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VOLUNTEERING AS SERVICE LEARNING: A QUALITATIVE PILOT STUDY OF REFLECTIONS OF FUTURE TEACHERS AND PEDAGOGUES

Abstract: *This paper explores the impact of volunteering, as a form of service learning, on students in teacher education programs. Based on the theoretical foundations of experiential learning and the importance of connecting theory and practice in the education of future teachers, 58 student reflections on volunteering with children with special needs were qualitatively analyzed. Each student wrote a review of their experience at the end of the volunteering. The results indicate a significant impact of volunteering on students' cognitive, emotional, motivational, and social development, highlighting the importance of such experiences for their personal and professional growth and the need to integrate service learning into formal curricula.*

Keywords: *service learning, volunteering, people with special needs, student reflections, teacher education programs*

INTRODUCTION

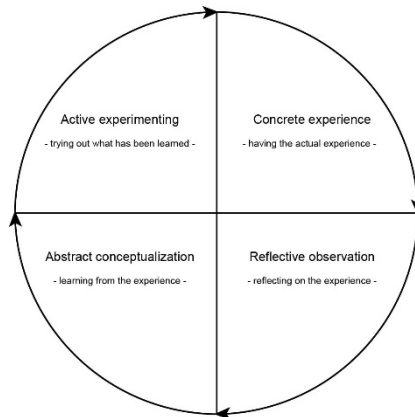
Service learning is a pedagogical approach that connects classroom learning with practical work in the community. Students apply theoretical knowledge in real-life situations, simultaneously providing services to the community and developing personal civic responsibility and competencies. This learning approach has theoretical and conceptual roots in the ideas of John Dewey, who, in his seminal work *Experience and Learning* (Dewey, 1938), emphasized experiential learning as a fundamental component of education (Kihm & Slawson, 2020; Kolb & Kolb, 2022).

Building on these ideas, Kolb (1984) developed a model of the experiential learning cycle, which consists of four phases: concrete experience, reflective

observation, abstract conceptualization, and active experimentation (Figure 1). Service learning, with its emphasis on connecting theory and practice and reflecting on experience, naturally fits into this cycle, allowing students to learn through active engagement in the real world.

Figure 1.

Kolb's Experiential Learning Cycle (Kolb, 1984).



Service learning in teacher education connects classroom learning with practical work, offering the possibility of applying theoretical knowledge in real-life situations (Welch & James, 2007). Integrating theory and practice bridge the gap between content knowledge and practical application, thus deepening the understanding of teaching material on the one hand and civic responsibility on the other (Resch & Schrittmesser, 2021; Peterson et al., 2020). In this process, reflection is a key aspect of such a pedagogical approach, as it allows students to connect personal experiences in the community with academic content, while simultaneously developing professional competencies. Reflection catalyzes deep learning, helping students interpret personal experiences and give them meaning (Castellan, 2012; Peterson et al., 2020). In addition, it further contributes to the lifelong development of teaching competencies, encouraging future teachers to reflect on their professional identity, develop self-confidence, and increase motivation for the chosen profession (Cañabate et al., 2019).

Previous research has shown a range of positive effects of this pedagogical approach. It has been shown to enhance students' sense of social responsibility, as well as their understanding of social problems and dilemmas (Yorio & Ye, 2012; Conway, Amel & Gerwien, 2009; Reed et al., 2005; Celio et al., 2011). Also, participation in community-based learning programs contributes to personal growth through increased self-efficacy (Yorio & Ye, 2012; Kurkovsky, 2023), especially among female students (Gutzweiler et al., 2022). In addition

to personal development, service learning contributes to the development of cognitive abilities and academic outcomes: developing and changing attitudes, developing skills, designing career goals, and strengthening self-confidence in working with vulnerable groups (Drinkard & Tontodonato, 2019; Celio et al., 2011). Reflection has proven to be a key factor in encouraging this development, as an integral part of the process (Yorio & Ye, 2012; Celio et al., 2011). Finally, in addition to other benefits associated with this type of learning, such as intercultural and multicultural competencies (Kilgo, 2015), social engagement (Pinto & Costa-Ramvalho, 2023) and skills (Drinkard & Tontodonato, 2019), it is worth highlighting research that has shown a significant contribution of service learning to increasing motivation for learning and the experience of meaning and purpose in the process of one's education (Reed et al., 2005).

In Croatia, service learning is still in the initial acceptance phase and is not formally recognized or integrated into the higher education system, so future teachers are primarily exposed to traditional teaching approaches (Škugor & Sablić, 2018). Volunteering was used to provide students practical experience working in the community in the teaching organization on which this qualitative research is based. Although it does not include all the elements of service learning, it still allows students to acquire valuable experiences, develop social skills, empathy, and understand others' needs. Therefore, although not a complete substitute for service learning, volunteering in this context can involve students in the community to encourage personal and professional development. By connecting volunteering experiences and classroom work, the fundamental properties of service learning can be achieved as a pedagogical approach that connects academic learning with practical experience in the community.

This paper aims to systematically present the personal reflections of a generation of students from the Integrated Teacher Education Study and the Graduate Study of Pedagogy at the Faculty of Humanities and Social Sciences, University of Split, who were exposed to service learning through volunteering in institutions providing services to children with special needs, as part of the mandatory course Psychology of Motivation and Socialization in the Classroom. The specific questions related to this goal are as follows:

1. What key themes appear in students' personal reflections on their service-learning experiences?
2. How do service-learning experiences influence students' perceptions of children with special needs and their education?
3. How do service-learning experiences shape students' professional identity as future teachers?

METHOD /METHODOLOGY

Research design

Given the type of data, the aim, and the research questions, this is a qualitative study whose primary goal is to describe and understand the structure of students' service-learning experiences through volunteering.

Thematic analysis (Braun & Clarke, 2006) was used for data analysis, which allows us to identify, analyze, and interpret patterns, i.e., themes within the data. This approach is particularly suitable for qualitative research as it enables a deeper understanding of participants' experiences and perspectives.

Research approach

The research was approached from a pragmatic epistemological position. In the context of this research, pragmatism as an epistemological position allows us to explore how reflections on service learning can offer practical implications for understanding students' experiences, and thus, perhaps, guidelines for improving teacher preparation programs, especially in the field of education for working with people with special needs.

Sample

The study included 30 female students and two male students in the second year of the Integrated Teacher Education Study, aged between 19 and 23 years (median=20, IQR=20–21), and 25 female students and 1 male student in the first year of the Graduate Study of Pedagogy, aged between 21 and 24 years (median=22, IQR=21–23).

Both studies were conducted at the Faculty of Humanities and Social Sciences, University of Split.

Procedure

Within the mandatory course, Psychology of Motivation and Socialization in the Classroom, which includes teaching units on working with people with special needs, students are instructed to write a seminar paper after spending at least fifteen hours volunteering in any institution, state, non-governmental, or private, where programs for working with people with special needs are carried out. The students were not assigned specific special needs or age target groups, but could choose any institution, provided that it met the specified criteria. After completing the volunteering hours, they were required to write a seminar paper according to the following instructions:

“After volunteering for at least 15 hours in an institution that works with or supports people with special needs (it can be a specialized state institution, school, or non-governmental

organization), write a seminar paper that will consist of three parts: The first part (at least two pages) will be a professional description of the specifics of the special needs of the people you encountered (using at least three sources from the literature, of which no more than one can be from the Internet). The second part (at least 1 page) will describe where you volunteered and your participation (where you were, what was happening there, what you were doing). The third part (at least 1 page) will be your reflection of your whole experience (how the process went for you, what you experienced, what you learned, what was useful to you, what you would change, whether you changed at the end of the process compared to the beginning and, if so, how you changed...). Attached is a letter explaining your task and a request to allow you to volunteer, which you should print out, write your name and surname, and bring to me to sign in class. Parts of your papers may be used for scientific research purposes. If this happens, all identifying information about you, the institutions where you volunteered, and the people you encountered will be removed or masked. You can freely and without consequences for your success or our relationship request the exclusion of your report from processing.”

For this study, the parts of students’ papers with personal reflections were extracted and processed in a separate document. The texts ranged from 470 to 1338 words in length (median=623, IQR=512-936). Processing was carried out via the NVivo 12 Pro program.

Data processing

The qualitative data collected in this research, which consisted of students’ written reflections, were analyzed via thematic analysis (Braun & Clarke, 2006).

Thematic analysis is typically carried out in six overlapping and interconnected phases. For clarity, the processing procedure is presented below. However, consistent with the qualitative approach, these phases took place in parallel, and the researcher constantly moved between them until the final version of the research results.

Phase 1: Familiarization with the data

The students’ reflections were carefully read several times, with initial notes taken, and the researcher became deeply acquainted with the content and developed an initial understanding of the key patterns. This phase was crucial

for achieving ‘immersion’ in the data, allowing the researcher to develop a sense of the overall story of the data.

Phase 2: Generating initial codes

In this phase, the researcher identified interesting features that could represent patterns or themes. These features were marked with codes that labeled specific ideas or concepts presented in the data segment. Coding was performed manually, using notes and text marking to facilitate the organization and connection of the data.

Phase 3: Searching for themes

After all the data were coded, the codes were grouped into themes based on similarities and interrelationships. This process involved reviewing and sorting the codes and connecting them into broader, meaningful units. In this phase, the researcher also began to consider the hierarchical relationship between codes and themes, identifying central themes and subthemes.

Phase 4: Reviewing themes

In this phase, the researcher critically reviewed the identified themes to ensure their coherence, relevance, and clarity. This included checking whether all the coded data units within each theme were meaningful and connected, and whether the themes were delineated from each other. Certain overlaps were tolerated to maintain the integrity of the themes.

Phase 5: Defining and naming themes

After the themes were revised and refined, the researcher defined and named them. Each was given a precise name that concisely described its content and meaning.

Phase 6: Producing the report

The researcher produced a final report on the results in the final phase. This included selecting illustrative quotes from the data that supported the identified themes and including them in the report, which was formed as a coherent ‘story’ about aspects of students’ experiences based on the analyzed written reflections.

RESULTS AND DISCUSSION

Thematic analysis identified five main themes with corresponding subthemes (Figure 2, a detailed overview and definitions of themes, subthemes, and codes with illustrative quotes are available from the author).

Figure 2.

Presentation of themes and corresponding subthemes with indicated tentative relationships (indicated by arrows)



Cognitive aspects

The analysis of the students' reflections revealed a significant impact of the service-learning experience through volunteering on their thinking and understanding of the issues of working with people with special needs. Students gained new skills and knowledge, aligning with earlier research highlighting the importance of practical experience in the learning process (e.g., Eyler & Giles, 1999; Billet, 2009; Billet, 2015). In addition to developing practical skills, students deepened their understanding of the specific needs of people with developmental disabilities, which is crucial for their future profession.

“Through working with children, I better understood specific difficulties such as dyslexia and dysgraphia.”

“I am very glad that I had the opportunity to work with a boy with ADHD precisely because I know that I will often encounter it in the future.”

“Through this experience, I learned a lot about the importance of an individualized approach in education. I realized how important it is to understand each child's specific needs and adapt teaching methods to those needs.”

Developing empathy and better understanding was also a significant outcome of the volunteering experience. Students developed compassion and understanding for the challenges faced by children with disabilities, which is consistent with research showing that learning experiences through volunteering can foster the development of empathy (e.g., Lundy, 2007; Everhart, 2016; Wang et al., 2018). In addition, students changed perspectives and removed prejudices about children with disabilities, recognizing their abilities and potentials.

“This experience taught me empathy because, understanding the daily challenges faced by children with special needs, I

developed a deeper understanding and compassion for their struggles.”

“But very quickly I realized that the key to success will be patience, empathy, and consistency.”

“Volunteering has also changed my attitude towards any difficulties. I realized I feel too sorry for these people and am not helping them that way. I realized how much they can offer to the world and people and teach them how to live.”

The change in perception and attitudes was also evident in students’ reflections. Students developed more positive attitudes about volunteering and working with children with disabilities, recognizing the value and importance of such experience. This change in attitudes has also been observed in previous research (e.g., Chambers, 2017; Gil-Gomez et al., 2015; Chiva-Bartoll et al., 2020), and can be explained through the theory of cognitive dissonance, which suggests that people strive to align their beliefs and behaviors (Festinger, 2017). Furthermore, students developed self-confidence and a sense of competence in working with children with disabilities, which is an important outcome for their future professional development.

“When I first came to Association X, I did not know what to expect. I expected a room for working with children and children who come there because they have to improve their knowledge, reading, writing, and the like. I encountered the opposite. In association X, children come with a smile.”

“I can say that I am significantly different from that day. Many things have changed in my perception of ‘important things’.”

“At the beginning of volunteering, I was under a feeling of compulsion... I proved to myself that I can do it and have a feeling for people, especially those who need even more help.”

Finally, students successfully connected theoretical knowledge with practical experience, a key element of service-learning experiences (Peteresen et al., 2020). This integration of theory and practice enabled them to gain a deeper understanding of the complexities of working with children with disabilities and to apply theoretical concepts in real situations.

“Every moment spent with children was an opportunity for learning and applying theoretical knowledge in real life.”

“Attempts to convey history material classically were insufficient, so I adapted my approach. Reading the text was

challenging due to difficulties in decoding and interpreting some words, so we learned the material orally, using various memorization techniques and a mobile device as a visual aid.”

“That experience also encouraged me to read literature and improve my knowledge, abilities, and skills for a future teacher or pedagogue job.”

Emotional aspects

Students experienced a sense of satisfaction and fulfillment through volunteering, which is consistent with earlier research showing that volunteering can contribute to a positive emotional state and a sense of happiness (e.g., Opazo et al., 2018; Chiva-Bartoll et al., 2020). Students expressed joy in providing help and positively impacting children, and the experience motivated and inspired them to work further with children.

“I have never felt so fulfilled and satisfied anywhere.”

“Volunteering in Association X has changed my view of the world and encouraged me to become even more involved in helping others.”

“Volunteering in Association X was not only a part of my life path, but also a part of my identity, reminding me daily of the importance of empathy and solidarity.”

Emotional connection and compassion were also important aspects of the volunteering experience. Earlier research has systematically shown that service learning contributes to developing emotional skills crucial for connecting with students (e.g., Opazo et al.; Austral, 2023). Students built relationships with children, creating emotional connections and friendships, and a safe and trusting environment in which children felt comfortable and loved.

“The children were becoming more and more relaxed and often wanted to talk and asked me about everything. I have a special memory of a boy I worked with the first hour I came to the association. At the end of the work with him, he drew me a drawing and thanked me for helping him.”

“I was happy that these children were open towards me and talked about themselves, so I had no fear of how to approach and help them.”

“I am writing this seminar with a full heart and gratitude that I can even write something like this and that I have the opportunity to be with my little friend even today.”

The students' reflections also revealed that they were coping with challenges and frustrations. They faced difficulties in communication and interaction with children, as well as with their emotional states, such as sadness and frustration. These challenges sometimes led to the questioning of their own abilities and competencies and the system within which they operated.

“There were times when I felt frustrated because I did not know how to approach a certain child or how to solve a problem.”

“I realized that I cannot help everyone and that some things are beyond my power. This hit me hard because I came with the idea that I would help them all.”

“The lack of resources and support for children with developmental disabilities is a serious challenge. More funds must be invested in education, health care, and social services to ensure full integration into society.”

Ultimately, the volunteering experience contributed to students' personal growth and development. Students developed patience and tolerance in working with children with special needs, which is a key skill for future teachers and educators (e.g., Schulte et al., 2008). In addition, volunteering encouraged increased self-confidence and a sense of competence in working with children. It contributed to a change in life perspectives and priorities, which aligns with findings that show the impact of service learning on personal growth and life perspective (Reed & Hadad, 2016).

“One of the things I learned is that you need to be patient for this kind of job because children are very impatient and playful, so you need to have patience with them.”

“I would also like to point out that at the beginning of the process, I felt insecure about my abilities, and I was unsure if I had the knowledge they needed and if I could transfer that knowledge to them. With each new arrival at the association, I gained confidence in my skills and role.”

“I believe that this experience has built me up even more as a person and has opened additional doors for the future development of me as a professional pedagogue and teacher, but also as a person.”

Social aspects

Students developed communication skills through volunteering, consistent with earlier research that emphasizes the importance of service learning

for developing social and communication competencies (e.g., Drinkard & Tontodonato, 2019; Tan & Soo, 2020). They learned to adapt communication to the individual needs of children with special needs, using different methods and approaches to ensure effective interaction. Also, they developed active listening and non-verbal communication skills, which enabled them to understand children and their needs better.

“With their questions, the children taught me to explain some things in several possible ways, and thus I became more creative.”

“I learned that non-verbal communication is just as important as verbal communication, especially when working with children who have difficulty expressing themselves.”

“I learned that it is important to be present and focused on the child, listen to him carefully, and show interest in what he is saying.”

Building relationships and connecting with children were also important aspects of students' experiences. Students established emotional connections and friendships with children, creating a safe and supportive environment. The development and understanding of relational competencies represent an important component of the teaching profession, especially when working with people with special needs (Aspelin et al., 2021; Koenen et al., 2021). In addition, students learned to recognize and respect children's individual needs and interests, adapting their approach to provide them with optimal support.

“I developed a very nice relationship with the children in which they felt safe and free to talk to me about everything that bothered them and what made them happy.”

“It is important to emphasize that for successful work with children with developmental disabilities, it is crucial to create an environment in which they will feel safe, accepted, and loved. This includes respecting their needs, providing support and encouragement, and creating opportunities for success.”

“I also learned that every child is special and that we cannot generalize them. You must develop a special relationship with each child and understand their wishes. Some children like a lot of play and talking, and some like peace and quiet, and we should adjust our behavior accordingly.”

Collaboration and teamwork were important elements of students' reflections. They collaborated with colleagues, experts, and parents, exchanging

knowledge and experiences and jointly planning support for children. This is an important aspect of the profession (Santagata & Guarino, 2012) that can only be superficially learned from textbooks or lectures. In addition, students encouraged mutual support and cooperation among children, creating a sense of community and belonging.

“Exchanging experiences with other students and employees of the association further enriched my understanding. Through conversations with colleagues, I heard different perspectives.”

“The mentor who directed and distributed the work and provided the necessary information also helped in this process.”

“I talked to his mother, and she mentioned that his drawing is not in line with his age, but that she can usually recognize what he is drawing because she knows him well.”

“I am glad that I shared this experience with my colleagues from the faculty because we could cooperate and retell our experiences.”

Finally, the volunteering experience fostered the development of social awareness and a sense of responsibility among students. This aspect is one of the fundamental components and expected effects of this form of learning (e.g., Prasertsang, 2013; Mergler et al., 2017). They recognized the importance of active participation in the development of the community and developed awareness of the needs of vulnerable groups. Students felt that they were actively participating in creating positive changes in society, reflecting on their role and the importance of contributing to the community.

“I learned that real societal changes occur when each individual takes responsibility for the community and acts with love and respect towards others.”

“This experience also prompted me to think about ways in which society can better support people with Down syndrome, both in education, employment, and everyday life. It is important to continuously work on creating an inclusive environment that encourages full participation and empowers people with Down syndrome to realize their potential.”

“Working with children with disabilities has changed my perception of difficulties and human needs. I have become more sensitive to the demands of society, more often and

more bravely defend the oppressed, and appreciate the people around me more.”

Motivational aspects

Altruism and the desire to help were strong motivators for students. In line with earlier research showing the development of reciprocal patterns of altruism as a result of service learning (e.g., Şimşek, 2020; Chiva-Bartoll et al., 2020), students expressed a selfless desire to help and contribute to the community, especially for children with special needs. In addition, they felt responsibility and solidarity towards children with disabilities, recognizing their needs and wanting to support them.

“I believe that volunteering is one of the most valuable experiences anyone can ever have. It is extremely important because it provides an opportunity to actively contribute to the community and help those who need help the most.”

“This association taught me how to be compassionate and sensitive and communicate with children.”

“When thinking about where to volunteer, I decided it was time to see what real difficulties are, to experience something that will certainly be difficult for me, but also useful for future work.”

“Until that moment, it was only somewhere deep in my subconscious that after completing my university education I would encounter children with difficulties in my future work. I became aware that I do not have the necessary knowledge, that a long road and much learning awaits me. That sparked my curiosity and desire for change and learning.”

“This experience has encouraged my desire to experience as much volunteer work as possible so that I can better understand what children of today are facing, so that I can help someone, so that I can progress as a person, and so that I can be at least approximately ready for the situations I will face in my future job.”

Professional interest and development also played an important role in students’ motivation. Volunteering enabled them to gain practical experience and apply theoretical knowledge in real work with children with disabilities, which is crucial for their future professional development (Billet, 2015). The volunteering experience also confirmed their professional calling and

motivation for working with children with disabilities, providing them with insight into the real challenges and joys of such work.

“This volunteering experience was beneficial for my further education and personal development.”

“Many children have positively affected me and confirmed that this calling is just for me, which I could not witness until direct work with children.”

“Volunteering in the association is an experience that I will surely remember, but also one that will help me further my studies.”

Finally, social responsibility and engagement were also present in the students' reflections. As in previous research, students recognized the importance of personal contribution to the community, developing awareness of the needs of vulnerable groups and actively participating in creating positive changes (e.g., Jobling & Moni, 2010; Broomhead, 2013; Chiva-Bartoll et al., 2020).

“Volunteering in Association X has definitely changed my view of the world and encouraged me to get even more involved in providing help to others.”

“I learned how to support children with special needs, acquired valuable professional skills, and improved communication skills. Most importantly, I realized how important volunteer work and community support are for creating a more sensitive, stimulating, and just society.”

“I learned that real societal changes occur when each person takes responsibility for their community and acts with love and respect towards others.”

Expectations and outcomes

Students often started volunteering with initial uncertainty and fear of the unknown, which is consistent with earlier research showing that students may have different expectations and concerns before starting a volunteering experience (e.g., Bringle & Hatcher, 1996). Some expressed concern about a lack of experience in working with children with disabilities, while others had unclear expectations. Despite the initial uncertainty, students also expressed expectations about gaining experience, knowledge, and motivation for helping and contributing to the community.

“On the first day, I did not know what to expect and felt a small dose of fear because I had never been in close contact with people who have certain types of difficulties.”

“When I first came to Association X, I did not know what to expect.”

“When I learned in lectures that, instead of classic writing of seminar papers and giving presentations, we would have to volunteer in an association that deals with people with disabilities, I was very excited and satisfied because I knew that it was a new experience from which I would learn a lot.”

The volunteering experience often exceeded their initial expectations, providing them with the opportunity for personal satisfaction and fulfilment, increased self-confidence and a sense of competence, and positively impacted children and young people with disabilities. They reported feelings of joy and satisfaction through volunteering, the development of self-confidence and a sense of competence in working with children, and a positive influence on children.

“Seeing the smiles on their faces and knowing that I contributed to their development was a feeling that cannot be described.”

“Despite this, after working with each child, I felt fulfilled and happy because I could see they were progressing.”

“I consider myself more competent working with children with special needs after this experience. Before volunteering in Association X, I thought I lacked the knowledge and experience to work with children with special needs. However, this new experience makes me more confident than ever.”

Although they experienced numerous positive outcomes, students faced challenges and difficulties while volunteering. These included difficulties in communication and interaction with children and young people with special needs, coping with emotional challenges, difficulties in adaptation and finding appropriate working methods, and organizational challenges and shortcomings.

“For me, the hardest thing is the lack of feedback from the child. Due to the lack of communication, I must learn to recognize his needs without him telling me.”

“The hardest thing for me was when a child was sad or frustrated, and I did not know how to help him.”

“I could not dedicate myself to just one child and his needs. I believe quality work cannot be done in a room with more children and volunteers (a child with special needs requires

special circumstances). It is very difficult to ensure that a child with concentration problems can focus on learning if there is a hyperactive child in the room. Therefore, I believe it is necessary in association X to make more rooms so that individual work with children can be achieved.”

The volunteering experience also prompted changes in students’ attitudes and values. Attitudes about people with special needs and their abilities, attitudes about volunteering and its significance, and personal values and priorities changed. Students developed greater empathy and understanding for the needs of children with disabilities, recognized the value of volunteering and its impact on personal growth, and re-examined their priorities and life goals.

“The prejudices and fears that may have existed have almost disappeared. I am very glad that I had the opportunity to experience and ‘live’ with these people because, for a better tomorrow for all of us, we must be aware of the needs and specificities of all members of our society.”

“This volunteering experience also prompted me to reflect on my own values and priorities. I realized how important it is to contribute to the community and how small acts of attention and support that I show to children can significantly impact them and their lives.”

”It is positive that these children, young people, and adults are so happy regardless of their condition and health. There is so much life in them. If only we were like that, where would we end up? Less positive opinions are related to the position of the staff in a very unenviable situation. Many people are in a small space, and each of them has its own needs (different). In addition, they are not of the same age. I admire them very much, their patience, effort, work, in every drop of sweat. I learned we should devote more time to such special people; too many are neglected. Regardless of their situation, they still understand when someone gives them love or when they do not. It was very useful to me. I somehow started to appreciate these people and my health more, which I often take for granted.”

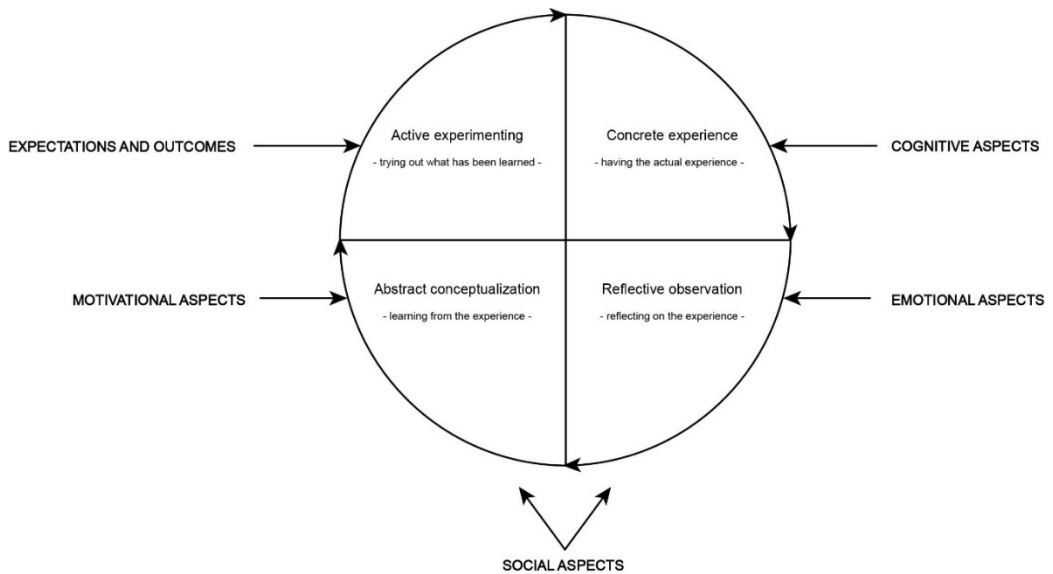
GENERAL DISCUSSION

The results of this research can be viewed in the context of Kolb’s experiential learning cycle (Kolb, 1984, Figure 3). Kolb’s model is widely

accepted and influential in education and human potential development, and due to its flexibility and applicability, it is used in various contexts, from formal education to business training (Morris, 2019).

Figure 3.

Conceptual connection of the obtained results with Kolb's experiential learning cycle



Overall, the results of this research showed that volunteering had a significant impact on students in the cognitive, emotional, motivational, and social aspects, which is consistent with earlier research on service learning (e.g., Eyler & Giles, 1999; Billet, 2009; Bringle & Hatcher, 1996). In a cognitive sense, students gained new knowledge and skills, deepened their understanding of the specific needs of children with special needs, and connected theoretical knowledge with practical experience. This volunteering experience, where students actively participated in real situations and faced challenges, fits into the first phase of Kolb's cycle – concrete experience. The findings support the importance of practical experience in the learning process and emphasize the value of volunteering as a learning method (Eyler & Giles, 1999; Billet, 2009). Also, students developed empathy and understanding for the challenges faced by children with special needs, changed perspectives and broke down prejudices, which is consistent with research showing that learning experiences through volunteering can foster the development of empathy (e.g., Lundy, 2007; Everhart, 2016; Wang et al., 2018).

Emotionally, students experienced satisfaction and fulfillment, joy for the help provided and the positive impact on children, and developed emotional

connection and compassion. Through writing a seminar paper, which included a personal review of the experience, students had the opportunity for reflective observation. This phase of Kolb's cycle allowed them to re-examine their experiences, emotions, and reactions and better understand themselves, their values, and their role in society. These findings support the idea that volunteering can contribute to a positive emotional state and a sense of happiness (e.g., Opazo et al., 2018; Chiva-Bartoll et al., 2020). However, students also faced challenges and frustrations, sometimes leading to questioning their abilities. Despite this, the volunteering experience contributed to students' personal growth, encouraging the development of patience, tolerance, and self-confidence.

In terms of motivation, altruism and the desire to help were strong motivators for students, which is consistent with earlier research that shows the development of reciprocal patterns of altruism as a result of service learning (e.g., Şimşek, 2020; Chiva-Bartoll et al., 2020). Also, the desire for learning and development, and professional interest and development were significant motivational factors. Volunteering enabled students to gain practical experience and apply theoretical knowledge, which is crucial for their future professional development (Billet, 2015). Connecting practical experience with theoretical knowledge, a key part of seminar papers, represents abstract conceptualization in Kolb's cycle. Students analyzed their experiences, drew conclusions, and created new concepts and understandings.

Socially, students developed communication skills, learned to adapt communication to the individual needs of children with disabilities, and developed active listening and non-verbal communication skills. These findings support the importance of service learning for the development of social and communication competencies (e.g., Drinkard & Tontodonato, 2019; Tan & Soo, 2020). Also, students built relationships with children, established emotional connections and friendship, and learned to recognize and respect children's individual needs and interests. Collaboration and teamwork were important elements of students' experiences, encouraging the exchange of knowledge and experiences and joint planning of support for children. These processes can be placed in the phases of concrete experience and reflective observation, since students were on the one hand directly immersed in situations in which they developed the mentioned skills and gained experiences, and also reflected on their meaning and their role in society and social processes in which they are involved.

The volunteering experience often exceeded students' initial expectations, providing them with the opportunity for personal satisfaction, increased self-confidence, and a positive impact on children. Although they faced challenges, volunteering prompted changes in students' attitudes and values, developing greater empathy, understanding, and awareness of the needs of vulnerable groups. This transformation and application of new knowledge

and skills in future situations represent the final phase of Kolb's cycle – active experimentation. Students have the opportunity to test and consolidate their learning, which closes the cycle and opens the possibility for new experiences and further development.

The results emphasize the importance of service learning through volunteering as an approach that encourages students' cognitive, emotional, motivational, and social development. Furthermore, the importance of practical experience in connecting theoretical knowledge with practical work and the development of empathy, communication skills, and self-confidence among future teachers is highlighted. Future research could focus on the long-term effects of volunteering on the professional development of teachers and the research of specific support strategies for students during the volunteering experience. Also, since European initiatives aimed at developing and encouraging social engagement within the framework of the development of student competencies in Croatia are still in the development phase, in the local context it would be useful to investigate how learning experiences through volunteering can be meaningfully integrated into the curricula of teacher education programs. Namely, similar to other post-communist countries, the historical and cultural context represents a challenge for the wider application of such teaching practices (Aramburuzabala et al., 2019). Therefore, it is important to do everything possible so that curricular changes due to European initiatives do not remain formal fossils without real and meaningful integration into the experience and well-being of students, teachers, and members of the wider community.

This research provides initial insights into the experiences of the Teacher Education Study and Pedagogy students who volunteered with children with special needs. These results should certainly be considered in their limited context. It is the experience of students from one institution in a course organized by the same teacher. In this sense, the results should be seen as conceptual evidence of the possibilities that this way of learning and teaching provides, and not something that can be generalized to other populations and situations, which is not in the spirit of qualitative research. This approach certainly depends on many factors that will differ from case to case, such as the needs and characteristics of the community, the connection of teachers with local stakeholders, the competencies of teachers and students, the formal and practical support of the institution, etc. These factors will differ from case to case. Therefore, it is difficult, or even counterproductive, to reduce this type of learning organization to a sequence of procedures that will lead to the desired outcomes. Instead, in the spirit of the service-learning approach, open and honest communication and constant reflection and adaptation to real needs as they appear and change are needed. Thus, this approach is also a form of service learning for the teacher.

CONCLUSION

Through volunteering with children with special needs, students gained practical knowledge and skills and experienced a significant leap in personal and professional development. The experience fostered empathy, self-confidence, and competence, shaping them into future teachers who are professionally trained and deeply committed to their profession.

The research results emphasize the importance of including service-learning experiences in the curricula of teacher education programs. Such experiences allow students to connect theoretical knowledge with practical work, develop key social and emotional skills, and build positive attitudes towards working with children with disabilities. Furthermore, volunteering encourages the development of altruism, social responsibility, and engagement, key values for future teachers. Although students faced challenges while volunteering, these experiences enabled them to develop resilience, adaptability, and the ability to cope with difficulties. Also, volunteering prompted reflection on their own values, priorities, and role in society, which is crucial for personal and professional growth.

Ultimately, this research confirms that service-learning experiences have a transformative potential for students in teacher education programs. Volunteering prepares them for the challenges of their future profession and shapes them into empathetic, competent, and socially responsible individuals. Therefore, it is important to continue to research and promote such forms of learning to ensure that future teachers are ready to create an inclusive and supportive educational environment for all children.

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