Early outcomes of the ITIP²: Interdisciplinary Technology Instruction Program for Individualized Technology Implementation Planning training grant

Michelle Kaye Silverman¹, Sara Jozwick¹, Shelley Lund¹, Victoria Moerchen¹, Roger O. Smith¹ Elise Brevik¹, Carly Schaffer¹ ¹University of Wisconsin-Milwaukee

INTRODUCTION

Federal legislation (i.e., IDEA) mandates that members of individualized education program teams consider assistive technology (AT) when planning to meet the needs of each student with a disability in public school. There continues to be minimal evidence that all students who need AT have access to appropriate devices and services. [1,2]

A recent updated survey of AT service providers underscores the previously identified need for interdisciplinary training to support effective service coordination and outcomes measurement. [3-7] While professional university programs are charged to consider AT interventions, the level of competence among the workforce, both real and perceived, remains weak. Thus, there is a critical need for research-oriented practitioners who understand and can collaborate effectively to implement evidence-based practices (EBPs) for students with disabilities.

Developed in part under a grant from the U.S. Department of Education's Office of Special Education Programs and facilitated by the CAAHEP/CoA-RATE accreditation of the University of Wisconsin-Milwaukee (UWM) Assistive Technology and Accessible Design Certificate (ATAD Certificate), the Interdisciplinary Technology Instruction Program for Individualized technology implementation planning (ITIP²) Program launched in January 2019. The project's stated purpose is to foster the interprofessional development of an innovative personnel preparation program utilizing evidence-based practices to address the shortage of highly qualified special education and related service personnel of occupational therapy (OT), physical therapy (PT) and speech and language therapy (SLP) specially trained to implement technology interventions (AT, instructional technology) and Universal Design for Learning (UDL) for the school-age population.

This paper presents plans for analysis of early survey data from the first two graduating cohorts from this innovative AT and interprofessional education program at UWM.

Specific questions to be addressed include:

- 1. Do scholars who completed ITIP² Promote AT and/or address barriers to acquisition of AT in the settings they are working in?
- 2. Are graduated scholars working in leadership positions in their places of employment?
- 3. Are graduated scholars implementing AT for their students or clients in a classroom setting?
- 4. Are graduated scholars working on an interdisciplinary team? If so
 - a. Who is on the team?
 - b. Are they collaborating with regards to AT implementation and services?

PROGRAM IMPLEMENTATION

The ITIP² collaborating faculty team was able to leverage the ATAD Certificate, already in place, with its overarching student competencies and overlay some additional and add a specialization in school-based AT within the certificate. Furthermore, the ITIP² was able to break through a major ATAD barrier of ensuring coursework and field experiences were available to students in the complementary professions of OT, PT, SLP and special education who are frequently on assistive technology teams together in various settings. The program is now in its fifth year and two cohorts graduated.

PROPOSED METHODS Design

This study is designed as a descriptive study that will analyze data from several surveys from the first two cohorts of ITIP² Scholars. Surveys are completed at the end of interdisciplinary coursework during the program as well as annually to graduates requesting feedback about the project and information about their current employment.

Participants

Six scholars graduated in the first cohort including three occupational therapy **Table 1. Participants** students, two speech and language therapy students and one physical therapy student. Eight scholars graduated from

cohort two including four occupational therapy students, two speech and language therapy students one physical therapy student and one special education student (Table 1). A total of 14 scholars have graduated.

Procedure

Recruitment occurred as part of the project recruitment. All scholars are sent a survey annually post-graduation for the duration of the program. Consent to use de identified data will be acquired. Survey data will be examined for completeness. Scholars will be contacted first by email and then by phone to fill in any missing data. Follow up question surveys will be sent if necessary.

Analysis

Descriptive statistics and graphs will be used to evaluate the survey data as well as analysis of data gathered from written comments using qualitative analysis software to glean any themes if appropriate. Preliminary graphical data depicts scholar confidence in their own knowledge of concepts learned in the introduction to assistive and rehabilitation technology course. (Figure 1). This graph clearly shows that scholar confidence in their knowledge and skills in the covered topic areas improved from prior to the class (series 1) to after the class (series 2).

Scholar	Number
Professional	
Program	
Cohort 1	6
Occupational	3
Therapy	
Physical Therapy	1
Communication	2
Sciences and	
Disorders	
Special Education	0
Cohort 2	8
Occupational	3
Therapy	
Physical Therapy	1
Communication	3
Sciences and	
Disorders	
Special Education	1
Total	14



Figure 1: Cohort 2 pre and post course confidence in AT topics

REFERENCES

- [1] Edyburn, D. (2013). Critical Issues in Advancing the Special Education Technology Evidence Base. Exceptional Children, 80(1), 7-24.D. L.
- [2] Edyburn, D. (2015). *Efficacy of Assistive Technology Interventions* (First ed., Advances in special education technology; v. 1). Bingley, UK: Emerald Group Publishing Limited.

[3] Bouck, E. C., & Long, H. (2021). Assistive Technology for Students With Disabilities: An Updated Snapshot. *Journal of Special Education Technology*, 36(4), 249–257. <u>https://doi.org/10.1177/0162643420914624</u>

[4] Dishman, K. M., Duckart, J., & Hardman, L. J. (2021). Perceptions of Assistive Technology Education From Occupational Therapists Certified as Assistive Technology Professionals. *The American Journal of Occupational Therapy*, 75(2), 7502205110. <u>https://doi.org/10.5014/ajot.2021.041541</u>

[5] Michaels, C., & Mcdermott, J. (2003). Assistive Technology Integration in Special Education Teacher Preparation: Program Coordinators' Perceptions of Current Attainment and Importance. Journal of Special Education Technology, 18(3), 29-44.

- [6] Michaels, C., Prezant, F., Morabito, S., & Jackson, K. (2001). Assistive and Instructional Technology for College Students with Disabilities: A National Snapshot of Postsecondary Service Providers. Journal of Special Education Technology, 17(1), 5-14.;
- [7] Arthanat, S., Elsaesser, L., & Bauer, S. (2017). A survey of assistive technology service providers in the USA. Disability and Rehabilitation. Assistive Technology, 12(8), 789-800.

This work was developed in part under a grant from the U.S. Department of Education's Office of Special Education Programs (grant number H325K180164). The content of this work does not necessarily represent the policy of the U.S. Department of Education and you should not assume endorsement by the Federal Government.