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Pre-service Teachers' Attitudes Toward Inclusion In A Non-Traditional Classroom

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ABSTRACT

The purpose of this study was to examine the effects of 52 pre-service teachers' participation in an outdoor education program, for sixth grade students, on their attitudes toward inclusion of students with special needs. A survey was administered before and after the three-day event. After the experience the subjects felt more familiar with the concept of inclusion and realized possible conflicts between expectations of regular classroom teachers and special education teachers. This suggests that experiences in outdoor settings, a learning environment not usually explored, can influence pre-service teachers' attitudes toward inclusion of students with special needs as well as make them aware of the various roles that teachers assume.

INTRODUCTION

Legislation dealing with inclusion has had a major effect on how children with special needs are accommodated in the classroom. However, there are many things that cannot be legislated, one of them being the attitude of teachers toward inclusion.

The negative attitude of teachers has been documented in many studies (Siegel, 1992; Houck, 1992; Lobosco & Newman, 1992; Phillips, Allred, Brulle & Shank, 1990). Much of this negativity results from lack of knowledge. There is considerable research that suggests that classroom teachers feel inadequate when children with special needs are included in a regular classroom (Monaham, Miller & Cronic, 1997; Schumm & Vaughn, 1992; Thompson, 1992; Thompson, White & Morgan, 1982). Although the reasons for this may vary, one contributing factor is the lack of training in special education (Monaham, Miller & Cronic, 1997; Thompson, 1992; Lombardi, 1990; Semmel, Abernathy, Butera & Lesar, 1991). The significance of gap in education of future teachers continues to grow along with teaching requirements beyond the traditional classroom. Teachers are expected to integrate many programs into the lives of the children they teach.

One such program, environmental education, has received substantial attention by public schools in recent years. Outdoor education deals with the ability to link natural materials and living things with experiences and awareness of the environment and life (Hammerman, Hammerman & Hammerman,

1994). It is this underlying concept of connecting children to natural places and systems that keeps outdoor education a driving force in environmental education and has led to considerations of pre-service teacher training. There is little evidence to suggest that pre-service teachers are knowledgeable enough to teach environmental education. In addition, there is little information about the effects of pre-service teachers' attitudes toward inclusion with environmental education as a context. The concept of inclusion in an outdoor environment takes on additional meanings and demands when addressing the special needs of children.

The purpose of this study was to examine the effects of pre-service teachers' participation in an outdoor, environmental education program on their attitudes toward inclusion of students with special needs. Although there has been research involving the effects of professional development and field experiences on teachers' attitudes toward teaching special needs children, there has been little research on how this type of educational setting influences how pre-service teachers perceive inclusion. Their attitudes are critical to the success of inclusion.

METHODS

The subjects for this study were 52 pre-service elementary teachers, at a large mid-western university, who are taking methods courses in the semester before student teaching. All the subjects had previously taken a survey course called "The Exceptional Child." It is not a methods course; the curriculum deals with the legal aspects and characteristics of the exceptional learner.

The study was conducted the last week in September during the outdoor education program that is collaboration between a public middle school and a large Midwest university's elementary education program. All activities took place in a special campground environment. Each sixth grade student attended for one day.

Special needs students (including learning disabled, emotionally disturbed, and mentally retarded) also attended on each of the three days. One special education teacher or special education teacher's aide attended each day and accompanied the special education students.

The pre-service teachers had a one-day training session, based on Project WET (1995) and Project WILD (1992), then planned for instruction of the sixth grade students on one of the three days. Each sixth grader had an opportunity to participate in the activities of all the groups scheduled for the day that s/he attended.

All of the pre-service elementary teachers completed an attitude survey composed of two different surveys. The first was a nine-statement Likert-type attitudinal instrument, adapted from Andrews and Clementson (1997), consisting of a five-point scale (internal consistency reliability of 0.93). The range of possible scores is 9-54, with high scores indicating a more positive attitude. A definition of inclusion (Moisio, 1994) was written at the top of the survey: "the education of all students, both with and without disabilities (e.g., learning disabilities, behavioral problems,)) in a regular elementary, junior high, or high school classroom. Students attend school with their age and grade peers." The second survey, by Moran, Miller, & Cronin (1997), was also based on a five-point scale. The composite instrument was given at the beginning of the semester, before the project began. The same survey was administered immediately following the project. The statements encompassed ideas about the benefits and hindrances of inclusion as well as the support provided for implementation of inclusion.

Also included with the final administration were 17 additional statements similar to 17 statements in the

composite survey, except that they were specific to the outdoor classroom. The data for complete survey had a reliability of 0.74. In order to address content validity, a special educator, an environmental educator, and a middle level teacher educator examined the survey. All three concurred that the items collectively gave a good representation of the subject matter as intended. Because of the fact that there was no control group, the issue of internal validity needed to be considered. The pre-service teachers involved in the study had no other field experiences between the pre-test and post-test and they had no additional contact with students with special needs. These facts together with the short time between the pre-and post-tests led the researchers to conclude that there were no plausible threats to internal validity.

RESULTS/CONCLUSIONS

A series of t-tests for paired samples was used for the data of the pre- and post- surveys to determine if the experiences in the outdoor classroom had an influence on the pre-service teachers' attitudes toward inclusion. Of the 34 statements that were identical for the pre- and post- surveys, four elicited responses for which there were significant differences in the means (Table 1). The responses to the question involving familiarity with inclusion (statement 1) showed a significant increase in the perception of familiarity with inclusion. This result is consistent with the responses on the same survey by Andrews and Clementson (1997) in which pre-service teachers engaged in simulations and role-playing, as well as participated in field trips to facilities that serve those with disabilities. There are several possible explanations for the pre-service teachers' perceptions about their knowledge relating to inclusion. In the course "The Exceptional Child" the pre-service teachers have studied about inclusion, but have not been required to apply that information until participating in this outdoor education program. Exposure to special needs children has been limited for many of the pre-service teachers. Anxiety and apprehension are common feelings for those who have not worked with this population prior to the outdoor education program. Therefore, after working with these children their confidence has increased. Andrews and Clemenson (1997) concurred that students need to become involved with students with special needs, not just be provided with information.

The pre-service teachers showed a significant increase in the belief that there is resistance from regular education teachers toward inclusion (statement 2). Due to the fact that the pre-service teachers had the opportunity to experience "including" children with special needs, they generalized their difficulties or time-consuming modifications to perceive that resistance does occur for regular educators.

There was also a significant decrease in the perceived comfort of regular education teachers co-teaching with special education teachers (statement 3) as well as a significant decrease in the idea that special education teachers provide support for all students (statement 4). During the outdoor education program, the special education teachers remained primarily with the students with special needs and did not interact with the regular education students. Therefore, the pre-service teachers did not observe any positive interaction between the two groups. This affected their comfort level and their idea of support they may feel is needed for them to be successful with inclusion as regular educators. Of the 17 statements that compared inclusion in a regular classroom and an outdoor setting, the data for 4 showed a significant change between the pre- and post-tests (Table 2). The pre-service teachers indicated that they felt it was easier to make minor adjustments in an outdoor education setting than in a regular education setting (statement 1). This could be due to the fact that there is less structure and more flexibility with outdoor education activities. Students conforming to expectations for regular education students are not as critical in an outdoor setting as a formal classroom.

The pre-service teachers thought that regular education teachers have primary responsibility for students with special needs in an outdoor setting more than in a regular classroom setting (statement 2). This may be due to the fact that the pre-service teachers reported that they felt it was easier to include these students and therefore, can be accountable and are more self-assured in the outdoor setting.

According to the pre-service teachers gifted students are more likely to be neglected in inclusive regular classrooms than in outdoor classrooms (statement 3). In the course "The Exceptional Child" pre-service teachers are taught that children can be gifted in a variety of areas such as music, art, etc. This particular outdoor education experience was multidisciplinary (reading, math, science, arts, social studies) as opposed to the single-discipline classrooms.

The final question for which the data showed a statistically significant difference between the regular and outdoor classrooms involved the support of families for inclusive classrooms (statement 4). The results showed that families were thought of as more supportive in the outdoor classrooms. This could be due to the fact that parents attended the outdoor program and were seen participating and interacting with students. The pre-service teachers had not participated in many traditional classroom situations involving parents.

Although there have been some studies (Wilczenski, 1991; Jamieson, 1984; Barryman & Barryman, 1981) in which actual experience with inclusion can lead to more negative attitudes, the results of this study suggest that some experiences in outdoor settings can positively influence attitudes toward inclusion of students with disabilities. However, this was only one experience in a fairly controlled environment. More research is needed to explore other environments in a variety of time frames.

There is much concern about how teachers feel regarding inclusion of children with special needs in various learning environments. Although there is no doubt about the importance of examining the attitudes of teachers, one must be aware of the reality that attitudes are also being formed in the teacher education experiences of pre-service teachers. They cannot be omitted from our investigations. In addition, our education efforts must incorporate all aspects of inclusion. This study helped to illuminate some of the influences on attitudes of pre-service teachers toward inclusion by examining a learning environment that is not normally explored. This has potential for improving teacher education. The insights suggested by this research can give direction to educating future teachers about the possibilities for educating all children.

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Table 1. Statements with Statistically Significant Means

Statement	N		Mean	SD	95% Confidence Level of Difference		t	Sig
					Lower	Upper		
1. I am familiar with inclusion.	52	Pre	4.211	0.605	-0.367	-1.76E-02	-2.210	0.032*
		Post	4.404	0.569				
2. Although inclusion of students with special needs is a good idea, one reason it will not succeed is too much resistance from regular education teachers.	51	Pre	2.863	0.775	-0.429	-2.87E-03	-2.036	0.047*
		Post	3.078	0.977				
3. Regular education teachers are comfortable co-teaching content areas with special education teachers.	51	Pre	3.373	0.599	3.53E-02	0.5137	2.305	0.025*
		Post	3.098	0.985				
4. Special education teachers provide educational support for all students.	50	Pre	3.180	1.004	6.15E-02	0.5385	2.528	0.015*
		Post	2.880	1.062				

* p < 0.05

Table 2. Statements Comparing Regular and Outdoor Classrooms

Statement	N		Mean	SD	95% Confidence Level of Difference		t	Sig
					Lower	Upper		
1. Only minor adjustments will be needed to teach all students in the regular (outdoor) classroom.	52	regular	2.192	0.908	-0.998	-0.310	-3.818	0.000**
		outdoor	2.846	1.161				
2. Regular education teachers have the primary responsibility for the education of students with special needs in their (outdoor) classroom.	51	regular	2.192	0.908	0.122	0.722	2.844	0.006**
		outdoor	2.846	1.161				
3. Gifted students are neglected in inclusive (outdoor) classrooms.	52	regular	2.962	1.236	6.56E-02	0.5113	2.599	0.012*
		outdoor	2.673	1.133				
4. Families are supportive of inclusion classrooms (outdoor).	52	regular	3.192	0.864	-0.304	-4.03E-03	-2.062	0.044*
		outdoor	3.346	0.905				

* p < 0.05

** p < 0.01