

# **Efficacy of pre-service teachers and attitudes towards disabilities in Saudi Arabia: The influence of practical training**

**Mohammad Ahmed Hammad**  
*Special Education department, Faculty of Education,  
Najran University, Saudi Arabia*

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## **Abstract**

**Background:** Field training is the most helpful for teacher training programs where pre-service teachers place acquired knowledge and theories in practical tasks during training. This preliminary study is based on the collaboration between the Special Education Programme and the Resource Room for students with learning difficulties in a primary school. This study aimed to investigate the impact of practical training of teacher effectiveness on pre-service teachers and their attitudes towards disability in Saudi Arabia.

**Materials and Methods:** The study sample consisted of 92 student teachers, including 40 males and 52 females with an average age of 21.5 years; as well as, the study tools consisted of the Self Efficiency Scale (Lombardo-Graves, 2014) and The Attitudes to Disability Scale (ADS) by Power et al. (2010). In addition to the practical Training Programme for Education program of Special Education Department, University of Najran.

**Results:** The results of this study show some practical training on the self-efficacy of pre-service teachers. In addition, improve their attitudes towards students with disabilities.

**Conclusion:** Based on the results of this study, the experience of practical training of pre-service teachers has been effective in developing their self- efficiency and adjusting their orientation towards students with learning difficulties. Hence, the presence of integrated equipment in the integration schools, which includes the source rooms with their active equipment.

**Keywords:**Teacher efficacy, Practical training Pre-service teacher, Attitudes, Disability

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## **I. INTRODUCTION**

According to Genç [1], practical training is a distinct aspect of the graduate training program. More specifically, it's the practical experience given to students to practice what they've learned in practical situations, making them highly qualified and capable teachers. In other words, Dalinger, Thomas [2] state that practical training is a proper translation of theoretical knowledge and the applied skills a teacher will need in working life. Despite the importance of practical training in the pre-service teacher training program, this is one of the most stressed periods in which the student learns throughout their life due to the problems they can face during practical training<sup>3</sup>.

Special education is a type of educational service and program that includes special modifications in curricula, methods, or teaching methods that are appropriate for disabilities, such as those with learning difficulties, hearing disabilities, visual disabilities, motor disabilities, autism, speech disorders, may experience some of the difficulties that negatively affect their performance and ability to learn<sup>4</sup>. Moreover, Special education includes students with outstanding skills and talents, such as gifted and creative people<sup>4,5</sup>.

Suppose the preparation of a general education teacher may face some problems in his practice, especially in the field training. The preparation of a special education teacher is one of the most critical issues resulting from the psychological stress they will be subjected to; by their work with a different nature and diverse academic, behavioral, and psychological problems<sup>6</sup>. Therefore, Utley [7] emphasizes the importance of practical training for students of the Special Education Programme, which provides them with the opportunity to practice the theoretical skills and knowledge they acquired during the curriculum, such as (early intervention, behavioral modification, etc.) and their practical and realistic application in practical training through teaching and interaction with those with special needs. This has also been confirmed by several studies, such as<sup>8</sup>.

Pretti-Frontczak, Giallourakis [9] declares that professional practice is developed through the synergy and interaction between knowledge and theoretical understanding and effective implementation of the information in reality and with students with disabilities during field training. Consequently, its transfer to pre-

service teachers requires an ongoing process of overseeing their training in institutions to enable them to apply the professional knowledge, principles, and values that have been absorbed in academic study in different situations with disabilities<sup>10</sup>. Besides, several studies have indicated a wide disparity between theory and practice in preparing pre-service teachers qualified to work with children with disabilities<sup>11</sup>.

Self-efficiency is a concept that is central to the identification and interpretation of human energy and involves the behavior, perseverance, and adequacy of the initiative to deal with the challenges of the environment and the surrounding circumstances. More specifically, it influences the event through cognitive and emotional impulses, so self- efficiency is one of the mentors of behavior. As a result, an individual who believes in his ability is more active and self-appreciative<sup>12, 13</sup>. Furthermore, Cognitive self- efficiency is also an essential determinant of learning, which reflects a set of provisions that relate not only to what an individual achieves, but to what they can accomplish. Self- efficiency is not just a public opinion or a sense of self-expression, but it's self-righteous, what they can do, how persistent they are, how resistant they are to failure, how flexible they are in dealing with difficult and complex situations<sup>14</sup>. Rudy, May [15] define self- efficiency as "one's beliefs about one's ability to behave or interact successfully in social situations.". According to De Jong, Mainhard [16], self- efficiency has particular importance to the teacher at the beginning of their actual work and their desire to become a teacher where the teacher's self- efficiency is associated with motivation, enthusiasm, planning, organization, and effort in their work. With the growth of teachers' self- efficiency , they are more willing to experiment with new methods to help their students upgrade and provide them with support and positive enhancement<sup>17</sup>.

Depending on Ayad and Salha [18], the teacher's self- efficiency consists of three basic components: academic self- efficiency , social self- efficiency , and professional self- efficiency. Bandura [19] points out that a strong sense of self- efficiency in an individual enhances their ability to deliver and perform their mandated tasks better. Individuals with a strong sense of self- efficiency show an interest in being more deeply influential in their assigned tasks and seem to have great confidence in their ability to make a difference for the better. In contrast, the individuals with low self- efficiency, show doubt about their ability to perform tasks and avoid challenging situations that threaten them to fail<sup>20</sup>. A special education teacher needs to feel that he has a level of self- efficiency to cope with the psychological stress to which he may be subjected, since the nature of his work requires him to deal with a group that is different in nature, has diverse academic, behavioral and psychological problems and has special needs and requirements different from their normal peers<sup>21</sup>. He also felt that he was able to teach this group and he could anticipate their behavior and influence them positively (Zogby, 2014).

Attitudes are critical topics in social psychology, which is an important indicator through which individual behavior is expected in different social attitudes<sup>22</sup>. In addition, Attitudes are fundamental aspects of emotion and belief that illustrate the relationship between the individual and their social world<sup>23</sup>. Another important point is attitudes have a prominent place because of their importance in shaping one's personality, influencing and guiding one's behavior, as well as giving them an indication of how one's future life will be. Consequently, the study of attitudes is crucial in determining positive behavior towards an individual's profession, providing some indications of the likelihood of success in different occupational requirements<sup>24</sup>. Attitudes consist of three main dimensions: First, the cognitive component; includes experiences and attitudes that affect one's perspective on something, which, in turn, creates emotional or emotional orientation and includes one's beliefs, ideas, and information on the trend. Second, the emotional component; refers to an individual's feelings and emotions on the trend. Third, the behavioral component; means the willingness of the individual to undertake certain actions and responses consistent with the trend<sup>25</sup>. Zahran, Hamdan [26] indicates that attitudes are a result of experience and are linked to current behavior. They also tend to be more subjective than objective in content. Moreover, Attitudes are consistent and relatively persistent but can be modified and changed under certain circumstances<sup>27</sup>. It is important to know the attitudes of individuals towards persons with disabilities in such decisions as: The psychological acceptance of society members towards this group, the improvement of educational, social, health, and vocational programs offered to them, the methods of integration, and the preparation of the necessary personnel for each group of persons with disabilities<sup>28</sup>. If the attitudes of university students, especially students in the special education program, are positive towards the disabled, this may have a positive impact on their behavior in different life situations. Therefore this will be reflected in the perception of people with disabilities to themselves and their society, so that it is a look full of optimism and acceptance of reality, other than negative attitudes that may negatively affect them<sup>29</sup>.

Many studies have indicated that teachers' attitudes towards their profession are generally linked to their undergraduate academic numbers, through which sufficient theoretical and cognitive experience is gained to practice after graduation<sup>30, 31</sup>. Therefore, emphasis should be placed on raising the numbers of students in these colleges not only in order to create positive educational attitudes towards the teaching profession, but also to help them cope with the pressures of work, which would have a negative impact on their mental health and professional performance<sup>32</sup>. Thus, the theoretical study of curricula cannot be relied upon alone to create and

shape the orientation of the student-teacher, especially the student of special education, towards work in the field of education in general and in particular in the field of special education<sup>27</sup>. As a result, Yell, Katsiyannis [5] see the importance of practical training for special education students through feedback by supervisors, which helps them gain experience in how to deal with special needs. Therefore, the importance of identifying the attitudes of student teachers, especially in the field of special education, who provide educational services to the group of persons with disabilities, who are a group of society, ranging from about 10-13% of the population, is very essential in the success of the teacher of special education. Teacher composition positive attitudes towards dealing with persons with disabilities, is closely linked to the courses he has studied with practical training; with experience and skills that qualify him for future professional success<sup>28</sup>.

Practical training of students of the special education program with its diversity of expertise and the knowledge, training, and skills acquired by the student-teacher, the resulting friction with those with special needs, and the parent's wishes for educating their disabled children, affects the self-awareness of the student-teacher and their orientation towards working with those with special needs<sup>33</sup>. Hence, This study is designed to identify the self-aware competence of pre-service teachers of the Special Education Program and their orientation towards working with those with special needs. Where it is expected that there will be a positive relationship between the personal and educational experiences acquired by the student-teacher while studying curriculum and practical training and between attitudes and self- efficiency .

The current study problem emerged from the observation by researchers as supervisors of practical training students in the Special Education Department that there may be some weakness in students' self-efficiency during teaching and interaction with children with needs during the application of practical training in schools; This is due to the difficulty of dealing with students with disabilities as they are different from ordinary students or may have a negative trend towards children with disabilities, reflecting their level of self-efficiency , leading to problems in teaching or interacting with them that affect the outcome of the sterile process. Hence, practical training may be a significant impact on the self-efficiency of pre-service teachers and their attitudes towards working with those with disabilities. Based on the above, the problem of the study could be formulated in the following questions:

- 1- What is the effectiveness of practical training in developing self-efficiency among student-teachers of the special education program of the University of Najran?
- 2- What is the effectiveness of practical training in changing the trend towards persons with disabilities among student-teachers of the education program of the University of Najran?
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## **II. MATERIAL AND METHODS**

### **Participants**

The current study sample consisted of 92 pre-service teachers in the final year of the Special Education program of the Faculty of Education of the University of Najran, Saudi Arabia, 40 males, 52 females, and an average age of 21.5 years.

### **Measures**

A Special Educators Efficacy Scale (SEES, 2014)

A Special Educators Efficacy Scale was used, which was developed by<sup>34</sup>, to measure the Self-efficiency required for junior teachers. The scale contains (23) items, consisting of three dimensions: First dimension, learner Development and Learner Differences. It has 10 items, which are (7, 8, 11, 14, 15, 16, 18, 20, 22 and 23), such as I can create a behavior intervention plan. The second dimension, Instruction and Strategies. It has 6 items, which are (2, 3, 4, 5 and 9), such as I can motivate reluctant learners. The third dimension, Curriculum Content and Planning. It has 7 items, which are (6, 10, 12, 13, 17, 19 and 21), such as I can make accommodations and modify curriculum based on students' needs. The scale is a gradient of five variants, from 1 to 5. The constancy of the scale was verified in its original image by applying it to a sample of 265 student teachers. The reliability analysis revealed the value of Cronbach's alpha (Subscale 1:  $\alpha = .954$ ; Subscale 2:  $\alpha = .895$ . Subscale 3:  $\alpha = .923$ ). It has been translated and all items of the scale have been adapted to Saudi Arabia's culture, and the average alpha factor in the current study of the three dimensions is (0.87).

### **The Attitudes to Disability Scale**

The Attitudes to Disability Scale (ADS) by Power, Green [35] aims to measure individual Attitudes towards disability. The scale consists of 16 items spread over four dimensions, namely (Inclusion, Discrimination, Gains, and Prospects), each dimension consisting of four items. The first dimension is, inclusion, which consists of item numbers (1, 2, 5, and 6), such as: People with a disability find it harder than others to make new friends. The second dimension is, discrimination, which consists of item numbers (3, 4, 11, and 12), such as: People often make fun of disabilities. The third dimension, gains, which consists of item numbers (7, 8, 9, and 10), such as: Having a disability can make someone a stronger person. The fourth

dimension is, prospects, which consists of item numbers (13, 14, 15, and 16), such as: People should not expect too much from those with a disability. The scale responses consist of a gradient of five alternatives (one strongly disapproved to five strongly approved degrees). The level of honesty of the four sub-dimensions of the scale was between 0.75 to 0.81. All paragraphs of the scale have been translated and adapted to Saudi Arabia's culture, and the honesty factor in the current study of the four dimensions is between 0.80 to 0.83.

**Training program: Field Training Course:**

This course is offered by the Special Education Program of the Faculty of Education of the University of Najran, which aims to prepare a teacher in the field of learning difficulties who can prepare a case study and teach those with learning difficulties who are enrolled in the resource rooms. Besides, participate in awareness-raising activities such as lectures for families of persons with learning difficulties and evaluate the achievement of the educational goals that are set out in the individual education plan. Students have a full school day for a semester. Student-teacher supervisors are selected from the teaching staff of the Special Education Section, as well as from the resource room teacher within the school. Workshops are being held for field supervisors to inform pre-service teachers about all subjects related to field training. In addition to teaching in resource rooms, pre-service teachers engage in several activities, including participating in school day events, participating in various methodological and non-performing activities within the school, and teaching students with learning difficulties in the resource room.

Teachers are trained on how to apply tests and measures to students with learning difficulties. As well as, familiarize the student-teacher on how to develop an educational, teaching, and individual plan, apply effective teaching skills in the resource room, categorize teaching methods, cooperate with the classroom teacher in the teaching process, complete training files promptly, use the computer to design computerized learning programs for those with learning difficulties, explain the results of applying the basic skills scale in Arabic and mathematics to students with learning difficulties, use the multi-sensory strategy during the teaching process, and use appropriate body language during the presentation of lessons. At the end of the semester, students are assessed through rigorous questionnaires by the school's principal teacher, and the practical supervisor from the teaching staff of the Special Education Department, to see to what extent they have acquired teaching skills for those with learning difficulties, interacting and participating in the achievement of the goals of the course, to see to what extent they have acquired teaching skills for those with learning difficulties, interacting and participating in the achievement of the goals of the course.

**Statistical analysis**

Statistical analysis was carried out using SPSS, version 21.0 software. The data were illustrated using simple descriptive statistics. T-test was used to compare differences and the Pearson test was used for correlations. P-value < 0.05 was considered statistically significant.

**III. RESULTS**

1- To answer the first question, which states: "What is the effectiveness of practical training in developing the Self-efficiency of pre-service teachers in the education program of the University of Najran?" The T-test was used to indicate the differences between the associated averages. Table 1 shows the results:

**Table no1** T-Test to compare the significance of the differences between the average grades of the experimental group members before and after the application of the program to the dimensions of the self-efficiency scale.

Scale Dimensions	Apply	Average differences	standard deviation	T
Learner Development and Learner Differences	Before	35.5	4.68	7.99**
	After	40.84	4.39	
Instruction and Strategies	Before	22.93	2.29	6.47**
	After	25.27	2.59	
Curriculum Content and Planning	Before	25.5	2.81	7.25**
	After	28.94	3.58	
Total	Before	83.93	8.77	8.14**
	After	95.06	9.73	

\*\*0.01

The table shows differences in a statistical function at a level (0.01) between the average grades of students of the experimental group before and after measurements of the dimensions of the self-efficiency measure, which are in favor of after the application.

2- To answer the second question, which states, “What is the effectiveness of practical training in changing the trend towards persons with disabilities among student-teachers of the education program of the University of Najran?”

**Table no2** T-Test to compare the significance of the differences between the average grades of the experimental group members before and after the application of the program to the dimensions of the orientation scale for persons with disabilities.

Scale Dimensions	Apply	Average differences	standard deviation	T
Inclusion	2.39	9.67	before	4.05**
	3.5	11.46	after	
Discrimination	2.76	11.30	before	3.22*
	2.59	12.57	after	
Gains	4.77	11.84	before	4.25**
	3.74	14.54	after	
Prospects	2.67	7.82	before	5.52**
	3.74	10.47	after	
total	8.96	40.65	before	6.24**
	9.29	49.06	after	

\*\* 0.01 \*0.05

The table shows differences between a statistical function at a level (0.05 and 0.01) between the average grades of students of the experimental group before and after measurements of the dimensions of the trend towards persons with disabilities, which are in favor of after the application.

#### IV. DISCUSSION

Results of the study showed the effectiveness of practical training in developing the Self-efficiency of student teachers. Many studies emphasize that the experience of practical training contributes to the development of the self- efficiency of student teachers, since the direct services are provided by the school to students with learning difficulties through the resource room and its integrated equipment. Also, direct supervision and guidance of the learning difficulty teacher helps pre-service teachers to make progress and achieve the goals of the Individual Learning Difficulty Student Plan<sup>36, 37</sup>. Therefore, the Special Education Programme Plan was distributed to students, with a clear plan to be implemented through successive phases. Also, Contributes to skills acquisition, setting individual plan goals, and placing them in the light of the abilities and potential of each child with learning difficulties who have helped to achieve these goals, reflecting positively on pre-service teachers and contributing to their sense of self- efficiency.

Practical training has also contributed to increasing trainee knowledge and both theoretical and practical information in the specialization. More specifically, the questions that pre-service teachers ask the school's learning difficulty specialist and the faculty's practical training supervisors without any embarrassment and fluidity were not available within the lectures and maybe somewhat restricted. It helped them to develop both their theoretical and practical knowledge, as well as Practical training has assisted them to develop teaching skills by effective teaching methods, whether acquired through the program's theoretical courses or by acquiring them from teachers of learning difficulties at school or through field training supervisors. This was confirmed by Katajavuori, Lindblom-Ylänne [38] that practical training helped to develop students' ability to solve problems and social interaction by engaging and interacting with a new community of school teachers and students by learning about students' problems and how to deal with them and using educational methods to address them. Further, their success in training students with learning difficulties in some of their disabilities in writing, reading, or math has helped them develop self-confidence, and their level of self-esteem has grown, leaving them with a high level of self- efficiency<sup>39</sup>.

The Practical Training Programme also provides pre-service teachers with the opportunity to discover and take into account the individual differences between their pupils with learning difficulties, thus enabling them to define the objectives of the individual education plan according to their capabilities and abilities. Hence, they have practical field experience in dealing with people with difficulties. in accordance with their various capabilities and capabilities. Likewise, practical training has provided teachers with an opportunity to develop an observational skill that helps them understand the emotions and connotations of students with learning

disabilities. Training has also contributed to the development of their diagnostic skills through their diagnosis of many learning disabilities, whether they are academic or diagnostic tests<sup>40,41</sup>.

The results of the study also showed the effectiveness of practical training in adjusting the attitudes of students towards students with disabilities, possibly because of the attitudes and experience of teaching and practice in practical training in dealing directly with those with learning difficulties, the partial application of certain curricula in the Special Education Program, field visits by practical training supervisors and support and promotion of student teachers, and the sterile activities of students to pre-service teachers with learning difficulties. Furthermore, practical training provided pre-service teachers with the opportunity to interact with children with learning difficulties in a supportive environment. Additionally, the long-term frequent contact of six hours a day for more than 90 days, which is the entire semester, direct treatment of children with learning difficulties, and frequent communication in the teaching and learning environment, has helped to build positive relationships between them and these children.

Many studies point out that frequent communication and long-term interaction with pre-service teachers during practical training and among children with disabilities contributes to positive attitudes towards these children<sup>28,33</sup>. What was discussed by teaching staff supervisors in the Special Education Section with pre-service teachers during field visits is about students with learning difficulties in practice, the nature and characteristics of this group, and how to deal with them. Another important point is that Pre-service teachers are going to have a direct relationship in the future with those with learning difficulties, as teachers must be based on acceptance, respect, and appreciation of the other. without this indicative relationship, they will have difficulty teaching and dealing with them and achieving the desired success, which has been reflected positively in their attitudes towards students with learning disabilities<sup>42,43</sup>. The material incentives they receive more than ordinary teachers make them look positively at students with learning difficulties by making more effort to deal with those with learning difficulties. Moreover, God compels them to that effort to teach those with learning difficulties, and the State also cares for them and materially distinguishes them from their ordinary teachers with greater material incentives.

## V. CONCLUSION

Based on the results of this study, the experience of practical training of pre-service teachers in the education program of the Faculty of Education of the University of Najran has been effective in developing their self- efficiency and adjusting their orientation towards students with learning difficulties. Hence, the presence of integrated equipment in the integration schools, which includes the source rooms with their active equipment, also, the directions, instructions, and advice that pre-service teachers receive from the learning difficulties teacher and practical training supervisors from the teaching staff of the Special Education Department, have contributed effectively to the development of their self- efficiency and the adjustment of their orientation towards people with special needs.

### **Conflict of Interest and Funding Disclosure**

the authors reported no conflict of interest or funding contributions for the development of this manuscript.

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