
Developing Practice Guidelines for Interprofessional Educational Collaboration Between Design and Healthcare Fields

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ABSTRACT

Effective assistive technology (AT) development requires proper identification of user needs, knowledge of materials, and application of design methodology and iterative processes. Current evidence suggests that the process benefits from collaboration with occupational therapists, yet this is not a professional norm. To address AT design challenges and to promote future professional collaboration, Thomas Jefferson University developed an interprofessional education (IPE) co-design program for Occupational Therapy Doctoral (OTD) and Masters of Industrial Design (MSID) students. Using experiential learning modules, students co-create assistive devices for individuals living with Fibrodysplasia Ossificans Progressiva (FOP), a rare genetic disorder causing progressive immobility. Students experience real-world contexts and collect ongoing data. FOP user-experts participate in the design process via standardized interviews and structured feedback recorded during device user-testing sessions. Here, we present our in-progress approach to creating evidence-based practice guidelines for future collaborations between healthcare professionals and designers based on an IPE collaboration. This IPE program offers insight into how to structure effective interdisciplinary programs and implement co-design methodology.

Keywords: Interdisciplinary collaboration, Interprofessional education, Assistive devices, Design education, Cultural inclusivity, Practice guidelines, Industrial design

INTRODUCTION

Effective assistive technology (AT) development requires proper identification of user needs, knowledge of materials, and application of design methodology and iterative processes. Consideration of the physical and cognitive challenges faced by users is the first step before creating adaptive products that support participation in daily tasks. When designers collaborate with healthcare professionals to create adaptive products for users, the result is high-quality prototypes that have high market-readiness and usability compared to mass-produced, one-size-fits-all adaptive devices (Aflatoony et al., 2021; Rostetter et al., 2022).

Occupational therapy (OT) is a healthcare profession dedicated to maximizing health, well-being, and quality of life for all people, populations, and communities through effective solutions that facilitate participation in everyday living (Wagenfeld et al., 2017). Occupational therapists have unique skills that can provide designers with insights regarding user abilities and AT needs, content that is vital to creating adaptive devices that support participation and maximize quality of life. OT and design are complementary professions, and research is emerging on the specific benefits of interprofessional education (IPE) fostering collaboration between students in these fields. Identified benefits include an increased understanding of each profession's scope of practice and improved awareness of user perspectives when designing products (Adams et al., 2022; Barrett et al., 2022). Further, industrial design students demonstrate more accessible product designs overall, while OT students develop a deeper understanding of how the iterative design process can create aesthetically pleasing devices capable of mass production (Adams et al., 2022).

To promote interprofessional collaboration, the Occupational Therapy and Industrial Design departments at Thomas Jefferson University (TJU) have provided IPE programming for 24 years. In 2018, faculty embarked on an embedded, year-long academic IPE experience at the graduate level. Department faculty, Occupational Therapy Doctorate (OTD), and Masters of Industrial Design (MSID) students have worked together in an effective interdisciplinary embedded experience that promotes the exchange and application of knowledge among disciplines, facilitates co-design of AT, and maximizes quality of life and participation in actual users. The collaborative program has become grounded in users' lived experiences via the Jefferson WILL Project, a partnership with the International Fibrodysplasia Ossificans Progressiva Association (IFOPA).

IFOPA is the largest international advocacy group for Fibrodysplasia Ossificans Progressiva (FOP), a rare genetic disorder that causes an individual's muscles, tendons, and ligaments to turn to bone through the process of heterotopic ossification, resulting in progressive immobility (IFOPA, n.d.). An estimated 900 individuals have been diagnosed with this condition worldwide (Liljeström et al., 2020). As the condition worsens over time and severely limits an individual's ability to perform activities of daily living, the use of assistive devices can promote independence with daily activities. Current mass-produced assistive devices available on the market often do not adequately meet the usability requirements of individuals with FOP due to their varying complex physical needs, resulting in the demand for custom modifications. Through the Jefferson WILL Project, individuals with FOP are invited to share their personal experience and expert opinions regarding their daily lives and use of AT with mobility impairments. This ongoing collaboration between OT and MSID students with user involvement fosters a co-design process resulting in AT that meets the complex needs of those with mobility impairments and improves health outcomes and wellbeing.

To identify the strengths of the IPE program and ongoing challenges to collaboration outside of TJU's program, we analysed ongoing collaborative experiences between OT and design students and faculty, findings gleaned

from a literature review, and an internal needs assessment. Identified challenges include a lack of knowledge about the existing opportunities for collaboration, differences in educational curriculums, separation within colleges, and disparate professional languages and frameworks used by design and healthcare professions (Wagenfeld et al., 2017). Efforts to implement interprofessional experiences in education are often limited to short, singular workshops and projects (Larkin et al., 2013; Ielegems et al., 2021). Research also indicated non-standardized approaches to IPE between OT and design among educational institutions (Aflatoony et al., 2021; Grace et al., 2021; Ielegems et al., 2021; Larkin et al., 2013). The development of practice guidelines was determined to be an essential next step in optimizing the educational collaboration between Industrial Design and Occupational Therapy at TJU.

Here, we aim to outline the components of the in-progress practice guidelines to date, expand on their development, and provide evidence to support future implications of how to use them to enhance educational initiatives for collaboration between design and healthcare fields at Jefferson and beyond. Guidelines can inform future approaches to IPE between healthcare and design to expand interprofessional collaboration opportunities and allow professions to gain further insight into how to structure effective interdisciplinary programs and implement co-design methodology.

METHODOLOGY, MODELS, AND PROCESSES

Participant Demographics

Participant demographics have been broken down by project and guidelines development scope (Table 1). First, the IPE experience consists of faculty and student participants within Jefferson's MSID and OTD program. Second, the Jefferson WILL Project consists of international FOP expert participants (the users) via the COPM assessment. Third, the modified Delphi measure anticipates participants from both design and occupational therapy practices providing expert review of the guidelines.


An Embedded IPE Model


Practice guidelines are being developed within the context of an embedded IPE model at TJU. Development began in December of 2022 and is projected to finish in April 2023. These guidelines will reflect insights from the collaborative experience between OTD and MSID students with direct communication and input from FOP user experts and guidance from industrial design and occupational therapy faculty. The initial months (August to October 2022) of the collaborative experience built the foundation for the guidelines with a comprehensive needs assessment, rapport building, interprofessional collaboration, and outlining of project goals and expectations. From December 2022 to February 2023, the foundation for a theoretical framework, collaborative pedagogy, and classroom application is being formed. As the WILL Project was introduced to the new cohort of OT ($n = 4$) and


Table 1. Participant demographics by project.

		# of Participants	n	Participant Inclusion Criteria
Interprofessional Education Experience	MSID Students	4	11	Enrolled in a design program at TJU
	OTD Students	4		Enrolled in a Occupational Therapy program at TJU
	Design Faculty	2		Designer in an educator and/or teaching role
	OT Faculty	1		OT professional in an educator and/or teaching role
Jefferson WILL Project (COPM)	English Speaking 2021-2022 (Adams et al., 2022)	11	20	Medical diagnosis of FOP or a verified caregiver of an individual with FOP
	Spanish Speaking 2022-2023	7		Current geographical location in a minimum of 3 different countries within the Latin American region
	English Speaking 2022-2023	1		Under the age of 18 must have a caregiver present as the primary participant in all interviews
	Bilingual 2022-2023	1		Must be recruited through the IFOPA
Modified Delphi Measure	Design Experts	7 (anticipated)	19 (anticipated)	Experience in any design related field
	OT Experts	6 (anticipated)		Experience in OT not limited to OT, OTA or OT educator
	Both	6 (anticipated)		Experience as both an OT and designer: case specific

Key:

 : Relates to Interprofessional Education Experience

 : Relates to Jefferson WILL Project (COPM)

 : Relates to Modified Delphi Measure (OTD Research and Data Analysis)

MSID students ($n = 4$) in September 2022, international participant recruitment resumed; for this cycle, a cross-cultural approach is being applied. Semi-structured interviews and focus groups with users, conducted in Spanish and English with translation occurring from November 2022 and extending to April 2023, has provided initial data to be applied to user experience and cross-cultural inclusivity guidelines. Transcripts from all interviews, focus groups, and surveys taken by students and educators participating in the collaborative IPE experience will be analysed in March 2023 to inform the creation of all practice guidelines.

Canadian Occupational Performance Measure (COPM) and Focus Groups

For the past 2 years, OTD students have conducted individual semi-structured interviews for all participants using the Canadian Occupational Performance Measure (COPM) for both English and Spanish-speaking participants. Initial data were presented at AHFE, 2022 (Adams & Berger et al., 2022). The COPM is a client-reported outcome measure commonly used in OT practice in which clients identify their top occupational performance problems in the areas of self-care, productivity, and leisure. In turn, MSID

Table 2. Timeline of the embedded, interprofessional year, including the jefferson WILL project and development of practice guidelines through the modified delphi process.

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
Project Timeline: Interprofessional Education Experience	Design Bootcamp									
		IPE Education Modules								
		Introduce FOP Project								
OTD Students Embedded into Design Curriculum										
Project Timeline: Jefferson WILL Project						Faculty & Student Perspectives Focus Group				
					COPM Initial Interviews with FOP Participants					
						Design Interviews with FOP Participants and Designers				
							Prototypes Sent to Participants			
							FOP Participant Feedback Focus Groups			
Project Timeline: OTD Research, Data Analysis, Drafting of Practice Guidelines	OTD Literature Review									
			Data Collection							
					Outline Research Plan					
						Draft Practice Guidelines				
							Modified Delphi			
								Modified Delphi		
								Transcribing Interview Data		
								Finalize Practice Guidelines		

Key:

- : Relates to Interprofessional Education Experience
- : Relates to Jefferson WILL Project (COPM)
- : Relates to Modified Delphi Measure (OTD Research and Data Analysis)

students are conducting semi-structured interviews with FOP experts under the guidance of OTD students using IRB-approved interview questions specifically developed by OT and design faculty to gain user feedback on the prototypes (exempt approval by Jefferson IRB, control #19E.827, effective March 11, 2021).

The Modified Delphi Process

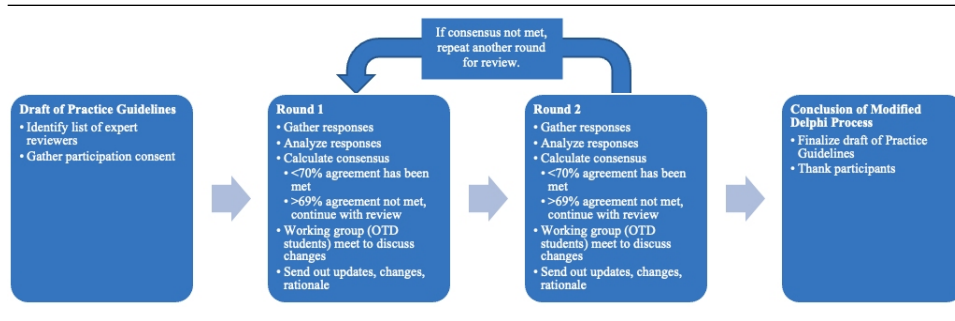
A modified Delphi process will be used to establish validity of the practice guidelines. Delphi panel methodology is a scientific approach that utilizes a structured process to collect expert understanding to achieve expert consensus (Hohmann et al., 2018). OTD students (facilitators) are selecting a panel of expert reviewers (n = 12) based on their experience as occupational therapy and/or design educators to provide feedback via a Qualtrics survey. Expert reviewers will include designers, OT professionals, and/or professionals with both design and OT experience (see Table 1). Questions were

submitted for IRB review and were granted exempt from approval (confirmation that data collection does not constitute human research was received from Jefferson IRB via email, effective December 22, 2022).

Data Analysis

All COPM interviews and MSID focus groups have been recorded and transcribed using Otter.ai or Airgram software and coded for common themes using Nvivo software. In previous years of the Jefferson WILL Project, all interviews and focus groups were conducted in English with English-speaking participants living in the US (Adams et al., 2022). The 2022 to 2023 year of the WILL Project differs in the novel inclusion of Spanish-speaking participants located in a minimum of 3 countries other than the US (see Table 1). As a result, all COPM interview and MSID focus group transcriptions with Spanish-speaking participants underwent an additional process of verified translation. For the modified Delphi process, a minimum of two rounds of review will be completed or until group stability and/or consensus is met (Gracht, 2012); OTD students will meet to establish consensus after each review round. Consensus has been defined as, “the agreement of opinions; the collective unanimous opinion of a number of persons. A feeling that the group’s conclusion reached by the individual members” (von der Gracht, 2012, p. 1528). Analysed responses will be scored as a percentage ranging from 70 to 80% consensus agreement, feedback will be considered by the OTD students, guidelines will be modified according to the feedback received, and reviewers will be provided with a detailed rationale to justify any needed changes. Guidelines will then be resent to the expert reviewers for an additional round of review until reviewers achieve agreement on the content areas. See Table 3 for further information about the modified Delphi method.

Table 3. Modified delphi method data analysis.



THEORETICAL MODELS AND FRAMEWORK

Guiding Framework, Theories, and Models

The proposed practice guidelines are rooted in evidence and theory which drive the collaborative relationship between occupational therapy and design.

The theoretical frameworks, models, and concepts used to guide this research include Bloom's Revised Taxonomy, User-Centered Design, and Occupational Justice.

Bloom's Revised Taxonomy

This theoretical approach provides an organized structure to support educational outcomes and was used to guide the pedagogy within the proposed practice guidelines. It has historically laid the foundation at TJU for the growth and evaluation of outcomes in the current design and healthcare educational programs (Barrett et al., 2022). Dimensions of knowledge have been categorized into four set notions that include factual, conceptual, procedural and metacognitive knowledge types (Krathwohl, 2002). Bloom's Revised Taxonomy emphasizes a series of key concepts that relate to the educational relationship that occurs between the educator and learner. Two main driving concepts influencing the current collaborative work are the use of learning objectives that relate to the significance of understanding the interchange that occurs between the students and teachers and the use of framework used by the educator(s) to organize learning objectives for themselves and for the learner are two main driving concepts influencing the current collaborative work (Armstrong, 2010).

User Centered Design

User Centered Design (UCD) is a philosophy that places the user of a product, application, or experience at the center of the design process (Pratt & Nunes, 2012). An important principle of UCD requires that designers anticipate how users interact with a product and test their designs in real life situations with an actual user. User testing is essential to the design process as it amplifies the user voice and can illuminate device functionality and/or faults. Facilitating user testing through a UCD perspective involves one-on-one interviews, surveys, focus groups, and work shadowing (Pratt & Nunes, 2012). Focus groups, run by a facilitator (in TJU's case, OTD students) allow for than more than one user at a time to interact with, provide feedback, and ask questions of the group of users, encouraging the users to interact with each other's discussion about the design. Understanding the needs of the user is the first step in incorporating accessibility into design (Wyke, 2011).

Occupational Justice

Occupational justice is an evolving theory that relates to social justice, recognizing occupational rights and inclusive participation in everyday occupations for all persons in society, regardless of age, ability, gender, social class, or other differences (Nilsson & Townsend, 2010). Occupational justice aims to integrate justice into practice, requiring health professionals to adapt to a health advocacy agenda and expand on occupation, health, justice, and environment in both individuals and populations. Healthcare professionals, through multidisciplinary teams, can combine individualized practice with population and community development initiatives and build communities

for advocacy in professional, consumer, community, and industry partnerships (Nilsson & Townsend, 2010). Occupational justice theory supports a multidisciplinary team approach to build alternative service models that move beyond the physical symptoms of disability and illness and to foster equality in all areas of participation, extending beyond employment, housing, industry, transportation and education (Nilsson & Townsend, 2010).

PEDAGOGY

To address gaps in professional scope and language between OT and design fields, a series of healthcare-related educational modules are presented to MSID students by the OTD students each year (Table 2; see Table 4 for list). Each module aims to educate design students on “discrete themes for [UCD] through collaborative peer-led experiential learning,” with faculty support (Barrett et al., 2022, p. 4). Bloom’s Revised Taxonomy serves as the theoretical framework that guides learning objectives, as well as the development and evaluation of learning outcomes resulting from the IPE collaborative year (Barrett et al., 2022). Since the modules’ initial development in 2018, OTD capstone students have refined past modules annually and created new ones based on the current educational needs of each design student cohort. For example, the module on FOP was created to prepare design students for the user-centered co-design process taking place during the WILL Project. Development of the IPE curriculum continues to be an iterative process, and validation of the work done so far is being conducted through the modified Delphi process. As of February 2023, plans remain on track to collect data regarding the qualitative effects of the curriculum’s pedagogy, application, and knowledge translation within educational modules. All modules will be revised as necessary and submitted for review by the panel of experts during

Table 4. Educational modules and experiential activities.

	Project: Interprofessional Education Experience	Project: Jefferson WILL Project
Introductory Healthcare Topics	Introduction to occupational therapy Biomechanics and activity/task analysis Universal design	
	Disability etiquette and advocacy Client-centered research and interview skills	
Specific Healthcare Topics	Intellectual and developmental disabilities Assistive technology and devices	Fibrodysplasia Ossificans Progressiva (FOP)
Experiential Activities	Hands-on testing of current assistive technology Design consultation and collaborative critique sessions Structured empathy activities	

Key:

- : Relates to Interprofessional Education Experience
- : Relates to Jefferson WILL Project
- : Relates to Interprofessional Education Experience and Jefferson WILL Project

the modified Delphi process (Table 2), leading to a validated series found within the practice guidelines.

Educational modules in an IPE curriculum ideally should be tailored to the audience, seeking to improve collaboration and other outcomes in interprofessional innovation between design and healthcare fields. Modules presented in the practice guidelines reflect the collaboration between design and occupational therapy professionals and are intended to capitalize on the intersection between their respective knowledge bases. The modules are intended to be generalizable to any design professional looking to learn more about healthcare concepts and UCD; the transitive effect of this specific IPE curriculum on other educational institutions has yet to be explored. As such, the procedures followed to validate guideline contents (Table 2) are important for anyone trying to implement the practice guidelines at their institution. Survey of the curriculum audience is important in understanding its impact in a broader context.

FACILITATING USER EXPERTISE

The continuous involvement of users throughout the design process is vital to increase the usability of products (Pinard et al., 2022). Thus, the UCD method helped to structure the interprofessional collaboration of the WILL Project to maintain the emphasis on the FOP experts throughout the design process.

In the early phases, information gained from users gives designers the ability to have an in-depth understanding of their needs to inform the design. OT interview tools, such as the COPM, allow a standardized way for designers to gain preliminary knowledge about performance challenges that users face. In the WILL Project, OTD students conduct COPM interviews with design students present to observe, allowing the design students an opportunity to determine levels of engagement in the activity they are designing for among FOP experts. With the baseline knowledge about top performance challenges, design students conduct semi-structured interviews with FOP experts to probe about devices used during daily tasks and supports and barriers to accomplishing these tasks. The information FOP experts provide informs the creation of prototypes to be sent out for user-testing. FOP experts receive working prototypes to test during their daily routines. In post user-testing, design students will hold focus groups with multiple users to elicit feedback about the design prototype. Focus group sessions allow for in-depth discussions among FOP experts about the benefits and drawbacks of using the prototype. Feedback is incorporated in further iterations of the design, amplifying the FOP experts' voices throughout the design process. In TJU's current iteration, qualitative data collected from focus groups regarding the FOP experts' role as a collaborator in the design process will inform the development of practice guidelines. Multiple opportunities for gaining information about user needs and feedback on the design should be incorporated throughout the design process (Adams et al., 2022; Pinard et al., 2022; Santos et al., 2019). When working with individuals who have complex medical needs, such as individuals with FOP, it is essential to consider the contextualization of this

information among designers to ensure a thorough understanding of how this affects functioning and participation in daily activities (Adams et al., 2022; Amiri et al., 2017; Pinard et al., 2022; Santos et al., 2019). Although these guidelines are based on a collaboration with FOP experts, it is possible that the methods used to facilitate user expertise can be extrapolated to various user populations. Information presented in the practice guidelines will include procedures to increase the user-centeredness of the design process within an interprofessional team to expand the useability of assistive devices.

CULTURAL INCLUSIVITY

Developing a lens of cultural inclusivity is a necessary step towards inclusive and accessible AT. A collaborative IPE between design and occupational therapy is particularly beneficial as the importance of justice and accessibility for any alienated or marginalized population is continuously advocated for through the lens of OT and facilitated through the action of design. Occupational justice envisions that all individuals have the right to participate in meaningful occupations and to minimize alienation and marginalization (Framework of Occupational Justice, 2022). In the case of interdisciplinary design of adaptive equipment for individuals with FOP, cultural inclusivity is a particularly apparent method to optimize occupational justice. As of 2020, the confirmed global population of patients with FOP consisted of approximately 900 individuals. FOP patients living in Latin America accounted for 161/834 of this global population with the second highest regional representation at 19% after North America at 24% representation (Liljeström et al., 2020). Thus, our approach sought to design for individuals with FOP beyond the USA, since to do otherwise significantly limits the feasibility and transferability of all findings and results to a small fraction of the global FOP population.

Experiential data from the 2022 expansion to include international participants informs a resource guide for overcoming language barriers with the inclusion of non-English-speaking participants, including translation processes and recommendations for navigation of common barriers and errors. Findings will additionally be used to create a step-by-step guide for inclusion of international participants in collaborative projects between design and healthcare.

DISCUSSION

This approach to developing guidelines for IPE collaboration between design and healthcare will provide useful information for other institutions seeking to develop similar programs. Data collected from the continuation of the WILL Project in the current academic year will continue to assess the impact of including users in the collaborative design process through the use of the COPM and focus groups to provide direct user input. Information collected from the modified Delphi process will provide expert feedback from OT and design professionals. The embedded, IPE format has been a vital component of building a collaborative relationship between MSID and OT students

and encouraging knowledge exchange between them. OT students gain the opportunity to experience the iterative nature of the design process by participating in studio courses, while MSID students receive educational modules guided by Bloom's Revised Taxonomy to bolster their knowledge on various healthcare topics. Past studies conducted as a part of this collaboration have revealed that a majority of students perceive the IPE program positively as a way to increase understanding of other professions, the user, and the inter-professional collaborative process (Adams et al., 2022; Barrett et al., 2022; Brown et al., 2021). Feedback collected from interviews as well as the modified Delphi process is expected to validate and increase educational module generalizability beyond the scope of this collaboration.

The WILL Project is a core component of the embedded IPE experience between MSID and OT students. Other programs have used a workshop-based, short-term timeline (Aflatoony et al., 2021; Larkin et al., 2013; Ielegems et al., 2021), yet the present guidelines offer evidence that a longer-term embedded program holds promise for improved sustainability. The guidelines aim to be a practical application of the collaboration between OT, MSID, and users (FOP experts) grounded in the UCD approach. We anticipate findings from analyzed focus groups will demonstrate that users viewed themselves as expert collaborators whose experiences equally contributed to the design of assistive devices that met their needs. Findings will validate that the use of multiple interviews and focus groups conducted by the inter-professional team facilitates user expertise and increases user-centeredness in the design process.

It is also anticipated that a positive correlation between earlier inclusion of users and enhanced self-perceived user experience and our prior research will continue to unfold through analysis of semi-structured interviews and surveys. This cycle's inclusion of Spanish-speaking participants is expected to address potential limitations within the themes of marginalization, alienation, and cross-cultural barriers. Transferability of design based on limitations of available resources is a significant limitation in the collaborative design process (Moser et al., 2021; Waller et al., 2015). Feasible recommendations for assistive devices have additionally been indicated as a barrier by IFOPA (IFOPA, n.d.). Manual guidelines will include a tool for optimizing the accessibility of assistive devices based on predicted available resources based on global region, thus prioritizing the Latin American region based on data collected from the sample of FOP participants living in Latin America. Future directions will be proposed for the inclusion of participants from additional global regions, with specific qualifiers based on specific region. Transferability for the application to a range of projects and interdisciplinary collaborations will be prioritized in all areas of the proposed guidelines.

CONCLUSION

The practice guidelines presented in this paper provide the means for structuring collaboration among OT students, design students, and users in an accessible and culturally inclusive manner. Findings from the past five years of interprofessional, educational collaboration at TJU have supported the

need for evidence-based guidelines to capitalize on this collaboration and enhance the design of products to more effectively meet the unique needs of users. Other institutions looking to expand IPE opportunities may find these practice guidelines and our approach to developing them applicable and useful.

REFERENCES

- Adams, K., Berger, A., Corlett, T., Schneider, E., & Mollo, K. S. (2022). Empowering individuals with limited joint mobility: An embedded interdisciplinary program between occupational therapy & industrial design. *Human Factors in Accessibility and Assistive Technology*, 37, 158–167. <https://doi.org/10.54941/ahfe1001655>
- Aflatoony, L., Lee, S. J., & Sanford, J. (2021). Collective making: Co-designing 3D printed assistive technologies with occupational therapists, designers, and end-users. *Assistive Technology: The Official Journal of RESNA*, 1–10. <https://doi.org/10.1080/10400435.2021.1983070>
- Altay, B. (2014). User-centered design through learner-centered instruction. *Teaching in Higher Education*, 19(2), 138–155. <https://doi.org/10.1080/13562517.2013.827646>
- Amiri, T., Wagenfeld, A., & Reynolds, L. (2017). User wellbeing: An entry point for collaboration between occupational therapy and design. *Design for Health (Abingdon, England)*, 1(2), 187–193. <https://doi.org/10.1080/24735132.2017.1386367>
- Armstrong, P. (2010). *Bloom's taxonomy*. Vanderbilt University Center for Teaching. Retrieved from <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>
- Barrett, M. P., McNabb, S. A., Mollo, K. S., Schneider, E., & Corlett, T. (2022). An exploration of interprofessional embedded educational model between occupational therapy and industrial design: A qualitative hermeneutical phenomenological inquiry. *International Journal of Technology and Design Education*. <https://doi.org/10.1007/s10798-022-09797-4>
- Brown, R., Mollo, K., Peterson, M., Avery, M., Schneider, E., & Corlett, T. (2021). Insights from an inaugural eight-month interdisciplinary collaborative co-design educational experience between occupational therapy and industrial design. *Journal of Accessibility and Design for All*, 11(1), 148–177. <https://doi.org/10.17411/jaces.v11i1.296>
- Framework of Occupational Justice (FOJ). (n.d.). *Framework of occupational justice (FOJ) | OT Theory*. Retrieved from <https://ottheory.com/therapy-model/framework-occupational-justice-foj>
- Grace S. (2021). Models of interprofessional education for healthcare students: A scoping review. *Journal of Interprofessional Care*, 35(5), 771–783. <https://doi.org/10.1080/13561820.2020.1767045>
- Hohmann, E., Brand, J. C., Rossi, M. J., & Lubowitz, J. H. (2018). Expert opinion is necessary: Delphi panel methodology facilitates a scientific approach to consensus. *Arthroscopy: The Journal of Arthroscopic and Related Surgery*, 34(2), 349–351. <https://doi.org/10.1016/j.arthro.2017.11.022>
- Ielegems, E., Froyen, H., Herssens, J., & Vanrie, J. (2021). “Light up for all” - building knowledge on universal design through direct user contact in design workshops. *Studies in Health Technology and Informatics*, 282, 102–119. <https://doi.org/10.3233/SHTI210388>
- IFOPA. (n.d.). *FOP FAQ*. IFOPA. Retrieved from https://www.ifopa.org/fop_faq

- Krathwohl, D. R. (2002). A revision of bloom's taxonomy: An overview. *Theory into Practice*, 41(4), 212–218. https://doi.org/10.1207/s15430421tip4104_2
- Larkin, H., Hitch, D., Watchorn, V., Ang, S., & Stagnitti, K. (2013). Readiness for interprofessional learning: A cross-faculty comparison between architecture and occupational therapy students. *Journal of Interprofessional Care*, 27(5), 413–419. <https://doi.org/10.3109/13561820.2013.779233>
- Liljeström, M., Pignolo, R. J., & Kaplan, F. S. (2020). Epidemiology of the global fibrodysplasia ossificans progressiva (FOP) community. *Journal of Rare Diseases Research & Treatment*, 5(2), 31–6.
- Moser, C., & Deichmann, D. (2020). Knowledge sharing in two cultures: The moderating effect of national culture on perceived knowledge quality in online communities. *European Journal of Information Systems*, 30(6), 623–641. <https://doi.org/10.1080/0960085x.2020.1817802>
- Nilsson, I., & Townsend, E. (2010). Occupational justice-bridging theory and practice. *Scandinavian Journal of Occupational Therapy*, 17(1), 57–63. <https://doi.org/10.3109/11038120903287182>
- Pinard, S., Bottari, C., Laliberté, C., Pigot, H., Olivares, M., Couture, M., Aboujaoudé, A., Giroux, S., & Bier, N. (2022). Development of an assistive technology for cognition to support meal preparation in severe traumatic brain injury: User-centered design study. *JMIR Human Factors*, 9(3), e34821–. <https://doi.org/10.2196/34821>
- Pratt, A. & Nunes, J. (2012). *Interactive Design: An Introduction to the Theory and Application of User-Centered Design*. Rockport Publishers.
- Rostetter, R., Jenni, B., Eggmann, S., Meyer, J. T., & Schmitt, K.-U. (2022). Implementing an interprofessional user-centered design approach to develop a bedside leg exercise device. *Technology and Health Care: Official Journal of the European Society for Engineering and Medicine*, 30(4), 981–992. <https://doi.org/10.3233/THC-213511>
- Santos, A., Licursi L., Amaral, M., Cavalcanti, A., & Silveira, Z. (2019). User-centered design of a customized assistive device to support feeding. *Procedia CIRP*, 84, 743–748. <https://doi.org/10.1016/j.procir.2019.04.318>
- von der Gracht, H. (2012). Consensus measurement in Delphi studies: Review and implications for future quality assurance. *Technological Forecasting & Social Change*, 79(8), 1525. <https://doi.org/10.1016/j.techfore.2012.04.013>
- Wagenfeld, A., Reynolds, L., & Amiri, T. (2017). Exploring the value of interprofessional collaboration between occupational therapy and design: A pilot survey study. *The Open Journal of Occupational Therapy*, 5(3). <https://doi.org/10.15453/2168-6408.1354>
- Waller, S., Bradley, M., Hosking, I., & Clarkson, P. J. (2015). Making the case for inclusive design. *Applied Ergonomics*, 46, 297–303. <https://doi.org/10.1016/j.apergo.2013.03.012>
- Wyke, O. (2011). *User Centered Design for persons with disabilities: How persons with cerebral palsy can be included in the design process* (Dissertation). Retrieved from <http://urn.kb.se/resolve?urn=urn:nbn:se:kth:diva-93267>