

FACTORS OF INCREASING OF SPECIAL EDUCATION OF SELF-EFFICACY BY FUTURE TEACHERS IN THE USA

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Summary

The article examines the importance of the pedagogical self-efficacy formation of future teachers for working with students with special educational needs, analyzes the influence of a teacher's professional self-efficacy on their self-regulation, and indicates possible options for working with students in the direction of the formation of future teachers of special education pedagogical self-efficacy. It was determined that the concept of «pedagogical self-efficacy» is an integrative education expressed in the teacher's confidence in his own professional competence, the ability to productively carry out pedagogical activities, choosing such means of pedagogical influence that ensure the successful achievement of the goals of the educational process. It was made the conclusion that pedagogical self-efficacy is one of the most important aspects of teacher's professional training. In this key Social-cognitive theory by Albert Bandura was analysed.

Key words: pedagogical self-efficacy, future special education teacher, special educational needs, teacher self-efficacy, self-regulation, special education.

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1. Introduction

The problem of self-efficacy appeared in the theory of professional development of the individual, the founder of which was A. Bandura. N. Branden, M. Zimmerman, J. Rotter, D. Myers, J. Martinez-Pons, R. White and others contributed to the study of this problem. Scientists believe that self-efficacy is a fundamentally important quality that affects a person's behavior and performance. Recently, the phenomenon of self-efficacy has attracted more and more attention of Ukrainian scientists, including T. Volfavska, T. Hordeeva, T. Kremeshna, S. Loginov, L. Malts, etc.). They consider it in various fields of knowledge: psychology, pedagogy, medicine, management, administration, etc.

The purpose of the article is to study factors and mechanisms that influence the formation of pedagogical self-efficacy of future teachers of special education in the USA.

2. The concept of pedagogical self-efficacy

Pedagogical self-efficacy is an integrative education expressed in the teacher's confidence in his own professional competence, the ability to productively carry out pedagogical activities, choosing such means of pedagogical influence that ensure the successful achievement of the goals of the educational process. It is one of the most important aspects of teacher's professional training, which allows to productively carry out professional

activities, to interact effectively with students and colleagues, to get satisfaction from work (*Kremeshna, 2008: 1*).

One of the most prominent psychologists of our time is the American scientist Albert Bandura. Unlike the radical behaviorists, he believed that personality is shaped by the following factors: human behavior, individual characteristics (thinking plays a particularly important role here), and environmental influences. It was Bandura who developed the socio-cognitive theoretical framework, which proposed a multifaceted structure that links correlations between the development and performance of competencies through a highly cognitive process (*Bandura, 1993*).

Social-cognitive theory, originally called social learning theory, recognizes several factors that lead to the formation of cognitive, social and behavioral skills, including the realization of anticipation with an emphasis on learning through observation. Through his experiments, Bandura found that people can learn through observation, imitation, and modeling behavior. In addition to learning through reward or punishment, Bandura suggested that people can also learn by watching others receive rewards or punishments for their behavior. This is confirmed by the experiment with the Bobo doll (*Bandura, 1961*). In this experiment, children watched videos of other people performing aggressive actions for which they were rewarded or punished, depending on the group to which the child was assigned. Then, the children were observed playing and their imitative behavior was recorded. The results of this study led to the key foundations of social cognitive theory.

The first principle of Bandura's social-cognitive theory focuses on learning as a cognitive process. His theory views learning as a social construct. This means that learning can occur by observing behavior and observing the consequences of behavior. This statement is the second postulate of the theory and refers to learning through observation. The third postulate of social cognitive theory relates learning by observation to a person's ability to make decisions about the effectiveness of the behavior they observe. This cognitive process adds value to the learning experience and creates something more than just a behavior/reward scenario, which leads to the fourth tenet, reinforcement, which plays a role in learning but is not the only predictor. Finally, the fifth principle assumes that the learner is not a passive recipient of information, but instead is constantly interacting with various influences of cognition, environment, and behavior simultaneously. This mutual determinism led to Bandura's theory of self-efficacy (*Bandura, 1977: 191-215*).

The theory of self-efficacy can be seen as a motivational construct based on self-perception rather than actual results. Bandura defined self-efficacy as "the belief in one's ability to organize and perform actions necessary to achieve certain results" (*Bandura, 1977: 191-215*). He suggested that self-efficacy beliefs can influence how much effort is exerted, how persistent people are in overcoming problems, their resilience when faced with problems, and the level of stress they experience during difficult situations.

According to his theory, self-efficacy consists of four factors, including **mastery, modeling experiences, verbal persuasion, and physiological states**, and it can be influenced by the context in which they develop.

Mastery is the experience of doing something with a high degree of success. Success gives a sense of achievement and belief in one's abilities, while failure and defeat have the opposite effect. It is mastery that gives teachers a sense of self-confidence that helps them overcome obstacles. Young teachers in the first few years of teaching do not yet have experience of mastery. Their self-efficacy is still developing. The positive sense of accomplishment

experienced by young teachers can go a long way toward boosting their self-esteem. At the same time, feelings of anxiety, unpreparedness, constant mistakes and loss of control can negatively affect their self-efficacy (*Tschannen-Moran, M., & Hoy, A. W., 2007: 944-956*). However, successful performance of a skill does not always equate to high self-efficacy, as other factors can also influence performance. Self-efficacy can vary based on perceived difficulty, biases in one's capabilities, the amount of effort put in, and assistance from external factors.

Learning through modeling occurs by comparing one's own behavior with that of others in similar situations, such as colleagues, classmates, or competitors. Because of this relationship, self-esteem will change depending on the outcome. When the modeling subject is perceived to be similar to the observer (e.g., similar age, gender, socioeconomic status, etc.), successful performance tends to increase the belief in performance. However, it does not mean that differences will interfere with learning. Often, teachers in training are paired with elder, more experienced colleagues, and personality characteristics are not usually taken into account when matching participants. Nevertheless, modeling competence becomes very important in such situations, when the student has much to learn and the experienced teacher has much to share. Self-confidence and low self-efficacy can manifest if they have negative experiences at the beginning of teaching. Similarly, when an experienced teacher is performing well, the student belief in self-efficacy may increase depending on how closely the student identifies with the experienced teacher (*Tschannen-Moran, M., & Hoy, A. W., 2007: 944-956*).

Verbal persuasion can also lead to increased levels of self-efficacy. When a young teacher receives encouraging words that convey belief in possibility, he will use this information to support their efforts and persevere in difficult tasks because it is easier to believe in themselves when others demonstrate that they can do it. Bandura found that verbal persuasion has the greatest impact on people who have reason to believe that they can make a difference through their actions. This construct can be applied to future special educators who want to make a difference in the lives of children with disabilities. As novice teachers, they may benefit from verbal praise and encouragement, as these self-affirming beliefs can help them develop skills that will help them achieve their goals.

Physiological and emotional states often indicate a person's comfort in a situation through the accompanying somatic indicators. When situations become stressful, people often notice physiological changes (e.g., heart palpitations, shortness of breath, hand tremors, stomach pain, and loss of control). When it happens, people do not feel confident because these somatic indicators can negatively affect performance. A teacher who is feeling joyful may be more motivated and have a higher sense of self-efficacy than a colleague who is experiencing anxiety or high levels of stress in the classroom (*Tschannen-Moran, M., & Hoy, A. W., 2007: 944-956*). However, people differ in their ability to cope with these somatic states, as some look at them from the inside and others from the outside.

Much of the research on self-efficacy in education has been conducted after graduation, taking into account factors related to current teacher position, school support, and student achievement. However, pre-service teachers spend time in classrooms learning under the guidance of master teachers and university professors. As suggested by Lortie, teachers actually begin observation while being a students (*Lortie, 1975*). This experience is enriched when future teachers begin to interact with master teachers during the practice (*King-Sears, M. E., Carran, D. T., Dammann, S. N., & Arter, P. S., 2012; Woolfolk Hoy, A., & Burke-Spero, R., 2005: 343-356*). Studies show that once a teacher's self-efficacy beliefs are firmly established, they hardly change.

3. Practices of self-efficacy skills acquiring by American special education teachers

Over the past 150 years, special education teacher preparation has progressed and evolved from a categorical approach focused on a specific disability category to an integrated approach. The focus has also shifted from segregated instruction to ensuring that students with disabilities have access to general education programs to the fullest possible extent (Brownell, M. T., Sindelar, P. T., Kiely, M. T., & Danielson, L. C., 2010: 357-377). O'Shea, Hammitte, Mainzer, and Crutchfield (O'Shea, Hammitte, Mainzer, & Crutchfield, 2000: 71-77) write: "There is a growing consensus in special education that the most important factor is a well-prepared, caring, and qualified adult," but there is still debate in this field about the content of teacher preparation programs. In the controversial publication on the quality of special educator preparation, the U.S. Department of Education concluded that special educator preparation has no value in improving the performance of students with disabilities and reported that "the best available research shows that strong verbal abilities and content knowledge are the things that matter the most" (U.S. Department of Education, 2002). Members of the U.S. Department of Education also noted that graduates of educational institutions are not prepared for the realities of working in a classroom with the students with special needs. After a survey conducted by Bouck (Bouck, 2005: 309-319), more than half of participants indicated that they had no experience working with students with learning disabilities and/or mild mental retardation, and 19.5% felt unprepared to teach students with special educational needs. In another study (Loiacono, V., & Allen, B., 2008: 120-127) 80% of special education teachers felt that they were lack of knowledge and ability to use evidence-based methods of teaching students with autism. There are different opinions about the reasons for this lack of preparedness. UDOE members attribute this to the lack of qualified special education teachers in university training programs. Some find the need to increase the number of courses in subject areas, especially for teachers of special education (Branstad, T., Acosta, A., Barlett, S., Berdine, W., Butterfield, P., Chambers, J., 2002). USDOE members consider an accelerated pathway to certification with fewer coursework in teaching methods, but with a greater emphasis on functional academic skills (Ayres, K. M., Lowrey, K. A., Douglas, K. H., & Sievers, C., 2011: 11-21), as students with disabilities who had positive outcomes after graduation usually underwent a highly adapted and individualized program. Such scholars as Widen, Mayer-Smith, and Moon highlight the features that they believe should be the foundation of a special educator preparation program: established values and beliefs of future teachers, coherence and close cooperation between teachers and students, thoughtful field practice with ongoing communication and collaboration, and coherence between teachers, school staff, and teacher candidates during the practice (Wideman, M., Mayer-Smith, J., & Moon, B., 1998: 130-178).

Leaders of the Association of American Colleges of Teacher Education (AACTE) and the International Reading Association (IRA) believe that special education programs will be more effective in a case of full alignment of program vision; carefully designed field experiences; continuous monitoring of teaching quality standards; use of state-of-the-art teaching methods; focus on meeting the needs of diverse populations; and a combination of disciplinary theory and subject matter practice (Brownell, M. T., Ross, D. D., Colon, E. P., & McCallum, C. L., 2005: 242-252).

4. Pedagogical practice as a mean of self-efficacy

University practice can be considered as one of the most important factor in teacher education programs (Ergenekon, Y, Ozen, A., & Batu, E. S. 2008: 881-891) but only if it is sufficiently extensive, well planned and carefully supervised. There is a lack of researches on the number and types of field practices in the USA (Prater, M. A., & Sileo, T. W., 2004: 251-263). It is because of the teacher educational programs which have no specify requirements for field-work methods, being opened to the interpretation. Ergenekon and others believe that pedagogical practices should be included in the first three years of theoretical training to demonstrate to students the connection between theory and practice (Ergenekon, Y, Ozen, A., & Batu, E. S. 2008: 881-891). Investigation has shown that the collaboration of a teacher and a student while their work in the classroom has a greater impact on the effectiveness of a future teacher than a university coursework (with the exception of behavioral management, the only area in which student teachers relied on coursework to make decisions). This influence has a decisive impact on the students and this is especially true for their future teaching style, methods of teaching and methods of pedagogical problems solving (Cook, L., 2007: 118-130). This fact confirms once again that the cooperation between special education teacher candidates and teachers who have already use effective research-based teaching methods is highly important and necessary. Positive university practice can improve teacher candidates' perceptions of their readiness to teach (Hersh, R., Hull, R., & Leighton, M., 1982: 1812-1822).

5. Conclusions

Summarizing the following it can be argued that educational programs for future special education teachers are advantageous if they are based on a high level of communication and cooperation between university professors, students, and practitioners. The coursework should include a combination of theoretical knowledge, disciplinary knowledge, specific pedagogical knowledge, and their application. To meet the self-efficacy requirements pedagogical practices should be thoughtful and well organized and supervised. These recommendations seem to be easy to implement, but on practice they require substantial refinement of both licensure in different US states and training methods.

References

1. Kremeshna, T. PEDAGOGICAL SELF-EFFICIENCY AS A CONDITION FOR SUCCESS TEACHING. Retrieved from: https://dspace.udpu.edu.ua/bitstream/6789/1219/1/Uspishne_vikladannja.pdf
2. Bandura A. (1993). *Perceived Self-Efficacy in Cognitive Development and Functioning // Educational Psychologist*. Vol. 28 (2), pp. 117-148/
3. Bandura, A., Ross, D., & Ross, S. A. (1961). "Transmission of aggression through the imitation of aggressive models". *Journal of Abnormal and Social Psychology*. 63 (3), pp. 575-582.
4. Bandura, A. (1977). *Self-efficacy: Toward a unifying theory of behavioral change*. *Psychological Review*, 84, pp. 191-215.
5. Tschannen-Moran, M., & Hoy, A. W. (2007). *The differential antecedents of self-efficacy beliefs of novice and experienced teachers*. *Teaching and Teacher Education*, 23(6), pp. 944-956.

6. Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago Press.
7. King-Sears, M. E., Carran, D. T., Dammann, S. N., & Arter, P. S. (2012). *Multi-site analyses of special education and general education student teachers' skill ratings for working with students with disabilities*. *Teacher Education Quarterly*, 39(2), pp. 131-149.
8. Woolfolk Hoy, A., & Burke-Spero, R. (2005). *Changes in teacher efficacy during the early years of teaching: A comparison of four measures*. *Teaching and Teacher Education*, 21, pp. 343-356.
9. Brownell, M. T., Sindelar, P. T., Kiely, M. T., & Danielson, L. C. (2010). *Special education teacher quality and preparation: Exposing foundations, constructing a New Model*. *Exceptional Children*, 76(3), pp. 357-377.
10. O'Shea, Hammitte, Mainzer, & Crutchfield (2000). *From teacher preparation to continuing professional development*. *Teacher Education and Special Education*, 23(2), pp. 71-77.
11. U.S. Department of Education. (2002). *Meeting the highly qualified teachers challenge: The secretary's annual report on teacher quality*. Washington, DC: Author.
12. Bouck (2005). *Impact of factors on curriculum and instructional environments for secondary students with mild mental retardation*. *Education and Training in Developmental Disabilities*, 40(3), pp. 309-319.
13. Loiacono, V., & Allen, B. (2008). *Are special education teachers prepared to teach the increasing number of students diagnosed with autism?* *International Journal of Special Education*, 23(2), pp. 120-127.
14. Branstad, T., Acosta, A., Barlett, S., Berdine, W., Butterfield, P., Chambers, J. (2002). *A new era: Revitalizing special education for children and their families*. Washington, DC: U.S. Department of Education.
15. Ayres, K. M., Lowrey, K. A., Douglas, K. H., & Sievers, C. (2011). *I can identify Saturn but I can't brush my teeth: What happens when the curricular focus for students with severe disabilities shifts*. *Education and Training in Autism and Developmental Disabilities*, 46(1), pp. 11-21.
16. Wideen, M., Mayer-Smith, J., & Moon, B. (1998). *A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry*. *Review of Educational Research*, 68(2), pp. 130-178.
17. Brownell, M. T., Ross, D. D., Colon, E. P., & McCallum, C. L. (2005). *Critical features of special education teacher preparation: A comparison with general teacher education*. *Journal of Special Education*, 38(4), pp. 242-252.
18. Ergenekon, Y, Ozen, A., & Batu, E. S. (2008) *An evaluation of the views of mental retardation practicum students on teaching practicum*. *Educational Sciences: Theory and Practice*, 8(3), pp. 881-891.
19. Prater, M. A., & Sileo, T. W. (2004). *Fieldwork requirements in special education preparation: A national study*. *Teacher Education and Special Education*, 27(3), pp. 251-263.
20. Cook, L. (2007). *When in Rome...Influences on special education student-teachers' teaching*. *International Journal of Special Education*, 22(3), 118-130.
21. Hersh, R., Hull, R., & Leighton, M. (1982). *Student teaching*. In H. Mitzel (Ed.), *Encyclopedia of Educational Research*, pp. 1812-1822.