIRING ONE COMPLETE COURSE AT AN APPROVED COLLEGE OR UNIVERSITY IN THIS TOPIC	# OF STATES REQUIRING MORE THAN ONE COURSE	# OF STATES REQUIRING NO SPECIFIC COURSE*	# OF STATES WITH OTHER REQUIREMENTS
<b>EXCEPTIONAL STUDENTS</b>					
Regular	7 (14%)	21 (41%)	2 (4%)	21 (41%)	2 - Additional Inservice
Vocational	5 (10%)	19 (37%)	2 (4%)	24 (47%)	2 - Additional Inservice 1 - Inservice Only (2%)
<b>DISADVANTAGED/AT-RISK STUDENTS</b>					
Regular	7 (14%)	8 1, 2 (16%)	0	34 (66%)	1 - Inservice (2%) 1 - Field Experience (2%)
Vocational	5 (10%)	9 3, 4 (18%)	0	35 (68%)	1 - Field Experience (2%) 1 - Inservice (2%)
<b>MULTICULTURAL STUDENTS</b>					
Regular	7 (14%)	15 1, 5 (29%)	1 (2%)	27 (53%)	1 - Field Experience (2%)
Vocational	5 (10%)	15 3, 6 (29%)	1 (2%)	29 (57%)	1 - Field Experience

\*NOTE: MOST STATES RESPONDED THAT THE TOPIC IS COVERED IN THE GENERAL UNIVERSITY TEACHER PREPARATION PROGRAMS IN THEIR STATE.

1. 7 states require one complete course that addresses the needs of exceptional, disadvantaged/at risk, and multicultural students.
2. Only one state required a separate course to address the needs of disadvantaged/at-risk students.
3. 6 states require one complete course that addresses the needs of exceptional, disadvantaged/at-risk, and multicultural students.
4. Three states required a separate course to address the needs of disadvantaged/at-risk students.
5. Eight states required a separate course to address the needs of multicultural students.
6. Nine states required a separate course to address the needs of multicultural students.

**Total 51 States - including Washington, D.C.**

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## Questionnaire 2

The second questionnaire was sent to each state's vocational special needs supervisor to determine their perceptions concerning the adequacy of certification requirements and the type of support offered to vocational teachers. Thirty-seven of 51 surveys were returned after one followup mailing for a 72.5% return rate. Late responses were not substantially different from early responses. Therefore, nonresponse does not appear to seriously compromise the results of this study.

Vocational special needs supervisors were asked to respond to seven questions concerning their perceptions of certification requirements for vocational educators in their state, and the types of support offered their vocational teachers. Space was provided for comments or suggestions to each question. Due to the open-ended nature of this questionnaire, responses were coded verbatim and then analyzed for themes. For discussion purposes, each question will be presented followed by a summary of the responses. Selected suggestions for improvement provided by the respondents for each question are located in Table 2.

### **Question #1**

From your position at the Department of Education, do you perceive that certification requirements for vocational educators in your state adequately prepares teachers to work successfully with students with *exceptionalities*?

Seventy-eight percent (n=29) of the respondents indicated that the certification requirements in their states are *not* adequate in this area. Nineteen percent (n=7) stated the requirements are adequate, and three percent (n=1) were undecided. A respondent from one state commented "only a general exceptional students course is required and administrators and vocational teachers are exempt." Other comments included: "vocational instructors are ill-prepared to handle special populations with disabilities," and "vocational education instructors are in the best possible position to assist learning disabled and mild to moderate students with disabilities."

### **Question #2**

From your position at the Department of Education, do you perceive that certification requirements for vocational educators in your state adequately prepares teachers to work successfully with students who are *disadvantaged or at-risk for school failure*?

Seventy-three percent (n=27) of the supervisors did *not* perceive the certification requirements to

be adequate. Five respondents (13.5%) indicated the requirements are adequate, and 5 (13.5%) were undecided. One supervisor commented that "teachers only have preparation if they have a desire or saw a need for some preparation."

### Question #3

From your position at the Department of Education, do you perceive that certification requirements for vocational educators in your state adequately prepares teachers to work successfully with students with *multicultural backgrounds*?

Sixty-five percent (n=24) of the supervisors responded that the requirements are not adequate. Sixteen percent (n=6) responded that the requirements are adequate, and 19% (n=7) were undecided. Two state supervisors commented that it does not present a problem because "there are not many multicultural areas" in their states. Two supervisors described their specific requirements, and another supervisor stated "only if an interest exists do teachers have preparation."

### Question #4

What kind of support is offered to *first year* vocational teachers?

Seventy-eight percent (n=29) of the respondents cited inservice as the support system most frequently utilized. Thirty percent (n=11) offer mentoring as a form of support to first year teachers, and 24% (n=9) provide support through teacher induction programs. The categories of "teacher assistance teams" and "other" were both cited by 11% (n=4) of the supervisors as a method of supporting teachers in their first year. (Note: these choices are not mutually exclusive, thus equalling more than 100%.) Many of the supervisors stated that the amount and type of support depends on the local districts. In general, There tends to be very limited support available for most first year teachers.

### Question #5

What kind of support is offered to *all* vocational teachers?

Twenty-four of the 37 respondents (65%) cited inservice as a method of support to vocational teachers in their state. Respondents also mentioned statewide conferences, professional organizations, workshops, staff development programs and newsletters as methods of supporting vocational teachers. Several states offer technical assistance through consultants and/or state department personnel. One state offers extensive assistance through team teaching, visits to other schools, and in-house visits to each other's classrooms and laboratories. Another state uses cross-training with academic teachers, summer institutes, mentoring, and teacher support teams.

### Question #6

What kind of continuing education is offered to vocational teachers?

The majority (89%) of the supervisors stated workshops as the type of continuing education most often offered to vocational teachers. Seventyeight percent (n=29) of the supervisors cited local district inservice; 24% (n=9) stated that financial assistance is provided for vocational teachers to take university courses; and 27% (n=10) said their states offer "other" continuing education to vocational teachers. (These figures are also not mutually exclusive.) One state did

mention grants for group efforts and another mentioned "joint meetings with counselors and special needs personnel at the local level."

## Question #7

Describe in your own words the type of support that is offered to vocational teachers regarding students with special needs.

Nineteen (51%) stated inservice in their responses, although some replied that the inservice is limited. Other types of support reported were: staff development activities, workshops, cooperation with special education personnel, and classroom aides.

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## TABLE 2. SELECTED SUGGESTIONS FOR IMPROVEMENT

### QUESTION 1

*From your position at the Department of Education, do you perceive that the certification requirements for vocational educators in your state adequately prepares teachers to successfully work with students with **exceptionalities**?*

Two general themes emerged. First, that specific courses should be required with teaching strategies and techniques included. Second, that more practical experience is needed. Comments included:

- Only a general exceptional students course is required and administrators and vocational teachers are exempt.
- Vocational instructors are ill prepared to handle special populations with disabilities.
- Vocational education instructors are in the best possible position to assist learning disabled and mild to moderate students with disabilities.

Some specific suggestions include:

- Practical experience is needed for teachers who work with handicapped, disadvantaged, and LEP students. Additional course work without practical experience is of limited value.
- Increased emphasis on alternative teaching methods (co-teaching, peer tutoring, collaboration.)

Courses should include teaching strategies, etc. beyond lecture type.

- For college preparation, vocational instructors need to take classes in special education and especially information on inclusion & partnerships with vocational education and special education.

Competence in learning styles, state/federal laws, how to make reasonable accommodations.

- All teacher education programs need to provide more real, hands-on information and techniques on working with exceptional students.
- Additional course work without practical experience is of limited value.

### QUESTION 2

*From your position at the Department of Education, do you perceive that the certification requirements for vocational educators in your state adequately prepares teachers to successfully work with students who are **disadvantaged and at-risk** for school failure?*

The general theme was that vocational teachers would benefit from practical experiences such as

internship and practicum settings that prepare them for teaching students who have disadvantages and who are at-risk for school failure. Comments include:

- The teachers only have preparation if they have a desire or saw a need for some preparation.

Some specific suggestions include:

- Have a resource document on working with disadvantaged and at-risk students.
- Students need to have internships in vocational programs, particularly where there are "heavy" numbers of disadvantaged/high risk students.
- Classes on integrated services, what services are available, how to work with other agencies.
- The current pre-service & inservice training is too limited. Vocational Education teachers need intensive training in order to meet the diverse needs of this population.
- Teachers who choose to work with disadvantaged and at-risk students should complete a time block of student teacher with at-risk students before certification.

### QUESTION 3

*From your position at the Department of Education, do you perceive that the certification requirements for vocational educators in your state adequately prepares teachers to successfully work with students with **multicultural** backgrounds?*

The general theme was that more preparation and more practical experience is needed in this area. Two state supervisors commented that it does not present a problem because "there are not many multicultural areas" in their states. Two supervisors described their specific requirements for certification in their states which include specific multicultural classes. One supervisor "only if an interest exists do teachers have preparation."

Specific recommendations are as follows:

- A specific course needs to be implemented.
- Should have a mandatory 6 credit requirement.
- More time needs to be spent with economically and academically disadvantaged minority students.
- Provide courses on cross cultural strategies and multicultural studies in the university curricula.
- The needs of multicultural students and how to effectively meet those needs is barely addressed if at all at the present time.
- Thematic approach could be incorporated into the instructional program to prepare teachers for multicultural students.

### QUESTION 4

*What kind of support is offered to your **first year** vocational teachers?*

Induction	9	24%
Mentoring	11	30%
Inservice	29	78%
Teacher Assistance Teams	4	11%
Other	4	11%

[Not mutually exclusive]

Many of the supervisors stated that the amount and kind of support depends on the local districts, but that there tends to be very limited support available for most first year teachers.

Other Comments:

- Stipend to attend state meetings, state department has provided grant money to work with first year teachers.
- New Teacher Institute
- Internship with resource teacher in local district and university person (i.e. teacher education).
- Induction program if the teacher is an alternate route teacher.
- Lead teachers provide professional assistance.

QUESTION 5

*What kind of support is offered to **all** your vocational teachers?*

- Inservice mentioned by 24 (64%) of the respondents
- Technical assistance and conferences each mentioned by 7 of the respondents.
- Professional organizations mentioned by 4.
- Workshops mentioned by 3.
- Staff development activities mentioned by 2.
- Newsletter mentioned by 1.

State-wide conferences, professional organizations, workshops, staff development programs and newsletters were also mentioned as methods of supporting vocational teachers. Several states offer technical assistance through consultants and/or state department personnel.

- One state offers extensive assistance through team teaching, visits to other schools, and in-house visits to each other's classrooms and laboratories.
- Another state uses cross-training with academic teachers, summer institutes, mentoring, and teacher support teams.

Additional support systems mentioned were:

- Curriculum documents and educational materials.
- State/federal/local funds for preservice/inservice programs; team teaching; visits to other schools and their programs; and "in-house" visits to each other's classrooms and laboratories; also consultant expertise.
- The professional association plays the most important role in a support system. State staff cuts have left less than one program specialist per area, therefore support from us is very limited.
- Cross-training with academic teachers, summer institutes, mentoring, and teacher support teams.

QUESTION 6

*What kind of continuing education is offered to your vocational teachers?*

District Inservice	29 78%
Financial Assistance for University Classes	9 24%
Workshops	33 89%
Other	10 27%

[Not mutually exclusive]

One state did mention grants for group efforts and another mentioned "joint meetings with counselors and special needs personnel at the local level."

Other comments:

- Advanced degree programs with financial assistance.
- Grants for group efforts.
- Reduced cost per credit hour.
- State conferences for credit.

## QUESTION 7

*Describe in your own words the type of support that is offered to your vocational teachers regarding special needs students.*

Eighteen responses included inservice, several mentioned staff development, workshops, and technical assistance. Other selected responses include:

- Voc. Rehab and special education work cooperatively with vocational teachers at the local level.
- The state offers the following types of support for vocational teachers: counseling, guidance, member of IEP teams and multidisciplinary teams, employer assistance in school and on-the-job, consultants, funds for attending conferences, workshops, inservice and preservice programs, four courses for special/vocational education certification, and trips to out-of-state facilities and programs.
- Some districts have implemented the cooperative consultation model for special education students.
- Since the advent of the Carl Perkins II law, we have provided schools with part-time teachers who go into the voc-ed classroom to help S.P. students.
- A technical assistance guide for addressing the equal access and program planning assurances required in Perkins was developed & disseminated. A ESL Institute for career and technical education personnel is conducted in August. (Curricular modifications for career and tech. ed. students.)
- Statewide workshops on Transition Services, using the team concept. This team will provide training in their local school division transition services.
- Special grants are let and special targeted efforts are funded to work w/ special population students.

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## Discussion and Conclusions

Results suggested that vocational special needs supervisors did not consider the certification requirements to be adequate for preparing teachers to work with students with disabilities, disadvantages, and multicultural backgrounds. Preservice teachers in many states may take courses concerning special populations if they desire, but are not mandated to do so. One supervisor commented, "teachers who choose to work with disadvantaged and at-risk students should complete a time block of student teaching with at-risk students before certification." Several supervisors stated that universities should take responsibility for ensuring that their graduates are prepared for the diversity they will face in the classroom. They also suggested that universities should offer more courses that prepare teachers to work with diverse student populations and should include more practical and field-based experiences. Required coursework varies from university to university. Therefore, teachers may receive very different types of training before entering the classroom.

The National Council for Accreditation of Teacher Education (NCATE) provides three criteria for compliance in its standard on professional studies that specify the inclusion of instructional components that provide experiences related to culturally diverse and exceptional populations (NCATE, 1992). Colleges and universities accredited by NCATE are being held to a standard that requires them to include content in these areas. These components may be included in a specific course or integrated throughout a program of study. Teachers who graduate from NCATE accredited colleges or universities may have adequate instruction in the areas of multicultural, disadvantaged, and exceptionalities. However, Kearney & Durand (1992) reported that only a small minority of NCATE approved postsecondary institutions in New York state required education

to prepare teachers to work in mainstreamed classroom settings. Other authors (Garcia & Pugh, 1992; Valverde, 1993) also feel that a core course requirement in multi-cultural issues is inadequate. Certainly, preparation for specific knowledge and skills does not necessarily require taking a specific course. Material may be appropriately emphasized in a teacher education program so that it is integrated across the courses in a curriculum. However, college students tend to think of what they have learned in terms of courses they have taken. If the content was integrated across several courses, they may have studied it, but say they have not because they do not have a course title to connect with.

Responses from participants in this study indicate that inservice was the most frequently used method for providing support and continuing education for vocational teachers. Dirx, Spurgin, Lavin, & Holder (1993) found that inservice workshops were ranked first or second by every vocational content area as the most preferred continuing education activity. The supervisors also reported that limited state support was available for first year teachers. Several explained that most teacher support and continuing education is determined by local districts, therefore, there is little consistency even within a state for the type of additional training and support vocational teachers receive concerning special populations.

As shown in Table 1, 23 states require a class in exceptionalities for regular education certification, and 21 states for vocational education certification. In 1980, Smith and Schindler reported that 15 out of 50 states had certification requirements that included *some* coursework "concerning the exceptional learner for preservice general educators" (p. 394). A similar study in 1984 found that 19 unidentified states required one course on exceptionalities for certification and two states were in the process of requiring such a course (Ganschow, Weber, & Davis, 1984). Several years later, Reiff, Evans, & Cass (1991) found that the number of states that did not require a specific course had remained relatively unchanged compared to the Ganschow et al. study.

The significance of this study is that it provides a current perspective on the status of teacher certification requirements. The study also provides information about the perceptions of state vocational special needs supervisors concerning the preparedness of vocational teachers to successfully work with students from special populations. The present study reveals that in more than a decade, the overall situation concerning teacher certification requirements has not changed significantly. The number of states requiring one or more complete course(s) at an approved college or university specifically dealing with exceptional students is 45%, 23 out of 51. If we assume that the two states in the process of requiring a course have done so (Ganschow, et al., 1984), our findings are noteworthy. Only three additional states have added the requirement of a specific course concerning students with exceptionalities since 1984.

Results of this study have implications for future personnel when making reforms in vocational teacher preparation programs. Vocational education policy makers, teacher educators, and state certification departments should incorporate the results of this and other studies into effective changes in teacher preparation programs. Future research questions may be to compare whether teachers who attended NCATE accredited schools feel more prepared than those who did not; and whether there is a difference between teachers who graduated from programs that require courses and teachers who graduated from programs that have the topics covered in general preparation programs.

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