



Service-Learning: Everyone Deserves to Play!

Jessica A. Mason

University of Southern Indiana, jamason@usi.edu

Karen Dishman

University of Southern Indiana, Kmdishman1@usi.edu

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Author Biography

Dr. Jessica Mason is an Assistant Professor of Occupational Therapy at the University of Southern Indiana. She graduated with her Master of Science in Occupational therapy in 2006 and Occupational Therapy Doctorate in 2017. She has been teaching in occupational therapy education since 2014. Her clinical expertise includes inpatient rehabilitation and school-based practice.

Dr. Karen Dishman is an Assistant Professor of Occupational Therapy at the University of Southern Indiana. She graduated with her Bachelor of Science in Occupational Therapy in 1999 and Occupational Therapy Doctorate in 2018. She has been teaching in occupational therapy education since 2018. Her clinical expertise includes school-based practice. She received certification as an Assistive Technology Professional in 2013.

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Service-Learning: Everyone Deserves to Play!

Jessica Mason and Karen Dishman

University of Southern Indiana

Children learn from interactions with peers and through independent play. Children with significant disabilities often struggle to engage in play and require the use of adapted toys. The purpose of this research was to explore occupational therapy (OT) and occupational therapy assistant (OTA) student perceptions of a service-learning activity of adapting toys to be switch accessible. A total of 50 toys were switch adapted by the students and distributed to the local community. Student perception of interest included overall learning, views on service-learning, and the importance of volunteering in the community. Survey results indicate that most students believed this project helped them to become more aware of an individual's needs and how to make a difference in their community. The OT and OTA students also reported this activity reinforced problem-solving skills and classroom coursework. Learning how to adapt battery operated items is an important skill for OT and OTA students to develop prior to professional practice. Skills learned from adapting items can be used to assist clients of all ages in all practice settings.

The role of occupational therapy (OT) practitioners involves assisting individuals with participation in everyday occupations, including play for children (Graham, Truman, & Holgate, 2015). To increase the value and frequency of play experiences, OT practitioners can educate the child and his or her family on AT tools and strategies (Adams et al., 2013). To educate the occupational therapy (OT) and occupational therapy assistant (OTA) students on the value of play, assistive technology, and community outreach, the University of Southern Indiana (USI) Student Occupational Therapy Association (SOTA) modified battery operated toys to allow switch-accessibility for children in the community. The project involved purchasing battery operated toys and switches and then modifying them using a simple wire splicing strategy. The switch for the toy can be placed at a location the child can access easily like his or her head, finger, elbow, or chin. Learning how to adapt battery operated items with the most current techniques is an important skill for OT and OTA students to develop prior to professional practice. Skills learned from adapting items can be used to assist all ages of clients in all practice settings.

Purpose and Project Objectives

The purpose of this study was to explore perceptions held by OT and OTA students regarding a service-learning experience involving adapting toys for children with

disabilities in the community. The USI SOTA program applied and received the USI Endeavor Grant. Using the Endeavor Grant funds, toys, switches, and supplies were purchased to modify the toys and then given to community partners. Student perceptions of interest included overall learning, views on service-learning, and the importance of volunteering in the community. Objectives of this project were:

1. To educate OT and OTA students on the purpose and process of adapting battery-operated items.
2. Develop community outreach skills in OT and OTA students through collaboration with community partners.
3. Provide children with physical and/or cognitive disabilities with toys they can interact and play with independently.
4. To assess OT and OTA student perceptions of service-learning.

Literature Review

Play is the work of children. All children grow and develop from play experiences and have a right to participate in the act of play (van den Heuvel, Lexis & de Witte, 2015). Engaging in play activities gives children the opportunities to, “understand and make sense of their world, interact with others, express and control emotions, develop their symbolic and problem-solving abilities, and practice emerging skills” (National Association for the Education of Young Children, 2009, p. 14.) Children gain knowledge of their world by exploring things to see what happens (National Association for the Education of Young Children, 2009). For some children with physical and/or cognitive disabilities, limited opportunities to explore their environments and participate in play results in limited development of motor, social, and language skills (Adams et al., 2013). These children often demonstrate difficulty initiating and participating in play activities in a natural way (van den Heuvel et al., 2015). Typical toys are not designed for children with disabilities to manipulate making play sometimes frustrating and difficult (van den Heuvel et al., 2015). Furthermore, children with physical and/or cognitive disabilities are frequently left to be spectators during play watching others activate and engage with toys (Adams et al., 2013).

To move children from spectator to active participant, toys must be modified through assistive technology. Assistive technology (AT) is defined as “an item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities” (American Occupational Therapy Association, 2015, para. 2). One-way AT is utilized for independent play is by modifying a battery-operated toy to allow a switch or simple button to activate it. According to Schaefer and Andzik (2016), switches are simple devices that are used to complete electrical circuits so that another powered device can be activated. These switches are activated by small body movements in order to create an easier way for equipment to be used (Schaefer and Andzik, 2016). Using assistive technology to operate a toy

allows the child to be empowered and gain control of his or her play and learning (National Association for the Education of Young Children, 2009). Learning switch skills through play may lead to more independent switch use as an adult (Schaefer and Andzik, 2016).

Project Design

This research study used a survey with a Likert scale to identify occupational therapy and occupational therapy assistant students' perceptions of a service-learning activity in the community. Data was obtained through a survey made available to students following completion of the toy modification process. Information obtained from the study allowed for identification of student views on community service as a method of teaching and reinforcing academic content. Information obtained also determined if students believed they made an impact in a community by participating in this type of learning activity.

Setting

This research project was designed and implemented on the campus of a public university in the central Northern United States. The university typically enrolls approximately 10,000 students into its courses each fall and spring semester and offers dual credit, undergraduate, and graduate coursework to students. This university awards associate, bachelor, master, and doctorate degrees. The current OT program at the research setting is an accredited master's entry program and the OTA program is an accredited associate's entry level program.

Participants

The participants of this project were selected using purposeful sampling. Research participants were current first- and second-year occupational therapy and first-year occupational therapy assistant students enrolled in their respective programs. Of the 91 surveys distributed, 31 surveys were provided to second-year OT students, 30 were provided to first-year OT students, and 30 were provided to first-year OTA students. A total of 72 surveys were returned for a response rate of 79.12%.

Project Methods

For this research project, a survey approach was used as the data collection method. The overall aim of the survey was to identify student perceptions associated with a service-learning activity. The survey utilized was adapted from a previous survey used by Gelmon, Holland, and Spring (2018). Instructions for survey completion were provided with a detailed explanation of the overall intent of the survey. The survey included 12 questions. After information from the survey was obtained, responses were analyzed.

Table 1. OT and OTA Student Perceptions of a Service-Learning Activity.

Please indicate your level of agreement with the following statements.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
The community service aspect of SOTA helped me to see how the subject matter I learned can be used in everyday life.	1.39%	0.00%	0.00%	18.06%	80.56%
The community service I did through SOTA helped me to better understand the lectures and readings in my courses.	1.39%	1.39%	11.11%	36.11%	50.00%
The idea of combining service in the community with university coursework should be practiced in more classes in the OT/OTA programs.	1.39%	0.00%	0.00%	11.11%	87.50%
I feel that the community service I did through this course benefited the community.	1.39%	0.00%	0.00%	11.11%	87.50%
The community service involved in this course helped me to become more aware of the needs in my community.	1.39%	0.00%	4.17%	20.83%	73.61%
I have a responsibility to serve my community.	1.39%	0.00%	1.39%	13.89%	83.33%
The service I performed in the community enhanced my ability to communicate in a “real world” setting.	1.39%	1.39%	6.94%	23.61%	66.67%
The community service aspect of this course helped me to develop my problem-solving skills.	1.39%	0.00%	8.33%	22.22%	68.06%
Most people can make a difference in their community.	1.39%	0.00%	0.00%	16.67%	81.94%
This service-learning activity helped me become more comfortable working with people different from myself.	1.39%	1.39%	6.94%	25.00%	65.28%
The community service I performed in this course helped me learn how to plan and complete a project.	1.39%	0.00%	6.94%	19.44%	72.22%
I can make a difference in my community.	1.39%	0.00%	0.00%	9.72%	88.89%

Results

Statistical analysis was completed with Microsoft Excel as there was a small sample size and limited quantitative analysis required for the data. Seventy-two students participated in the IRB approved study. See Table 1 for complete survey results.

Results indicated that 80.56% (n=58) of participants strongly agree that the community service aspect of the project helped them to learn how to apply switch adaptation in everyday life compared with 18% (n=13) whom agreed. Participants indicated 50.00% (n=36) strongly agreed and 36.11% (n=26) agreed that the community service project helped them to better understand the class lectures and readings. When participants were asked if the service provided through this course benefited the community, 87.5% (n=63) strongly agreed. When asked if the community service aspect of this activity helped to develop problem-solving skills, 68.06% (n=49) strongly agree and 22.22% (n=16) agree compared to 8.33% (n=6) were not sure and 1.39% (n=1) strongly disagreed. Many of the participants indicated, 72.22% (n=52) strongly agree and 19.44% (n=14) agree, the community service performed in this course helped them learn how to plan and complete a project. Participants indicated that 88.89% (n=64) strongly agree and 9.72% (n=7) agree they can make a difference in their community.

Discussion of Findings

The purpose of this research study was to uncover perceptions of OT and OTA students regarding a service-learning activity of adapting battery-operated toys for children with physical and/or cognitive disabilities in the community. Survey participants reported that people, including themselves, can make a difference in their community and have a responsibility to serve their community. Survey participants strongly agree (87.50%) that community service should be practiced in more OT and OTA classrooms. The USI SOTA organization emphasizes community service and requires all students to complete community service hours. The findings of this research support the use of service-learning activities in OT and OTA coursework during the academic semesters of learning. The data also supports implementing additional service-learning opportunities in the classroom as a method to reinforce concepts. The results obtained during the research study will be used to support and aid in development of program content and the enrichment of learning experiences.

Strengths & Limitations

Strengths of this research study include but are not limited to increased identification for program development, opportunity for collaboration with university and community partners, and adding to existing literature regarding teaching pedagogy for OT and OTA students. A significant strength of the research study was the opportunity for program development within the research site setting. In order to evolve

and further develop, academic university programs should obtain student feedback. Data obtained from this research will be used to further develop educational opportunities in the classroom involving service-learning. The possibility of increased collaboration among OT and OTA academic faculty and community partners is another strength of the research study. In order to increase service-learning opportunities, collaboration among community partners is essential. Academic faculty and community partners can work together to further develop additional service-learning opportunities for students. Furthermore, the completion of this research study will add to the existing literature for occupational therapy education.

All research studies have limitations. The sample size for this research study was small. Student perceptions obtained may not represent the entire population of OT and OTA students within the occupational therapy profession. Therefore, the results of the survey must be used with caution when guiding program development. Another limitation of the study was participant interpretation of survey questions. Question format or wording may have been interpreted in a variety of ways. One final limitation was the inability of all student participants to deliver the adapted toys to the children in the community as the result of limited scheduling opportunities. The students unable to participate in the toy delivery did not have the opportunity to interact with the children or experience the children using the toys and switches.

Future Research

The results of the survey study provided evidence to support the use of service-learning for both OT and OTA students and the addition of more service-learning experiences embedded into OT and OTA curricula. Future research may center on collecting data on the level of direct participation with community partners when participating in service-learning. Future research may focus on the correlation between service-learning that involves direct participation with community partners versus a high level of participation of in-class activity requirements of students. Additional future research may include comparison of the current research data to survey data collected after providing a revised version of the toy adaption project involving a higher level of direct participation with community partners. This would involve the OT and OTA students collecting data on a child's abilities with using the adapted toys and switches. This evidence could be utilized to further support the education of OT and OTA students using the strategy of service-learning in the classroom.

References

- Adams, K., Rios Rincon, A., Becerra, L., Castanellos, J., Gomez, M., Cook, A. M., & Encarnação, P. (2013). An exploratory study of children's pretend play when using a switch-controlled assistive robot to manipulate toys. *British Journal of Occupational Therapy*, 80(4), 216-224. doi: [10.1177/0308022616680363](https://doi.org/10.1177/0308022616680363)
- American Occupational Therapy Association. (2015). The role of occupational therapy in providing assistive technology devices and services. Retrieved from <https://www.aota.org/About-Occupational-Therapy/Professionals/RDP/assistive-technology.aspx>
- Gelmon, S. B., Holland, B. A., & Spring, A. (2018). *Assessing service-learning and civic engagement: Principles and techniques* (2nd ed.) Boston, MA: Campus Compact.
- Graham, N. E., Truman, J., & Holgate, H. (2015). Parents' understanding of play for children with cerebral palsy. *American Journal of Occupational Therapy*, 69(3). doi: [10.5014/ajot.2015.015263](https://doi.org/10.5014/ajot.2015.015263)
- National Association for the Education of Young Children. (2009). Developmentally appropriate practice in early childhood programs serving children from birth through age 8: A position statement of the National Association for the Education of Young Children. Retrieved from <https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/PSDAP.pdf>
- Schaefer, J. M., & Andzik, N. R. (2016). Switch on the learning. *TEACHING Exceptional Children*, 48(4), 204-212. doi: [10.1177/0040059915623517](https://doi.org/10.1177/0040059915623517)
- van den Heuvel, R., Lexis, M., & de Witte, L. (2015). ICT based technology to support play for children with severe physical disabilities. *Studies in Health Technology and Informatics*, 217, 573-577. doi: [10.3233/978-1-61499-566-1-573](https://doi.org/10.3233/978-1-61499-566-1-573)