

DETERMINING THE EXTENT TO WHICH MAINSTREAMING OF
HANDICAPPED AND DISADVANTAGED STUDENTS IS ACCEPTED
AND USED IN SECONDARY VOCATIONAL AGRICULTURE
PROGRAMS IN NORTH DAKOTA

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Introduction

The Vocational Education Act of 1963 was designed, in part, to serve persons who have academic, socio-economic, and other handicaps that prevent them from succeeding in regular vocational education programs. Recent legislation put emphasis on non-discrimination of handicapped and disadvantaged students in vocational education programs. As a result of the Education Amendments of 1976 and Part 84 of the Rehabilitation Act of 1973, emphasis is placed on using the "least restrictive environment" for the education of students with special needs.

The responsibility of each vocational agriculture teacher is to help prepare the students enrolled in the program for the career of their choice in agriculture. It is also realized that every individual learns at a different pace with areas of strength and weakness.

Disabilities in students have often been stumbling blocks for them when pursuing a career. When a student is handicapped or disadvantaged, careers are often closed to them--not because of the inability on the part of the student to learn or handle the job but because of the nonacceptance on the part of the other people involved. Students with special needs, when presented with opportunities, often overcome their obstacles and succeed in their endeavors.

Educators who realize the needs of handicapped and disadvantaged students are often able to accommodate these students within the regular framework of the learning environment. The Education Amendments of 1976 and Part 84 of the Rehabilitation Act of 1973 mandate that students with special needs are to be educated within the regular framework of education wherever or whenever possible. The success of the legislation depends largely upon the acceptance of it by the educators themselves.

Objectives

The purpose of this study was to determine how educating the handicapped and disadvantaged students in the least restrictive environment is accepted and practiced by the secondary level vocational agriculture instructors in North Dakota. The specific objectives of the study were:

1. To quantify the number of formally identified students with special needs enrolled in vocational agriculture classes in North Dakota.
2. To quantify the number of informally identified students with special needs enrolled in vocational agriculture classes in North Dakota.
3. To identify the characteristics causing students to be handicapped and/or disadvantaged.
4. To determine how students with special needs are presently served in vocational agriculture classes in North Dakota.
5. To determine how the vocational agriculture instructors in North Dakota believe students with special needs could be best served using the least restrictive environment in education (mainstreaming).

Methodology

Mail questionnaires were developed to collect data from secondary vocational agriculture instructors in North Dakota. A total of 112 teachers were included in the sample. A total of 25 responses were received from the original mailing, yielding a 31.3 percent return. The researcher followed up the original mailing with two additional mailings to non-respondents and telephoned non-respondents to request their participation in the study. A total of 98 teachers responded, yielding an 87.6 percent response.

Findings

The respondents were asked to complete a matrix on the questionnaire which indicated some characteristics of the special needs students enrolled in vocational agriculture programs in North Dakota. Table 1 reveals selected characteristics of these students.

A total of 654 special needs students were reported to be enrolled in vocational agriculture programs in North Dakota. Of these, 348 or 53 percent were considered to be only disadvantaged. One hundred seventeen or 18 percent had handicaps only; and 189 or 29 percent were handicapped and disadvantaged. Only 261 or 40 percent of the 654 special needs students were formally identified. A total of 599 students or 92 percent of the enrollment were male. Eighty-three percent of the special needs students were Caucasian while 7 percent were American Indians.

Table 1

CHARACTERISTICS OF SPECIAL NEEDS STUDENTS
ENROLLED IN VOCATIONAL AGRICULTURE

Characteristic	Number of Students	Percent
Educational Impairment		
Handicapped Only	117	18
Disadvantaged Only	348	53
Handicapped and Disadvantaged	<u>189</u>	<u>29</u>
Total	654	100
Identification Classification		
Formally Identified	261	40
Non-Formally Identified	372	57
No Indication	<u>21</u>	<u>3</u>
Total	654	100
Sex		
Male	599	92
Female	39	6
Not Reported	<u>16</u>	<u>2</u>
Total	654	100
Race		
Caucasian	546	83.0
American Indian	44	7.0
Mexican	3	.5
Not Reported	<u>61</u>	<u>9.5</u>
Total	654	100.0

Table 2 indicates the impairments of handicapped and disadvantaged students enrolled in vocational agriculture programs in North Dakota.

A total of 62 percent were academically disadvantaged, 32.2 percent economically disadvantaged, and 18.2 percent had a specific learning disability. Only two or .3 percent were deaf, and five or .8 percent of the enrollees were orthopedically impaired.

Table 3 illustrates the services offered for handicapped and disadvantaged students in schools of the responding vocational agriculture teachers. Seventy-nine or 80 percent of the respondents indicated that special education programs are available. A total of 70 or 72 percent indicated that their school had special testing programs. District or area training centers for special needs students were available to the school of 64

Table 2

IMPAIRMENTS OF HANDICAPPED AND DISADVANTAGED STUDENTS*

Impairments	Number of Students	Percent
Deaf	2	.3
Deaf and Blind	0	0.0
Hard of Hearing	12	1.8
Mentally Retarded	51	7.8
Multi-Handicapped	7	1.1
Orthopedically Impaired	5	.8
Emotionally Disturbed	45	6.9
Specific Learning Disability	119	18.2
Speech Impaired	16	2.4
Visually Handicapped	17	2.4
Other Health Impaired	12	1.8
Academically Disadvantaged	404	62.0
Economically Disadvantaged	211	32.3

*Students could have more than one impairment.

Table 3

SERVICES OFFERED FOR HANDICAPPED AND DISADVANTAGED STUDENTS IN SCHOOLS OF THE RESPONDENTS

Services Offered	Number of Schools	Percent
Special Education Programs Available:		
Yes	79	81
No	19	19
Total	99	100
Special Testing Programs:		
Yes	70	72
No	28	28
Total	98	100
District or Area Center Available:		
Yes	64	65
No	34	35
Total	98	100
Cooperative Work Experience as Part of Vocational Agriculture Program for Special Needs Students:		
Yes	18	18
No	72	74
No Response	8	8
Total	98	100

or 65 percent of the respondents. Only 18 or 18 percent of the respondents indicated that cooperative work experience was a part of the vocational agriculture program for special needs students.

Table 4 reports that a total of 42 or 43 percent of the respondents provided training for handicapped and disadvantaged students that were in regular vocational agriculture classes, while 33 or 34 percent indicated that special help was given on an individual basis. Eleven respondents indicated that no special efforts were being made for handicapped and disadvantaged students in their program. Only three or three percent of the respondents indicated that they had a special program for the handicapped or disadvantaged.

Table 4

NUMBER AND PERCENTAGE INDICATING SPECIAL EFFORTS
BEING USED TO PROVIDE EDUCATION FOR THE HANDICAPPED
AND DISADVANTAGED STUDENTS IN VOCATIONAL AGRICULTURE

Special Efforts	Number	Percent
Special program for handicapped and disadvantaged	3	3
Special training for handicapped and disadvantaged that were in regular vocational agriculture classes	42	43
Special help was given on an individual basis	33	34
Handicapped and disadvantaged were transported to another school for special training in vocational agriculture	3	3
There was no need for special programs due to lack of handicapped and disadvantaged	4	4
No special efforts were being made	11	11
Handicapped and disadvantaged students were not accepted in the vocational agriculture classes	0	0
Non-respondents	<u>2</u>	<u>2</u>
Totals	98	100

A total of 73 or 74 percent of the respondents indicated that students with impairments were mainstreamed in their vocational agriculture classes as revealed in Table 5. Twenty-five or 26 percent of the respondents indicated these students were not mainstreamed.

Table 5

NUMBER AND PERCENTAGE WITH IMPAIRED STUDENTS MAINSTREAMED INTO VOCATIONAL AGRICULTURE CLASSES

Are students mainstreamed in your classes?	Number	Percent
Yes	73	74
No	<u>25</u>	<u>26</u>
Total	98	100

The respondents were asked to identify a major step in establishing a mainstreaming program in their vocational agriculture program. Table 6 reveals that 30 or 31 percent of the respondents indicated that getting the program explained to yourself was a major step. Twenty or 21 percent of the respondents indicated that getting the program explained to other teachers and the administration was a major step. Five respondents did not respond to this question.

Table 6

NUMBER AND PERCENTAGE OF INSTRUCTORS IDENTIFYING A MAJOR STEP IN ESTABLISHING A MAINSTREAMING PROGRAM

Major Step	Number	Percent
Getting the program explained to yourself	30	31
Getting the program explained to the other teachers and administration	20	21
Getting proper facilities	12	12
Getting proper teaching materials	11	11
Other	21	21
Non-respondents	<u>5</u>	<u>5</u>
Total	98	100

Conclusions

In light of the foregoing data, the following conclusions have been formulated:

1. A majority of the special needs students enrolled in vocational agriculture in the State of North Dakota have disadvantages only, are non-formally identified, and are Caucasian males.
2. The single most common impairment found among the special needs students was academic disadvantages, followed by economic disadvantages, and then by specific learning disabilities.
3. A large majority of the schools provided special education programs, special testing programs, or had district or area centers available for the instruction of special needs students.
4. A majority of the special needs students received specialized and/or individualized aid by the vocational agriculture instructor in the vocational agriculture class in which they enrolled, while only a small minority of the special needs students utilized a cooperative work experience program.
5. A majority of vocational agriculture instructors had the special needs students mainstreamed in their classes. A majority of those that did not utilize mainstreaming were willing to attempt the process and felt that they were able to handle the task.
6. A majority of vocational agriculture instructors felt that lack of acceptance and understanding by other teachers, administrators, and themselves is the largest obstacle to overcome in effectively using mainstreaming.

Recommendations

The following recommendations are based on the researcher's findings and knowledge gained in conducting this study.

1. Pre-service and in-service training concerned with the identification of handicapped and disadvantaged students should be offered to vocational agriculture instructors.
2. Pre-service and in-service training concerned with the concepts and implementation of mainstreaming should be offered to vocational agriculture instructors.
3. Teacher educators and state supervisors should work closely with school personnel and acquaint them with mainstreaming.

4. Vocational agriculture departmental policy statements should include provisions for mainstreaming.
5. The vocational agriculture programs that utilize mainstreaming should use some method of constant evaluation to monitor the progress of the program.
6. Some pilot or demonstration programs that utilize mainstreaming in vocational agriculture should be developed and made available for viewing by representatives of other schools.

References

- Cavey, Mike, *Identification of Characteristics of Successful Vocational Agriculture Education Programs for Disadvantaged Students*, Unpublished Master's Degree paper, Montana State University, August, 1972.
- Kent, C. N., "Mainstreaming in the Shop Class," *Industrial Education*, 66 (April, 1977), pp. 24-26.
- Luft, Vernon D., *Determining the Need for Special Programs in Vocational Agriculture for Handicapped and Disadvantaged Students in Montana*, Unpublished Master's Degree paper, Montana State University, June, 1970.
- Mack, Gregory L., *Determining the Extent to Which Mainstreaming of Handicapped and Disadvantaged Students is Accepted and Used in Secondary Vocational Agriculture Programs in North Dakota*, Unpublished Master's Degree paper, North Dakota State University, March, 1980.
- Wright, R. G., "Special--But Not Separate," *Education*, 87, (May, 1967), pp. 554-557.
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