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A Multiple Case Study of the Training of Instructors Teaching Inclusive Postsecondary Education Students in Typical College Courses

Enoh Nkana
Andrews University, enoh@andrews.edu

ABSTRACT

A MULTIPLE CASE STUDY OF THE TRAINING OF INSTRUCTORS
TEACHING INCLUSIVE POSTSECONDARY EDUCATION
STUDENTS IN TYPICAL COLLEGE COURSES

by

Enoh Nkana

Chair: Luana Greulich

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

College of Education & International Services

Title: A MULTIPLE CASE STUDY OF THE TRAINING OF INSTRUCTORS
TEACHING INCLUSIVE POSTSECONDARY EDUCATION STUDENTS IN
TYPICAL COLLEGE COURSES

Name of researcher: Enoh Nkana

Name and degree of faculty chair: Luana Greulich, Ph.D.

Date completed: May 2021

Problem

Limited research exists regarding the professional development program

processes and components used to train instructors to equip students with intellectual and

developmental disabilities to receive greater support and access to the benefits of a

postsecondary educational experience.

Purpose of the Study

The principal purpose of this research was to conduct a multiple case study of

inclusive postsecondary education (IPSE) programs known as Transition Programs for

Students with Intellectual Disabilities (TPSID) and/or Comprehensive Transition

Programs (CTP) at institutions of higher education across the United States to examine

training provided to instructors teaching students with intellectual and developmental disabilities (IDD) who were enrolled in typical college courses.

Method

A qualitative, multiple case study design was used. Five IPSE programs across the United States comprised the sample for this study. Two types of sampling were used: convenience sampling and non-probability or purposeful sampling. Convenience sampling was used to select the five IPSE programs based on their willingness to participate and provide the needed documents for analysis. Purposeful sampling was used to select the interview participants based on their ability to provide the most insight and understanding of the instructor training processes.

To provide a comprehensive examination of the four research questions related to the training development, components, implementation, and evaluation processes for instructors teaching IPSE program students in typical college courses, interviews of the training affiliates, training observations, and document analysis were conducted within the five programs.

Results

There is no unified approach to the training of instructors teaching students with IDD in IPSE programs. However, similarities exist in the training development, implementation, and evaluation processes used across programs. In conjunction with knowledge, skills, and practices, potential barriers to success such as the attitudes of instructors must be addressed. The roles of training affiliates in the development, implementation, and evaluation of the training were described.

Conclusions

The landscape of higher education is changing to provide access and inclusive learning opportunities to a more diverse group of students. There is hope that the institutions of higher education will begin to adopt the teaching and learning practices that best meet the needs of the new and growing group of learner types. Although there has been some progress, much work remains to be done to ensure that instructors are equipped to support the success of students with IDD and other diverse learners.

Andrews University

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A dissertation

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APPROVAL BY THE COMMITTEE:

_____   _____
Chair: Luana Greulich   Dean, School of Education,
                                                                            Alayne Thorpe

_____
Member: Larry Burton

_____
Member: Robin Moyher

_____   _____
External: Lileth Coke   Date approved:

DEDICATION

     I dedicate this work to my Mom and Dad, Dr. Cynthia Nkana, M.D. and Dr. Sam Nkana, Ph.D. My Dad's passion for education as my high school English teacher and my Mom's infinite wisdom have allowed me to accomplish this work. Their continued support and guidance are what led to my successful completion of this goal.

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LIST OF ABBREVIATIONS

ADA	Americans with Disabilities Act
CI	College Instructor
CTP	Comprehensive Transition Program
DOE	U.S. Department of Education
EBP	Evidence-Based Practices
FAPE	Free and Appropriate Public Education
FAQ	Frequently Asked Questions
HEA	Higher Education Act
HEOA	Higher Education Opportunity Act of 2008
ID	Intellectual Disability
IDD	Intellectual and Developmental Disability
IDEA	Individuals with Disabilities Education Act
IEP	Individualized Education Program
IHE	Institution(s) of Higher Education
IPSE	Inclusive Postsecondary Education
IRB	Institutional Review Board
LAC	Learning Assistance Centers
PSE	Postsecondary Education
SAP	Satisfactory Academic Performance
TC	Think College
TIC	Trinity Inclusive Curriculum
TPSID	Transition Programs for Students with Intellectual Disabilities
UD	Universal Design
UDI	Universal Design for Instruction
UDL	Universal Design for Learning

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Many people have contributed to completion of my life-long goal. To my parents, Drs. Sam and Cynthia Nkana, to whom this work is dedicated, I thank you especially for not only showing me the value of education through your example, but also cultivating dedication, organization, and perseverance within me from a young age. Dad, even ten years later, I referenced your dissertation multiple times during my journey. Ethan and Emmanuel, my amazing brothers, thank you for encouraging me along this journey. Kathy, my sister, thank you for your support and for my nephew, Dallas Reign, and the little bean, the joys of my life.

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CHAPTER 1

INTRODUCTION

Background of Study

An increased number of students with intellectual and developmental disabilities

(IDD) are enrolled in colleges and universities across the United States (Hall & Belch,

2000; Hitchings et al., 2005; Sniatecki et al., 2015; Stodden et al., 2001). According to

the National Center for Education Statistics, 19% of undergraduate students reported

having a disability in the 2015-16 school year. Changing laws and increases in federal

funding support the needs of these students and enhance the increase in enrollment.

"Federal legislation is now making it possible for students with intellectual and

developmental disabilities to enroll in university programs through inclusive

postsecondary transition models" (Giust & Valle-Riestra, 2017, p. 145).

Despite this increase of students with IDD in postsecondary education, they

continue to encounter barriers during their college experience (Dowrick et al., 2005;

Eckes & Ochoa, 2005; Madaus & Shaw, 2010; Stodden et al. 2001). One barrier has been

the lack of instructor knowledge and training regarding the needs of students with IDD.

Banks (2014) indicated that the most important influencer of academic performance was

the support of the professor and personnel in the university's counseling center.

Statement of the Problem

Students with IDD have limitations in adaptive behavior and intellectual functioning, such as daily living and social skills, learning, self-management, and application of information (American Association of Intellectual and Developmental Disabilities, n.d.), and are less likely to be gainfully employed, live independently, or attend a postsecondary program after high school (Wagner et al., 2005). However, inclusive postsecondary education (IPSE) programs offer them increased opportunity (Grigal et al., 2012) and have been demonstrated to enhance the rate of independent living, social networks, self-esteem, employment, self-determination, and purposeful community participation. (Moore & Schelling, 2015; Thoma et al., 2011). Limited research exists regarding the professional development program components which train instructors to provide students with IDD with greater support and access to the benefits of a postsecondary educational experience.

Two-hundred and ninety-eight IPSE programs exist across the United States which provide students with IDD access to higher education (Think College, 2020a). With the implementation of the Higher Education Opportunity Act (HEOA) of 2008, participants in eligible programs qualified for federal funding through a comprehensive transition program (CTP). IPSE programs can qualify as federally recognized transition and postsecondary programs for students with intellectual disabilities (TPSID).

The receipt of government funding requires that these programs are responsible to provide instructor training in the use of inclusive teaching strategies. IPSE CTPs and TPSIDs must meet specific requirements to receive and maintain federal funding and accreditation. Although IPSE programs vary in requirements, activities, enrollment, and

program characteristics (Grigal et al., 2012; Plotner & Marshall, 2015), all students must participate in typical college courses with students who do not have disabilities (Think College, 2021), i.e., those available to all students enrolled in the institution of higher education (IHE) hosting the IPSE program. A minimum of 50% of the coursework taken by students with IDD must be in conjunction with typical college courses.

The Think College (TC) Standards for Inclusive Higher Education (2020b) include several which support IPSE instructor training:

Standard 2: *Coordination and Collaboration:* The postsecondary education program should establish and maintain effective program coordination and internal and external collaboration.

Quality Indicator 2.2: The program establishes collaborative relationships with key IHE partners

2.2B: Program staff liaise with faculty to ensure inclusion of students in courses.

Essential Practices:

- Program staff meet with individual faculty when a student is enrolled in a course to address student goals, accommodations, and modifications as appropriate.
- Program staff coordinate with Disability Services as appropriate to communicate with faculty.
- Program staff meet with department heads, chairs, and directors to ensure students have access to a full range of courses.
- Program staff have met with faculty senate/council to provide information about the program.

Standard 6: Academic Access: The postsecondary education program supports inclusive academic access for students.

Quality Indicator 6.2: The program addresses barriers to course registration and participation

6.2E: College faculty are offered training on universal design for learning (UDL) principles.

Essential Practices:

- Professional development on UDL is offered to faculty in multiple ways (i.e. face-to-face workshops, online modules, brown bag lunches, individual technical assistance).

- The program partners with the academic teaching and learning center and/or disability services to provide UDL training. (pp. 5-6, 18)

Instructors who teach inclusive courses need to be equipped to meet the diverse needs of this population of learners. Often, instructors lack knowledge and ability to provide accommodations without sacrificing the academic integrity and rigor of the program (Beilke, 1999; Rao 2004; Sniatecki et al., 2015). As this study commenced, there was no data on how many instructors were trained in inclusive practices and could work in tandem with support staff toward successful completion of the academic program by these students.

IPSE programs provide instructors with training and resources related, but not limited to definitions and characteristics of intellectual and developmental disabilities, forms of accommodations and modifications, UDL, and instructional practices, any of which can be implemented to support students with IDD on the journey to successful

completion of typical courses. According to HEOA article 777 (b) federally funded TPSIDs and CTPs are required to develop and provide technology-based tutorials. McGuire & Scott (2006) found that within the postsecondary setting, "there is no unified approach to faculty preparation or ongoing professional development that includes preparation for teaching students with diverse learning needs" (p. 126).

Although several studies examined the attitudes of instructors toward students with IDD and learning disabilities, research was lacking that described the specific types of training provided for instructors teaching IPSE students in inclusive courses. Considering the federal funding received by TPSID programs, the IPSE and federal financial aid available for CTP program students, and the goal to establish the success of students with IDD, a detailed inventory and analysis of instructor training practices and resources would provide information on how instructors can meet the needs of this diverse population best. This study advanced awareness of the preparation practices provided to instructors and facilitate the IPSE student's successful program completion.

Purpose of the Study

The purpose of this study was to conduct a multiple case study of TPSID and/or CTP inclusive postsecondary programs at IHE across the United States to examine training provided to instructors teaching students with IDD who were enrolled in typical college courses. The focus was the development, implementation, and evaluation of training provided to instructors teaching IPSE program students in typical college courses. This study helped to fill the research gap about the training components for the inclusive higher education student and instructor demographic. The results may be used to develop a universal training model for IPSE programs.

Guiding Research Questions

The key questions guiding this study were

1. How was training for instructors teaching IPSE program students in typical college courses developed?

2. What were the components of training for instructors teaching IPSE program students in typical college courses?

3. How was training for instructors teaching IPSE program students in typical college courses implemented?

4. How was the training for instructors teaching IPSE program students in typical college courses evaluated?

All questions were answered using data from semi-structured interviews, observation, and document analysis.

Theoretical Framework

A theoretical framework is a structure, scaffolding, or frame of a study (Merriam, 2009). According to Maxwell (2005), it is "the system of concepts, assumptions, expectations, and theories that supports and informs research" (p. 33). The theoretical model for this study integrated several theories affecting the success of students with IDD in IPSE programs, highlighting the complexity of inclusive professional development practices. Vygotsky's (1993) Socio-Cultural Theory serves as the overarching theme for the purpose, goals, and barriers of inclusive postsecondary education for both instructors and students. The main components from Chen and Chang's (2006) Whole Teacher Approach (WTA) to professional development, which include 1) attitudes, 2) knowledge and skills, and 3) practice, coupled with the principles of Universal Design (UD), serve as

the framework for analysis of the observation, interview, and document data obtained. Collectively, these theories and principles represent the goals and outcomes of professional development for instructors: (a) positive attitudes, (b) adoption of the UD curriculum design, and (c) whole-person centered planning and instruction leading to the success of IPSE program students. The characteristics of this success include (a) receipt of instruction within a natural environment, (b) degree or certificate completion, (c) development of self-determination and advocacy skills, and (d) competitive and meaningful employment (see Figure 1).

Figure 1.

Inclusive Post-Secondary Education Instructor And Student Success Theoretical Framework

Goals/Outcomes for Instructors
- Positive Attitude Regarding the Instruction of IPSE Students
- Adoption of Universal Curriculum Design
- Whole-person Centered Planning and Instructional Methods

Integration of All 3 Components

Attitudes	Knowledge & Skills	Practice
• Behavior • Motivation • Thinking	• What and How to Teach • Who is Being Taught Universal Design for Learning (The Center for Universal Design, 1997).	• Apply Knowledge and Methods • Make Adaptations

Whole Teacher Approach (Chen & Chang, 2006)
- Emphasizes all aspects of teacher development: attitudes, knowledge, and practice.

Primary Barriers to Success
- Stigma and Discrimination
- Prejudicial attitude and beliefs of faculty, students, and staff
- Instructor Lack of: Prior Experience, Knowledge, Inclusive Instructional Practices, Modifications & Accommodations

Vygotsky's Socio-Cultural Theory (Vygotsky, 1993)
- Full Inclusion in Cultural Society (Employment & Social Opportunities)
- Alternative Pathways of Learning
- Normalization of Difference

Goals of Inclusive Postsecondary Education Programs
- Degree or Certification Completion
- Meaningful and Competitive Employment
- Instruction in Natural Environments

Vygotsky's (1993) Socio-Cultural Theory suggested that learning is strongly affected by society (Harry et al., 1999); that Vygotsky's and other social constructivists' focus shifted recently from examination of a solitary individual to the interaction of an individual in a cultural and social context. Methodology is contextualized on the idea of learning as a social cognitive process (Vygotsky, 1978). In the inclusive postsecondary learning environment, society represents the association and interaction among students, staff, instructors, and the community to accomplish educational purposes. Society's support of the rights of people with disabilities was evidenced through passing of the Education for All Handicapped Children Act, the Americans with Disabilities Act (ADA), and the HEOA, together leading to development and growth of IPSE programs.

Socio-cultural theory was closely aligned with the outcomes correlated with IPSE programs including (a) the full inclusion of students with disabilities in cultural society, (b) alternative pathways to learning, (c) and the normalization of differences. IPSE programs establish an inclusive learning environment by offering students with IDD an alternate pathway to learning through implementation of accommodations, modifications, and normalization of disabilities (Vygotsky, 1993). Creation of a successfully inclusive environment requires a favorable societal view of students with IDD and a focus on individual skills, rather than on weaknesses (Rodina, 2006). Students with IDD have unique abilities which should be nurtured and cultivated, allowing them to earn a degree or certification leading to meaningful employment, exposure, self-determination, and self-advocacy. Barriers to these objectives include stigma and discrimination by faculty, staff, and students plus an instructor's lack of knowledge, prior experience, and ability to implement accommodations and modifications.

Although many societal impacts on student success exist within the postsecondary learning environment, Hamre and Pianta (2005) and Loeb et al. (2004) stated that the quality of a program depends on the effectiveness of a teacher. According to O'Connor, et al. (2012) the primary responsibility of course instructors (CIs) was to provide all students with challenging and high-quality coursework, setting goals and objectives which are attainable for all students enrolled.

The WTA to professional development, infused with UD components, was the basis for exploration of the training practices found in this study. The WTA, developed by Chen & Chang (2006), is a professional development framework which "targets multiple dimensions of teacher development" (p. 2). The multidimensional variables on which the study focused were attitudes, knowledge and skills, and practice. Chen and McCray (2012) stated that integration of all three variables has an important influence on student success. Students with IDD experience a different level of functioning than their typical peers. The developmental component of WTA, which highlights developmentally appropriate instructional materials for students (Chen & McCray, 2012), considers the varying levels of expertise and experience of the participants on their development rather than just providing a training program (Chen & Chang, 2006).

The WTA addressed the correlation between attitudes and classroom practices (Chen & Chang, 2006) (see Figure 1). Professional development research indicates a close alignment between attitudes and classroom practice and teacher acquisition of knowledge. However, when providing professional development a lack of attention was often paid to attitudes. Despite this, research on teacher professional development indicates consistently that attitudes are related closely to teachers' knowledge acquisition

and classroom practice (Pajares, 1992, 1996; Vartuli, 2005). Attitude impacts a teachers' reasoning, performance, and level of motivation (Berk, 1985; Cassidy et al., 1995; Pajares, 1996). The strength of teachers' attitudes determines "how much effort they will expend on an activity, how long they will persevere when confronted with obstacles, and how resilient they will be when faced with adversity" (Vartuli, 2005, p. 76). Given their influence and effects, targeting teacher attitudes would contribute to the effectiveness of professional development programs (Chen & Chang, 2006).

Components of UD formed the framework for the knowledge and skills dimension of the WTA framework. UD was developed by Mace (1985) as an architectural concept which focused on accessibility for all, with an emphasis on those with disabilities (Embry et al., 2005). Students with disabilities often "encounter significant challenges of physical accessibility and access to curriculum and instruction" (Pliner & Johnson, 2004, p. 106). Presently, UD is referred to as "a framework of instruction that aims to be inclusive of different learning preferences and learners and helps to reduce barriers for students with disabilities" (Black et al., 2015, p. 1). The seven UD principles developed by North Carolina State University Center for Universal Design (n.d.) are 1) equitable use, 2) flexibility in use, 3) simple and intuitive use, 4) perceptible information, 5) tolerance for error, 6) low physical effort, and 7) size and space for approach and use related to the creation of accessible products and spaces.

Conceptual Framework

This study acknowledged the complexities associated with inclusive training practices that allow instructors to meet the needs of students with IDD. The purpose was to examine four factors of IPSE program training for typical college courses: (a)

development, (b) components, (c) implementation, and (d) evaluation. Specific factors

related to attitudes, knowledge, and skills and practice were explored. As previously

referenced, Chen and Chang's 2006 WTA to professional development served as the

conceptual framework for exploration of the training practices. The components of WTA

were used to conceptualize and portray the components of professional development

categories examined at each of the programs studied. This study may influence instructor

training best practices for IPSE programs. Table 1 represents the measures related to

WTA in the conceptual framework.

Rationale

Education determines well-being, health, and community engagement (Canadian

Council on Learning, 2010). With widespread development of inclusion programs,

students with IDD have opportunities to cultivate social, academic, and vocational

learning in a setting which values academics (O'Conner et al., 2012). Postsecondary

education for students with IDD provides personal, institutional, and societal benefits and

advanced opportunities (Lightfoot et al., 2018) including gainful employment.

"Individuals with ID who had post-secondary education were more than twice as likely to

be employed than their counterparts who did not have postsecondary education"

(Sannicarndro et al., 2018, p. 424). Rehabilitation data showed that young people with ID

who participated in postsecondary education were 26% more likely to obtain paid income

and to earn a weekly income 73% higher than those who did not (Migliore et al., 2009).

Table 1

The Measures of the Conceptual Framework (Chen & McCray, 2012)

Attitudes	Knowledge and Skills	Practice
Trainers establish a community of learners	Trainers address interrelated content strands	Programs offer year long professional development and ongoing classroom support
Trainers utilize materials the participants are familiar with	Trainers engage participants in multiple learning modes that include: listening, reading, discussing, observing, manipulating, dramatizing, analyzing, and reflecting	Training offers structured implementation activities
Trainers build on the strengths of the participants	Outline trajectories that indicate how people learn new concepts and acquire essential skills.	Trainers build time into professional development for practice of the new skill
Trainers address participant's confidence and comfortability	Trainers integrate knowledge of what should be taught with who the students are and how they can be engaged	Trainers introduce participants to a variety of instructional methods to engage students and encourage and inspire instructor creativity
Trainers build confidence in participants by 'learning by doing'	Participants learn how to use new concepts	Trainers use practical application of new concepts in the classroom setting
Trainers offer small group sizes in order to maximize interaction, assistance, feedback, and objective attainment of the participants	Participants complete classroom exercises involving content	Trainers provide immediate feedback to help participants evaluate their effort and reinforce the relevance of what they are learning
Trainers call attention to group progress and express confidence in the individual participant's ability to become proficient in content use	Participants develop skills in evaluating and selecting developmentally appropriate content	Trainers allow time for discussion in which participants describe their classroom experiences, what they have learned, and gain further insights through the feedback of students and peers
Training is focused on facilitating learning, rather than judging performance		Trainers consolidate skills to adapt what participants have learned to fit a specific classroom environment

During the 2018-2019 school year, 53% of the students enrolled in TPSID programs worked at a minimum of one paid position (Grigal et al., 2020). An outcome survey distributed to TPSID program completers indicated that 64% of respondents obtained employment; this was substantially higher than the 18% of total adults with IDD. Sixty-four percent of students who responded to an outcome survey were engaged in paid employment which is almost double the 31.4% of employed adults with disabilities (National Trends in Disability Employment, 2019) and much higher than the national employment of adults with IDD (National Core Indicators, 2019, as cited by Grigal, et al., 2020). Izzo and Shuman (2013) expressed how students with IDD in inclusive postsecondary environments developed personal skills such as self-advocacy and self-determination.

In conjunction with the personal and professional benefits experienced by students with IDD in IPSE programs, benefits accrue for the IHE as they become inclusive learning communities through the membership of students with IDD attending audited classes, volunteering and working among faculty, staff, and students, while taking no fewer than 50% of classes specifically tailored to their learning goals (O'Conner, et. al., 2012). Nevill and White (2011) proposed that once students with disabilities have been included, they will be viewed as an "unremarkable part of the diverse student body" (p. 248); there will be a shift in the culture of the institution as students with IDD become natural members of the society.

The societal benefits of higher education include civic responsibility and a lower rate of poverty and unemployment, resulting in fewer people depending on government services. According to Raynor, et al., (2016) IHEs need to enter into a new era of student preparation so students with IDD can obtain integrated, competitive employment. Hart discovered (2006) that students with IDD who participated in postsecondary education experienced better outcomes in employment levels, social networks, and increased wages. Postsecondary degree holders were also more likely to participate in active citizenship through donating blood, volunteering, and voting.

Discrimination experienced by students with IDD in a postsecondary setting can have a negative effect on a student's desire to attend or successfully complete a program. Stanley et al. (2013) stated that disability was considered the membership category most affected by discrimination and social perception. Backer et al. (2013) found that students with IDD in inclusive settings describe how higher education environments lack the support students need to be successful; the faculty and staff often lack the training needed to meet the needs of the IDD students.

To reduce discriminatory treatment and provide support, several authors suggest that IHEs provide students with disabilities greater equity and inclusion (Garrison-Wade, 2012; Getzel, 2008; Grigal et al., 2012; Huger, 2011; Kurth & Mellard, 2006). Hendrickson et. al., (2013) pointed out how the expertise and talents of faculty, staff, administrators, and students within the higher education community could contribute to the science and understanding to improve the learning outcomes of students with IDD and their postsecondary peers. Langley-Turnbaugh et al. (2013), discovered that faculty who were unaware of Universal Design for Learning (UDL) principles were also

unfamiliar with the challenges students with disabilities face. After learning about UDL and implementing the principles, the faculty observed an increase in self-sufficiency, student engagement, and overall positive student outcomes.

Instructors should be provided with increased experience, training, and resources in the diverse needs of IDD students and the strategies needed to teach students with disabilities. This study will further the understanding of instructor training practices for teaching students with IDD in an inclusive postsecondary setting.

Significance of the Study

Existing literature examining the training provided to CIs teaching typical college courses to students with IDD in postsecondary education was scanty. Literature exploring training for CIs of students with IDD who were not associated with specified inclusive programs was limited. Numerous studies regarding teaching students with learning disabilities existed, but very few addressed intellectual and developmental disabilities. Further study was hindered by the lack of information regarding the components, development, and evaluation of instructor training. The present study was needed to enhance understanding of the training components needed to equip instructors to meet the needs of students with IDD taking typical college courses. Such understanding can contribute to the development of model training programs consisting of documented practices instructors find most helpful in designing inclusive postsecondary instruction. These programs will assist instructors as they create an inclusive learning environment, implement teaching strategies that leading to students with IDD successfully completing courses, and equip and encourage more faculty members to enhance their teaching practice.

Ticoll, (1995) in her literature review of inclusion in postsecondary education, found very little literature specific to the inclusion of people with intellectual disabilities in postsecondary education. Instructor training was addressed as a need for future study. The majority of studies explored the attitudes of CIs toward the prospect of teaching students with diverse abilities in the postsecondary setting. Instructors often expressed a positive desire to teach students with IDD but conveyed a need for more training to be able to do it well. Hendrickson et al (2013) suggested that "research revealing what constitutes evidence-based best practices in inclusive postsecondary education settings for students with ID is sorely lacking" (p. 196). This study addresses a gap in the literature on IPSE programs by describing CI preparation procedures and resources.

Definition of Terms

The terms of this study are defined as follows:

Accommodation*:* "A change in testing materials or procedures that enables students to participate in assessments in ways that reflect their skills and abilities rather than their disabilities" (Salvia et al, 2007, p. 682).

Americans with Disabilities Act (ADA): "Prohibits discrimination against persons with disabilities in employment, transportation, public access, local government, and telecommunications" (Woolfolk, 2010, p. 553).

Attitude: "An idea charged with emotion which predisposes a class of actions to a particular class of social situations" (Triandis, 1971, p. 2)

Autism: "Developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3 and ranging from mild to major" (Woolfolk, 2007, p. 613).

Comprehensive Transition Program (CTP): *"*A college-based program for students with an intellectual disability defined and created by the enacting of Public Law 110–135: The Higher Education Opportunities Act" (HEOA, 2008, np). A CTP is "Designed to support students with intellectual disabilities who are seeking to continue academic, career and technical, and independent living instruction at an institution of higher education in order to prepare for gainful employment" (HEOA, 2008, sec. 760).

Disability*:* *"*A physical, sensory, cognitive, or affective impairment that causes the student to need special education" (Dictionary of Common Special Education Terms and Acronyms, 2008, p. 7).

Free and Appropriate Public Education (FAPE): "Education for children with disabilities provided in the least restrictive environment, and at public expense, under public supervision, and without charge, through an IEP [Individualized Education Program]" (Dictionary of Common Special Education Terms and Acronyms, 2008, p. 9).

Individuals with Disabilities Education Act (IDEA): *"*Individuals with Disabilities Education Improvement Act (IDEIA), which is Public Law 108-446 (generally referred to as the Individuals with Disabilities Education Act). IDEA is the Federal special education law that provides a free appropriate public education in the least restrictive environment to all eligible children with disabilities" (Dictionary of Common Special Education Terms and Acronyms, 2008, p. 10).

Individuals with Disabilities Education Improvement Act (IDEIA*):* "The latest amendment of PL 94-142, guarantees free public education to all children regardless of disability" (Woolfolk, 2010, p. 557).

Individualized Education Program (IEP): "Annually revised program for an exceptional student, detailing present achievement level, goals, and strategies, drawn up by teachers, parents, specialists, and (if possible), the student" (Woolfolk, 2007, p. 617).

Inclusion: *"*Providing accommodations and supports to enable all students to receive an appropriate and meaningful education in the same setting, including participation in extracurricular and nonacademic activities; full participation in the general education curriculum" (Dictionary of Common Special Education Terms and Acronyms, 2008, p. 10).

Intellectual disability: "Significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child's educational performance. There are two key components within this definition: a student's IQ and his or her capability to function independently, usually referred to as adaptive behavior" (IDEA, 2004).

Learning Disabilities: "A condition giving rise to difficulties in acquiring knowledge and skills to the level expected of those of the same age, especially when not associated with a physical handicap" (Oxford Dictionary).

Least Restrictive Environment: "To the maximum extent appropriate, children with disabilities . . . are to be educated with children who are nondisabled; and that special classes, separate schooling, or other removal of children from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplemental aids and services cannot be achieved satisfactorily" (IDEA, 2004).

Modifications: Course material adaptations tailored to the student's learning level (Parker, 2006).

No Child Left Behind Act (NCLB): "The Federal law reauthorizing the Elementary and Secondary Education Act. The law requires each state to set higher standards for what children should know and be able to do in grades 3-8. NCLB includes incentives and consequences for school districts who do or do not show adequate yearly progress towards the standards established in the law" (Dictionary of Common Special Education Terms and Acronyms, 2008, p. 14).

Peer Mentor: "Students who have mastered certain skills or information and then help others at the same grade level learn those same skills" (Dictionary of Common Special Education Terms and Acronyms, 2008, p. 16).

Section 504: "Provision of the Rehabilitation Act of 1973, which prohibits recipients of federal funds from discrimination against persons with disabilities" (Dictionary of Common Special Education Terms and Acronyms, 2008, p. 20).

Special Education: "Term used in the IDEA that is defined as specially designed instruction to increase the student's chance for success" (IDEA, 2004).

Transition Programs for Students with Intellectual Disabilities (TPSIDs): "Provide grants to institutions of higher education or consortia of institutions of higher education to enable them to create or expand high quality, inclusive model comprehensive transition and postsecondary programs for students with intellectual disabilities" (Department of Education, 2015, np).

Universal Design: "A concept or philosophy for designing and delivering products and services that are usable by people with the widest possible range of

functional capabilities, which include products and services that are directly accessible (without requiring assistive technologies) and products and services that are interoperable with assistive technologies" (Dictionary of Common Special Education Terms and Acronyms, 2008, p. 23).

Limitations of the Study

This study seeks to explore the training offered by an IHE's inclusive program to CIs teaching students with IDD in typical college courses.

1. Inclusive programs were selected based upon specific criteria, but the instructor training and resources may vary in each program

2. Both purposeful and convenience sampling strategies were used which may include some bias.

3. Training affiliate's prior experiences may influence the results. Training affiliates with experience with individuals with IDD may have more knowledge and ability than those who have not had as much experience.

4. The study does not take into consideration the course disciplines taught by the instructors.

Limitations of a Qualitative Study

1. Qualitative studies use a small sample size and the results cannot be generalized to a large number of institutions.

2. The results of the analysis may be interpretive and include bias.

3. The use of convenience sampling limits the use of the study on a broad and general scale by IHEs.

4. The responses of the interview participants may not be sincere, although they are being recorded as such.

Delimitations of the Study

1. This study is delimited to inclusive programs categorized as TPSID or CTP that offer training to instructors teaching typical college courses.

2. This study is delimited to training affiliates who are willing to be interviewed.

3. The results of the study are based on the responses of program directors and other training affiliates, results were not gathered directly from instructors or students.

Organization of the Study

This study was organized into six chapters. Chapter 1 contained the introduction and overview of the study and the theoretical and conceptual framework. Chapter 2 reviewed the literature about the historical background of inclusion in postsecondary education, IPSE programs, UD, and faculty development strategies. Chapter 3 was a description of the research methodology and data analysis procedures used. The cases explored in this study were discussed in chapter 4. Chapter 5 contained a discussion of the key themes of the study. The final chapter, Chapter 6, was a summary of the study, including the implications, recommendations for future studies, researcher reflections, and a conclusion.

CHAPTER 2

LITERATURE REVIEW

Introduction

This chapter examined relevant literature on inclusion, especially of students with IDD, in the postsecondary education setting. The topics in this review include a historical overview of diversity and inclusion in postsecondary education, disability legislative mandates, an introduction to the postsecondary inclusion programs examined in this study, a discussion of the impact of faculty attitudes toward students with IDD, and an exploration of training practices and resources suitable for instructors teaching members of postsecondary inclusion programs in typical college classes.

The researcher used online databases within the Weis Library at Washington Adventist University and the James White Library at Andrews University. The main search engines utilized were ERIC, JSTOR, and the Chronicle of Higher Education. Other resources were collected via TC "a national organization dedicated to developing, expanding, and improving inclusive higher education options for people with intellectual disabilities" (Think College, 2021). The search criteria were limited to inclusive programs, hosted in IHEs, which have been established for over five years. The inclusive program must offer some form of training, preparation, or resources to instructors teaching students with IDD in typical college courses.

Search Criteria

The researcher used various combinations of terms to locate relevant articles. The keywords used were a combination of "faculty development" AND "intellectual disability" OR "developmental disability" OR "higher education," OR "postsecondary inclusion programs" OR "instructor preparation" AND "intellectual disabilities," OR "developmental disabilities." The researcher used the keywords to search for articles related to postsecondary education programs for students with IDD. The researcher also used dissertations related to inclusion in higher education and faculty responses regarding preparedness for teaching students with IDD in typical college classes.

Inclusion Criteria

(a) Published in a peer-reviewed journal after 2008

(b) Included postsecondary inclusive programs that serve students with intellectual and developmental disabilities

(c) Included programs established under Sec 777(b) of the Higher Education Act (HEA)

(d) Participants between the ages of 16 and 26 (in the United States)

(e) Reported meaningful credentials for students upon completion of the program.

(f) Students enrolled in the Inclusive Post Secondary Education Program

(g) Only accredited CTPs and TPSIDs

**Historical Overview of Inclusion in
Postsecondary Education**

Special education and inclusion are educational specializations which emerged from increases in awareness and the need for equity for students with disabilities. The World Health Organization's International Classification of Functioning, Disability, and

Health define disability as "impairments, activity limitations and participation restrictions. Disability is the interaction between individuals with a health condition . . . and personal and environmental factors (e.g. negative attitudes, inaccessible transportation and public buildings, and limited social supports)" (World Health Organization, 2013, para.1).

IDDs can be evidenced in a variety of ways. "Diagnostic criteria describe intellectual and developmental disability manifesting in difficulties with reasoning, problem-solving, planning, abstract thinking, communication, social participation, and ability to conduct typical, daily, independent living skills" (Burgin et al., 2017, p. 361). Hendrickson et al. (2013) provided examples of intellectual and developmental disabilities including, but not limited to, autism spectrum disorder, Down syndrome, traumatic brain injury, and developmental delay. In young adults, IDDs can be experienced through the struggle to obtain an education as well as in difficulty transitioning from high school into employment (Papay & Bambara, 2013). Hahn (1996), noted that stereotypically, disability is often viewed as a limiting, personal hardship that leads to the individual being viewed with sympathy and pity.

Learning Assistance and Disability Services in Higher Education

Over several decades, the higher education climate shifted (McGuire & Scott, 2006) to counteract stereotypes and provide new opportunities for people with disabilities. McKee & Tew (2013) attributed the shift to an increase in the recruitment of nontraditional students, open-admissions policies, gender and race equity, and online education. Higher education has become more accessible to students who may be unprepared for the rigor of postsecondary education. McGuire & Scott (2006) found that

the changing demographics in IHEs also include increases in the population of students with invisible disabilities, such as cognitive disabilities.

Beginning in the 1940s and extending through the 1970s, postsecondary enrollment increased from 15 to 45 percent of the U.S. population. The most significant growth occurred in the later years, due to increases in adult and part-time students, who required a larger degree of learning support and assistance than other students (National Center for Education Statistics, 1993). Many underprepared students enrolled in remedial classes. Although prior to the 1940s, most college students were enrolled in remedial classes (Brubacher & Rudy, 1976; Maxwell, 1979), increased enrollment led to a widening disparity in student abilities; a stigma began to form around remedial courses and those who needed to take them.

In response, IHEs began to expand college preparatory programs by using federal involvement, financial support, and legislation. Colleges were commissioned to provide services other than the standard remedial courses for adult students who had faced interruptions in their learning, such as participating in the workforce, raising families, and serving in the military. Learning assistance for underprivileged or underserved populations began long before students with intellectual disabilities were being served in PSE programs. The idea of disability within the postsecondary environment continues to evolve (Shallish, 2015). Exploratory research began looking for ways for underrepresented groups to receive support (Lozano & Escrich, 2017; Storlie et al., 2016). Previous practices were no longer best for this new and diverse group of students.

1944 GI Bill

One of the first groups to receive support and make a significant impact on inclusion and learning assistance in PSE were disabled World War II veterans. A study commissioned by the American Council for Education described the disabled veterans as: "leg and arm amputees, those with spinal and back injuries, those with diseases such as malaria and tuberculosis, the deafened and the blinded, and those with psychoneurotic disabilities" (Strom, 1950, p. 39). The Servicemen's Readjustment Act of 1944, also known as the GI Bill, provided housing, education, and unemployment funding for veterans. Many veterans took advantage of the opportunity to advance their education. After just two years, veterans were using over $2 billion dollars in federal funding annually. In 1956, over 7.8 million service members used this bill for educational benefits, 2.2 million for college or university, and 5.6 million for vocational training (Bound & Turner, 2002; Olson, 1973). In 1946, veterans made up over 52 percent of the United States college population (Strom, 1950).

Civil Rights Movement and Compensatory Education

Although veterans had a substantial impact on development of disability services, (Madaus, et al. 2009), later, assistance was expanded due to the civil rights movement and other legislation (Chazan, 1973; Clowes, 1980). The changes in laws led to methodological changes in the educational system to include both civic and social values (Carrascal & Rodriguez, 2017). The Civil Rights Act of 1964 increased societal opportunities for people of color and other people groups excluded previously, initiating development and implementation of learning assistance and inclusive strategies.

Under the HEA of 1965, which provided federal funding to improve the education of disadvantaged students, learning assistance programs expanded from traditional

remedial practices to "compensatory education" such as TRiO (upward bound, talent search, & support services) and equal opportunity programs. TRiO provided services for individuals from disadvantaged backgrounds such as students of color, the poor, and first-generation college students, whose enrollment was significantly increasing. "The TRiO college access programs became an official entitlement for a federally defined population—based on historical underrepresentation in postsecondary education or physical disability" (Arendale, 2010, p. 37; Kerstiens, 1997).

> Compensatory education in higher education would take the form of remediation activities such as preparatory and supplementary work . . . all with a program to provide an enriching experience beyond the academic environment to counterbalance a non-supportive home environment (Clowes, 1980, p. 8).

As Maxwell (1997) and Ntuk-Iden (1978) elaborate, compensatory education assisted in the identification of factors in the home environment which influence academic achievement, and included educational enrichment activities and cultural experiences, creating a separate, enriched learning community for qualifying students.

Compensatory education program eligibility was dependent on the following criteria: "(1) neither parent completed college; (2) an economically disadvantaged background; or (3) an eligible disability. Students were served directly through the program. According to Grout (2003), this focus met the needs of students who were underserved previously. Unfortunately, these programs contributed to marginalization of these students and missed opportunities to meet the needs of a larger population. To combat the stigma accompanying marginalization, compensatory education leaders distanced themselves from traditional learning assistance programs, although, as Clowes (1980) relates, the programs still incorporated traditional comprehensive assistance approaches such as remedial courses, counseling, and tutoring.

Community Colleges

Open-door policies at junior and two-year community colleges led to an overall increase in college attendance. Unfortunately, Koos (1924) found that entry-level scores of community college students were lower than those of applicants to four-year institutions. Four-year institutions were recruiting more students who were academically prepared, which gave them a faulty perception of the average abilities of incoming college students. Four-year institution faculty began to perceive falsely that a larger proportion of new students were prepared academically for the rigors of challenging course material (Hankin, 1996). "The gap between student preparation and faculty expectations required a different form of learning assistance, leading to the creation of noncredit learning assistance centers and the decline of remedial credit courses" (Arendale, 2010, p. 40). Consequently, community college students were enrolled regularly in remedial or developmental courses (McCabe & Day, 1998; Roueche & Roueche, 1993). Very few comparable services were provided in four-year institutions.

Initially, IHEs could not keep up with the influx of underprepared students needing remedial courses, counseling, and other assistance. According to Casazza & Silverman (1996) the open door became a revolving door of students regularly dropping out. This led to a call to heighten the standards of admission, which would limit opportunities for thousands of prospective students (Casazza & Silverman, 1996). In response, community colleges expanded their mission focus from preparing for transfer to senior institutions to providing services for underprepared, traditional students, and students training for vocational and certificate programs (Arendale, 2010).

Learning Assistance Centers

Many two and four-year IHEs developed and expanded the breadth of their

learning services (Boylan, 1988, 1995). In the 1970s isolated learning assistance services

such as credit-bearing courses and tutoring were replaced by comprehensive learning

assistance centers (LACs) (Arendale, 2004; Christ, 1997). The first LAC was developed

by Frank Christ at California State University in Long Beach; LACs were characterized

by a comprehensive focus on underprepared students, providing non-credit-bearing

assistance to meet the needs of students with a broad range of academic ability.

> [LACs] differed significantly from previous academic support services by
> introducing concepts and strategies from human development, the psychology of
> learning, educational technology, and corporate management into an operational
> rationale specific to higher education; by functioning as a campus-wide support
> system in a centralized operational facility; by vigorously opposing any stigma
> that it was 'remedial' and only for inadequately prepared, provisionally admitted,
> or probationary students; and by emphasizing 'management by objectives' and a
> cybernetic subsystem of ongoing evaluation to elicit and use feedback from users
> for constant program modification (Christ, 1997, pp. 1–2).

LACs also included extended services for faculty members. Faculty involvement

in LACs was crucial to success because "the resource center does not define the goals of

the learning it supports; it accepts the goals of the faculty and the students" (Henderson et

al., 1971, p. 5). Establishment of LACs led also to a change from the term remedial

education to developmental education. Cross (1976) identified the difference between

remedial and developmental disabilities as:

> If the purpose of the program is to overcome academic deficiencies, I would term
> the program remedial, in the standard dictionary sense in which remediation is
> concerned with correcting weaknesses. If, however, the purpose of the program is
> to develop the diverse talents of students, whether academic or not, I would term
> the program developmental. Its mission is to give attention to the fullest possible
> development of talent and to develop strengths as well as to correct weaknesses
> (Cross, 1976, p. 31).

Unlike remedial education, developmental education was viewed as more comprehensive because it focused more on the individual development of affective academic domains (Boylan, 1995; Casazza & Silverman, 1996; Hashway, 1988; Higbee, 2005; Higbee & Dwinell, 1998). Developmental education established the idea that all students had some form of talent, knowledge, or skill which could be developed. Programs included classroom activities for the enrichment of all students (White & Schnuth, 1990). Carrascal and Rodriguez (2017) agreed there was a need for equal opportunities for all students regardless of ability.

LACs continued to grow and expand into the 1980s, signifying the need for more professionals equipped to attend to the varied needs in postsecondary education and leading to the institution of national associations and assistance centers (Arendale, 2010). Associations such as the National Association for Developmental Education were founded in 1976, as was the National Center for Developmental Education by the Kellogg Foundation, which developed pilot programs to outsource remedial math, reading, writing, and developmental courses to companies such as Kaplan and Sylvan. For economic reasons, these pilot programs were terminated, especially as availability of 21st-century resources moved from onsite to online.

Although developmental education leaders tried to avoid the stigmatization within their programs, it was inevitable. Martha Maxwell noted:

> Developmental education has become a euphemism for remedial with all the negative connotations that word implies. . . . Today, students taking developmental courses are stigmatized. . . In primary and secondary schools the term developmental education applies to programs for the mentally retarded (Piper, 1998, p. 35).

This stigmatization led several publications to discuss the need for change in the campus environment as a whole (Barr & Tagg, 1995; Lazerson et al., 2000).

The Influence of Legislation on Inclusive Programs

1973-1979

As a recipient of substantial federal funding, IHEs became primary settings in which new legislation was tested and analyzed. Disability law was implemented in higher education in 1973 through Section 504 of the Rehabilitation Act, which prohibits discrimination based on disabilities in federally funded programs (Rothstein, 2015). Section 504 also ensures accessibility, but only after a student meets the institution's admissions requirements. In the same year, the IDEA expanded the disability definition to include students with autism and traumatic brain injury as well as a transitional element for students ages 16 and older interested in transitioning into continued education.

Prior to 1975, federally funded programs for students with special needs were not in existence (Rothstein, 2015), but significant changes for elementary and secondary public education began with PL-94-142, the Education for All Handicapped Children Act, which resulted in "access to public education for all children, without regard for disabling conditions" (Keogh, 2007, p. 67). Other changes occurring with the PL-94-142 legislation included the availability of FAPE for all students in the least restrictive environment, nondiscriminatory assessment, due process, and access to an IEP (Keogh, 2007). High-school students with disabilities now had new opportunities to advance their education; postsecondary training became an explorable option. Nevertheless, these laws did not guarantee students with IDD access to postsecondary education or grant additional accommodations.

The 1990 ADA legislation paved the way for the 1999 and 2002 Supreme Court decision to narrow the definition of disability coverage (Sutton v. United Airlines, 1999). ADA is:

> A civil rights law which prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public. The purpose of the law is to make sure that people with disabilities have the same rights and opportunities as everyone else (ADA National Network: Information, Guidance and Training on the ADA, 2018, np).

Initially the ADA was authorized for employers with fifteen or more employees, government programs, and other establishments covered under the Rehabilitation Act, such as IHEs. For some employers, the financial and legal responsibilities of these regulations caused hardship. As a result of these increased demands, some employers denied accommodation of the disabilities of their employees (Rothstein, 2015). These regulations may have increased the negative attitudes of employers towards people with disabilities.

Under both the ADA and the Rehabilitation Act, any person declaring they had a disability must have been substantially limited in one or more major life activities, have proper documentation of a disability, as well as not pose a threat to the organization. Parallel to the employment requirements, students with disabilities in need of reasonable accommodations must also show proper disability documentation in a timely manner to allow the program or organization to make appropriate accommodations if needed. Institutions are not required to lower standards, fundamentally alter the program, or require programs that cause undue hardship. These statutes and regulations about disability apply to faculty, staff, students, and the public.

The rights of college students are protected under ADA. College students have a right not to be discriminated against on the basis of their disability. Disabled students cannot be denied admission or be excluded from any course or program of study because of a disability. They have a right to equal access to academic and extracurricular programs, including facilities, just like their non-disabled peers. Institutions must provide reasonable modifications, accommodations, or auxiliary aids to enable qualified students to have access to, participate in, and benefit from the full range of educational programs and activities offered to all students on campus. Colleges and universities are not required to provide devices such as wheelchairs, hearing aids, and personal attendants. Unlike elementary and secondary schools, postsecondary institutions are not required to design special academic programs for students with disabilities (ADA, 1990; Rehabilitation Act of 1973).

Higher Education Opportunity Act of 2008

The reauthorization of the HEOA of 2008, an amendment and extension of the HEA of 1965, provided a number of revisions for young adults with IDD in the IPSE environment (HEOA, 2008). The 2008 ADA Amendment assisted by providing a broader definition of the term disability in response to the 1999 and 2002 Supreme Court decisions. To receive services under both amendments, an individual must have documentation of an impairment which limits them in a major life activity (Rothstein, 2015). The disabled person must inform the employer of the disability in a timely manner so that the program or organization can make reasonable accommodations. However, the court incorporated a new regulation stating that even with reasonable accommodations,

the person with a disability must be able to perform the critical requirements of the position.

In higher education, reasonable accommodations can be classified as support through the use of tutors and other support staff. The Sellers v. University of Rio Grande case of 2012 led to the decision that tutoring services provided to the general student population must also be provided to students with disabilities. Because such a service might be interpreted in a personal nature in regards to students with learning and mental impairment, the decision to offer the service has generally been determined to be a non-essential auxiliary service. If, however, the program offers such a service to students generally, it must be offered on a nondiscriminatory basis, and reasonable accommodation might be required when providing such a service.

Prior to 2008, there were limited postsecondary options available for students with IDD after high school (Bouck, 2014). As a result of federal policies and grant initiatives, enrollment and participation in higher education continue to increase for individuals with disabilities (Lovett & Lewandowski, 2006; Raue & Lewis, 2011; Wagner et al., 2005). Pell grants, facilitated through the HEOA of 2008, help mitigate the cost of college for students with IDD (McEathron et al., 2013). These grants aid in alleviating financial barriers. According to the National Coordinating Center (Think College, 2017), in 2008 there were only 49 PSE programs for students with IDD; whereas in 2019 there were over 270.

Description of Inclusive Postsecondary Education Programs

Inclusion in postsecondary education has led to the refutation of previously held ideas about who should attend college (Ludlow, 2012). development and implementation

of IPSE programs for students with IDD was a fairly new concept which was birthed

through the efforts of a few individuals in IHEs (Kelley & Westling, 2013; Plotner &

Marshall, 2015; Raynor et al., 2016).

> What began through the efforts of a few individuals and institutes of higher
> education has now grown into a movement of many who share the conviction that
> all students should have access to postsecondary education that leads to
> employment and independent living opportunities (Martinez & Queener, 2010,
> p.1).

IPSE programs are certificate and degree programs designed specifically for

students with IDD within an IHE. "The overall goal for providing education services in

postsecondary settings is to give older students with disabilities age-appropriate settings

for their final public education and transition experiences" (Grigal et al., 2002, p. 68). As

reported by O'Connor et al. (2012), IPSE programs, are designed to offer:

> Instruction in natural environments, person-centered planning, cross-agency
> coordination, adoption of universal curriculum design, mentoring and coaching
> securing competitive employment, development of social pragmatics and
> communication skills, self-determination and advocacy, and program evaluation
> (p. 248).

A detailed description of each IPSE program can be found using the

thinkcollege.net search tool (Think College, 2019). TC is a national organization

committed to improving and expanding opportunities for students with IDD in higher

education. As of 2019, there were over 270 IPSE programs available for students with

IDD. These programs are available in forty-nine states across the country, including

Alaska and Hawaii. States such as New York, Pennsylvania, Massachusetts, Florida, and

California, have over ten nationwide programs. As of 2021, there are 33 IPSEs available

in New York (Think College, 2021).

Data analysis of the Rehabilitation Services Administration shows that close to

20% of young people with IDD are in postsecondary education and receiving vocational

rehabilitation services nationwide *(*Grigal et al., 2014). In IPSE programs, students with IDD are provided with opportunities for academic enrichment, skills for independent living and self-advocacy, and integrated career and work skills leading to employment. (Think College, 2019). IPSE students are preparing to enter the workforce. In order to be successful in the workplace, students must develop core learning skills in problem-solving, decision-making, and goal-setting (Association of American Colleges and Universities, 2008; Paiewonsky, et al., 2010).

<p align="center">Transition Postsecondary Education Programs</p>

Transition Postsecondary Education Programs for Students with Intellectual Disability (TPSIDs), refers to a group of federally funded IPSE programs (National Coordination Center, 2019). TPSIDs "provide grants to institutions of higher education or consortia of institutions of higher education to enable them to create or expand high quality, inclusive model comprehensive transition and postsecondary programs for students with intellectual disabilities" (DOE, 2015, np). TPSIDs can serve dual purposes: to provide students with IDD with opportunities, and to provide faculty with exposure to this population (Hart et al., 2010).

The HEOA established the National Coordinating Center to be responsible for TPSIDs. Since 2010, TPSID-funded programs are located in 23 states and were coordinated, designed, evaluated, and implemented by the National Coordinating Center (Hendrickson et. al., 2013). According to Papay and Bambara (2011), TPSIDs were among the most positive indicators of a successful transition for high school students with IDD to young adulthood. In 2012, 27 TPSIDs were authorized as demonstration

models (Kleinert et al., 2012). Twenty-five TPSIDs were funded in 2015, with 52

TPSIDs had received funding since 2010 (Think College, 2018).

TPSID projects are designed to establish CTPs which will:

(1) serve students with intellectual disabilities; (2) provide individual supports and services for the academic and social inclusion of students with intellectual disabilities in academic courses, extracurricular activities, and other aspects of the institution of higher education's regular postsecondary program; (3) with respect to the students with intellectual disabilities participating in the model program, provides a focus on: (A) academic enrichment; (B) socialization; (C) independent living skills, including self-advocacy skills; and (D) integrated work experiences and career skills that lead to gainful employment; (4) integrate person-centered planning in the development of the course of study for each student with an intellectual disability participating in the model program; (5) participate with the coordinating center established under section 777(b) in the evaluation of the model program; (6) partner with one or more local educational agencies to support students with intellectual disabilities participating in the model program who are still eligible for special education and related services under the Individuals with Disabilities Education Act, including the use of funds available under part B of such Act to support the participation of such students in the model program; (7) plan for the sustainability of the model program after the end of the grant period; and (8) create and offers a meaningful credential for students with intellectual disabilities upon the completion of the model program" (DOE, 2017.

Comprehensive Transition Programs

CTPs are IPSE programs designed specifically for students with IDD "to continue

academic, career and technical, and independent living instruction in order to prepare for

employment" (Pacer Center, 2019, np). CTPs were characterized by the HEOA as;

A comprehensive transition and postsecondary program for students with intellectual disabilities to mean a degree, certificate, or non degree program that: (1) is offered by an IHE; (2) is designed to support students with intellectual disabilities who are seeking to continue academic, career and technical, and independent living instruction in order to prepare for gainful employment; (3) includes an advising and curriculum structure; and (4) requires students with intellectual disabilities to participate on not less than a halftime basis with nondisabled students in (a) regular enrollment in credit-bearing courses, (b) auditing or participating in courses for which the student does not receive regular academic credit, (c) enrollment in non credit-bearing, non degree courses, or (d) participation in internships or work based training" (McEathron et al., 2013, p. 1; (HEOA, 2008, np).

A five-year agreement to provide cooperative assistance to federally funded programs and CTPs falls under Sec 777 (b) of the HEA of 1965. The coordinating center was authorized to provide technical assistance, recommend standards, and evaluate program components. The legislation emphasizes the importance of social and academic integration of CTP students through inclusive classes and internships. In 2008, for the first time, students enrolled in qualified CTPs were eligible to receive HEOA mandated federal funding. These grants have provided funding through financial aid grants to address the employment gap experienced by students with IDD (Burgin, et. al., 2017). Qualifying students can use work-study funding and financial aid grants to pay for the program even if they do not have a high school diploma or are not fully matriculated (Pacer Center, 2019).

Raynor et al., (2016) determined that IHEs interested in developing an inclusive postsecondary program must begin by submitting a proposal aligned with HEOA and meeting the following specifications: (a) be offered at an IHE, (b) offer support to students with IDD in academic, technical, and independent living instruction in preparation for competitive employment, (c) offer advising and guidance, (d) offer academic opportunities in which at least 50% of the focus is also provided to students without disabilities; and (e) lead to gainful employment. Prior to implementing an inclusive postsecondary program, Raynor et. al., (2016) suggested conducting an investigation of pre-existing initiatives and services offered on campus for students with IDD. The Conference Report H.R. 1437 for the HEOA conferees encouraged those developing postsecondary education programs to integrate students with ID into inclusive

activities, coursework, and campus settings with nondisabled postsecondary students (Lee, 2009).

Programs may be fully inclusive, where academics, social events, and independent living support take place with students without disabilities. (Pacer Center, 2019). Most programs offer program-specific courses for students with IDD (Grigal et al., 2017) in which students learn life-skills, self-advocacy, etc. IPSE students participate in typical college courses with students without disabilities with program-specific support from an education team, coaches, or mentors (Pacer Center, 2019). The percentage of program-specific and typical college courses vary by program, but CTP DOE authorization is dependent upon IPSE students spending at least 50 percent of the program in inclusive classes and work experiences.

Some programs allow students with IDD to participate and receive grades in the same way as their typically developed peers while other programs allow students with IDD to audit classes or receive a pass/fail grade. An audited course allows students to enrich their knowledge and experiences without the pressure of receiving a grade or course credit. Students who audit courses within a TPSID program do not receive course credit; this allows the CIs to be more flexible (Hafner et al., 2011). Hart et. al., (2010) suggested that audited courses provide students with IDD with more flexibility for accommodation without forfeiting course rigor. Students with IDD have the option of enrolling in audited classes and receiving accommodations to course expectations (Griffin & Papay, 2017). Students with IDD are able to enroll in audited classes in order to receive accommodations to course expectations (Griffin & Papay, 2017). A study by O'Connor et al., (2012) found that the teaching staff reported that students with IDD

attending classes for audit benefited the learning environment through the questions they

asked, the experiences shared in group work, and inspiration of the class dynamics.

Some programs offer a dual-enrollment option for students still attending

secondary school, while others only admit students who have completed high school

(Papay & Bambara, 2011). Students can be admitted into a CTP without a high school

diploma because of reliance on an IEP in high school; they can participate in

postsecondary course work and be provided with support to augment their educational

experience (Hendrickson et al., 2013). Even with the diversity amongst the program

requirements, there is a uniformity in the objective to offer opportunities to students with

IDD that were historically unavailable based on test scores and grade requirements

(Grigal, et. al., 2012).

Students enrolled in IPSE programs must have an intellectual disability defined

by the HEOA as:

> . . . a cognitive impairment, characterized by significant limitations in intellectual
> and cognitive functioning; and adaptive behavior as expressed in conceptual,
> social, and practical adaptive skills and who is currently, or was formerly, eligible
> for a free appropriate public education (FAPE) under the Individuals with
> Disabilities Education Act (2010).
>
> Students interested in CTP enrollment must meet the following requirements;
>
> (1) Has the desire and motivation to participate in a college experience; (2) Can
> use technology (cell phone, tablet, laptop, etc.) at a basic level; (3) Age is between
> 18-25 years old upon admission; (4) Can self-administer medications; (5) Exhibits
> behaviors appropriate for a college setting; (6) Able to communicate with others
> and express needs; (7) Able to handle changes in routine; can be flexible in
> fluctuating circumstances; (8) Has parents who will support their independence"
> (Pacer Center, 2019, np).

Benefits of Inclusion in Postsecondary Education

The purpose of inclusion is to promote mutual respect, cooperation, acceptance,

and community that emphasizes a sense of belonging (Vander Busard, 2012). There are

many advantages to the development and implementation of a successful inclusive setting in an IHE. The Convention on the Rights of Persons with Disabilities recognizes the increased significance of postsecondary education for students with IDD based on the social and economic benefits of continued education as a pathway to full participation in society through employment as it gains traction within the international community (O'Conner et al., 2012; United Nations, 2006).

College Instructor Responses

Students both with and without disabilities and their instructors benefit from an inclusive classroom setting. O'Connor et al. (2012) found that the inclusive strategies of an instructor were affirmed by the attention and interest displayed in class by the students with IDD; another teacher reported positive interactions between the students with IDD and the other students. CIs welcomed the challenge of restructuring their ways of instruction; students with IDD asked unexpected questions. Carroll et al. (2009) discovered that teacher trainees enrolled in classes with IDD students enjoyed the experience and gained a belief that the students with IDD would be able to complete college courses successfully.

Student Responses

A survey of students attending an IHE with an operating IPSE program found that students felt positive about inclusion in postsecondary; a higher percentage of positivity was held by students who had previous experience with students with IDD than was held by those who did not have previous experience (Griffin et al., 2012). Hendrickson et al. (2013) studied the inclusive postsecondary program, UI-REACH, and noted the expansion of diversity within the institution allowed students with IDD and students

without disabilities to experience meaningful learning opportunities. Other benefits for the campus community were found by Inkelas et al. (2007), who reported an increase in student engagement and a feeling of belonging as students-built relationships with faculty, staff, and peers, as they learned to navigate the campus.

Factors which Impact Inclusion in the Postsecondary Setting

Several factors influencing the inclusion of students with IDD in a postsecondary setting included student preparation and transition; enrollment; discrimination and stigma; faculty, staff, and student attitudes; instruction; and accommodations. Although the expansion of IPSE programs provides students with IDD with a wide range of opportunities, students with IDD and their CIs face various challenges. Often, students with IDD face marginalization, stigmatization, and discrimination. CIs are challenged when they lack understanding of the needs of students with IDD; and when they lack the training, resources, and knowledge of proper implementation of accommodation.

Preparation and Transition

To prepare for attendance in an IPSE program, common IPSE prerequisites include (a) the student communicates a desire to attend college, (b) the student can navigate the campus independently, and (c) the student is able to be safe on campus (Grigal et. al., 2012; Papay & Bambara, 2011). Although college attendance may not be an ideal fit for all students with IDD, opportunities to attend IPSE programs are becoming more available (National Coordinating Center Accreditation Workgroup, 2016). Training is required to make sure students are familiar with their options just as is done for students without disabilities (Griffin & Papay, 2017). Having postsecondary education as a long-range goal is a powerful factor in inclusive placement (Think

College, 2019). Teachers, students, and parents must be intentional about exploring and understanding available postsecondary options while setting goals. Wei et al. (2016) found that students who select college as their goal and participate in transition planning were more likely to achieve those goals than those who did not.

High school students with IDD who wish to enroll in an IPSE program often face a number of barriers. Often, secondary IEPs focus on independent living and employment goals rather than on postsecondary education opportunities (Burgin et al., 2017). Parents and teachers are encouraged to help high school students establish postsecondary education as a measurable goal by including college-preparation skills in the IEP. Measurable objectives include career-based soft skills and skills that contribute to independent living.

Colleges and universities do not operate within the same system that requires secondary and elementary schools to provide FAPE; postsecondary students are required to maintain eligibility and meet academic criteria (Mcguire & Scott, 2006). Postsecondary programs differ dramatically in courses and curricula (Morelli, 1999). Upon entering college, students with IDD, just as their non-disabled counterparts, are expected to assume responsibility for their education in the form of course selection, attendance, and communication with faculty members and support staff (Paiewonsky, et al., 2010). One major differences between the expectations of high school vs. postsecondary education is the need to demonstrate self-determination skills (Garrison-Wade & Lehmann, 2009; Paiewonsky, et al., 2010; Thoma & Wehmeyer, 2005). But Wehmeyer et al., (2007) pointed out that often, students with IDD making the transition

from high school to postsecondary have not had the opportunity to practice self-advocacy

and self-determination, both of which are linked to improved academic performance.

<center>Marginalization and Discrimination</center>

Whether due to lack of understanding, knowledge, or experience, intellectual

disabilities are rarely differentiated from other disabilities in studies of postsecondary

education in the United States (Grigal et al., 2010; O'Conner et al., 2012). In spite of

increased development and knowledge about postsecondary options for students with

IDD and learning disabilities, outcomes for adults are disheartening in comparison to

typically developing students (Kochhar-Bryant, 2007; Ludlow, 2012) including students

with learning disabilities. Although students with disabilities entering postsecondary

education have enhanced legislative frameworks to support their right to education

(Katsiyannis et al., 2009; Ontario Ministry of Economic Development, Employment and

Infrastructure, 2014), historically, individuals with disabilities have lower enrollment and

completion rates than those without disabilities (National Center for Special Education

Research, 2009). Students with learning and physical disabilities such as deafness,

blindness, and mental health are more widely accepted in the IHE system than those with

IDDs. IHEs are being challenged to analyze and rethink the current partnerships and

services offered on campus and in the community (Raynor et. al., 2016). Factors such as

the underutilization of support services and accommodations and limited social

opportunities lead to a lack of program completion for a large number of students with

disabilities (Quick et al., 2003).

In conjunction with low acceptance and enrollment rates, students with IDD in an

inclusive program may experience stigmatization and discrimination in a variety of ways,

"including self-perceptions, experiences with faculty, staff and instructors, and their willingness to access accommodations" (Lightfoot, 2018, p. 61). Postsecondary students who have publicly self-identified their disability can often be discriminated against or stigmatized (Holloway, 2001; Knis-Matthews et al., 2007; Lechtenberger et al., 2012; Olney & Brockelman, 2003; Olney & Kim, 2001; Walker, 2008). A self-identified disability is traditionally viewed as a limitation (Barnes, 2006; Dudley-Marling, 2004; Quick et al., 2003; Wax, 2014) and is often used as grounds for discrimination and/or stigmatization (Green, 2007; Ryan, 2007; Trammell, 2009; Walker, 2008). Stigmas and discrimination can arise because upon matriculation, given their support needs, students with IDD often do not meet the criteria to be considered a match for college (Plotner & Marshall, 2015; Raynor, et. al., 2016).

The expansive terminology and challenges of IDDs provide CIs with the challenge to meet the needs of so many diverse students who may require different intervention models (Carrascal & Rodriguez, 2017). Gobbo & Shmulsky (2014) discovered faculty members were challenged by the lack of social skills and critical thinking abilities of students with IDDs.

<div align="center">Attitudes</div>

The attitudes, instructional methods, and incorporation of accommodations by CIs has an influence on inclusion. Attitudes differ by faculty rank, prior experience, type of disability, departmental affiliation, as well as the faculty members' knowledge of disability law (O'Connor et al., 2012). Several researchers have explored the beliefs of teachers toward students with disabilities, as well as toward those with physical disabilities, learning disabilities, and developmental disabilities (Gibbons, et. al., 2015).

May (2012) found attitudes of openness toward students with IDD enrolled in inclusive classes.

Students with disabilities identified how vital it was for them to build relationships with professors through one-on-one interaction, especially when experiencing instances of helplessness. Students reported the care, concern, and accommodations they received were helpful. (Cornett-Devito & Worley, 2005; Denhart, 2008; Duquette, 2000; Erten, 2011; Greenbaum et al., 1995; Hadley, 2006; Hadley & Satterfield, 2013; Hutcheon & Wolbring, 2012; Koch, 2006; McCleary-Jones, 2007; Mytowicz & Goss, 2012; Nielsen, 2001; Perry & Franklin, 2006; Quinlan et al., 2012).

Faculty and staff are often willing to accept students with disabilities into their classes. Using a Likert scale survey, Gibbons et al. (2015) studied faculty ($n = 152$) and student ($n = 499$) attitudes toward future implementation of an IPSE program and found that overall both entities were willing to embrace the program. The faculty appeared to be more uncertain about inclusion than the students. Despite the overall positive attitudes of faculty members, there are many factors that can influence the difference in attitudes among faculty members, including program affiliation, previous contact, and type of disability.

Previous experience with students with IDD in either a personal or professional setting has a positive influence on faculty and student attitudes. Faculty members with previous contact were more knowledgeable about the relevant disability considerations than those without previous contact (Aksamit et al., 1987; Norton, 1997). Gibbons et. al., (2015) discovered previous experience with students with IDD was linked to a positive attitude regarding IPSE programs. Izzo and Shuman (2013) conducted a qualitative study

to examine the beliefs of mentors who worked with students with IDD. Overall, participants thought it was a good idea to include students with IDD in college classes. This positive belief came from their previous interactions with students with disabilities. Students grew increasingly comfortable with students with IDD as they interacted with them more frequently, highlighting the need for more inclusive programs. Although beliefs vary regarding students with IDD in higher education or postsecondary programs, interaction and exposure affected those beliefs in a positive manner (Gibbons, et al., 2015).

When faculty members and students are exposed to differences, they often become more accepting of individuals; there is a shift in their attitudes and level of acceptance. O'Connor et al., (2012) discovered faculty members were in support of the program as a means of supporting the collegial initiatives of the institution.

Faculty attitudes towards IPSE programs or students with disabilities can be negative. Several studies found that students with disabilities found their faculty to be insensitive, lacking awareness, and rejecting (Kurth & Mellard, 2006; Wilson et al., 2000). Other studies indicated that faculty members tended to be mistrusting and skeptical of students with invisible disabilities such as ADHD, psychiatric, and learning disabilities (Beilke, 1999; Jensen et al., 2004). According to previous research, individuals who are not as familiar with students with IDD may be uncomfortable interacting with them (Griffin et al., 2012).

Instruction

CIs also face challenges in the delivery of instruction. Most CIs deliver instruction in the form of lecture. Students with IDD experienced aspects of instructional

methods that were non-supportive, such as professors moving through class material very quickly (Erten, 2011; Hadley, 2006, 2007), and not providing adequate time (Hadley & Satterfield, 2013; Lightner et al., 2012; Troiano, 2003). O'Connor, et. al., (2012) pointed out that although students with IDD receive a great deal of support from their class members, they are at a disadvantage with this teaching style. Lecturers in this study recognized the need to diversify their teaching methods to meet the diverse needs of learners. To make it easier for all students to be successful, the researchers encouraged the use of more flexible teaching methods.

> In the realm of education, this encourages institutions to adopt instructional approaches that will benefit the greatest number of students possible. For example, the provision of lecture notes in alternate formats, such as audio recordings, can serve as a strategy for all students to review lecture content at their own pace and in a format consistent with individual learning needs (Lightfoot, et al., 2018; p. 60).

<center>Use of Accommodations</center>

Zafft et al. (2004) emphasized that students with IDD transitioning into postsecondary-level courses require accommodations regularly. Some studies reported on faculty members who were willing to provide modifications for students with disabilities and demonstrated a positive attitude towards these students (Bigaj et al., 1999; Leyser et al., 1998; McKeon et al., 2013; Norton, 1997; Vaseck, 2005; Vogel et al., 2006; Vogel et al., 2008).

Accommodations may include assistance from peer coaches. Students with IDD in postsecondary inclusion programs can obtain support from several avenues other than the CIs. Students indicated that support from professors or personnel from university counseling services were the most important factors in their academic performance (Banks, 2014; Bolt et al., 2011; Cornett-Devito & Worley, 2005; Denhart, 2008;

Duquette, 2000; Erten, 2011; Greenbaum et al., 1995; Hadley, 2006; Hinckley & Alden, 2005; Koch, 2006; Litner et al., 2005; Mytkowicz & Goss, 2012; Quinlan et al., 2012; Stage & Milne, 1996). Personnel can include program directors, counselors, and mentors. "In addition to the program's director and a team of educators, many programs utilize coaches or mentors to provide support in inclusive settings" (Pacer Center, 2019, np). Mentors have been described by Raynor, et. al. (2016), as a service needed to assist students with difficulty in executive functioning.

A lack of knowledge or experience with students with IDD often leads CIs to depend on the support staff or peer mentors understand the needs of the students with IDD in their classes. Misunderstanding may occur between the perceptions of the CI and the expected amount of involvement of the peer mentor. Peer mentors are trained to assist students in the inclusive program; however, their goal is to allow the student to function as independently as possible. Aspects of independence include developing a relationship with professors and being able to communicate needs for accommodations to successfully complete the course of study. According to O'Connor, et. al. (2012), in IPSE programs, some students attending typical college courses were accompanied by student mentors while others are unaccompanied. Some programs use occupational therapy assistants or graduate education students within the IHE while others hire candidates from outside the IHE who specialize in areas such as academics and job coaching.

Peer mentors generally receive extensive training on how to assist their mentee, whereas commonly CIs receive little to no preparation. Giust and Valle-Riestra (2016) discussed the availability of IPSE faculty members in the role of student advisement, but

there appears to be little evidence of the preparation of CIs to teach students with IDD in typical college classes.

<center>Training</center>

McKee and Tew (2013) describe the need for a change in the focus of IPSE:

> The inclusion of formally underserved populations, the change of focus of the college curriculum, and new directions in campus life have presented both new challenges and opportunities to higher education leaders, requiring a complete reevaluation of teaching methods that best enable student learning (p. 9).

According to Baker et al. (2012), faculty members often lack training in how to support students with IDD and the additional information needed to host TPSID students in audited classes. O'Connor et al. (2012) noted that some lecturers were unclear regarding the purpose of student attendance although they understood the need for students to attend classes to address initial interest. In this study, a lecturer expressed a lack of briefing regarding the program and expressed an inability to make appropriate accommodations to meet the needs of the student. O'Connor et al. noted,

> Although she found that faculty with prior disability-focused training had more positive attitudes toward students with disabilities than did those without such training, no evidence emerged that they were more likely to adopt inclusive instructional practices or provide accessible course materials (p. 82).

Casebolt and Hodge (2010) discovered that teachers felt class activity and preparation was difficult and that they lacked training. According to Lightfoot, et. al. (2018), "work needs to be done for students with disabilities in the area of advocacy that will lead to the changing of attitudes and dispelling of myths amongst faculty and their peers" (2018, p. 64). "Disability service providers can also accomplish this by educating postsecondary faculty and staff on relevant accessibility legislation and standards, universal design principles and strategies, as well as providing recommendations for

<center>50</center>

how" (p. 66). UDL strategies and principles can be applied to online learning, lectures, course materials, and standards.

The 21st-century IHE has experienced many technological advances. Technological advances lead to a pedagogical digital divide between information and instructional practices of CIs and students. With the increased information students have available to them on their internet-accessible devices, faculty members and CIs are no longer the sole proprietors of information; this influences instructional practice strongly (Hott & Tietjen-Smith, 2018). McKee & Tew (2013) agreed that traditional forms of instruction, e.g., lectures, as primary instructional tools might not be the best ways to reach the 21st-century student.

Despite these shifts in the postsecondary environment, CIs often have little experience with instructional strategies focused on pedagogy or with varied delivery systems; they often teach the way in which they were taught (McKee & Tew, 2013). Faculty and staff members can increase their competence by adjusting their instructional methods and learning environments to meet the needs of diverse learners (O'Connor, et al, 2012). Faculty must change from their prior teaching strategies if they wish to convey knowledge to a demographic of students who have grown up with technology (Pawlyshyn & Hitch, 2016). According to Seldin (1995), faculty "must learn to gear instruction to a new classroom dynamic" (p. 4). A study by Hott & Tietjen-Smith (2018) found that faculty members expressed a willingness to strive to meet the needs of a new, diverse student population which includes first-generation college students and international students (2018). Students in a study by Black et al. (2015) expressed concerns about the ability of faculty and staff to execute accommodations properly in

addition to a lack of awareness and training about the needs of students with disabilities. McKee & Tew (2013) stated that most faculty members were not equipped with the expertise or clerical services to acquire these 21st-century skills.

Academic administration and community members must recognize the changes in campus life; faculty members need to commit to understanding the new culture as well as to meeting the needs of the diverse groups of students. Another common change in academia is the reduction of general education courses in favor of courses focusing on preparation for careers in the working world (McKee & Tew, 2013). Academic administration has the responsibility to equip faculty members with the support and tools they need to meet the needs of the diverse student population and to "stand up to new challenges and be up to date both in terms of the scientific knowledge within their scopes and in terms of pedagogical advances" (Diaz et al., 2010, p. 105). According to Henard and Roseveare (2012) IHE can support faculty by providing professional development opportunities and fostering faculty learning communities.

Instructor Preparation

Postsecondary education is now a reality for many students with IDD; school personnel need to be equipped to prepare and facilitate this option with students and parents (Hart et al., 2010). According to Carrascal & Rodriguez (2017), teacher training is necessary to meet the needs of students with IDD transitioning into adulthood. To master the task of inclusivity, teachers need to be trained specifically in the competencies needed for the integration of disabled students into the school system (Marbán Gallego et al., 2012).

> A proper teacher training will suit his perception of real education faced to
> establish a model of teaching competencies which suit knowledge, the application

of methodologies and solving problems while paying attention to meet the demand of students in the process of transitional period to an active adulthood (Carrascal & Rodríguez, 2017, p.1864).

There are a number of other common strategies which can benefit postsecondary students with IDD such as using a planner or calendar for organization (Ginsberg, 2008; Hinckley & Alden, 2005; Perry & Franklin, 2006), making lists (Denhart, 2008; Ginsberg, 2008; Hollins & Foley, 2013; Perry & Franklin, 2006; Stage & Milne, 1996), the opportunity to study in a quiet, distraction free environment (Ginsberg, 2008; Koch, 2006; Stage & Milne, 1996), using earplugs in order to concentrate (Perry & Franklin, 2006), using a highlighter in order to document important texts (Denhart, 2008; Hollins & Foley, 2013; Stage & Milne, 1996), reviewing class or reading material (Stage & Milne, 1996), preferential seating at the front of the class (Velde et al., 2005), asking classmates and friends for help (Stage & Milne, 1996; Velde et al., 2005), and using practice tests to study (Greenbaum et al., 1995).

In a study of instructor support for students taking audited classes conducted by O'Connor et al. (2012), regarding the Trinity Inclusive Curriculum (TIC) initiative, semi-structured interviews were administered to instructors who taught students with IDD in undergraduate courses. The aim of the TIC was to "break down barriers to learning by providing a range of teaching and assessment methods, allowing all students to work to their strengths" (Trinity College Dublin, 2011, para. 2).

> Researchers identified the following themes in instructor motivation to host audit students: desire for social justice, reinforcement by university culture, and previous connections with family or others with disabilities. Beyond these motivating factors, the audit experience represented an opportunity to improve skills and gain training in accommodating students with IDD (O'Connor et al., 2012, p. 248).

The O'Connor et al. (2012) study also focused on instructor motivation to have students with IDD audit their courses to determine how it would impact class arrangement, preparation, and delivery of lectures, as well as the instructor's willingness to change their approaches to teaching

Few studies reviewed instructor training methodology and practices. Carrascal and Rodriguez (2017) discovered that 91.3% of teachers appreciated the use of collaborative reflection to improve training programs because it incorporated inquiry and communication skills. They found that 79.2% of teachers believed training led to joint inquiry and the application of teaching and learning strategies helpful for diverse students. Exchange and discussion of teaching experiences improved development and training, increasing collaboration.

Findings from the O'Connor et al. (2012) study were that instructor motivation was driven in part by an aspiration for improving instruction methods for teaching a diverse group of students. With assistance from the TPSID staff, the CIs made accommodations, most of which were suggested by the university's disabilities services. These accommodations included alterations or a decrease in assignments to meet the developmental level of the students with IDD.

Certification programs have been developed and restructured due to the awareness raised by relationships between staff and students with disabilities inclusive of students with IDD (Raynor, et al., 2016). A lecturer in the O'Connor et al. (2012) study emphasized the benefit of having an awareness and background knowledge of the disability and needs of the students with IDD auditing the class in order to provide engagement opportunities for all students. O'Connor et al., suggested CIs meet their

students before the commencement of the course and be provided with briefing notes which could be used for mentor training in student engagement.

Faculty Development in Postsecondary Education

Faculty development was defined by Mckee & Tew (2013) as "as an intentional set of educational activities designed to equip faculty to grow in their professionalism with the result of being partners in advancing all segments of the institution" (p. 13). When designed and implemented properly, faculty development can transport higher education into new competencies. Guskey (2000, 2002) outlined five essential levels of evidence to examine when evaluating the effectiveness of professional development, "(1) participants' reactions to the activities, (2) participants' learning of new knowledge and skills, (3) organizational support and change, (4) participants' use of new knowledge and skills, and (5) student learning outcomes" (p. 13). "For decades, schools have implemented professional learning without knowing exactly what they hoped to accomplish" (Guskey, 2014, p. 12). To avoid this major problem in professional development planning, Guskey (2001) stated that one must begin by planning "backward," by first considering the student learning outcomes. Covey (1989) stressed that one must "begin with the end in mind" (p. 14). Goals must be identified and clarified before considering the appropriateness of the professional learning activity (Guskey, 2014).

Those tasked with planning "must decide what specific knowledge and skills educators need in order to implement the prescribed practices and policies well" (Guskey, 2014, p. 15). To determine the needed knowledge and skills, the planner must consider the what and the why of the learning. Participants must acquire a depth of knowledge to

be able to put the policy into the practice as well as have a sound rationale for change. Lastly, the planner must consider the set of experiences which will best allow the participants to acquire the knowledge and skills needed (Guskey, 2002, 2014).

The primary responsibility of faculty members is to meet the needs of the students. "Faculty as teachers and faculty as purveyors of intellectual vibrancy remain integral to higher learning" (Pawlyshyn & Hitch, 2016, p. 41). With rapidly increasing societal shifts in higher education, Mckee & Tew (2013) emphasized the essential role faculty members play in expanding educational enterprise; faculty development should be considered a necessity for them to be fully engaged and prepared. Faculty must participate in the faculty development process. Bouwma-Gearhart (2012) related that faculty members are able to identify the professional development they need; accordingly, "institutions, administration, and policy makers have power and responsibility to provide the encouragement and resources for faculty to create their own realities" (p. 185). Hott & Tietjen-Smith (2018) observed that faculty members identified several beneficial forms of professional development such as face-to-face activities, webinars, and readings. Assistant professors also indicated the need for professional development on "tenure and promotion expectations, support for effectively working with challenging students, and research mentorship" (p. 7). Respondents expressed the need for strategies to support students at varying levels of learning.

Although professional development is a well-tried way to provide information to faculty members, several barriers may impede development, delivery, and use of the material presented. Several studies (e.g., Hahn & Lester, 2010; Jiandani et al., 2015) identified barriers to faculty development and continued education including "lack of

pedagogical training, lack of time, lack of incentives and tensions with professional identity" (Brownell & Tanner, 2012, p. 339). Regardless of the content, structure, or activity, for professional development to be effective, it must be well planned (Guskey, 2014). Groups who participated in the study by Guskey agreed that regardless of the content or structure of professional development, there is often a lack of direction, cohesiveness, or purpose. Those who plan professional learning opportunities may have focused on the process, rather than on the results.

Because of the barriers impeding successful faculty development, evaluation of effectiveness is vital; often, educators have not given much attention to this. Guskey (2002) discovered that many educators view evaluation as expensive, time-consuming, and shifting focus from the planning and implementation aspects of professional development. Educators often feel incapable of performing rigorous evaluations so it is left up to the experts or neglected altogether. Guskey (2002) relates that educators are more prone to evaluate event-driven professional development, but neglect to evaluate less formal, on-going professional development activities such as action research, peer coaching, collaborative planning.

Successful delivery and implementation of professional development can be measured only by examining goal achievement. Evaluation is the key instrument for the collection and analysis of evidence. Evaluation, simply stated, is "the systematic investigation of merit or worth" (Joint Committee on Standards for Educational Evaluation, 1994, p. 3). Through "systematic information gathering and analysis as a central component of all professional development activities, we can enhance the success of professional development efforts everywhere" (Guskey, 2002, p. 51)

Universal Design

Originally, UD was an architectural concept focused on access for all individuals (Embry et al., 2005). UD is vital to students with disabilities because they often "encounter significant challenges of physical accessibility and access to curriculum and instruction" (Pliner & Johnson, 2004, p. 106). Accessibility affects students with cognitive disabilities especially (McGuire & Scott, 2006). Presently, UD is referred to as "a framework of instruction that aims to be inclusive of different learning preferences and learners, and helps to reduce barriers for students with disabilities" (Black et al., 2015, p. 1). Developed by the North Carolina State University Center for Universal Design, the seven UD guiding principles for teaching techniques were (a) equitable use, (b) flexibility in use, (c) simple and intuitive use, (d) perceptible information, (e) tolerance for error, (f) low physical effort, and (g) size and space for approach, and (h) use related to the creation of accessible products and spaces (Center for Universal Design, 1997; Chickering & Gamson, 1987; Mcguire & Scott, 2006).

Expansion of the original seven UD principles broadened the purpose of UDI to include elements of instructional practice and research on learning (Mcguire & Scott, 2006). According to McGuire and Scott, two additional principles materialized from studies regarding college instruction; these were classified as essential to the inclusive instruction principles of UD and include

> (a) consideration of the social interaction and community involved in instruction and (b) the importance of the instructional climate for learning. As a result, two new principles (Principle 8, Community of Learners; and Principle 9, Instructional Climate) were incorporated into the UDI framework. Definitions for each of the nine principles were subsequently reviewed and revised to reflect both UD and educational research (2006, p. 127).

In the field of education, UD is often referenced as Universal Design for Learning (UDL) in the K-12 setting and Universal Design for Instruction (UDI) in the postsecondary setting; both were designed to implement inclusive strategies for the success of all students. UDL and UDI are very similar in theory, but each has a specific focus.

Although UDL was intended for the K-12 setting, some authors advocate for UDL to have implications in postsecondary education (Ashman, 2010; Rose et al., 2006). UDL involves developing products and learning environments to meet the needs of the greatest number of individuals without using an external specialized design or adaptation (Ringaert, 2002). Derived from the fields of neurocognitive and neuroscience, UDL is focused on the learner specifically (CAST, 2013a, 2013b). As a curriculum design it accentuates a framework and provides several ways of representation, expression, and engagement (CAST, 2013b; Pliner & Johnson, 2004).

An era of diversity and demographic change led to the exploration, application, and articulation of UDI, which is focused on the first UD principles designed by Mace (1985): environment and accessibility: UDI is used primarily in postsecondary education where students with diverse backgrounds would benefit most (Center for Universal Design, 2008). "Universal design for instruction (UDI) represents the systematic application of universal design, the construct from architecture and product development, to instructional practices in higher education" (Mcguire & Scott, 2006, p. 124).

The prime UDI audience is faculty (McGuire & Scott, 2006). Silver et al. (1998) were among the first to identify the connection between UD and higher education instructional practices. UDI is a proactive and inclusive instructional approach designed

to benefit a wide range of postsecondary learners (Mcguire et al., 2006). McGuire and

Scott (2002) describe UDI as a framework which faculty can use in all aspects of

instruction: planning, delivery, and assessment. The underlying premise was based on

faculty anticipation and value of a diverse group of heterogeneous learners and the desire

to acquire and develop inclusive instructional strategies to teaching and learning

intentionally.

> Since students with multiple disabilities can present additional challenges for educators, instruction needs to be usable by this broad range of students. Applying the UDL/UDI principles will help alleviate some accommodations that may be inappropriate and will create a more inclusive learning environment (Black, et al., 2015, p. 16).

> According to Black, et al. (2015) accommodations are tools, structures, or

materials that make learning usable and accessible to students with disabilities. These can

include modification of exams or equipment, notetakers, readers, or interpreters.

Sometimes the accommodations provided to students with disabilities are not appropriate,

they may have been selected from a set menu of choices (Black, et al., 2015). Burgstahler

(2007) and Kurth and Mellard (2006) highlight the need for accommodations that

correlate with the student's needs directly. Although accommodations are useful in

meeting the needs of students with disabilities, they may cause barriers to the process.

According to Black et al., (2015) this occurs when accommodations are developed after

designing the instructional setting, curriculum, and teaching methods. If classroom,

curriculum, teaching methods, and university procedures were developed with those

considerations and accommodations built in, many of these barriers might be alleviated

(p.2). Burgstahler (2007) suggests that this is one of the major purposes of UD.

Coupled with accommodations, faculty members can select effective instructional strategies to aid learning. Ambrose (1995) identified key factors influencing college teaching:

> (a) start slow to build credibility and trust; (b) enlist the support of key administrators and faculty about the importance of teaching; (c) understand the culture of the institution; and (d) identify a model for developing and changing teaching behavior that includes theory, practice, and feedback" (p. 81).

The final component of effective teaching strategies was directly related to UDI. participants in a study by McGuire and Scott (2006) determined that effective teaching strategies were related to structure in assignments, activity completion, and review of course material. Participants described characteristics of excellent instructors as subject focused, personable, available, and having the ability to connect on a personal level with students (2006).

For the UD system to be successful, the primary focus of academia must be teaching focused on student learning needs. McKee and Tew (2013) recommend that this focus be included within the promotion and tenure process. McGuire and Scott (2006) suggest a complete climate shift: "While it may sound radical, the time has come to move the paradigm relating to instructional access from accommodation to full inclusion" (p. 124). Perhaps if standard UDI-recommended accommodations such as online copies of notes, assessment options, and textbook selection including digital options were a standard part of faculty instructional practices and were provided to all students, the need for additional and specific accommodations might be reduced significantly.

UDL/UDI structure curriculum and learning around the individual in a flexible environment which focuses more on enhancing learning and engagement rather than on the subject matter (CAST, 2013b; Madaus et al., 2003). UDL/UDI also helps to remove

barriers, allowing all students to be focused and engaged with the learning material. Strong evidence supports the use of UDI and UDL strategies, when implemented in diverse learning communities, to improve student learning (Hill et al., 2013; Yoon et al., 2007).

As stated by McGuire and Scott (2006), well implemented UDI and UDL components can help students be more successful and self-motivated in both K-12 and higher education settings and cultivate new relationships amongst instructional design staff and faculty members. Black et al., (2015) found that when UDI and UDL strategies were used by faculty, students found the strategies useful in cultivating success in higher education. These findings were supported by an early study by Madaus et al. (2003), who discovered that highly effective instructional strategies are comparable to UDL principles. Students in the study by Black, et al. (2015) emphasized useful UDL/UDI principles included "establishing clear expectations, providing advanced organizers, presenting information in multiple formats, giving frequent informative feedback, and using diverse assessment strategies" (p. 19).

Faculty Development in Universal Design

Teachers in the K-12 setting are often trained specifically on how to meet the needs of diverse learners, whereas postsecondary faculty members are content specialists rather than pedagogy experts (McGuire & Scott, 2002). McGuire & Scott proposed that implementation of changes incited by the responsive culture and thoughtful approaches of faculty members needs to be distinctly different from how implementation appears in the secondary and elementary education context. implementation of UDL/UDI may

require a systems approach; Edyburn (2010) suggests using a model allowing it to be implemented in phases.

Successful implementation of UDL/UDI begins by reviewing whether the needs of the students are being met (Black, et al., 2015). Student improvement needs to be evaluated. According to Guskey (2014), teachers may be reluctant to implement a new practice without evidence supporting positive outcomes. A process must be in place to allow the teachers to see whether or not the practice is working.

Black, et al., (2015)

suggests the importance of raising awareness and improving training and education in IHEs targeted at increasing familiarity in meeting the needs of students with disabilities through UDL/UDI. One approach to improve practice in this area, in addition to education and training, is establishing mentorship programs to build awareness and increase familiarity for faculty in relation to working with students with disabilities (p. 18).

Summary

The purpose of the literature review was to examine the research related to the historical background of postsecondary education, remedial education, and inclusive education which has led to the development and implementation of IPSE programs in IHEs across the United States. The literature review also examined the benefits of IPSE programs, barriers to student success, the needs of instructors, and postsecondary faculty development practices. UDL and UDI principles in conjunction with of Chen & Chang's (2006) Whole Teacher Approach were described as the context and strategies for attitudes, knowledge and skills, and practices for instructors teaching students with IDD. In this study, we examined the instructor training practices of IPSE program training affiliates.

This study added to the existing literature on IPSE programs by focusing on instructor training development, implementation, and evaluation. The limited number of studies about training or faculty development for instructors teaching IPSE program students was a weakness observed through the review of the literature. Future studies should consider employing the responses of IPSE program faculty, staff, and students both before and after the completion of a semester, a year, and upon program completion.

CHAPTER 3

PROCEDURES AND METHODOLOGY

Introduction

The purpose of this chapter was to present the Guiding Research Questions and outline the qualitative research design utilized. The research population, sample, and methods and procedures for data collection and analysis were described. The primary purpose of this study was to conduct a multiple case study of the TPSID and CTP IPSE programs at IHEs across the United States in order to 1) examine the training provided to instructors who were teaching students with IDDs enrolled in typical college courses and 2) describe the development, implementation, and evaluation of the instructor training.

The Guiding Research Questions were:

1. How was the training for instructors teaching IPSE program students in typical college classes developed?

2. What were the components of the training for instructors teaching IPSE program students in typical college classes?

3. How was the training for instructors teaching IPSE program students in typical college classes implemented?

4. How was the training for instructors teaching IPSE program students in typical college classes evaluated?

Type of Study

A qualitative, multiple case study design was utilized to examine the training of instructors teaching IPSE program students in typical college classes comprehensively. A multiple case study design, also known as a collective case study, examines several cases to better understand a central phenomenon (Creswell, 2002; Yin, 2003; Yin, 2006). According to Yin (2003) a multiple case study affords the researcher an opportunity to analyze data both within and across cases. Creswell (1998) categorized case studies as "an exploration of a 'bounded system' of a case or multiple cases over time through detailed, in-depth data collection involving multiple sources of information rich in context" (Creswell, 1998, p. 61). In this study, a case was defined as the TPSID and/or CTP IPSE programs providing training to instructors teaching inclusive typical college courses.

Because of the lack of studies examining IPSE program training, the researcher chose to use a multiple case study design which allowed for flexibility to discover previously unknown information (Merriam, 2009; Meyer, 2001, Stake, 1995). Rao (2004) suggested the use of qualitative approaches when exploring faculty views on teaching accommodations for students with disabilities. This design facilitated exploration of complex, textual descriptions of training such as development, materials, communication, implementation, and evaluation.

Although studies containing relevant outcomes about faculty attitudes toward students with disabilities and about postsecondary faculty development used quantitative or mixed-method designs, the report aligned most closely with the present study utilized a qualitative study design. Burgin et al. (2017) used qualitative, semi-structured interviews

to examine instructor preparedness for teaching students with learning disabilities within a single university setting. To get a more in-depth look into instructor training and obtain robust data, the researcher examined multiple cases.

Table 2 compares the research methodology used in research studies relevant to the three study-related categories: faculty attitudes, instructor responses, and faculty development.

Ethical Treatment of Participants

The study was conducted according to Andrews University's Institutional Review Board (IRB) standards and policies. The IRB application, protocol, and all other documents, including informed consent and solicitation were submitted for review and approval (see Appendix A). As part of the process, the researcher completed the National Institute of Health's Protecting Human Research Participants online training and employed the standards and policies from this program to data collection, storage, and analysis to ensure the ethical treatment of human subjects. Throughout Chapter 3, the human protection procedures relating to the informed consent and confidentiality of the participants were identified. Researcher bias and methods utilized to reduce bias and conserve the credibility of the research and the safety of the participants were identified.

Table 2

Existing Research Related to This Study.

Study	Topic	Design	Instrument
Baker et al. (2012)	Faculty Attitudes	Mixed Methods	Interviews and a 5-point Likert Scale Survey
Plotner & Marshall (2015)	Faculty Attitudes	Mixed Methods	Survey and Interviews
Zafft et al. (2004)	Faculty Attitudes	Mixed Methods	Focus Groups, Semi-Structured Interviews, Student Outcomes, Meeting Evaluation, Surveys
O'Connor et al. (2012)	Faculty Attitudes	Qualitative	Semi-Structured Interviews
Gibbons et al. (2015)	Faculty Attitudes	Quantitative	Attitudes on Postsecondary Education for Students with Intellectual Disabilities and Autism Survey (APES-S; APES-F)
Grigal et al. (2012)	Faculty Attitudes	Quantitative	Survey
Hafner et al. (2011)	Faculty Attitudes	Quantitative	Survey
Rao, S. (2004)	Faculty Attitudes	Quantitative	The Attitudes Toward Disabled Persons (ATDP) Scale by Yuker et al. (1960).
Carrascal, & Rodríguez, (2017)	Faculty Development	Mixed Methods	Surveys & Interviews
Hott & Tietjen-Smith (2018)	Faculty Development	Mixed Methods	Surveys & Focus Groups
Kurth & Mellard (2006)	Faculty Development	Mixed Methods	Survey & Interview
Katsiyannis et al. (2009)	Faculty Development	Qualitative	Focus Groups
Pawlyshyn & Hitch (2016)	Faculty Development	Qualitative	Oral interviews, written evaluations, and physical artifacts
Silver et al. (1998)	Faculty Development	Qualitative	Focus Groups
Jiandani et al. (2015)	Faculty Development	Quantitative	Questionnaire
Lombardi, A. R. (2010)	Faculty Development	Quantitative	Survey
Burgin et al. (2017)	Instructor Responses	Qualitative	Semi-Structured Interviews
Gobbo & Shmulsky, (2014)	Instructor Responses	Qualitative	Focus Groups
O'Connor et al. (2012)	Instructor Responses	Qualitative	Semi-Structured Interviews

Table 3

IPSE Program Types.

Type of Program	Number of Programs
IPSEs	298
TPSIDs	60
CTPs	112
Both	41
Neither	167

Population

The primary purpose of a case study is an extensive investigation of a phenomenon in its current context (Creswell, 2007); therefore the population of this study was the 298 IPSE programs across the United States serving students with IDD (Think College, 2020a). See Table 3. IPSE program students spend 50 to 100% of their academic instruction in typical college courses taught by instructors in what TC (2021) describes as "typical courses with students who do not have disabilities." Within this population, the researcher examined the training provided to instructors teaching typical college courses to IPSE program students.

To answer the questions guiding this study thoroughly, the population was bounded further into TPSIDs and CTPs.

According to the U.S. Department of Education:

The Model Comprehensive Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSID) provides grants to institutions of higher education or consortia of institutions of higher education to enable them to create

or expand high quality, inclusive model comprehensive transition and postsecondary (CTP) programs for students with intellectual disabilities (2015, np.).

Because IHEs use federal funding for TPSID programs and qualifying students at CTPs receive federal student aid, these programs must adhere to specific standards of operation. One hundred and thirty-one programs were categorized as TPSIDs, CTPs, or both. These programs constituted 43.9 % of the total IPSE population (see Table 3).

Sample

Two types of sampling were used in this study: convenience sampling and non probability or purposeful sampling. For case study research, Creswell (2013) recommends the use of four to five cases. The researcher solicited the participation of the 131 TPSID and/or CTP programs and used convenience sampling to select five IPSE programs for training session observation, interviews of the training affiliates, and document analysis. Programs studied were based on the time and availability of the respondents (Creswell 2007; Miles & Huberman, 1994; Patton, 2002). Convenience sampling was appropriate for this study because of the varying availability of training sessions for observation and the willingness of the participants.

During the IRB process, I solicited all 131 IPSE programs identified as CTP and TPSID in 2019 (Think College, 2019), requesting their participation in the study. Initially, three programs responded to the email solicitation expressing willingness to participate in the study. After two weeks, I sent a follow-up email requesting participation; two additional programs responded that they were willing to participate. After receiving IRB exemption, interviews were scheduled and data collection from the training affiliates begun. Over a four-week period, interviews and observations were

conducted and documents collected from the five programs. A total of six virtual Zoom interviews were conducted with the persons directly responsible for instructor training in each of the programs studied. Document analysis was conducted from each of the programs. A total of three instructor training sessions were observed by the researcher.

Program A

Program A was a CTP for students with intellectual disabilities hosted on the campus of a public, 4-year university. According to Think College (2020a), Program A is a two- or four-year non-degree certificate program. Students participate in typical college classes for credit or audit and program-specific courses. The credit-bearing and audited typical college classes were taught by approximately twenty-five faculty members across departments. Program A students participated in university life, academic courses, and work-based training to develop social and independent living skills and attain gainful employment. If a student was invited to complete the four-year program, they earned an additional certificate.

Program B

Program B was a CTP for students with mild to moderate intellectual disabilities hosted on the campus of a public, 4-year university. According to Think College (2020a), Program B was a four-year, non-degree certificate program. Students participated in typical college classes for credit or audit, continuing education courses, and program-specific courses. The credit-bearing and audited typical college classes were taught by faculty members across departments. Program B students participated in university life, internships, and career exploration to develop leadership and healthy living skills,

personal responsibility, social networks, academic achievement, and to obtain meaningful employment.

Program C

Program C was a CTP for students with intellectual disabilities hosted on the campus of a public, 4-year university. According to Think College (2020a), Program C was a two or four-year non-degree certificate program. Students participated in typical college courses for credit or audit and in program-specific courses. The credit-bearing and audited typical college courses were taught by approximately 50 faculty members across departments. Program C incorporated UDL and person-centered planning for students to achieve academic, employment, and independent-living goals.

Program D

Program D was a CTP for students with intellectual disabilities hosted on the campus of a private, 4-year, university. According to Think College (2020a), Program D was a fully-inclusive, two or four-year non-degree certificate program. Students audited between three and four typical college courses per semester taught by twelve to fifteen faculty members across departments. Program D students participated in co-curricular activities, campus and social organizations, and community or campus-based internships to develop independent and healthy living skills and communication skills. Additional supports available to Program D students included peer mentors, academic coaches, and job coaches.

Program E

Program E was a CTP for students with intellectual disabilities hosted on the campus of a public, 4-year, university. According to Think College (2020a), Program E

was a fully inclusive, two-year non-degree certificate program. Students participated in

typical college courses for credit or audit. Credit-bearing and audited typical college

courses were taught by faculty members across departments. Program E students

participated in course work, socialized with peers, engaged in student life and career

development activities, to develop social, academic, and career skills for competitive and

meaningful careers and community membership. Upon completion of the program,

students would be prepared to enter the workforce or continue toward an associate

degree.

Interview Participants

Non-probability or purposeful sampling (Patton, 2002) was used to select

interview participants and documents for analysis within these programs. According to

Merriam (2009), nonprobability sampling is a preferred method for qualitative research.

Purposeful sampling "is based on the assumption that the investigator wants to discover,

understand, and gain insight and therefore must select a sample from which the most can

be learned" (Merriam, 2009, p. 77). According to Creswell (2007), purposeful sampling

allows the researcher to "select individuals and sites for study because they can

purposefully inform an understanding of the research problem and central phenomenon in

the study" (p. 125).

There were no risks foreseen for the human subjects in this study. The participants

in this study were all above the age of eighteen. Program directors were contacted

through email addresses listed on the public domain ThinkCollege.net; any additional

participants were identified through a gatekeeper: the program director. All willing IPSE

program training affiliates involved in the development, presentation, and evaluation of

instructor training were interviewed because they provided the most insight and understanding from each training session. Training affiliates included, but were not limited to: 1) the IPSE program directors and assistant directors, 2) IPSE program trainer(s), and 3) any other participants in training preparation such as administrative assistants. Interviewees were identified with code letters and numbers. The letter coincided with the identification letter assigned by the researcher and the number corresponded with the order in which they were interviewed. Identifying information was collected from the program website and program director about each program, including the program name and type (i.e., TPSID, CTP, or both), the training date, and the time.

Interview participants completed a consent form which included information regarding the nature of the study, a statement indicating there was no risk foreseen for them, and a notice that they could withdraw from the study at any time without explanation; permission for their interview to be video- and audio-recorded was requested also. (see Appendix B).

Purposeful sampling was used for document selection and analysis of all documents and materials related to training including handouts, notifications and general correspondence sent to participants, modules, and websites.

Criteria for Sampling

The following list consists of attributes essential to the study (LeCompte & Preissle, 1993)**.** To ensure quality, the sample consisted of IPSE programs available at IHEs which met the following criteria:

1. The organization had an active inclusive postsecondary program for students with IDDs.

2. The organization offered training to instructors regarding the integration of IPSE students into typical college courses.

3. The program was categorized as a TPSID and/or CTP.

4. The program had a well-established, informative website promoting the inclusion program.

5. Typical college courses were available to IPSE program students.

Data Sources

Data was collected using three methods: non-participant observation, document analysis, and semi-structured interviews. All three sources of data were used to answer the four research questions.

Non-Participant Observation

Observation of instructor training was conducted at three of the programs. The researcher met with the IPSE program director prior to the training to discuss the study and seek permission to observe. In conjunction with the interviews and document analysis, the researcher observed and recorded virtually the instructor training provided by the programs. The researcher viewed one recorded training session. Program director discretion was used to determine whether or not the participants were notified of the observation. The researcher took notes using note paper during each observation.

Reflective Journal

The researcher obtained additional data by recording reflections in the margin of the note paper. Reflection allowed the researcher to record expectations, biases, assumptions, and directions of the process, and supported the rigor of a qualitative

analysis (Morrow & Smith, 2000). Data collected from these fieldnotes provided

additional analysis data.

<center>Document Analysis</center>

In conjunction with non-participant observation and interviews, documents were

collected to provide data to answer Research Questions 1, 3, and 4 by examining,

assessing, and describing training practices. According to Krippendorff (2004), document

analysis "is a research technique for making replicable and valid inferences from texts (or

other meaningful matter) to the contexts of their use" (p. 18). Yanow (2007) supported

the use of document analysis to contribute pertinent information in a case study while

seeking to discover the "how," which is the basis of Research Questions 2 and 3. Yin

(2011) suggested that documents can afford "important contextual information to

complement fieldwork" (p. 148). Creswell (1994; 2007; 2012) stated that archival

material and public documents are beneficial in a qualitative study. Yanow (2007)

concludes:

> Documents can provide background information prior to designing the research
> project, for example prior to conducting interviews. They may corroborate
> observational and interview data, or they may refute them, in which case the
> researcher is "armed" with evidence that can be used to clarify, or perhaps, to
> challenge what is being told, a role that the observational data may also play. (p.
> 411).

Documents relevant to the training were collected from the program directors.

They included both digital and electronic handouts given to the participants, PowerPoint

presentations, recordings of the training, notifications and general correspondence sent to

all participants, online modules, and referenced websites.

<center>76</center>

Semi-Structured Interviews

Many qualitative studies collect data in the form of interviews (Merriam, 2009).

Patton (2002) suggested the use of interviews in conjunction with observations because

interviews were beneficial for discovering information that cannot be observed directly.

The purpose of an interview was to gain an understanding of the training development,

implementation, and evaluation processes from the perspective of someone responsible

for those functions. The semi-structured interview method allowed respondents to speak

freely and provide in-depth responses (Creswell, 2007). The semi-structured format

"allows the researcher to respond to the situation at hand, to the emerging worldview of

the respondent, and to new ideas on the topic" (Merriam, 2009, p. 90). Interviews are "a

process in which a researcher and participant engage in a conversation focused on

questions related to a research study" (DeMarrais, 2004, p. 55). The virtual face-to-face

interview method was chosen to allow flexibility in obtaining specific information from

each of the respondents (Merriam, 2009) and for the opportunity to observe nonverbal

cues for deeper understanding of participant replies. During the COVID-19 pandemic, the

virtual option allowed for the safety of participants and researcher.

Interview Protocol

Ten interview questions were used to explore the training provided to instructors

teaching typical college courses to IPSE program students. The interview questions were

based on Research Questions 1, 2, 3, and 4. Research Question 1 asked: How is the

training for instructors teaching IPSE program students in typical college classes

developed? The interview questions used to answer Research Question 1 were (1a)

Describe your background with individuals with intellectual and developmental

disabilities. (1b) How is the training developed? (1c) Is there a model you follow for your training?

Research Question 2 asked: What are the components of the training for instructors teaching IPSE program students in typical college classes? The interview questions for Research Question 2 were (2a) What are the goals and objectives of the training? (2b) What are the components addressed in training?

Research Question 3 asked: How is the training for instructors teaching IPSE program students in typical college classes implemented? The interview questions related to Research Question 3 were (3a) What is the first point-of-contact between professors, program, and students? (3b) What resources are distributed to instructors? (3c) What role do the participants have in the training?

Research Question 4 asked: How is the training for instructors teaching IPSE program students in typical classes evaluated? The interview questions to answer Research Question 4 were (4a) How do you know whether or not the training was effective? (4b) Is the training evaluated by participants? (4c) What is done with the information received from the evaluations?

An additional question was asked: Is there any additional information you would like to provide about the training? Follow-up questions were asked in response to the answers given by the participants.

Procedures

Program Description

The IPSE programs and training affiliates selected for observation, document collection, and interviews remained confidential to protect subjects from any liability.

Yin (1994) stated, "There are some occasions when anonymity is necessary. The most common rationale is that, when the case study has been on a controversial topic, anonymity serves to protect the real case and its real participants" (p. 143). Therefore, each of the five training programs was referred to as Program A, B, C, D, or E based on the order in which the sessions were observed. The program position and role of the training affiliate being interviewed was stated, but to ensure the privacy of the program and interviewees, the data was labeled with a code name and stored on the researcher's password-protected computer and a GoogleDocs electronic folder. All communication with research participants was treated confidentially.

Participant Contact

During the IRB approval process, the researcher contacted program directors at the criterion-referenced programs via the email address listed on the IPSE program website ThinkCollege.net using a solicitation letter (see Appendix C) to confirm program willingness to participate in the study (Merriam, 2009) and obtain general information about the program's training provided. If there was no response within a week of the initial email, the researcher contacted the programs again via email.

Upon initial contact and confirmation of participation, the researcher confirmed a date on which she could attend a training session or requested a recording of a training session. Program directors were asked whether they were willing to participate in an interview; also, the researcher solicited contact information for the training affiliates using an interview consent form (see Appendix B). The IPSE program director functioned as a gatekeeper when providing email addresses of the training affiliates. The researcher set up appointments with each interviewee.

After reviewing the consent form, participants were asked whether they had any questions regarding the study. All interviewees signed the consent form prior to the interview. Interviews were conducted via the online forum, Zoom. A one-hour Zoom meeting was set up at a time convenient for both parties although the interviews were designed to last no more than thirty minutes.

The purpose of the interview was to answer the research questions regarding the development, implementation, and evaluation of the IPSE program's instructor training through the lens of their role in the process. At the beginning of each interview, interviewees identified their role within the program (i.e., program director, assistant director, trainer, administrative assistant) and their prior experience working with students with IDD.

After the interview, each recording was transcribed by the researcher. The transcription and the audio/video recording of their interview was sent to each participant via email for them to note any needed changes or revisions. A 5-day deadline was given to make any changes by participants; if no response was received, it was assumed that the information in the transcripts was correct.

Data Storage

Data was obtained from interviews, observations, and document collection, and included handwritten notes, handouts from training sessions, video and/or voice recordings, electronic materials, and training modules. During the data collection phase, the researcher transcribed all notations made during the observations, document review, field notes, and interviews. Data was stored in both paper and digital form. Paper documentation and researcher notes were stored in clearly labeled and organized binders

in the researcher's secure office. Each programs had a binder for storage of the program-specific documentation. All non-digital documents were scanned and stored on the researcher's Google drive with all digital data.

Data Analysis

Yin (2009) suggested that data analysis can be the most difficult part of case study research. For this reason, both Yin (2003) and Stake (1995) emphasized the importance of establishing protocols for data analysis prior to data collection, although some protocols will be subject to shift or change during the study. Creswell (2018) recommended assessing multiple sources of data and obtaining a chronology of events. Yin (2014) suggested using cross-case synthesis when studying multiple cases to make naturalistic generalizations which could be transferable in similar contexts.

The researcher employed Creswell's (2018) data analysis spiral to manage, organize, and represent data. Through Creswell's method "the researcher engages in the process of moving in analytic circles rather than using a fixed linear approach" (p. 185). Each spiral presented the researcher with an opportunity to use "analytic strategies for the goal of generating specific analytic outcomes" (Creswell, 2018, p. 185). Creswell's method was broken down into Braun and Clarke's (2006) step-by-step guidelines for thematic analysis, which were (1) familiarizing oneself with the data, (2) generating initial codes, (3) reading each transcript and becoming immersed in the data (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. These methods were relevant for data analysis of the interviews, documents, and observations as they helped identify the themes pertinent to the research questions.

According to Riessman (2002), transcription is a process which allows the researcher to become familiar with the data. As recommended by Saldana (2016), the researcher begins the coding process during the data transcription; meaning will be assigned to the data throughout the process (Patton, 2015). During the initial reading of the data transcription, the researcher also engaged in memoing (Creswell, 2018). Additional notes were made in the margins as the interview transcripts, observation transcripts, and training documents were read and re-read. The researcher noted phrases, concepts, and ideas in order to "synthesize them into higher level analytical meaning" (Miles et al., 2014, p. 95) and to determine themes.

A multiple case design was followed in which each case was analyzed independently to identify themes and subthemes. The unit of analysis the researcher used was the "meaning of analysis" in which coding was done to abstract meaning from the document as a whole rather than sentence by sentence. The descriptions provided by the interviewees and through researcher observation and document analysis allowed reduction of codes to themes through noting of patterns and themes (Miles & Huberman, 1994), identifying salient themes (Madison, 2005, 2011), and identification of patterned regularities (Wolcott, 1994; as cited in Creswell, 2018) related to the training development, implementation, and evaluation of each case.

Researcher Bias

I was aware that as a researcher I had certain biases. Although bias is inherent, by describing it clearly within the study, the researcher gives the reader an opportunity to determine whether or not the bias influenced the research outcomes inappropriately. In the eyes of readers and other researchers, it may appear that I stand on one particular side

of the topic. I was aware of my bias based on my personal and professional interest in the understudied topic of IPSE program training and my desire to advocate for students with exceptional abilities. Personally, I have always had an interest and passion for the needs of exceptional people, especially students. Professionally, my experience as an inclusive education professional development curriculum developer and trainer, as well as an assistant professor allowed me to have a holistic understanding of the inclusive training practices examined in this study. I felt comfortable studying this topic because the goal was to examine, rather than to evaluate IPSE program training to gain an understanding of this topic.

To mitigate these potential biases, I utilized a reflection journal to document any expectations, biases, assumptions, and directions to the process; this supported the rigor of qualitative analysis (Morrow & Smith, 2000). I employed Creswell's (2018) methods of addressing ethical issues by reporting from multiple perspectives and providing copies of the report to participants for review. I included a researcher reflection in the final chapter of the report.

Validity and Credibility Strategies

Qualitative research still receives criticism regarding the validity of the methodology and ethical issues such as informed consent and participant disclosure (Bloomberg & Volpe, 2008). Thus, the researcher established credibility and reliability through the use of triangulation and participant verification; also known as member checks and respondent validation (Creswell, 2013; Merriam, 2009, Stake, 1995).

> [Respondent Validation] is the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on, as well as being an important way of

identifying your own biases and misunderstanding of what you observed (Maxwell, 2005, p. 111).

Denzin's (1978) triangulation (see Table 4) criteria were met by collecting data through multiple sources (e.g., interviews, documents, observations, reflective journals, and field notes) to provide substantial evidence (Bazeley, 2013; Ely et al., 1991; Erlandson et al., 1993; Glensne, 2016; Lincoln & Guba, 1985; Miles & Huberman, 1994; Patton, 1980, 1990, 2015; Yin, 2014). Protocols were implemented for the interviews, document analysis, and observation including the use of participant consent forms. Quality recording devices such as Zoom and documented and detailed field-notes were accompanied by reflections.

Interviewees were given the opportunity to participate in member checking to verify accuracy. The transcribed interviews and the coded material were returned to each interviewee for member checking and participant feedback, which Lincoln and Guba (1985) considered to be "the most critical technique for establishing credibility" (p. 314). Participants were asked to contribute alternative language, observations, or interpretations (Stake, 1995). The interviewees had five days to provide input.

Table 4

Research Questions Methodology Triangulation

Research Questions	Interviews	Documents	Field Notes	Communication
How is the training for instructors teaching typical college courses to IPSE students developed?	X	X		
What are the components of the training of instructors teaching typical college courses to IPSE students?	X	X	X	X
How is the training for instructors teaching typical college courses to IPSE students implemented?	X	X	X	X
How is the training for instructors teaching typical college courses to IPSE students developed?	X	X	X	X

CHAPTER 4

CASE STUDIES

Introduction

The goal of this chapter is to present descriptive case studies for each of the five IPSE programs studied. Data collection methods included interviews, observation, and analysis of the training documents, and focused on gaining an in-depth understanding of instructor training development, components, implementation, and evaluation. To ensure the accuracy and validity of interview data, all six interview participants were provided a video recording of their interview to compare against the interview transcript. This process, known as member-checking, was a prerequisite for dependable and credible results, known as internal validity.

Four research questions guided this study and shaped the process for interviews, training observations, and document analysis.

1. How was the training for instructors teaching IPSE program students in typical college courses developed?

2. What were the components of the training for instructors teaching IPSE program students in typical college courses?

 3. How was the training for instructors teaching IPSE program students in typical college courses implemented?

4. How was the training for instructors teaching IPSE program students in typical college courses evaluated?

Program A

Two interviews, observation of an online training session, and analysis of several documents composed the data for Program A. The documents analyzed were a PowerPoint presentation embedded with a video, a faculty/instructor handbook, a survey of student performance indicators, and copies of email correspondence with instructors. Two training affiliates were interviewed from Program A, they will be identified under the code names Training Affiliate A1 and Training Affiliate A2.

Training Affiliate A1 was Program A's IPSE program director whose primary training responsibilities were development, overseeing implementation, evaluation, and instructor and student support. Training Affiliate A1 has an extensive background in special education. When asked to describe her prior experiences with individuals with IDD, she replied:

> *In my professional experiences, I was a special education teacher in the local school district here for eight years. My professional training included a bachelor's degree in collaborative special education, a masters degree in collaborative special education with an emphasis in transition and earned a transition specialist certification, and my Ph.D. is in special education with an emphasis in leadership and evidence-based practices and secondary transition; specifically looking at community-based vocational instruction for people with intellectual disabilities. Prior to coming to [Program A], I developed a transition program at our local high school, teaching responsibility, advocacy, and independent living skills to individuals with ID and on the autism spectrum whose postschool outcome goals were employment and independent living. So for the past, going on 10 years really, all my professional experiences align with working and serving individuals who have ID to help them gain meaningful employment and independent living skills.*

Training Affiliate A2 was Program A's IPSE academic coordinator whose primary training responsibilities were implementation, evaluation, adaptations, and

instructor and student support. She described her prior experiences working with students

with IDD, saying:

> *I have a special Ed [education] undergrad degree, and then my Masters focused on transition, and then I finished my Ph.D. in May of this year [2020], I taught for almost eight years in the special education classroom in our county schools. My master's focused on transition. My teaching experience focused on...I was in an elementary school. I taught 3rd through 6th-grade special education students, I was in a resource setting. I use my transition knowledge that I gained through school and I did student-led IEPs for the elementary students. I tried to use that student-led planning to let them really take ownership of themselves. And I think that helped them realize their disability, as well as what accommodations really worked for them.*

Training Development

To understand Program A's training development, I asked, "How is the training

developed?" Training Affiliate A1 explained that Program A's training was developed

using components of a Faculty/Instructor Handbook created by the original program

director, the program creator, and a team of special educators. Training Affiliate A1 said,

> *There are special education professors who help develop this training. So basically, took the research and guidance that is supposed to help everyone and then compared to what a general ed [education] teacher in a school, a K-12 setting, how they would provide inclusion, and what the responsibility on their part would be for the learning of that student and what role they would play in helping that student learn.*

According to Training Affiliate A1, the most important features of the handbook

were used as a reference for the instructor training. She explained, "*so we have a*

handbook, but instead of making people read the entire handbook, we went through the

highlights and they have it as a reference." Training Affiliate A1 described her role in

making the updates to the instructor training,

> My role was to take that training and then update or shift it to meet the needs after the program started. It set a great foundation, however, once students were actually taking the classes, you saw what supports they needed.

These training updates were described by Training Affiliate A1 as being focused

primarily on teaching and learning strategies that met the needs of a diverse group of

learners, including both traditional and IPSE program students; she explained,

> *So as far as developing the training, we looked at evidence-based practices for how students with intellectual and developmental disabilities learn. Universal Design . . . in what not only benefits our students but also traditional students in the class. Academic performance indicators that the university has on a whole for students, and then what that looks like for our [Program A] students.*

Training Affiliate A1 described other training development considerations such as

the previous experiences of instructors. Instructor training addressed the challenge of

instructor inexperience. She explained,

> *Part of the development was understanding that in most of these classes, the professors or instructors are not going to have a history of working with people with ID. So we start it very broad and basic like we need to describe the characteristics of someone with intellectual disabilities. How they perform, put it in terms that they [instructors] can relate to and understand.*

The workload of the instructors was another consideration during Program A's

training development process. Training Affiliates A1 and A2 attempted to create a

product that would solicit instructor participation and cooperation in the inclusion of their

students. Training Affiliate A1 explained,

> *We really try to make it [training] not so cumbersome on our faculty members so it's a healthy balance. Because you don't want to deter them from participating and including your students. So we don't want it to look like it's extra work.*

Program A's training affiliates have continued to develop the training protocols to

include scenarios the instructors may face in their classrooms. Training Affiliate A1

explained this, saying,

> *We added scenarios to the training, like if this happens how would you respond? And then, so just really taking life experiences was a part of the development. So like I said, as we grow, we really have a lot more to include in our training than just the research, what research says, and past experiences as a special educator.*

Training Components

Goals and Objectives

When asked, "What is the goal of instructor training?," both Training Affiliate A1 and A2 shared that the goals and objectives of the training were for instructors to gain an understanding of the characteristics of students with IDD, to develop teaching strategies, and to be able to implement accommodations and modifications. Training Affiliate A1 stated, *"The goals we have are for them [instructors] to learn, we have an overview and understanding of the [Program A] program, and what their role in helping our students access college looks like."* She went on to say that they want instructors to, "*Learn more about what postsecondary programs in general for students with ID look like, characteristics, like I said, of students with ID, we hope that they will walk away with an understanding of that."*

Training Affiliate A2 added, "*We do characteristics of individuals with intellectual disabilities, we go over teaching strategies, accommodations, and modifications, we talk about our [Program A Mentor Program Title] peer-mentor program."*

Characteristics of Individuals with IDD

The characteristics of individuals with disabilities was a component of Program A's instructor training. Characteristics listed were delayed academic performance and language skills, difficulty understanding complex and abstract information, slower learning rate, memory difficulty, attention problems and distractibility, generalization and maintenance difficulty, motivation challenges, and adaptive behavior deficits. During

training, Training Affiliate A2 emphasized that these were a few general characteristics of individuals with IDD, but that every individual is unique.

Teaching Strategies

A variety of teaching strategies were discussed in Program A's instructor training, including performance activities, student research, problem-solving, cooperative learning, small group work, classroom discussion, and direct instruction. Training Affiliate A1 described the process of selecting the strategies, saying, "*We really reviewed what research said on the elements of explicit instruction and what it looks like from a special educator's standpoint compared to someone who may not have experience with teaching as a special educator.*"

The three primary UDL guidelines: engagement, representation, and action and expression, were outlined in Program A's instructor training as factors supporting instructional and active learning strategies. Instructional strategies promoted were to engage students actively, to provide experiences for success, to group students for instruction, to scaffold instruction, to address forms of knowledge, to organize and activate knowledge, to teach strategically, and to make instruction explicit. The active learning strategies were minute paper (Cross & Angelo, 1988), electronic responses, think, pair, share, fact find, turn and learn, teaching in small groups (Lang, 2010), plus one, jigsaw (Aronson & Bridgeman, 1979), work group, teaching in small groups (Lang, 2010), and debate.

Accommodations and Modifications

Another component of Program A's instructor training was accommodations and modifications. According to Training Affiliate A2, Program A instructors tend to find the

course modification process for students auditing classes a challenge; she said, "*But I think the hardest thing for our professors is if a student is auditing a class, then we can modify the curriculum.*" This was why the differences between accommodations and modifications were the primary focus of these components. Training Affiliate A2 presented a comparative chart and gave examples of accommodations which can be used during instruction and for assignments. Training Affiliate A2 explained, "*We do go over what is an accommodation, what is the modification, different teaching strategies.*" Training Affiliate A1 further described the modification process, "*We look at how to modify the class in the training, versus how to accommodate the class. And then compared what typical university class activities look like, to what those would look like with accommodations.*" Training Affiliate A2 gave an example of a modified exam which she had made the previous semester; she had adapted a 50-question multiple-choice test into a 10-question, short-answer test.

Modifications for audited classes were facilitated beyond instructor training. Training Affiliates A1 and A2 partnered with instructor and student to determine the goals and outcomes the student would meet. Training Affiliate A1 explains this process,

> *Say you're taking a class for audit; we looked through the syllabus together, I worked with that professor before passing on to our instruction coordinator. We looked at what we hoped the student would gain from the class, how that would align with his career interests, and then developed how he would meet their objective.*

Peer Mentor Program

The peer mentor program was another component described during Program A's instructor training. During training sessions, Training Affiliate A2 gave an overview of the role of peer mentors in the academic setting. Peer mentors provided the IPSE student

with support, which also supported the instructor and other members of the learning

environment. Training Affiliate A1 described the role of the peer mentor in detail,

> *A peer mentor who attends the class with the student, just to kind of help keep them on track behaviorally. We don't have aversive behaviors, but like redirection, if you will, or to communicate so the professor doesn't have to stop during the middle of class. Some of our students lose focus easily. They might be more inclined to raise their hand and impulsively ask questions, but to kind of help teach those social norms that are in a class for how you would engage in a class appropriately. And then also help communicate, if the [Program A] student is unable to truly express the requirements for an assignment, they're there just as an extra layer of support.*

Satisfactory Academic Performance Indicators

The final components of Program A's training were the Satisfactory Academic

Performance (SAP) indicators, which are used to measure the progress of the IPSE

program student. Training Affiliate A2 describes these indicators, "*We have technology

indicators, we have academic indicators, and we have medical, but I've combined some

of the academics and some of the technology indicators and I send those to our university

professors at midterm and final.*"

According to Training Affiliate A2, these indicators gave Program A staff an

indication of how students were doing in their courses, especially those who were

auditing the course. Training Affiliate A2 explained the purpose of the SAP indicators in

relation to audited courses:

> *Some of our students audit a lot of their classes, but this still gives us an idea of how they're performing in the class, so their work ethic, if they're coming to class on time, if they're completing assignments, do they reach out to their professor, are they using Zoom appropriately, that sort of thing.*

Training Resources

Instructors who participate in Program A training received a variety of resources.

Training Affiliate A1 described the resources given to instructors,

Our handbook is distributed to them, and then honestly their ILA's [Individualized Learning Plan]. [A]Qualtrics survey that goes out mid-semester and at the end of the semester. A bio of the student, if they request it, that students have agreed that we can share. We create a blurb or a bio for some of the students like our personal trainers, just to understand that student a little more. So sometimes that bio is a resource individual to that student. And then we include references for them if they would like to look at any additional research. And then in our appendices, include what our academic performance indicators look like.

Faculty/Instructor Handbook

The primary components of Program A's training were based on the information in the faculty/instructor handbook. The handbook was comprised of the following topics and resources:

1. Introduction

2. Postsecondary Programs for Students with Disabilities

3. [Program A] Program Overview

4. Students with Intellectual Disabilities

5. Strategies for Teaching Students with Intellectual Disabilities

6. Working with students in the [Program A] program

7. Conclusion

8. References

9. Appendices

    a. Academic Performance Indicators
    b. Individual Learning Agreement
    c . [Program Specific Title] Plan

Satisfactory Academic Performance
Indicators Survey

Another instructor training resource was a Qualtrics survey of the SAP and

technology performance indicators. Training Affiliate A2 developed this resource, taking

into consideration the instructors' time and commitments. She explained,

> *We are not trying to make extra work for the professors by any means. So I just broke it down, because we want the professors' feedback, but we don't want to overwhelm them with paperwork to do. So I put it in a Qualtrics, and so it's . . . they just go through and you know, selecting little multiple-choice . . . I think it's just 12 questions.*

During the instructor training session, Training Affiliate A2 showed participants

an example of the components of the Qualtrics survey. Program A instructors were asked

to complete the Qualtrics survey during midterms and at the end of the semester. Training

Affiliate A1 explained this process, "*they [instructors] fill out a mid-semester evaluation*

and an end of the semester evaluation based on our academic indicators that students

must meet like behavior, participation . . . it's based on the university's policy. It is in

rubric format.

Person-Centered Planning

An individualized learning agreement was developed for each Program A student,

in compliance with Program A's CTP status, which requires the use of person-centered

planning. The agreement included the accommodations developed for the student through

the office of accessibility and modifications for students taking a course for audit.

Training affiliate A1 explained how the plan is presented during training,

> *We review our individualized learning agreement and we include a scenario for that. And then, what a person-centered plan [looks like]. So really, what it looks like to be a part of having that student in your classroom. So to identify where they're functioning, what you can expect from them. We go over their strengths and weaknesses. We talk about active learning strategies.*

Certificate of Attendance

Program A training participants received a certificate of attendance upon completion of the instructor training. Training Affiliate A1 explained,

> *We want to provide them with a certificate of attendance in completion for them, for their CV or whatever they need or to report back to their department to show that they attended the training. Professional development, just to honor that.*

Training Implementation

Training Format

Program A's instructor training was delivered in a whole-group training format, presented by Training Affiliate A2, and traditionally in-person and on campus prior to the beginning of each semester. Normally, the training session was conducted for 90 minutes. Training Affiliate A1 explained the training model thus, "*I would say we have a lecture style, if we had to name the model. Like traditional teaching, now these are the outcomes, what we hope for you to accomplish, here's the material, what questions do you have?*" The training participants included both IHE instructors and Program A staff members. According to Training Affiliate A1, "*Everybody comes to a training.*"

The researcher observed the Spring 2021 training session. Training Affiliate A2 began the training session by introducing herself, sharing her position within Program A; then asked each participant to introduce themselves and describe their position at the IHE or within the IPSE program. Then, she presented the training agenda with a PowerPoint:

A. Overview of the [Program A] Program

B. Characteristics of individuals with intellectual disabilities

C. Teaching strategies

D. Accommodations and modifications

E. [Peer Mentor Program Title] peer mentor program

F. Satisfactory Academic Performance (SAP) Indicators

G. Questions and Answers

After reviewing the agenda, Training Affiliate A2 showed a video providing an overview of the program: goals, objectives, and outcomes. Program A students were featured in this introductory video. A lecture format was used to present the rest of the topics. Participants were encouraged to ask questions at any point throughout the training.

There was some discussion during the training related to peer mentors. Training Affiliate A2 told the instructors that she would provide the names of peer mentors so instructors would know who to expect in class. She asked the instructors to add peer mentors to the roster to support the students, especially in the online learning setting. One instructor asked what happens if a peer mentor is sick. Training Affiliate A2 explained that the peer mentor is responsible to find another peer mentor to attend class with the student and notify Training Affiliate A2 if they need assistance with finding a substitute.

Training Adaptations Due to COVID-19
Restriction

Due to restrictions and regulations during the COVID-19 pandemic, the Fall 2020 and Spring 2021 instructor trainings were conducted on the online platform Zoom and were abbreviated into a 1-hour session, in a lecture-style format with limited interactive components such as a video, discussion, and question and answer session. Training Affiliate A2 explained, "*I just go through this PowerPoint. We do have a Q&A at the end*." Training Affiliate A2 went on to describe the implementation process saying, "*I did two Zoom trainings in August.*" To ensure the training was accessible to everyone, Training Affiliate A2 stated, "*I recorded one, and then there were a couple professors that were not able to attend, so I sent it to them. And then I do stay in touch with them.*"

Some additional adaptations to the training session included components related to teaching on an online learning platform and a hybrid learning environment. Training Affiliate A1 described the first online training session,

> *It was virtual this past Fall obviously due to COVID. That is some things that evolved over this past semester, you know, Zoom. Ya know, how the class format will be delivered. Everything was face-to-face and now we have hybrid, and Hyflex, and people coming on some days and not coming on the others. And so what was new.*

Communication

Communication with Instructors

Communication with instructors is a vital method of supporting instructors. Program A staff frequently communicated with instructors to support them and facilitate the success of the IPSE program students. The first point of contact between Program A and the instructor occurred after Program A students selected their courses. Training Affiliate A1 reached out to the instructors via email to introduce the program and request that the instructor host the student.

Training Affiliate A1 facilitated introduction of the instructors to Training Affiliate A1. Initial communication regarding instructor training was delivered by Training Affiliate A2; she emailed instructors to provide the Zoom link and let instructors know that the training would be recorded if they would like to request a copy. Training Affiliate A1 described some of the communication she had formerly with professors:

> *If they have questions or concerns, they'll reach out. I've had a few who've asked, while I'm looking for classes, how does this student work in a group setting? This class is heavily based on group work. Can they meet that requirement? Should I hold them to the same standard as the group member or put them in addition to a group, and they have an extra person? Ya know, just questions like that.*

Student/Instructor Communication

Training Affiliates A1 and A2 assisted in the initial communication between Program A's students and instructors, but students have primary responsibility in communication. Students were taught how to communicate with their instructors; Training Affiliate A1 expressed, *"Some of the emails that go back-and-forth between our students and the professors are beautiful because we teach email etiquette, we teach advocacy."* Program A students were responsible for communicating their accommodations to their instructors and for arranging a meeting with them. During the training session, Training Affiliate A2 offered support of communication between instructors and students by giving examples of over-communication and under-communication; she advised instructors that if either of these were happening, it was important to address it with the student first and then reach out to her if it did not improve. Training Affiliate A1 described the student's role and what happened during first meetings with their instructors,

> *So they would then send their accommodations, but they're still responsible for requesting a meeting, they would meet . . . the goal would be before the first day of class, but typically the students aren't here, the professors aren't here. Within the first week, they all meet directly with their professors, one-on-one. It's been through Zoom this past semester. They reviewed their accommodations, they reviewed their ILA's, their Individual Learning Agreement, and then the professors will communicate directly with the student at that point. Then, once the students are enrolled in the class, just like any other student, they are then added to Canvas. The professors treat them just like any other student.*

Training Evaluation

When asked questions about evaluation of Program A's instructor training, Training Affiliate A1 answered, *"We currently are not evaluating the training. It seems to be just from anecdotal observation, but no, we don't know how to determine the effectiveness at this point."* Training Affiliate A2 agreed with Training A1, saying, *"It's*

really not [evaluated]. It should be, and that's something we will continue to work on. We ask for feedback from the professors, I'll send a follow-up email, but so far, it hasn't been evaluated."

Anecdotal Feedback

Although there was no formal evaluation, Program A's Training Affiliates did collect anecdotal feedback from participants through the general cooperation and responsiveness of instructors to Program A initiatives. Training Affiliate A2 shared her rationale related to anecdotal feedback by stating, "*I hope it's effective because our students have done well, and I think that shows that the professors are doing a good job as well.*" Referring to the levels of instructor responsiveness, Training Affiliate A1 described, "*but I'll be honest, some professors are all in and then we have some that never once completed an assessment.*" Training Affiliate A1 described how anecdotal observation is used for course selection, explaining:

> *Parents who have reached out really wanting their student to take a class if our relationship with that person didn't seem to benefit the students like I understand that you want to take that class, but we also want to make sure it's a good fit. So if it isn't benefiting the student, we'll slowly step away from that. So I would say that maybe that wasn't effective if the partnership doesn't seem to be prudent or beneficial for the student.*

Feedback Used for Training Updates

Program A Training Affiliates used instructor feedback to make updates to their training. Training Affiliate A2 expressed the importance of instructor feedback,

> *And so, the number of professors that we're working with is going to continue to grow as well and so I do wish there was a way to get more feedback from the professors. I do think that their feedback is meaningful, and if we could hear it, we could make the changes that would help future semesters.*

Program A Training Affiliates have made adaptations to their training based on the needs of students and instructors, research, and past special education experiences of program faculty and staff. Training Affiliate A1 described the materials used to make changes and adaptations to their training. She noted, *"I work with our instructional coordinator to review all of our training materials, look at feedback from our previous instructors; what worked, what didn't work, and then our training evolves every semester."*

Future Plans for Training

Program A has planned to make changes to improve future training. Training Affiliate A2 acknowledged there is room for enhancement of their training, *"I think there is some room for improvement and we will continue to work on it. But I've only done this one other time, and so I'm not ready to make any big changes yet."*

Program A Training Affiliates were working to add additional components to the training. Both Training Affiliate A1 and A2 expressed their desire to evaluate the training formally. Training Affiliate A1 said, *"As we grow, we really have a lot more to include in our training than just the research, what research says and past experiences as a special educator. And then, comments, so all of the professors and instructors."*

Training Affiliate A2 agreed with the use of more responses and examples from instructors saying, "*and actually, I'm not sure what major changes I would make, besides providing more examples.*"

Some of the bigger changes to Program A's training will include formalizing the training process and creating a training evaluation. Training Affiliate A1 explained the

steps they are taking to offer their training as an IHE-sponsored professional development. She explained:

> *We are working to go through our HR department so that we can host it [training] as "for real" [quotation symbols with fingers] professional development so they can get hours through our university for credit, but we're not there yet. But for continued education, if you will, that's what we're hoping to get to. And that will be something on my list for next summer.*

In a follow-up email from Training Affiliate A1, she expressed her desire to formulate a formal evaluation in the future. Training Affiliate A2 said, "*I guess we could do a pre-and-post.*" Training Affiliate A1 was working to streamline the course selection process, and explained:

> *I'm moving towards a track-like system or concentration where they choose a concentration and we have professors who agree to be a part of that. So instead of having to get permission every single semester, we then can shift to notifying them. So for example, I've worked with our director of the School Communications for sports media, we outline six different courses, so instead of having to reach out every single time, I just work directly with her and we're now just going to the next sequence of this class. And then we do the same with Kinesiology.*

Program B

Program B's data consisted of one interview and analysis of several documents, including a PowerPoint presentation, an audit agreement, a frequently asked question (FAQ) form, a grade-check form, and a copy of email correspondence sent to instructors. One training affiliate was interviewed from Program B, she will be identified as Training Affiliate B1. Training Affiliate B1 was Program B's IPSE academic coordinator; her primary training responsibility was to revise and implement instructor training, train academic coaches, and support the instructors and students in the academic setting. She described her prior experience working with students with IDD, *"I am a licensed*

intervention specialist in the [Program B State], so before I moved to postsecondary, I

was an intervention specialist in a local public high school for about eight years."

<div align="center">Training Development</div>

Program B was one of three programs offering transition services to people with

disabilities at the high school, college, and adult levels. The introductory training was

developed by the parent program's marketing team. That training was then adapted by

Program B's leadership team to include program-specific information. Training Affiliate

B1 explained the development process further, "*We use pretty much the same*

introduction PowerPoint for an info [information] session. And then I've just added best

practices and UDL for my specific trainings that I do after." Program B's training was

evolving continually. According to Training Affiliate B1, "*We always consider it a*

working, living document because things are always changing. Like I said, it's been

ongoing."

<div align="center">Training Goals, Objectives, and Components</div>

The main goal of Program B's instructor training was to promote community by

including students in the full experience of the IHE. Training Affiliate B1 described the

Program goals further,

> *Our biggest goal is for our students to really feel like community members. To really practice intentional inclusive communities, learning environments. So I think our biggest goal is to . . . as much as we are teaching our students how to, you know, incorporate into society, we are also teaching our bigger community how to receive these humans that they are going to see in their lives. So I think that's our biggest goal is to have a larger impact on the campus community as a whole.*

Program Overview

Program B's training consisted of several components. The first component was

an overview of the program, its mission, structure, roles, and population, and an

introduction to people with IDD. Explaining this component, Training Affiliate B1 stated, *"we have an introduction training that we do with everyone, if the people haven't had experience working with people with disabilities, then we just use that to give them the introduction."*

Teaching Strategies

Definitions and examples of evidence-based practices (EBPs) and UDL strategies were additional components of Program B's instructor training. Training Affiliate B1 discussed that in conjunction with EBPs and UDL strategies, there was a major focus on prompting strategies. She explained,

> *We focus a lot on what prompts look like, what prompts are, and then we do a little bit of training on collecting data based on prompting, how to determine if a student is independently doing a skill versus what prompts are needed.*

Accommodations and Modifications

Accommodations and modifications were components presented in instructor training. Training Affiliates in Program B partnered with the Office of Accessibility to register students for accessibility resources. Training Affiliate B1 assisted students in communicating their accommodations with instructors, Training Affiliate B1 explained, "*The student sends their accommodation letter directly to their professor during the first week of class.*" As a part of the IHE processes, instructors were notified of any IHE students who were registered with the Office of Accessibility for accommodations, which added an extra layer of confidentiality for all Program B students. Training Affiliate B1 noted further, "*So that's been really helpful, because even if a student doesn't want to be identified as being in our program, then at least the instructor is aware that they have accommodations.*"

Audited Courses

Program B students took both program-specific and inclusive IHE courses for credit or for audit. Training Affiliate B1 explained the course selection processes and her role in advisement:

> *They [Program B students] are required to take at least one university elective course every semester. One or two courses might be electives. So any course that's open to any first-year undergraduate is open to our students. So they look through the course catalog, there are thousands and thousands of courses that they can choose from. We do, pretty much, one-on-one advising.*

Whether a student was taking a course for credit or for audit impacted the work the student would complete in the course. If the student chose to take a class for credit, Training Affiliate B1 said, they *"complete the course just as any traditional student would. They follow the Syllabus, they are graded the same way, same expectations."* She also explained the course audit option, stating, *"If they audit the course, then we complete an audit agreement, one-on-one with the instructor and the student."*

Training Resources

PowerPoint Presentation

A PowerPoint presentation was used during the training and included the following components: program mission and commitments, a description of the participants, vocational experience, and the timeframe of the program. The presentation included a breakdown of staff members and their roles, the communication structure, the roles of student volunteers and student workers, an introduction to ID and IDD, and evidence-based practices. The final slide included names, titles, and contact information for Program B staff.

FAQ Form

The FAQ sheet provided general Program B information and course-specific information. Also, the FAQ sheet was included in the initial email correspondence with instructors. Questions answered were: What is [Program B]? How many students are enrolled in this program? How do I know if I have a [Program B] student in my course? And how might I support a student enrolled in my course? Program B's website and the academic coordinator's information were included on the FAQ form.

Audit Agreement

Training Affiliate B1 assisted instructors in completing an audit agreement for Program B students who were taking a course for audit. Primary components of an audit agreement included whether a student would be completing all, some, or none of the coursework, quizzes, exams, and projects. The instructor was asked to specify which coursework the student would complete in each category. The form included a section for the instructor to note any additional information they wanted to provide.

Grade-Check Form

The grade-check form was used to document Program B student performance. Communication to instructors stated, *"Twice during the semester, you will receive a request to complete the attached grade check form for the [*Program B*] student in your course."* The data collected on the grade-check form noted student absences, tardies, grades, comments on student strengths, and additional comments or concerns the instructors might have.

Program B's instructor training was offered in a variety of formats based on need.

Some training was offered on an individual basis for new faculty. Group training was

typically provided within a department hosting multiple Program B students. Training

Affiliate B1 described the training format selection process further:

> *If there are a couple of colleges or departments where students take a lot of the classes. So HFL is health, fitness, and leisure. So that's our yogas, and basketball, and weight training, and stuff. And so, when we have a trend where we have maybe four or five students taking a course like that, then at the very beginning of the semester, I will go to a faculty meeting for that department and do a very basic intro; here's our program, here's kind of what our student looks like, here are some best practices, or Universal Design strategies that you can utilize, and if you have any further questions then here's who I am.*

Communication

Communication with Instructors

Training Affiliate B1 facilitated communication with instructors related to the

training. She explained the communication process, "*Before the semester starts, as the*

academic coordinator, I send an email to every faculty member that is going to have one

of our students in their courses." The components of this email were explained:

> *And I have a drafted letter that I send to everybody. It has an FAQ about our program, my contact information, so if they have any questions, and then telling them if the student is going to take the class for credit or audit. And then it says if the student's going to audit, then in the next week be expecting the student to contact you to determine what the audit agreement says.*

Inclusive Communication

Program B staff sought to ensure that any communication related to the student

was discussed with the student beforehand. Training Affiliate B1 said, "*So any*

communication that happens between myself and any professor, the student is always

copied." She discussed her rationale for this decision,

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I think it's important just to mention that it's not done outside of the student. We really want the student to have some peace in that communication. At least be a part of the email chain. We often say "nothing about you without you."

Training Evaluation

Program B's training was not formally evaluated, but instructors were able to provide feedback and ask questions following the training. Because the training is formulated in-house, Training Affiliate BI faced the challenge of determining the overall effectiveness of the training; she explained, "*I think the biggest struggle with that [instructor training] is just the consistency and effectiveness because we are just doing it as needed, versus having a system for doing it.*" In the future, she plans to partner with the IHE to provide formal training through the online platform. Training Affiliate B1 said, *"It would be amazing if we could work with our university to put our training together, so it was like a Canvas training. People could go through it, take the quizzes, and then be done with it."*

Program C

One interview, observation of the online training session, and analysis of several documents comprised the data from Program C. The documents included a PowerPoint presentation with two embedded videos, the initial email correspondence sent to instructors as well as the training invitation email, a UD interactive handout, an audit agreement form, and a post-training survey. One training affiliate was interviewed from Program C, he will be identified under the code name Training Affiliate C1; he was the IPSE program director with primary responsibilities of development, implementation, and evaluation of the training programs, plus instructor and student support. Training Affiliate C1 provided information about his background working with students with IDD, saying,

Prior to my experience here at [Program C], I was a teacher teaching individuals with intellectual developmental disabilities in the school district here in [Program C State] for four years. And so I've been working with individuals with intellectual and developmental disabilities for almost 10 years now.

Training Development

The training offered by Program C was developed by Training Affiliate C1 and other Program C staff and focused on instructor support. When I asked, "How is the training developed?" Training Affiliate C1 explained how that at the beginning of the training development process, *"we first thought about why it was important; what we should do."* After considering the "why," Training Affiliate C1 developed their program by incorporating aspects of available training sessions from other IPSE programs to address the "what." He explained:

> *We've taken things from other trainings that are out there. And other people that we've seen at conferences across the country. We've asked for permission to take some things, and use some of those things. So it's just something that we've really developed in-house, but we've taken from other people that are doing the same thing as well.*

As expressed by Training Affiliate C1, one of the primary intended outcomes of the training process was to ensure that instructors received the resources and support they needed to facilitate the course effectively for the benefit of all students. The support was based on the possibility that the instructor had limited exposure to people with IDD. Training Affiliate C1 expressed it thusly,

> *I want to make sure that the instructors are comfortable because individuals with ID and DD [developmental disability] are such a small percentage of the population. When we say an individual with disabilities is in their class, I think a lot of the professors, from my opinion, just don't know what that really is. They've definitely had an experience, I would say most, with a student with disabilities through our disabilities resource center or something.*

Training Goals, Objectives, and Components

The instructor training addressed several objectives and outcomes. According to Training Affiliate C1, the primary objective of the training was, *"to have an understanding of what the program is, a basic description of an individual or some characteristics of individuals with intellectual and developmental disabilities. And then understand aspects of UDL, and how to implement that in their course."*

The training components presented in the PowerPoint by Training Affiliate C1 training were:

A. Introduction to [Program C]
B. Post-secondary education (PSE) programs
C. Building relationships with diverse students
D. Accommodations vs. adaptations
E. Universal design for learning
F. Audit agreement/check-in
G. Questions

UDL principles identified in the HEOA were focused on heavily during the training. Training Affiliate C1 presented a video about UDL in the training session and shared that the reason for such a heavy focus on UDL was

> *I've always found it interesting that a lot of individuals that come to our training very rarely have an idea of what UDL is. It's in the Higher Education Opportunity Act, it's in the law, but it's not like you can really police it or force it. But instructors don't even know about it.*

Program C students audit classes and instructors need to develop accommodations and adaptations. To ensure that students were able to meet the course learning objectives, the Program C staff members facilitated an instructor meeting to discuss objectives and course expectations. An audit agreement was created by the instructor, student, and program C staff member. To facilitate this process, Training Affiliate C1 explained to instructors during training that the first step is for the student to communicate with the

instructor and set up a time to meet during their office hours. During this meeting, students were to share a little bit about themselves; their interests, their reason for selecting the course, and their learning style. When creating the audit agreement, Training Affiliate C1 reminded instructors that each student has unique abilities. He suggested focusing on the main objectives of the course and adapting or modifying the key assignments to reflect the ability level of the student. Instructors were encouraged to make adaptations or modifications to the assignments based on the needs of the students as individuals, while keeping the main objectives at the forefront.

Training Resources

Program C instructors were given several resources, including a PowerPoint training presentation, a video recording of the training, a post-training survey, an academic course evaluation, Training Affiliate C1's contact information, TC's PSE video, the TC and Cast-UDL website, a Ted-Talk video, a UDL video, and a UDL interactive form. The majority of the resources were available within the PowerPoint presentation. This presentation was developed and updated by Training Affiliate C1 and the program staff.

The academic course evaluation was used by instructors to report Program C student academic progress. The GoogleDoc form was used to evaluate the student's attendance, participation, motivation, positive peer relations, request for needed assistance, and acceptance of constructive feedback. The Likert scale responses for each objective were superior, above average, average, below average, and needs improvement.

Training Implementation

Program C's training was held at the beginning of each semester, either the Friday before the semester started or the first Friday of the semester. Participants were asked to indicate their preferred training timeline in the training evaluation survey, either before the semester, the first week of the semester, the first month of the semester, or after the first month of the semester. Training Affiliate C1 collected feedback regarding the timing of the training, he said, "*I've gotten some mixed results kind of on the best time to do it, and I don't know that there is a good time to do it, just based on the anecdotal stuff that I've seen.*"

Training Format

Program C's training was delivered in a formal, whole-group format by Training Affiliate C1. The session was a 2-hour, interactive lecture which included videos, open discussion, and application of content. Training Affiliate C1 began the training by introducing himself and giving the participants an opportunity to introduce themselves, what they teach, and their prior experiences with individuals with disabilities. He then introduced the training objectives.

During the program, he showed a video created by TC, the National Coordinating Center, and discussed the main three purposes of a PSE program: employment, academics, and independent living. He then discussed laws that led to the development and need for PSE programs, followed by discussion of the Program's foundations, staff members, and the mission statement.

Interactive Learning

Throughout the training, Training Affiliate C1 used strategies to provide an interactive learning experience actively engaging participants with the material. These strategies included asking questions, presenting scenarios, and providing interactive material. In the interview, Training Affiliate C1 explained his rationale for the use of questioning and real-life application of the material,

> *I also really want to give the instructors opportunities to really think and work through aspects of UDL. And so I asked them questions about their syllabus for the course that they're teaching and the objectives that they have for that class and work through aspects, and how we can include the aspects of UDL in their class. So it gives them time to reflect on that, to then come up with some ideas of things that they can incorporate. I also use some ideas to share with others that are in the training. We kind of work together.*

During the training, one of the scenarios presented to participants for discussion was ways in which they could introduce the concept of diverse learners in the classroom without identifying that there was a Program C student in the course. Openly, the participants discussed ways in which they promoted diversity in their courses. Training Affiliate C1 provided suggestions also. He gave instructors an opportunity to identify ways in which students can achieve course objectives using UDL principles. This was facilitated using an interactive UDL form adopted from the CAST organization (2013b). Training Affiliate C1 described these resources in more detail,

> *We really focus our training on UDL, Universal Design for Learning. And so we take a lot of resources from that. There's quite a few resources specifically for higher ed [education] with Cast and a couple of other organizations. So it's just something that we've really developed in-house, but we've taken from other people that are doing the same thing as well.*

Instructors were encouraged to use this forum to identify one or two key course objectives and explore how they could differentiate their course using UDL principles of

action and expression, representation, and engagement. Training Affiliate C1 described

the UDL resources in more detail,

> *We have a number of documents that we'll hand out around UDL. The document that we work through, and each one of the principles of UDL, where they're taking an objective, is distributed and then they use that throughout the training. But we also provide a one-page sheet on best practices, a one-page sheet on working with students with disabilities, one with, specifically UDL.*

Increasing Training Accessibility

Instructor attendance was one of the primary training challenges Program C faced.

Program C students take courses from fifty instructors each semester, and an average of

only about ten instructors attend the training. During the training I observed, thirty-eight

instructors were invited; only nine were in attendance. Training Affiliate C1 disclosed his

feelings regarding attendance by expressing, "*I think it's hard to get people to come to*

training. I'm not paying, I'm not bribing them to attend." In response to the challenge of

instructor training attendance, Training Affiliate C1 strived to ensure that the training and

subsequent materials were accessible to all instructors. The recording of the training

session and the training materials were distributed to all instructors who host Program C

students in their courses. Training Affiliate C1 extended himself to instructors in a variety

of ways, explaining,

> *I always try to make sure that I reach out to them [instructors] and say I'm willing to come to your office and do this. If you want to read, I'll send you all of our material, I'll send you the slides, I'll send you the handouts, and I'll meet with you again. I'll meet with you after you go through it, or if you don't want to go through it, I'll go through it with you. Just showing them I am there for some support.*

In an attempt to increase the accessibility of the training to a larger audience,

Training Affiliate C1 made the training available to anyone at the IHE who is interested

and specifically reached out to newly hired faculty members. "*I'm looking at other ways*

to present and get to all instructors. I open it to everybody. I say any instructor can come

whether you have a student from our program in their class or not. He detailed further:

> *So one of the things that recently, I try to do is get into the new hire orientations. So, instructors, professors that have just been hired at [the IHE] . . . I'm one of the people that they're going to see . . . that they know that there's our program there and that they could potentially have a student, and that there's support there for them.*

<div align="center">Communication</div>

Communication with Instructors

Training Affiliate C1 was primarily responsible for communication between

Program C and the instructors regarding program and training information. Prior to the

start of each semester, Training Affiliate C1 reached out to the instructors via email to

inform them that they would have a Program C student in their class, give a brief

overview of the PSE program, and let them know there would be training available. A

follow-up email included the training date and access link. After the training session,

instructors were provided with a PowerPoint presentation and a recording of the training.

Collaboration with the instructors was very important to Training Affiliate C1.

Throughout the training session, Training Affiliate C1 expressed his availability and

willingness to connect with professors regarding any questions or concerns they might

have. He stated,

> *I wanna make sure that I reach out, that I am there, that there's going to be a training, and that I'm there throughout the whole semester for whatever they need. For whatever questions, or to go over that training again throughout the entire semester.*

**Communication with Students and
Support Staff**

Instructors were taught the communication protocol for students during training.

Communication between the instructors and the Program C students was facilitated by

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Training Affiliate C1 and the program staff. Program C students also received training in how to communicate with their instructors.

During training, Training Affiliate C1 discussed information regarding FERPA regulations, student privacy, and parent communication. He also explained the communication process, especially the initial communication, stating,

> *So, the first week of class, something that we tell all of the instructors is that they are going to meet in-person with the student and a member of our staff. On the first day of class, well we usually say between the first week of class at least, a member of our staff will try to get to every single class. It usually takes a week to do. So it's either the first or second class a staff member is going to be there or an intern.*

Intern Support

Some Program C students required additional support in the form of an intern who would attend class with them. Training Affiliate C1 explained,

> Oftentimes we have a student that attends class, and they have an intern that will attend with them. They might need more support in class and so that intern is also going there to kind of briefly introduce the program.

An intern or staff member accompanied each student on the first day. The staff member was careful to preserve the privacy of the student, and not, according to Training Affiliate C1, *"divulge or say this is a student with a disability, here you go."* Even with the support of the intern, Program C worked to equip the students with the ability to communicate for themselves. Training Affiliate C1 said, *"We really want the student to be able to introduce themselves. One of the things we work on with students prior to each semester is introducing themselves to instructors. So having them do it."*

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Training Modifications Due to COVID-19 Pandemic
Restrictions

Adaptations were made to Program C's Fall 2020 and Spring 2021 training

sessions due to the restrictions of the COVID-19 pandemic. Changes to the traditional

training format include instructor training held via the online platform Zoom. According

to Training Affiliate C1, this presented some difficulty; he stated, "*We still do some stuff*

using the tools on Zoom, but it was a little bit harder."

Another adaptation made for these two training sessions was that Training

Affiliate C1 took on full responsibility for the training. He said that typically members of

his staff also participate in the training. He stated that under normal conditions, "*So I*

have a career coordinator and an academic coordinator with a lot of experience working

with our population and I want them to present as well during that training."

He added,

> *Yeah so, it depends on the semester, but I try and include staff members as well.*
> *This last semester, it was just me through Zoom, online. I probably should have,*
> *but I said I'll just do it, and then get it done. But generally, I like to have them*
> *involved in that. And they take a portion of that training.*

Training Evaluation

Formal Training Evaluation

Program C's training was evaluated by participants using a post-training survey

that was emailed to the participants by Training Affiliate C1. The survey was created

using Google Docs. He further explained some of the details of the survey questions:

> *I surveyed them afterward, kind of a pre-and-post. I ask questions, like did you*
> *know what a modification was before? Do you understand what it is now after?*
> *Did you know what accommodation is before you attended the training? Did you*
> *understand UDL? Do you understand it now?*

Participants responded using a five-point Likert scale (1 = *not beneficial* to 5 = *beneficial*) to these survey questions:

1. Was the [Program C] instructor training beneficial?

2. Before the training, I understood the purpose of [Program C]?

3. After the training, I understood the purpose of [Program C]?

4. Before the training, I understood the difference between accommodations and adaptations?

5. Before the training, I understood the difference between accommodations and adaptations?

6. Before the training, I understood Universal Design for Learning (UDL) and how it applies to my course?

7. After the training, I understand Universal Design for Learning (UDL) and how it applies to my course?

8. After the training, I understand Universal Design for Learning (UDL) and how it applies to my course?

9. Before the training, I know what is expected of me as an instructor working with a [Program C] student or staff member.?

10. Before the training, I know what is expected of me as an instructor working with a [Program C] student or staff member?

11. Before the training, I know what is expected of me as an instructor working with a [Program C] student or staff member.

12. Before the training, I know what is expected of me as an instructor working with a [Program C] student or staff member?

Feedback Used for Training Updates

Program C's post-training survey included open-ended responses to the training

session for instructors to provide additional feedback, which was used by Program C to

enhance the training process. Training Affiliate C1 uses the instructor responses to, "*try*

and improve that training based on what they said. I really try and look at what people

are saying and make some adjustments to the training." The questions were 1) How can

we improve this training? 2) How can we support you better? 3) Any other thoughts?

Program D

Program D's data was composed of one interview and analysis of documents,

which included a PowerPoint presentation, instructor feedback, and a copy of the email

correspondence with instructors. One training affiliate was interviewed from Program D,

she will be identified under the code name Training Affiliate D1; she was the IPSE

program director with a) primary training responsibility for facilitating training for

instructors teaching IPSE students in typical courses and b) supporting instructors and

students in the academic setting. When asked about her prior experiences working with

people with IDD, Training Affiliate D1 replied:

> *I started working with people with intellectual/developmental disabilities in*
> *college in a friendship/volunteer capacity through Best Buddies and Special*
> *Olympics and did various college-level internships in the community with some*
> *non-profit agencies that served them. I had the opportunity again to be in that*
> *peer one-on-one role. I also did work as a direct support professional so that is*
> *also one-on-one, but community-based, but not necessarily education or*
> *academic-focused. And then I worked as an employment support coordinator, so*
> *then I was a job coach, a job developer. I worked specifically with high school*
> *students with intellectual and developmental disabilities, again one-on-one, but*
> *around the area of employment, finding internships, supporting them in their*
> *internships, facilitating the transition out of high school and into employment.*
> *And that time is when I learned about inclusive postsecondary ed [education]*
> *because one of the students I supported actually went to go to a CTP program in*
> *Pennsylvania, and I thought that's kind of interesting, that's cool. I loved working*

as a job coach in the areas of employment, but I wanted to be able to do more with students, so I began my doctorate in occupational therapy and throughout that time, throughout all of OT school, I had various experiences, internships and volunteer experiences working with people with developmental and intellectual disabilities. I worked with an inclusive postsecondary education program throughout my time there and I did programming around cooking and independent living skills for adults with Down Syndrome in the community. I worked as a direct support professional. I worked at a high school transition culture. There were many experiences throughout that, that really built those skills. And then as part of my capstone experience, I developed, with somebody else, a summer academy for students that were interested in pursuing these types of inclusive postsecondary programs. So we created this transition summer academy. We worked on building a resume, and cooking skills, and having academic sessions, and what do they look for in college, and doing some preparation around that. And then we had various colleges within the area come and do an information session and of our group, a bunch of them ended up going to those programs. It was really exciting.

Training Development

Needs of Instructors

Program D's instructor training was developed by Training Affiliate D1, who pointed out that training development was an ongoing process, "*Training was developed, and honestly it is still being developed and honed each semester.*" She identified that getting instructors on board with program initiatives was one of the primary considerations during the development process. She solicited and incorporated the needs of the instructors and the campus community into the development of the training and the training components selection process. Because of challenges related to faculty participation, preparation, and empowerment disclosed to her upon arrival at the IHE, she explained:

> *It [training] was developed because, when I came into this role from experience working with other institutions, I was told that the biggest challenge you will face is with the faculty. Getting faculty on board, getting faculty to feel as if they have the skills they need, that they are empowered, that they are equipped, that they do not feel as if they are overworked or overburdened, and getting them, like on your side.*

Building Rapport with Instructors

Training Affiliate D1 began the training development process by building rapport

with faculty members and getting to know them in faculty and department meetings, to

address the needs and challenges of instructors. By building rapport with the faculty

members first, she was able to connect with the instructors, introduce herself and the

program, and begin to ask questions to assess and identify the primary needs of the

faculty members. Training Affiliate D1 stated,

> *I spent my first semester just getting to know faculty. Like I didn't ask them anything, I just connected with them, told them about the program. We built relationships and rapport. Then I would ask questions at faculty meetings and ya know, various department meetings about what you feel like you need to know in order to effectively ya know, teach students with intellectual disabilities. Then gathering information about what my campus community needed.*

Through the process of building rapport with the instructors, Training Affiliate

D1 identified that their primary concerns related to the logistics of course auditing. Some

of the specific questions faculty members asked were: "If they're [Program D students]

auditing how do I grade them? What does the peer mentor do? How do I add them into

the class?" Some of the other driving questions were: "How am I supposed to talk to

them?" and "How am I supposed to communicate with them?"

In conjunction with the questions originating from initial conversations with

faculty and other members of the campus community, Training Affiliate D1 facilitated

the development process by conducting research about faculty training resources and

UDL. She elaborated on the selection process explaining:

> *I also reviewed other universities' faculty training. Anyone who had posted them online at Think College, any recent articles I could find about what should be included in the faculty training. I went to some sessions over the summer at the college program directors' meeting that they had. Anybody who talked about faculty training or Universal Design for Learning training. I tried to piece in anything that I could and I wanted to address some of those logistics pieces,*

address what the program was, and why it is important to our university community, that this isn't going anywhere, that it's a valuable component of our campus's diversity and inclusion initiatives.

Accessibility of Training

Accessibility of the training for instructors was an important consideration during the development stage. To facilitate participation by the instructors, Training Affiliate D1 explained:

> *My approach to developing the training was to do something that was going to be watched, like they would actually sit there and listen to it and learn from it and that it wasn't going to be too long. So I was advised to keep it at like 20 minutes, which is a lot of information to put in.*

Training Components

Program Information

The first component in Program D's instructor training was information about the Program and the role of Training Affiliate D1. The Program's department, length program, student outcomes, and audited courses were presented. The role of the program coordinator was defined as working with students and instructors to modify assignments, providing workshops and instructor support, enhancing accessibility, assisting person-centered planning and goal-setting, and collecting feedback.

Logistics of Audited Courses

Another component of Program D's training was the logistics of courses taken for audit, including how the student would appear on the class roster and how the grade would be documented. Training Affiliate D1 specified that "*The audit credential allows for some flexibility in the ways this is completed.*" She emphasized that instructors should not disclose that a student is taking a course for audit, but rather, the student "*should be treated as any other student enrolled in your course.*"

Role of the Faculty

In conjunction with the role of the program coordinator, roles and responsibilities of the faculty members were also discussed in Program D instructor training. Faculty members were encouraged to include students in activities, provide feedback on assignments, collaborate with the program coordinator in determining appropriate alternative assignments, and connect with the program coordinator for additional support.

Accommodations vs. Modifications

One of the primary components addressed in Program D's training were accommodation and modification principles and differences. Training Affiliate D1 expressed that it is important, "*for faculty to be able to differentiate from students who are receiving accommodations, who are taking the course for credit, and students who are receiving modifications. And what is the difference between an accommodation and a modification.*" This concern also shared also by the staff of the Office of Accessibility. Training Affiliate D1 explained, *"because that was something that our accessibilities office was concerned that in the training that faculty would see that modifications were for everybody or these were the same as the students that they had already been working with."* It was important to Training Affiliate D1 to explain clearly that in terms of modifications, "*there is this other layer of support that can be provided because they're auditing and are in this non-degree certificate program.*"

Universal Design for Learning

Training Affiliate D1 incorporated UDL principles such as alternative means of engagement into the instructor training presentation. She explains, "*I also wanted to show*

some pieces of Universal Design by having alternate means of engagement in the lecture.

Hopefully, it would be accessible for more people."

Faculty Feedback and Advice

One of the final components of Program D's training program was feedback and

advice compiled from faculty members who taught Program D students during the

previous semester. Some of those quotes included,

> *Treat all students equally, don't be afraid to modify assignments and
> assessments for students in [Program D], and use the assigned educational coach
> for help bridging any gaps; prepare early, be flexible and creative, get to know
> your student well, and communicate often with both the student and
> with [Training Affiliate D1]! Really—they should be patient and understanding,
> but also give the other enrolled students equal attention, and Be open to working
> with [Training Affiliate D1] and having the conversations throughout the term.*

Other responses from Program D instructors about the benefits of having a student

with IDD in class included:

> *Having a student with intellectual disabilities in class was a terrific growth
> opportunity. It provided the opportunity to review syllabus requirements, typical
> means of communication, assignments, and grading for inclusive language and
> for potential access concerns. I find that having students of different abilities, and
> from different backgrounds and experiences enriches the classroom environment.
> It creates a space that is more intentional in its design and more thoughtful in its
> delivery. I think the student brought motivation, tenacity, dedication, and an
> extreme desire to accomplish her desire for education beyond high school. I
> believe that set a great example, as she served as a model for ALL students in the
> class.*

Quotes related to instructor challenges presented in the PowerPoint were:

> *Getting the student to participate. The overall class atmosphere was different,
> sometimes students would appreciate his comments and other times, it was a
> distraction to their learning. Knowing the right amount of invitation to participate
> in spontaneous classroom discussions without causing discomfort.*

Training Resources

Program D's training resources included a voice-over PowerPoint presentation with links to additional UDL resources. Training Affiliate D1 described those additional resources,

> *And then I have an article and a presentation, one is on faculty perspectives of inclusive courses, any challenges that they have experienced in the past, things like that. And also a presentation on supporting students with ID using Universal Design in college.*

Training Affiliate D1 stated that she included in the PowerPoint presentation, "*some feedback the faculty provided from the semester previously on what is the benefit of having a student with intellectual disabilities and what was the greatest challenges,*" as well as, "*some examples of different things I have seen come up in classes.*"

Training Implementation

Training Format

Program D's training was a recorded, 17-minute, voice-over PowerPoint presentation. Training Affiliate D1 justified this presentation format saying, "*and so I think by doing this voiceover PowerPoint it can be something that they can click through on their own time or listen to my overview.*"

Modifications due to COVID-19
Pandemic Restrictions

Training Affiliate D1 considered creating and implementing an in-person training but said, "*in the midst of COVID especially, I was encouraged not to do that and to just create trainings that would not be burdensome for faculty, but things were accessible and something that they'd actually watch.*"

Communication

There was consistent communication between Training Affiliate D1 and

instructors. The first point of contact with instructors teaching Program D students was an

email from Training Affiliate D1 which included an introduction to the program, her

contact information, the PowerPoint training, and survey links related to feedback on

student performance, faculty training, and support questions. She described her email

communication with the instructors:

> *The first point of communication was a week or so, maybe a week or so. I sent an email saying hello, you have a [Program D] student auditing your course. I introduced myself, I said, attached to this email is a voice-over PowerPoint, if you want to talk more about it, I am available, and here are some times. And then I also requested for the peer mentor or the instructional coach, not everyone has that, but for those who did, can they be added to your Blackboard? And here are the instructions on how to do that.*

Training Affiliate D1 also facilitated on-going communication and requests for

instructor feedback to ensure that the instructors were being supported and that the

students were making substantial progress. She said,

> *And then I just explained that I will be reaching out if I didn't hear from them periodically through the semester, just to see how things are going, especially during midterm and final because students aren't receiving official grades, sometimes the feedback is more narrative. So I have a survey of feedback from the students that I send out during midterm and finals.*

Training Evaluation

Program D's training was not formally evaluated, but Training Affiliate D1

obtained general feedback from instructors. Previously, more detailed feedback was

requested from instructors in the form of a survey, but to decrease the amount of data

distributed to instructors, she consolidated feedback surveys. The result of this was

> *I've kind of combined surveys so I didn't have to do separate surveys, I just asked for general feedback. And I kind of wish I asked these questions more specifically this semester. So I will probably change that for next semester and go back to asking more specific questions about; What is the benefit? What was the*

challenge, like other areas of feedback to get more specific information? Because the information I've gotten this semester has been a little bit vague versus what I received the semester previously with more specific questions.

The independent nature of the training format and the lack of formal instructor training evaluation presented a challenge for Training Affiliate D1 as she explained, "*I have no idea if every faculty watched it, so that's the challenge of sending this voice-over PowerPoint, that you don't know if they engaged unless they respond back and say 'oh, great presentation,' or ask follow-up questions.*"

To mitigate this challenge, Training Affiliate D1 petitioned feedback from instructors and engaged them in follow-up conversations to gain an understanding of the effectiveness of the training. She described the feedback received from instructors,

> *I still got feedback from faculty that they wanted more training, or some said it was perfect, some said I still didn't know what to do. So there is still tweaking and honing that needs to be done before I'm like, alright, this is the one I am doing semester to semester.*

Feedback Used for Training Updates

Feedback from instructors was used to make training adaptations in hopes of clarifying concepts. Training Affiliate D1 explains this,

> *This semester, an area that a lot of them [instructors] had questions with was specifically around test-taking, and if there is a modified test, who creates the modified test? What is the communication around that like? And how do they know what each assignment's modification looks like? So that was something that kind of throughout the semester I collaborated with faculty to determine what was the best way of communicating that. Other than that I think next semester I will communicate in a more clear way in the training so that it minimizes any confusion initially.*

Future Plans for Training

Training Affiliate D1 has plans to formally evaluate the instructor training in the future; she mused,

I don't have a survey evaluation, which would be really easy to just incorporate into the training. If you give feedback on this training, what else do you feel like you are missing or still need to know? Maybe that could be the last slide or just a quick evaluation.

Program E

Program E's data was composed of an interview. One training affiliate was interviewed from Program E, he will be identified under the code name Training Affiliate E1. Training Affiliate E1 is Program E's program director, whose primary training responsibility is development, implementation, and evaluation, plus student and instructor support. When asked to describe his prior experiences with individuals with IDD, he explained:

> *I got my Masters at Kent State University in Ohio and I worked in an inner-city for about 10 years in middle school and high school. I was a transition coordinator, so I was doing various things with IEP's and all of those fun things . . . transitioning them after high school. And then this opportunity came out two years ago, the program coordinator.*

Training Development

Program E's training was developed by Training Affiliate E1. When asked about the training development processes and components, he explained that it consisted of "*information I've gathered over the years. I just present, nothing formal, but that's where I kind of get it from.*" He described information obtained from prior presentations in his experience as a high school transition coordinator, saying:

> *I mean, mostly I developed it [the training], from things that I used at the high school when I was a transition coordinator; I talked a lot to teachers, just because inclusion in the K-12 world is becoming bigger and bigger. So I had already a lot of talking points and presentations that I used with high school teachers that I got from, you know, various conferences.*

He went on to describe the resources and strategies obtained from his own postsecondary courses and professors, explaining,

Ohio State has a nice Lastinger Center that has a lot of information on inclusion and curriculum, things like that. So, I've used information from them and Kent State . . . from some of my professors there. I've used information from them about Universal Design for Learning, those kinds of things.

Training Objectives and Components

Building Positive Experiences

The objective of Program E's training was to provide information about the program to instructors and to promote positive new experiences for the instructors. Training Affiliate E1 noted, *"I think as more students go into those classes, the easier it is.*" According to him, a primary objectives of Program E's instructor training is, *"building that bridge between my program and the faculty."*

An important component of Program E's training was cultivating a positive image of students with IDD in the postsecondary learning environment. During the training session, Training Affiliate E1 focused on the positive experiences to facilitate inclusion of the students. He explained his methods by suggesting:

> *Instead of saying well they should be here, they should be doing this. Instead of telling them what to do, you know, looking at the outcomes, why you teach college, why are you here in the first place? You know you want kid . . . do you want them to just go read a book? The academics, but college is more than that. And I think most teachers agree, so when you tell them that, you know, our students want that experience too. I think it kind of brings that holistic picture. And that's kind of the approach I take.*

Wanting to cultivate positive experiences for instructors, Training Affiliate E1 said he intends for this experience, *"not to be an added stress, but something that, especially now that they've had kids in their classes, you know, it adds an element of excitement and engagement that they haven't had before."* During the training, he hopes to, *"answer some questions, talk about basic things, an understanding of why they're here, the purpose of the program, and those kinds of fun things."*

Faculty Attitudes

The attitudes of instructors regarding the abilities of individuals with IDD is one of the challenges addressed in Program E instructor training. Training Affiliate E1 explained, *"I think a lot of faculty feel that students with IDD don't belong in college. And so, I don't like the word convince, but to relay the message that they do belong."* Training Affiliate E1 believed it was important to address these attitudes for inclusion to be successful. He discussed the importance of sharing the positive outcomes of inclusion with instructors, explaining:

> *Two things I would say is, the one is, why they [Program E students] belong, and how it positively impacts the environment on campus and the classroom. Research has shown inclusion not only helps students with disabilities but typical students as well, and helps the teachers.*

Modifications for Audited Course

Information related to course modification for students who are auditing courses was a component of Program E's instructor training. Training Affiliate E1 collaborates with instructors to provide course modifications for any student auditing a course; as he explained, *"sometimes they [instructors] jump right in and start modifying things because the students are auditing the classes. And other times they'll want me to do the modifications, which is fine too."* He noted, *"typically I'll be modifying the big assignments like tests and projects."*

Training Implementation

Program E's instructor training was offered in an informal, group-training format. During implementation, Training Affiliate E1 would join department meetings to provide information about the program. He preferred to work with smaller groups in department meetings rather than full faculty meetings because *"I think faculty meetings are . . . there*

are so many people, people are afraid to ask questions and have that discussion. So I think smaller groups sometimes work better." He described the process,

> *I typically use PowerPoint. When I've jumped into the department meetings, it's more informal, I'm just kind of giving a topic. And then I'll try and have some literature, UDL or something like that. Something that's pretty basic, an overview of what I'm trying to talk about. But typically the bigger presentation, I had a PowerPoint with the faculty, and the other ones are more informal.*

According to Training Affiliate E1, instructors hosting Program E students are often receptive to the students, the training, and the educational process. He expressed, "*I'd say that 90% of the professors have been very . . . kind of accepting and just saying, 'yep, that's what we'll do' and just move on. Some will have more specific questions."*

Due to the COVID-19 pandemic restrictions, Training Affiliate E1 made adaptations to the training format. Typically the training is presented in-person, but it was presented virtually in the Fall of 2020 and Spring of 2021. He explained

> *COVID has kind of changed things a bit. But, in the beginning of the semester, we usually have a faculty meeting, and I will present there on different topics with inclusion, and working with kids with disabilities, especially developmental and intellectual disabilities, how it's a little bit different. So we still try and meet on WebEx or Zoom. So I've been trying to do that, jumping into the department meetings on Zoom, we use WebEx, but . . . same thing. Jump into those department meetings and just give an overview of the topic or something and then some of the questions that teachers might have about my students or the students that are in their class. So that's how it's been going right now.*

Training Affiliate E1 also focused on how the importance of the social aspect of the postsecondary experience was emphasized during the restrictions of the COVID-19 pandemic. He explained, "*but with COVID, it's becoming even more apparent that college is not really just academics, they learn so much of the social world in college."* As a result, Training Affiliate E1 believed in the importance of providing this opportunity for students with IDD. He explained,

And students with disabilities, especially with low incidences and more severe disabilities miss out on that part of their life in college. Whether it's from like, community college or four years in the dorms, you learn that social piece of working with groups, working with faculty, working on campus as a job, paying for your own food. . . . Those kinds of like, things that they miss out on. So I really try to sell that to . . . I don't like that word sell . . . but sell [laughs] that to the faculty, that these students are not gonna get a doctorate, yeah, they're not gonna get their Masters, or even maybe a college degree at all, but they're learning just so much interacting with their peers and faculty. From a social standpoint, it is worth their while. So I guess that in training, that's one of the two things I try and point out.

Communication

Training Affiliate E1 offers information and support to instructors through various means of communication. According to Training Affiliate E1, when asked about the first point of contact between the program and instructors, he described the format and content of the initial contact stating, "*The first contact is typically an email. I'll say the student John is in your class . . . your intro to psych [psychology] class, he'll be auditing the class. I'll get some strengths and kind of needs of that student.*"

Facilitating Student Communication

Another component of the initial email to instructors was to inform them of the communication they would receive from the Program E student. Training Affiliate E1 described this process by emphasizing the skills they were teaching their students. He said,

And then I'll say, this student should . . . I'd like the student to reach on some of that self-determination, you know, those fun key-words to come out and have the students reach out. So I want them to know that the student should be reaching out as well.

Classroom Visit

Traditionally, Training Affiliate E1 would meet with instructors in their classrooms. He explained, "*I tried to go the first day. I try to go in early to this class and*

talk to the professor face-to-face because I was new too, and make a connection that

way." He used this method to connect with instructors and verify the accessibility of the

physical learning environment for Program E students. Although there were positive

implications of this practice, Training Affiliate E1 was hesitant to continue this action.

He expressed:

> *I don't know if I'll always do that, obviously this semester, everything is online. I like making that connection, but I also don't want to feel like I have to walk into the classroom with the students too. It's kind of like a fine line between [laughs] holding their hands and also making sure that that's a comfortable environment for them. So, some of my students have . . . are in wheelchairs and things like that, so I'll make sure the classroom is set. And they have . . . because I'll ask for tables and things and different furniture and stuff. So I'll walk in like that, I usually tell the student, I'm going to check the classroom before, so they know. So that's usually how the semester starts.*

<div align="center">Training Evaluation</div>

In response to the question of whether the training was being evaluated, Training

Affiliate E1 responded, "*Not yet, I would like it to be. I would like to get some feedback,*

you know, if it's effective and things like that." Training Affiliate E1 expressed that he

would like to incorporate evaluation in the future to receive instructor feedback.

Training Affiliate E1 desires implementation of a more formal training in the

future, expressing, "*I would like to get it more formalized if possible."* He also expressed

a desire to improve the effectiveness of the training by partnering with a co-worker who

has more experience in higher education. He notes that:

> *She's been at a couple of different colleges, so she kind of has some ideas on what would be effective, which will be nice. And then, you know, getting feedback from the deans and administration and stuff like that. I would like it to be a little more formal, but right now it's just like feedback here and there . . . informal feedback that I get from teachers and staff.*

As Program E's training continues to develop, training Affiliate E1 has plans to

develop other topics to be made available to members of the IHE. He said, "*And then*

hopefully moving forward, talking with the deans, I would like to do some UDL,

Universal Design for Learning trainings. Not only just from my students, but I think just

in general."

Program A, B, C, D, & E Further Analysis of Results

The five programs examined in this study provided data about training

development, implementation, and evaluation. The training development themes

analyzed were the training goals, objectives, and components, plus the training resources.

The training implementation theme was the training format. The training evaluation

theme was the method of evaluation.

Comparative Analysis of the Training Development
Components

A total of eight training components were identified from the five programs (see

Table 5). Components identified in Program A were 1) an introduction to IPSE programs,

2) a program overview, 3) characteristics of students with IDD, 4) strategies for teaching

students with IDD, 5) accommodations and/or modifications, and 6) academic support

personnel. In Program B, the components were 1) a program overview, 2) characteristics

of students with IDD 3) strategies for teaching students with IDD, 4) accommodations

and/or modifications, and 5) academic support personnel. The components identified for

Program C included 1) an introduction to IPSE programs, 2) a program overview, 3)

characteristics of students with IDD 4) strategies for teaching students with IDD, 5)

accommodations and/or modifications, 6) academic support personnel, and 7) building

relationships with diverse students. Within Program D the identified components were 1)

a program overview, 2) the role of the program coordinator, 3) strategies for teaching

students with IDD, 4) accommodations and/or modifications, 5) academic support

personnel, and 6) feedback and advice from previous faculty. Those identified in Program

E were 1) a program overview, 2) strategies for teaching students with IDD, and 3)

accommodations and/or modifications.

Table 5

Inclusive Postsecondary Education Program Instructor Training Components

Training Components	Program A	Program B	Program C	Program D	Program E
Introduction to IPSE Programs	Yes		Yes		
Program Overview: Mission, Vision, Roles	Yes	Yes	Yes	Yes	Program Purpose & Roles
Characteristics of People with IDD	Yes	Introduction to IDD	Yes		
Accommodations and/or Modifications	Yes	Yes	Accommodations and Adaptations	Accommodations vs. Modifications	Modifications
Strategies for Teaching Students with IDD	UDL & Active Learning	EBP, UDL, & Prompting	UDL	UDL & Student Feedback	UDL
Academic Support Personnel	Peer Mentors	Coaches	Program & Natural Peer Support	Educational Coaches	
Building Relationships with Diverse Students	Yes		Yes		
Feedback and Advice from Previous Faculty				Yes	

A cross-analysis of the training components discovered that all five Programs (A-E) shared three components: 1) a program overview, 2) accommodations and/or modifications, and 3) strategies for teaching students with IDD. Four of the five programs (A, B, C, and D) shared the component academic support personnel. Three of the programs (A, B, and C) utilized the training component characteristics of people with IDD. Two of the programs (A and C) included training components 1) introduction to IPSE programs and 2) characteristics of people with IDD.

Comparative Analysis of the Training Resources

Seven training resource categories were identified from the five programs. Those identified in Program A were 1) a PowerPoint presentation, 2) a faculty/instructor handbook, 3) person-centered planning, 4) student performance evaluation, 5) supplemental resources, and 6) a recording of the training session. The components included in Program B were 1) a PowerPoint presentation, 2) person-centered planning, 3) student performance evaluations, and 4) supplemental resources. Those comprising Program C were 1) a PowerPoint presentation, 2) person-centered planning, 3) student performance evaluation, 4) a recording of the training, 5) supplemental resources, and 6) participant feedback. In Program D, the components were 1) a PowerPoint presentation, 2) student performance evaluation, 3) a recording of the training, 4) supplemental resources, and 5) participant feedback. The resources in Program E were 1) a PowerPoint presentation, 2) literature, and 3) student performance evaluation.

A cross-analysis of the training components identified in all five programs (A, B, C, D, E) shared three resource categories: 1) a PowerPoint presentation, 2) student performance evaluation and 3) supplemental resources. See Table 6.

Table 6

Resource Categories Shared by Programs

Resource	Program A	Program B	Program C	Program D	Program E
PowerPoint Presentation	Yes	Yes	Yes	Yes	Yes
Person-Centered Planning	Individualized Learning Plan	Audit Agreement	Audit Agreement		
Faculty/Instructor Handbook	Yes				
Student Performance Evaluation	Student Academic Performance Survey	Grade Report Form	Survey of Student Performance	Survey of Student Performance	Email Correspondence
Recording of Training	Recording of Live Training		Recording of Live Training	Voice-Over PowerPoint	
Supplemental Resources	Professional Development Certificate	FAQ Sheet	Websites, Ted Talk, Cast UDL Worksheet	Websites, Accessibilities Services, Literature	Literature
Participant Feedback			Post Training Survey	Faculty Feedback Link	

Comparative Analysis of the Training Implementation
Format

A total of four training implementation formats were identified from the five

programs (Table 7). The training format in Program A was 1) formal group training. The

two training formats in Program B were 1) informal group training and 2) individualized

training. The three training formats in Program C were 1) formal group training, 2)

individualized training, and 3) recorded training. The two methods of evaluation in

Program D were 1) an evaluation survey and 2) anecdotal feedback. The one training

format identified in Program E was 1) informal group training.

Table 7

Training Formats Used by Programs

Training Format	Program A	Program B	Program C	Program D	Program E
Formal Group Training	Yes		Yes		
Informal Group Training		Informal Department Training			Faculty Meeting Training
Individualized Training		One-on-one for New Faculty	One-on-one on an as-needed basis		
Recorded Training			Recording of Live Training	Voice-Over PowerPoint	

A cross-analysis of the training formats revealed that two programs used a formal group training format: Programs A and C. Secondly, two programs used an informal group training format: Programs B and E. Also, two programs used the individualized training format: Programs B and C. Lastly, the cross-analysis revealed that two programs used the recorded training format: Programs C and D.

Comparative Analysis of the Training Evaluation Methods

A total of three categories of training evaluation were identified from the five programs (Table 8). The one method of evaluation identified in Program A was 1) anecdotal feedback. The one category of evaluation identified in Program B was 1) no evaluation. The two methods of evaluation identified in Program C were 1) an evaluation survey and 2) anecdotal feedback.

Table 8

Evaluation Format in Programs

Evaluation Format	Program A	Program B	Program C	Program D	Program E
Evaluation Survey			Post-Training Survey	Instructor Feedback Survey	
Anecdotal Feedback	Instructor Cooperation and Responsiveness		Yes	Yes	
No Evaluation		Yes			Yes

The two methods of evaluation identified in Program D were 1) an evaluation survey and 2) anecdotal feedback. The one evaluation category identified in Program E was 1) no evaluation. A cross-analysis of the evaluation methods revealed that two programs evaluated their training using an evaluation survey: Programs C and D. Secondly, three of the programs evaluated their training using anecdotal feedback: Programs A, C, and D. Lastly, two of the programs did not evaluate their training, programs B and E.

Summary

Chapter four conveyed the findings from the instructor training document analysis, the training observation field-notes, and the interviews conducted with the IPSE program training representatives. Initial findings were categorized and reported by program. The findings were also cross-analyzed to identify components existing across programs. The three training components identified in all five programs were 1) a program overview, 2) accommodations and/or modifications, and 3) strategies for teaching students with IDD. None of the training formats were universal across programs, but each of the training formats: 1) formal group training, 2) informal group training, 3) individualized training, and 4) recorded training were used by a minimum of two programs. None of the methods of evaluation were used by all five of programs; the anecdotal feedback method was used by the majority of programs.

CHAPTER 5

RESEARCH THEMES

Introduction

The purpose of this multiple case study was to gain a more in-depth understanding of the development, implementation, and evaluation processes of IPSE program training for instructors teaching IPSE students in "typical college courses with students who don't have disabilities" (Think College, 2021). This chapter outlines the overarching and specific themes derived from analysis of the case studies presented in Chapter 4. The case studies were analyzed, themes synthesized, and then interpreted within the context of the theoretical framework, Vygotsky's socio-cultural theory, and the individualized determinants of the conceptual framework, the WTA to professional development.

Vygotsky's Socio-Cultural Theory

As discussed in Chapter 1, Vygotsky's (1993) socio-cultural theory is the overarching theoretical framework which supports the goals and outcomes of IPSE programs. The fundamental assumption of socio-cultural theory suggests that learning is strongly impacted by society (Harry et al., 1999). According to Vygotsky (1978), learning is a social, cognitive process. In the inclusive postsecondary learning environment, society represents the association and interaction among students, staff, instructors, and the local community for educational purposes. Three central components

of the socio-cultural theory align with the desired goals and outcomes of an IPSE program: (a) full inclusion in cultural society, (b) alternative pathways of learning, and (c) the normalization of differences. The elements of Vygotsky's socio-cultural theory were interwoven throughout the key themes and processes of training development, implementation, and evaluation emerging from the data.

The Whole Teacher Approach

The conceptual framework, also discussed in Chapter 1, which served as the basis for this study included the components of Chen and Chang's (2006) WTA to professional development and UD principles. The WTA is a professional development framework which "targets multiple dimensions of teacher development" (p. 2). Components of UD form the framework for the knowledge and skills dimension of the WTA framework. Unbeknownst to the program training affiliates in this study, the three components of Chen & Chang's (2006) WTA to professional development, (a) attitudes, (b) knowledge and skills, and (c) practice, were evidenced in the key themes and were identified throughout the IPSE program training development, implementation, and evaluation practices. The key findings were analyzed further using the WTA characteristics of Chen & McCray's 2012 study.

Themes and Subthemes

Four key themes and multiple subthemes associated with the research questions were derived from the data. These themes and associated subthemes were as follows.

1. Attitudes
   a. Lack of prior experience
   b. Receptivity of instructors in training,

    c. Instructor confidence and comfortability

    d. Interaction and exposure, and small group sizes

2. Alternative pathways to learning

    a. Instruction in natural environments

    b. Normalizing differences

    c. Accessibility

    d. Engagement and representation

    e. Flexible teaching methods

    f. Course audit challenges

    g. Person-centered planning

    h. Academic support personnel

    i. Ongoing instructor support

3. Full inclusion in cultural society

    a. Meaningful employment

    b. Formalizing training

    c. Institution of higher education support

4. The effect of the Covid-19 pandemic

    a. Virtual platform

    b. Teaching and engagement strategies

The first three themes aligned closely to Vygotsky's socio-cultural theory, most likely because of the theory's correlation with the desired IPSE program outcomes.

Attitudes

Training affiliates from all five of the programs studied accounted for the attitudes of instructors based on their prior experiences with students with IDD and their degree of confidence and comfortability working with this demographic. The attitudes of the participants were an important consideration in all aspects of the instructor training processes. Attitude is one of the primary components of Chen and Chang's (2006) WTA approach to professional development. According to O'Connor et al. (2012), attitudes can differ based on the faculty rank, prior experience, type of disability, departmental affiliation, as well as the faculty members' knowledge of disability law. The training affiliates from the programs addressed participant attitudes using Chen and McCray's (2012) strategies; a small group training format and the learning by doing method.

Lack of Prior Experience

Instructors' lack of prior experience with students with IDD was one barrier to student success which was focused on during instructor training. Programs A, B, and C specifically acknowledged and addressed the lack of prior experiences of instructors by presenting a general overview of the characteristics of students with IDD. In response to the interview question "How is training developed?", Training Affiliate A1 recognized that prior experiences were an important factor to consider; she explained, "*part of the development was understanding that in most of these classes, the professors or instructors are not going to have a history of working with people with ID.*"

Training Affiliate E1 found that instructors can demonstrate stigmas and discrimination towards people with IDD; he noted, "*I think a lot of faculty feel that students with IDD don't belong in college.*" This statement aligns with the findings from

studies by Plotner and Marshall (2015) and Raynor et. al., (2016) in which stigmas and discrimination were identified as early as at matriculation; given the student support needs, students with IDD do not often meet the criteria to be considered a match for college.

Prior to training, Training Affiliate D1 implemented a pre-training strategy; she connected with instructors at their department and faculty meetings, and introduced herself and the program to assess attitudes, previous experiences, and needs of instructors. Meeting with instructors in their learning environment helped bridge the gap between the program and the instructors and provided Training Affiliate D1 an opportunity to ask instructors, "*What you feel like you need to know in order to effectively teach students with intellectual disabilities? Then gathering information about what my campus community needed.*" These processes are aligned with the findings in a study by Lightfoot et. al., (2018), which identified that advocacy work needs to be done for students with disabilities to lead to changing attitudes and dispelling of myths amongst faculty and their peers.

<div align="center">Receptivity of Instructors in Training</div>

Senses of motivation and receptivity to working with IPSE program students were identified in participants of four of the programs. receptivity was expressed by those with and without prior experiences working with individuals with IDD. As a result of previous positive association with the IPSE program, instructors from Programs A, C, and D expressed their willingness and motivation to continue to collaborate with the program. Training Affiliate A1 experienced a great deal of cooperation from an IHE colleague who has a daughter with an ID. Training Affiliate A1 explained further, "*I have called on*

some colleagues, say especially in the college of Human Sciences, one of the advisors there has a daughter with Down Syndrome, so she is able to speak on behalf, from a personal experience."

Previous positive experiences of instructors were documented in Program C and Program D's training. A slide from Program D's PowerPoint presented quotes from instructors who had hosted program students previously. The first quote said, *"Having a student with intellectual disabilities in class was a terrific growth opportunity. It provided the opportunity to review syllabus requirements, typical means of communication, assignments, and grading for inclusive language and for potential access concerns."* The second instructor quote said, *"I find that having students of different abilities, and from different backgrounds and experiences enriches the classroom environment. It creates a space that is more intentional in its design and more thoughtful in its delivery."*

Two participants in Program C's training had positive prior experience working with Program C students. One instructors in Program C was familiar with the program because her daughter worked there; she expressed a willingness and excitement to work with the students, stating,

> The only experience I have is that my daughter works for [Program C] and that's how I got to know the wonderful job that you do there. And I am absolutely thrilled that I will have some of your wonderful students in my class and I hope I can do a decent job with them.

Another Program C training participant had a positive experience with a student during the previous semester; she shared,

> *It was a really great experience, I think for the student, and the instructor teaching the course, and for myself. So we are looking forward to having more [Program C] students in our course, and I know we have another this semester.*

These findings align with May's findings (2012) that the training participants were open to students with ID being enrolled in inclusive classes.

Training Affiliate E1 found that often instructors were willing to implement accommodations or modifications for the students, he expressed, "*I'd say that 90% of the professors have been very accepting, and just saying, 'yep, that's what we'll do' and just move o*n." This aligns with several studies reporting that faculty members were willing to provide modifications for students with disabilities and demonstrated a positive attitude towards those students (Bigaj et al., 1999; Leyser et al., 1998; McKeon et al., 2013; Norton, 1997; Vaseck, 2005; Vogel et al., 2006; Vogel et al., 2008).

Although Program A staff experienced cooperation from the majority of the instructors teaching their students, Training Affiliates A1 and A2 considered the varying levels of acceptance instructors might have regarding teaching students with IDD. Training Affiliate A1 expressed the desire to meet instructors where they are to cultivate a positive experience. She expressed,

> *People go back and forth, because they're like, everybody should include our students, and I totally agree with that, but at the same time, we're not there yet. And so, we want to build success stories, ideal relationships, and partnerships. You don't want to force it on someone because they're not earning a degree. The University has accepted our students, but not everybody has this call to support every person, their initiatives, and all that. So I think everybody should be accepting of all, but that's just not realistic, it's just not the case and we don't want to push it on anyone or guilt anyone into it*.

Instructor Confidence and Comfortability

The attitudes of instructors in three of the programs were associated with instructor confidence and comfortability teaching students with IDD. Training Affiliate C1 found that some instructors had prior experience with students with disabilities through the disabilities resource center, but not with IPSE program students, which may

lead to what Griffin et al. (2012), found, that individuals who are not familiar with students with IDD might be uncomfortable interacting with them. Program C considered instructor comfortability in the training development phase; Training Affiliate C1 explained,

> *I want to make sure that the instructors are comfortable because individuals with ID and DD [developmental disability] are such a small percentage of the population when we say an individual with disabilities is in their class, I think a lot of the professors, from my opinion, just don't know what that really is.*

The majority of Program C's training participants will be hosting IPSE program students for the first time this semester. Training Affiliate C1 addressed confidence and comfortability by providing an opportunity for participants to introduce themselves at the beginning of training and to share any prior experiences they may have had with students with disabilities. This method allowed her to take inventory of the prior experiences of the participants and allow that knowledge to guide the training. Overall, the primary focus of Program C's instructor training was to build confidence and comfortability.

During her interview, Training Affiliate D1 explained that her training goals and objectives were geared toward

> *Getting faculty on board, getting faculty to feel as if they have the skills they need, that they are empowered, that they are equipped, that they do not feel as if they are overworked or overburdened, and getting them, like on your side.*

Program D focused on the confidence and comfortability of instructors in the establishment of training goals and the selection of training components. Training Affiliate C1 incorporated a description of the characteristics of students with IDD and background information on the IPSE organization.

Interaction and Exposure

Staff from four of the programs specified how they facilitate meetings with instructors and students prior to the beginning of the semester or within the first week. This practice aligned with a report by O'Connor, et al., (2012), which suggested that instructors be provided with an opportunity to meet their students before commencement of the course and receive briefing notes which could be used to engage students. These meetings were intended to increase instructors' interaction and exposure to IPSE program students and to provide an opportunity to develop person-centered plans. The increased interaction and exposure provided in these meetings can lead to instructor confidence and comfortability with this student demographic. Training Affiliate E1 found, "*as more students go into those classes, the easier it is."*

Although instructors may have varying beliefs towards the abilities of students with IDD, this study revealed that interaction and exposure affect instructors' attitudes in a positive manner, coinciding with findings by Gibbons et. al, (2015), which identified a link between experience working with students with IDD and a positive attitude about IPSE programs. Training Affiliates from Programs A, B, C, and E shared how they facilitated meetings between the instructors and the students. Program A students were held responsible to forward their accommodation needs and set up a meeting with their instructors. Training Affiliate A1 describes this process, stating,

> *They would then send their accommodations, but they're still responsible for requesting a meeting. The goal would be before the first day of class, but typically the students aren't here, the professors aren't here. If within the first week they all meet directly, with their professors, one-on-one. It's been through Zoom this past semester. They reviewed their accommodations, they reviewed their ILA's, their Individual Learning Agreement, and then the professors will communicate directly with the student at that point.*

Program B students met with the instructor if they were auditing a course to complete an audit agreement. Training Affiliate B1 explained the process saying:

If they audit the course, then we complete an audit agreement, one-on-one with the instructor and the student. Before the semester starts, I send an email to every faculty member that is going to have one of our students in their courses telling them if the student is going to take the class for credit or audit. If the student's going to audit, then in the next week be expecting the student to contact you to determine what the audit agreement says.

Program C also facilitates a meeting with the student and the instructor within the first week of the course. Training Affiliate C1 explained:

The first week of class, something that we tell all of the instructors is that they are going to meet in-person with the student and a member of our staff. Between the first week of class, at least, a member of our staff will try to get to every single class. It usually takes a week to do. So it's either the first or second class a staff member is going to be there or an intern.

Training Affiliate E1 personally goes with the Program E student the first day. He explained:

I tried to go the first day to this class and talk to the professor face-to-face, because I was new too, and make a connection that way. I like making that connection, but I also don't want to feel like I have to walk into the classroom with the students too. It's a fine line between holding their hands and also making sure that that's a comfortable environment for them. Some of my students are in wheelchairs and things like that, so I'll make sure the classroom is set. And they have . . . because I'll ask for tables and things and different furniture and stuff. So I'll walk in like that, I usually tell the student, I'm going to check the classroom before, so they know. So that's usually how the semester starts. Sorry, that's probably a little more information that you probably needed.

Training Affiliate E1 hopes that working with IPSE program students will stimulate a positive learning experience that adds an "element *of excitement and engagement that they [*instructors*] haven't had* before." Instructors studied by O'Connor et al., (2012) had similar positive experiences and highlighted the attention and interest the students with IDD displayed in class; another teaching staff member reported positive interactions between the students with IDD and the other students in their group.

O'Connor also found that CIs welcomed the challenge of restructuring their typical ways of instruction, and students with IDD asked unexpected questions.

<h3 style="text-align:center">Small Group Sizes</h3>

The five programs in this study offered training in several different formats: whole group, individualized, and recorded; nonetheless, the two whole-group training sessions observed were both small, with no more than ten attendees. Training Affiliate E1 preferred small group sizes to get feedback from instructors, allowing them to feel more comfortable. This finding aligns with another component of Chen and McCray's (2012) WTA training method related to participant attitudes which recommends working with small groups to monitor progress and provide feedback.

Between forty to fifty instructors host Program C students each year, but Training Affiliate C1 shared there was a large discrepancy between the number of instructors teaching Program C students, and those attending training. Thirty-eight participants were invited to Program C's training, but only nine attended the whole-group training. With smaller groups, trainers were able to move through the training concepts fluidly, discussing materials and answering questions.

<h3 style="text-align:center">Alternative Pathways to Learning</h3>

Alternative pathways to learning were evidenced in this study by provision of access for students with IDD in the traditional or natural postsecondary learning environment. The process was facilitated through normalization of differences and use of a variety of instructional practices, which were rooted in UDL principles. IPSE program instructor training focused on the second component of Chen and Chang's (2006) WTA approach, knowledge and skills, consisting of what should be taught based on who the

students are, new concepts of course content, and the selection of developmentally

appropriate content. According to Marbán Gallego et al. (2012), to master the task of

inclusivity, teachers need to be trained in competencies needed for the integration of

disabled students within the school system. As reported by O'Connor et al., (2012), IPSE

programs, are designed to offer:

> Instruction in natural environments, person-centered planning, cross-agency
> coordination, adoption of universal curriculum design, mentoring and coaching
> securing competitive employment, development of social pragmatics and
> communication skills, self-determination and advocacy, and program evaluation
> (p. 248).

Instruction in Natural Environments

The opportunity to take typical college courses for audit was available to students

in all five of the programs. "The overall goal for providing education services in

postsecondary settings is to give older students with disabilities age-appropriate settings

for their final public education and transition experiences" (Grigal et al., 2002, p. 68).

This age-appropriate setting was the IHE courses IPSE program students could take for

credit or for audit, an option available for students in four of the programs.

Audited courses allow students to receive instruction within the natural learning

environment of the IHE, and receive accommodations and/or modifications needed to

successfully meet the course objectives. As outlined in Chapter Four, each program

handles the course audit process within the IHE regulations. Course options for IPSE

program students also varied; Program B students had access to all first-year

undergraduate courses, whereas other programs collaborated with deans and departments

to request courses congruent with student interests and desired learning outcomes.

Training Affiliate B1 expressed, "*We really do believe that with the right supports, our*

students can succeed in any of those courses, whether they audit or take it for credit and

whatever it is they are seeking." Hart et al. (2010) suggested that audited courses provided students with IDD the rigor of a course while allowing for flexibility for accommodations.

Training Affiliate E1 believes that the inclusion of students with IDD can have a positive impact in the IHE environment; he explained,

> *Two things I would say is, the one is why they belong positive, and how it positively impacts the environment on campus and the classroom. Research has shown inclusion not only helps students with disabilities but, typical students as well, and helps the teachers.*

This aligned with findings by Hendrickson et al. (2013) who noted expansion of diversity within the institution allowed students with IDD and students without disabilities to experience meaningful learning opportunities.

<div align="center">Normalizing Differences</div>

The five programs examined here addressed barriers to academic access through implementation of UDL principles. Cook and Rao (2018) identified that the key premise of UDLs was that learner variability in the classroom should be the norm. UD is "a framework of instruction that aims to be inclusive of different learning preferences and learners, and helps to reduce barriers for students with disabilities" (Black et al., 2015, p. 1). The normalization of differences was identified within the universal challenges faced by Program D instructors working with IPSE program students that the principles would work with traditional students. During the training module, Training Affiliate D1 expressed, *"I'm quite pleased to see that the challenges expressed here by faculty are ones that are quite familiar for any college student."* In the interview, Training Affiliate D1 related that instructors will often ask her how to deal with issues with Program D students such as engagement or attendance; she often turns the question back to

instructors asking them how they would address this issue with any of their students. This response was intended to help instructors understand that the tools they use to address challenges with traditional students can be successful for students with IDD; this often takes instructors by surprise.

Program A determined how implementation of UDL principles in their training programs can increase access for a diverse group of students, both those with and without disabilities in an inclusive learning setting. Training Affiliate A1 explained,

> So as far as developing the training, we looked at evidence-based practices for how students with intellectual development of disabilities learn. Universal Design . . . in what not only benefits our students but also traditional students in the class.

During Program C instructor training, Training Affiliate C1 presented a video on UDL, in which he identified the components of UDL within the HEOA specifically. Training Affiliate C1 chose to emphasize the law, expressing concern that,

> I've always found it interesting that a lot of individuals that come to our training very rarely have an idea of what UDL is. It's in the Higher Education Opportunity Act, it's in the law, but it's not like you can really police it or force it. But instructors don't even know about it.

This concern was linked to findings by Langley-Turnbaugh et al. (2013), that faculty who were unaware of UDL principles were unfamiliar also with the challenges students with disabilities face.

Accessibility

Accessibility in UD was inclusive of both physical and mental accessibility of resources. Specifically, Training Affiliate E1 ensured that the physical UD component was being met for Program E students by going to the classroom on the first day of the course to confirm that the accessibility requests had been met. The request may include seating options such as sitting in the front or sitting at a table. Although Training Affiliate

E1 might not continue to go to classes, as a new IHE staff member the classroom visits afforded him a means to acquaint himself and build rapport with instructors. Training Affiliate E1's process aligns with the seventh component of UD, "size and space for approach and use related to the creation of accessible products and spaces." (Center for Universal Design, n.d.)

Engagement and Representation

The primary three UDL components presented in instructor training were (a) engagement, (b) representation, and (c) action and expression. Program C instructors had an opportunity to practice UDL principles during the training with a UDL interactive worksheet. The UDL principles of engagement and representation were presented to instructors as flexible instruction such as group work, prompting, and a combination of audio, visual, and text. This coincided with findings by Lightfoot, et al., (2018) who found that UDL strategies and principles can be applied to online learning, lectures, course materials, and standards. Program D outlined UDL principles: (a) Effective networks (the why of learning), (b) recognition (the what of learning), and (c) strategic networks (the how of learning). Program D identified students communications that their favorite classes included those which provided them with opportunities to engage with the learning material in interesting ways. Program C instructors participated in interactive learning in which they were able to practice the UDL concepts with implementation of their course objectives.

Flexible Teaching Methods

Varied instructional methods were discussed in instructor training; the training affiliates in the two sessions observed incorporated these strategies. Training participants

in Program A and C's whole-group training participated in multiple modes of learning such as listening, discussing, observing, analyzing, and reflecting. This instructional format provided an opportunity for instructors to experience varied forms of instruction which could be used to meet the diverse needs of students in their courses. Program A outlined instructional strategies for engagement and active learning. Program B presented instructors with a table of examples and definitions of evidence-based practices aligned with UDL principles. The use of varied instructional methods was in accordance with those of O'Connor et al. (2012) who encouraged the use of more flexible teaching methods to meet the needs of a wider range of diverse learners. The third component of Chen and Chang's WTA approach was *Practice,* which consisted of trainers introducing a variety of instructional methods with the goals of engaging students, providing immediate feedback, structuring implementation and application of concepts in a classroom setting, and providing ongoing classroom support. According to Seldin (1995), faculty "must learn to gear instruction to a new classroom dynamic" (p. 4).

The training affiliates emphasized how the use of these strategies benefits the diverse group of learners who are becoming more prevalent in postsecondary education. These varied instructional methods coincide with the knowledge and skills component of Chen and McCray's (2012) WTA approach which addressed the importance of trainers focusing on what should be taught based on who the students are and their engagement needs.

> In the realm of education, this encourages institutions to adopt instructional approaches that will benefit the greatest number of students possible. For example, the provision of lecture notes in alternate formats, such as audio recordings, can serve as a strategy for all students to review lecture content at their own pace and in a format consistent with individual learning needs (Lightfoot et al., 2018, p. 60).

Course Audit Challenges

This study revealed that instructors in several programs were unfamiliar with the course audit process, as it is not used commonly. During Program C's training, one of the few questions asked was related to the specific classroom guidelines used for audited courses. Program D found that a major challenge instructors face were logistical concerns related to audited courses including the course roster, expectations for students, assignments, and grading. The logistics of audited classes were explained on a PowerPoint slide during Program D's training.

Training Affiliate A2 acknowledged the challenges instructors face regarding audited courses when she said, "*I think the hardest thing for our professors to get in their heads is if a student is auditing a class, then we can modify the curriculum.*" This statement aligns with the findings of Baker et al. (2012), who determined that often faculty members lack training to assist them in the support of students with IDD as well as the additional information needed to host TPSID students in audited classes.

Another challenge instructors face is the difference between accommodations and modifications. A primary component addressed in Program D's training was the principles and differences for and between accommodation and modification. Training Affiliate D1 expressed the importance, "*for faculty to be able to differentiate, I guess, from students who are receiving accommodations, who are taking the course for credit, and students who are receiving modifications.* According to Training Affiliate D1, training needed to clearly explain that, "*there is this other layer of support that can be provided because they're auditing and are in this non-degree certificate program.*" That is, students auditing classes may receive modifications. Training Affiliate A1 describes this as, "*a little step further than those accommodations.*" According to Training Affiliate

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A1 *"We look at how to modify the class in the training, versus how to accommodate the class. And then compared what typical university class activities look like, to what those would look like with accommodations."* During training, Training Affiliate A2 expanded on the differences between accommodations and modifications, provided a comparative chart, and gave examples which could be used during instruction and for assignments. Training Affiliate A2 explains,

> *We do go over what is an accommodation, what is the modification, different teaching strategies, and that sort of thing. But I think the hardest thing for our professors is if a student is auditing a class, then we can modify the curriculum.*

Person-Centered Planning

All five of the programs in this study were CTPs and therefore must incorporate an element of person-centered planning. Zafft et al. (2004) emphasized that students with IDD who are transitioning into postsecondary-level courses require accommodations regularly. The programs supported inclusion of IPSE program students in typical college courses through use of a person-centered planning tool which incorporated one of Chen and Chang's (2006) professional development components, the selection of developmentally appropriate content. Three programs used a physical form to record the course requirements and outcomes which the IPSE program students would complete in an audited course.

Program B staff and students met with instructors to assist in determining appropriate accommodations and modifications, which were recorded then on the audit agreement. Program B's audit agreement resource included general information related to the instructor, course, and the student, outlining whether a student would be completing all, some, or none of the coursework, quizzes, exams, and projects. The instructor was

asked to specify when selecting some on any of the categories. The form also included

space for other details related to auditing the course.

Program A used the accommodations developed with the student and the office

of accessibility to develop modifications, thus meeting CTP requirements of person-

centered planning in the development of an Individualized Learning Agreement (ILA).

Program A partners with the Office of Accessibility to establish and review the student's

accommodations. According to Training Affiliate A1,

> *They would meet and go over their accommodations with the office [of] accessibility. We do that every Fall during the orientation, everybody has meetings with the office of accessibility. If you're a new student or a returning student, the meetings look slightly different.*

The purpose of these partnerships was to support students by helping them

determine their course goals and objectives. The person-centered planning process is

explained during Program A instructor training. Training Affiliate A1 elaborated on the

training process, saying,

> *We review our individualized learning agreement and we include a scenario for that. And then, what a person-centered plan [looks like]. So really, what it looks like to be a part of having that student in your classroom. So to identify where they're functioning, what you can expect from them. We go over their strengths and weaknesses. We talk about active learning strategies.*

Training Affiliate E1 made himself available to provide course modifications for

any student auditing a course. He notes, "*typically I'll be modifying the big assignments*

like tests and projects." Although he is available to make or assist with modifications,

Training Affiliate E1 explains that "*sometimes they [instructors] jump right in and start*

modifying things because the students are auditing the classes. And other times they'll

want me to do the modifications, which is fine too.

Academic Support Personnel

The programs in this study support academic access for IPSE program students through the use of academic support personnel, which aligned with the findings of O'Connor, et. al. (2012), in which some IPSE program students attending typical courses were accompanied by student mentors while others were unaccompanied. Programs A, B, C, and D provided information about the support personnel available to students in the form of peer mentors or academic support staff to help instructors understand the role of support personnel assisting the program student. Instructors had an opportunity to know who the support personnel would be and how to grant them access to the information needed to assist the IPSE program student.

Training Affiliate C1 suggested using natural peer mentors, who are students whom someone might gravitate to naturally or who might appear willing to help a student engage in learning. This coincides with other common postsecondary strategies which can benefit students with IDD: asking classmates and friends for help (Stage & Milne, 1996; Velde et al., 2005).

Ongoing Instructor Support

Training Affiliates from all five programs offered continued and ongoing support throughout the year by providing instructors with their contact information and indicating to instructors they were available to meet with them and support their needs at any time throughout the semester. Training affiliates from each of the programs check in with instructors throughout the semester to verify the progress of IPSE program students and to attend to the instructor's needs or concerns. Programs A, C, and D recorded their training and made it available to instructors to review at any time they wished.

Full Inclusion in a Cultural Society

Each program training affiliate expressed a passion for inclusion of their students in the higher education community in their interview or during the training. When asked about the goals and objectives of instructor training, Program B emphasized that one of their goals was for their students to be considered a part of the IHE community prior to being identified as IPSE program students; a primary outcome of IPSE programs and Vygotsky's (1993) socio-cultural theory is full inclusion in cultural society. Training Affiliate B1 said, "*We're really big on the idea that our students are [*Name of IHE*] students first before they are [*Program B*] students. So, we really try to embed our students in the community of the University.*" Program B's main goal of training is to promote community by including students in the full experience of the IHE. Training Affiliate B1 expressed:

> *Our biggest goal is for our students to really feel like community members. To really practice intentional inclusive communities, learning environments. So I think our biggest goal is to . . . as much as we are teaching our students how to, you know, incorporate into society, we are also teaching our bigger community how to receive these humans that they are going to see in their lives. So I think that's our biggest goal is to have a larger impact on the campus community as a whole.*

Training Affiliate E1 expressed a similar passion for inclusion of students with disabilities, noting the importance of the social aspect of postsecondary education which people with disabilities don't have the chance to experience often. Training Affiliate E1 says,

> *With COVID, it's becoming even more apparent that college is not really just academics, they [students] learn so much of the social world in college. And students with disabilities, especially [those] with low incidences and more severe disabilities miss out on that part of their life in college. Whether it's from community college or four years in the dorms, you learn that social piece of working with groups, working with faculty, working on campus as a job, paying for your own food. . . . Those kinds of like, things that they miss out on. So I really*

try to sell that to . . . I don't like the word sell . . . But, sell [laughs] that to the
faculty that these students are not gonna get a doctorate, they're not gonna get
their Masters, or even maybe a college degree at all, but they're learning just so
much interacting with their peers and faculty. From a social standpoint, it is
worth their while. So I guess what I'm training that's one of the two things I try
and point out.

His views were in alignment with those of O'Conner, et al., (2012) who found

that with the development of more widespread inclusion programs, students with IDD

had the opportunity to continue to cultivate social, academic, and vocational learning in a

setting that valued academics.

Meaningful Employment

The five programs in this study each had CTP status which required them to reach

the outcome of preparing students for meaningful employment upon program completion.

Three programs addressed vocational outcomes specifically for program completers in

their training. In Program C's introduction to the IPSE program, Training Affiliate C1

presented the CTP employment goal of employment and aligned his presentation with

outcomes from Hart (2006), who discovered that students with IDD who participate in

postsecondary education experienced better outcomes in employment levels, social

networks, and increased wages. Program B's training included a description of the

vocational experiences the students would have during their attendance. These programs

supported the findings of Raynor, et al., (2016) who stated that IHEs need to enter into a

new era of student preparation so that students with IDD obtain integrated, competitive

employment.

One of the key requirements of IPSE programs is the receipt of a certificate of

program completion. All IPSE program completers earn a certificate of completion.

Training Affiliate A1 explained, "*So the classes they take that are [Program A IHE]*

courses should relate to their post-school outcome career goals or help them learn

transferable job skills that could benefit them in the employment setting." Inclusive

postsecondary education (IPSE) programs offered these individuals increased opportunity

(Grigal et al., 2012) and were demonstrated to enhance rates of independent living, social

networks, self-esteem, employment, self-determination, and purposeful community

participation. (Moore & Schelling, 2015; Thoma et al., 2011).

Formalizing Training

In the discussion related to the instructor training evaluation, several training

affiliates expressed their desire to formalize the instructor training and evaluation to

further legitimize the program and its students within the IHE learning community. This

strategy addressed the training-related challenges programs face in instructor attendance.

Programs lack the authority to make instructors attend the training. Program A provided

them with a certificate of attendance, but most programs were trying to formalize training

and increase incentives to benefit instructors in their professional careers at the IHE.

Many studies (e.g. Hahn & Lester, 2010; Jiandani et al., 2015) identified that faculty

development and continued education barriers include "lack of pedagogical training, lack

of time, lack of incentives and tensions with professional identity" (Brownell & Tanner,

2012, p. 339).

IHE Support

Responsibility for student success relies heavily on the cooperative efforts and

support of the IHE. To move these programs forward, the programs were striving to work

with instructors using a bottoms-up approach; but additional support from the IHE as a

whole was needed for the programs to move forward. To continue to cultivate an

inclusive culture, Program E had plans to integrate an inclusive training session within new hire orientation at the IHE. O'Connor et al., (2013) discovered that often faculty members were in support of the program as a means of supporting the collegial initiatives of the institution.

The Effect of the COVID-19 Pandemic

Virtual Platform

The Covid-19 pandemic led to unforeseen restrictions which impacted the Fall 2020 and Spring 2021 instructor training in all five programs studied. The greatest effect on the training was the transition from an in-person to a virtual platform. Training Affiliate D1 considered creating and implementing in-person training but said, "*in the midst of Covid especially, I was encouraged not to do that and to just create trainings that would not be burdensome for faculty, but something that was accessible and something that they'd actually watch.*" Training Affiliate D1 developed a voice-over PowerPoint presentation with transcription for Program D's instructor training.

Program A's instructor training was conducted on the online platform Zoom and was abbreviated from a ninety-minute session to a one-hour session. Training Affiliate A2 explained, "*I did two Zoom trainings in August.*" Training Affiliate A2 wanted to ensure that the instructor training was accessible to everyone; she explained, "*I recorded one, and then there were a couple professors that were not able to attend, so I sent it to them. And then I do stay in touch with them.*"

Program C's training was delivered on the Zoom platform also. According to Training Affiliate C1, this presented some difficulty; he stated, "*We still do some stuff using the tools on Zoom, but it was a little bit harder.*" Another adaptation made for

these two training sessions was the training presentation personnel. Training Affiliate C1 expressed that typically members of his staff participate in the training. He stated, *"So I have a career coordinator and an academic coordinator with a lot of experience working with our population and I want them to present as well during that training."* But in the light of COVID restrictions, Training Affiliate C1 took on full responsibility for the training and expressed:

> *It depends on the semester, but I try and include staff members as well. This last semester, it was just me through Zoom, online. But generally, I like to have them involved in that. And they take a portion of that training.*

> Program E's instructor training was delivered virtually also and the format was

more informal than it generally was. Training Affiliate E1 explained:

> *We still try and meet on WebEx or Zoom. So I've been trying to do that, jumping into the department meetings on Webex. Jump into those department meetings and just kind of give an overview of the topic or something and then some of the questions that teachers might have about my students or the students that are in their class. So that's how it's been going right now.*

Teaching and Engagement Strategies

Another impact of the COVID-19 pandemic was the implementation of teaching strategies related to online and hybrid learning. Some additional adaptations addressed in Program A's training related to the inclusion of components for instructors using an online learning platform and hybrid learning environment. Training Affiliate A1 described these changes, explaining,

> *It [the semester] was virtual this past Fall, obviously due to COVID. Some things that evolved over this past semester; Zoom and how the class format will be delivered. Everything was face-to-face and now we have hybrid, and Hyflex, and people coming on some days and not coming on the others. And so what was new.*

CHAPTER 6

SUMMARY, DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

Introduction

The principal purpose of this study was to conduct a multiple case study of TPSID and/or CTP inclusive postsecondary programs at IHEs across the United States to examine the training provided to instructors who taught students with IDD enrolled in typical college courses. The roles of training affiliates in the development, implementation, and evaluation of the training were described. Chapter Six presents an overview of the study, the research design, and the sampling methods used to determine the resulting four key themes. This chapter suggests recommendations for practice and future research, the researcher's reflections, and the conclusions of the study.

Statement of the Problem

Students with IDD are limited in adaptive behavior and intellectual functioning including daily living and social skills, learning, self-management, and application of information (American Association of Intellectual and Developmental Disabilities, n.d.) and are less likely to be gainfully employed, live independently, or attend a postsecondary program after high school (Wagner et al., 2005). However, IPSE programs offer these individuals increased opportunities (Grigal et al., 2012) and have been demonstrated to enhance rates of independent living, social networks, self-esteem, employment, self-determination, and purposeful community participation. (Moore &

Schelling, 2015; Thoma et al., 2011). Limited research exists regarding the professional development program processes and components used to train instructors as they seek to equip students with greater support in and access to a postsecondary educational experience.

Students with IDD were provided access to higher education at 298 IPSE programs across the United States (ThinkCollege.net, 2020). With implementation of the HEOA of 2008, participants in eligible programs qualify to receive federal funding. IPSE programs qualify as federally recognized TPSIDs.

With receipt of government funding, these programs have a responsibility to provide instructor training in inclusive teaching strategies. IPSE CTPs and TPSIDs must meet specific requirements to receive and maintain federal funding and accreditation. Although IPSE programs vary in requirements, activities, enrollment, and program characteristics (Grigal et al., 2012; Plotner & Marshall, 2015), all students with IDD are expected to participate in typical college courses with students who don't have disabilities (ThinkCollege.net, 2021). Typical college courses are those available to all students enrolled in the IHE hosting the IPSE program; students with IDD must enroll in a minimum of 50% of their coursework in such courses. The TC Standards for Inclusive Higher Education (2020b) include several supporting IPSE instructor training:

> Standard 2: Coordination and Collaboration: The postsecondary education program should establish and maintain effective program coordination and internal and external collaboration.

> Standard 6: Academic Access: The postsecondary education program supports inclusive academic access for students. (pp. 5 & 18)

Instructors responsible for teaching inclusive college courses must be equipped to meet the needs of these learners. Often, instructors experience a lack of knowledge and

ability to provide accommodations without sacrificing the academic integrity and rigor of the courses and program (Beilke, 1999; Rao 2004; Sniatecki et al., 2015). A review of the literature demonstrated a lack of information about how instructors were being trained in inclusive practices and how to work in tandem with support staff toward successful completion of the program by students with IDD.

IPSE programs are expected to provide instructors with the training and resources including, but not limited to, definitions and characteristics of IDD, types of accommodations and modifications, UDL, and other instructional practices which support the successful completion of typical college courses by students with IDD. According to HEOA article 777(b) federally funded TPSIDs and CTPs are required to develop and provide technology-based tutorials for instructors. McGuire and Scott (2006) found that within the postsecondary setting, "there is no unified approach to faculty preparation or ongoing professional development that includes preparation for teaching students with diverse learning needs" (p. 126).

Although several studies examined the attitudes of instructors towards students with IDD and learning disabilities, there was a lack of research describing the specific training provided for instructors who were teaching IPSE students in typical college courses. Considering the federal funding received by TPSID programs such as IPSE and the federal financial aid available for CTP program students, and the goal of establishing success for students with IDD, a detailed inventory and analysis of instructor training practices and resources would provide information on how instructors can meet the needs of these students best. This study advanced awareness of the preparation practices provided to instructors which facilitate IPSE students' successful program completion.

Summary of the Literature Review

Instructor Preparation

Postsecondary education has become a reality for many students with IDD;

school personnel need to be equipped to facilitate this option with students and parents

(Hart et al., 2010). According to Carrascal and Rodriguez (2017), teacher training is

necessary to meet the needs of students with IDD transitioning into adulthood. To master

the task of inclusivity, teachers need to be trained in the competencies needed for

integration of disabled students into the school system (Marbán Gallego et al., 2012).

> A proper teacher training will suit his perception of real education faced to
> establish a model of teaching competencies which suit knowledge, the application
> of methodologies and solving problems while paying attention to meet the
> demand of students in the process of transitional period to an active adulthood
> (Carrascal & Rodríguez, 2017, p. 1864).

Other common strategies which benefit postsecondary students with IDD include

use of a planner or calendar for organization (Ginsberg, 2008; Hinckley & Alden, 2005;

Perry & Franklin, 2006), list-making (Denhart, 2008; Ginsberg, 2008; Hollins & Foley,

2013; Perry & Franklin, 2006; Stage & Milne, 1996), opportunities to study in a quiet,

distraction-free environment (Ginsberg, 2008; Koch, 2006; Stage & Milne, 1996), use of

earplugs to concentrate (Perry & Franklin, 2006), use of a highlighter to document

important texts (Denhart, 2008; Hollins & Foley, 2013; Stage & Milne, 1996), review of

class or reading material (Stage & Milne, 1996), preferential seating at the front of the

classroom (Velde et al., 2005), asking classmates and friends for help (Stage & Milne,

1996; Velde et al., 2005), and use of practice tests to study (Greenbaum et al., 1995).

When studying instructor support for students taking audited classes in the TIC

initiative, O'Connor et al. (2012) administered semi-structured interviews to instructors

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teaching students with IDD in undergraduate courses. The aim of the TIC was to "break down barriers to learning by providing a range of teaching and assessment methods, allowing all students to work to their strengths" (Trinity College Dublin, 2011, para. 2).

> Researchers identified the following themes in instructor motivation to host audit students: desire for social justice, reinforcement by university culture, and previous connections with family or others with disabilities. Beyond these motivating factors, the audit experience represented an opportunity to improve skills and gain training in accommodating students with IDD (O'Connor et al., 2012, p. 248).

The O'Connor et al. (2012) study focused on instructors' motivations to have students with IDD audit their courses, sought to determine how this would impact class arrangement, preparation, and delivery of lectures, and investigated instructor willingness to change approaches to teaching.

Very few studies reviewed instructor training methodology and practices. Carrascal and Rodriguez (2017) discovered that 91.3% of teachers viewed the practice of collaborative reflection as helpful to improve training programs by promoting inquiry and communication skills. They found that 79.2% of teachers believed training led to joint inquiry and enhanced application of teaching and learning strategies that were helpful when working with diverse students. Exchange and discussion of teaching experiences improved development and training, increasing collaboration.

Findings from the O'Connor et al. (2012) study showed that instructor motivation was driven in part by an aspiration to improve instruction methods to teach a diverse group of students. With assistance from the TPSID staff, CIs made accommodations, most of which were suggested by the university's disabilities services. Accommodations

included alterations or decreases in assignments to meet the developmental level of the students with IDD.

Certification programs have been developed and restructured because of increased awareness resulting from relationships between staff and students with disabilities, including students with IDD (Raynor, et al., 2016). A lecturer in the O'Connor et al. (2012) study emphasized the benefits of having awareness and background knowledge of the disabilities and needs of the students with IDD who were auditing the class, facilitating provision of engagement opportunities for all students. O'Connor et al., suggested CIs should meet their students before the commencement of the course and be provided with briefing notes for mentor training in student engagement.

Faculty Development in Postsecondary Education

Faculty development was defined by Mckee and Tew (2013) as "as an intentional set of educational activities designed to equip faculty to grow in their professionalism with the result of being partners in advancing all segments of the institution" (p. 13). When designed and implemented properly, faculty development can transport higher education into new competencies. Guskey (2000, 2002) outlined five essential levels of evidence to examine when evaluating the effectiveness of professional development, "(a) participants' reactions to the activities, (b) participants' learning of new knowledge and skills, (c) organizational support and change, (d) participants' use of new knowledge and skills, and (e) student learning outcomes" (p. 13). "For decades, schools have implemented professional learning without knowing exactly what they hoped to accomplish" (Guskey, 2014, p. 12). To avoid this problem in professional development

planning, Guskey (2001) stated that one must begin by planning "backward," by first

considering the student learning outcomes. Covey (1989) stressed that one must "begin

with the end in mind" (p. 14). Goals must be identified and clarified before considering

the appropriateness of the professional learning activity (Guskey, 2014).

Those tasked with planning "must decide what specific knowledge and skills

educators need in order to implement the prescribed practices and policies well" (Guskey,

2014, p. 15). To determine the needed knowledge and skills, the planner must consider

the what and the why of the learning. Participants must acquire a depth of knowledge to

be able to put the policy into the practice as well as have a sound rationale for change.

Lastly, the planner must consider the set of experiences which will best allow the

participants to acquire the knowledge and skills needed (Guskey, 2002, 2014).

The primary responsibility of faculty members is to meet the needs of the

students. "Faculty as teachers and faculty as purveyors of intellectual vibrancy remain

integral to higher learning" (Pawlyshyn & Hitch, 2016, p. 41). With rapidly increasing

societal shifts in higher education, Mckee and Tew (2013) emphasized the essential role

faculty members play in expanding educational enterprise; faculty development should be

considered a necessity for them to be fully engaged and prepared. Faculty must

participate in the faculty development process. Bouwma-Gearhart (2012) related that

faculty members were able to identify the professional development they needed;

accordingly, "institutions, administration, and policy makers have power and

responsibility to provide the encouragement and resources for faculty to create their own

realities" (p. 185). Hott and Tietjen-Smith (2018) observed that faculty members

identified beneficial forms of professional development such as face-to-face activities, webinars, and readings. Assistant professors indicated the need for professional development on "tenure and promotion expectations, support for effectively working with challenging students, and research mentorship" (p. 7). Respondents expressed a need for strategies to support students at varying levels of learning.

Although professional development was a well-tried way to provide information to faculty members, several barriers may impede development, delivery, and use of the material presented. Some studies (Hahn & Lester, 2010; Jiandani et al., 2015) identified barriers to faculty development and continued education including "lack of pedagogical training, lack of time, lack of incentives, and tensions with professional identity" (Brownell & Tanner, 2012, p. 339). Regardless of the content, structure, or activity, for professional development to be effective, it must be well planned (Guskey, 2014). Groups who participated in the study by Guskey agreed that often, regardless of the content or structure of professional development, direction, cohesiveness, or purpose were lacking. Those who plan professional learning opportunities may have focused on the process, rather than on the results.

Because of the barriers impeding successful faculty development, evaluation of effectiveness is vital; often, educators have not given much attention to this. Guskey (2002) discovered that many educators view evaluation as expensive, time-consuming, and shifting focus from the planning and implementation aspects of professional development. Educators often feel incapable of performing rigorous evaluations so it is left up to the experts or neglected altogether. Guskey (2002) related that educators are

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more prone to evaluate event-driven professional development, but neglect to evaluate less formal, on-going professional development activities such as action research, peer coaching, and collaborative planning.

Successful delivery and implementation of professional development can be measured only by examining goal achievement. Evaluation is the key instrument for the collection and analysis of evidence. Evaluation, simply stated, is "the systematic investigation of merit or worth" (Joint Committee on Standards for Educational Evaluation, 1994, p. 3). Through "systematic information gathering and analysis as a central component of all professional development activities, we can enhance the success of professional development efforts everywhere" (Guskey, 2002, p. 51).

Faculty Development in Universal Design

Often teachers in the K-12 setting are trained specifically on how to meet the needs of diverse learners, whereas postsecondary faculty members are content specialists rather than pedagogy experts (McGuire & Scott, 2002). McGuire and Scott proposed that the implementation of changes incited by the inclusive culture and the thoughtful approaches of faculty members needs to be different in distinct ways from how implementation appears in the secondary and elementary education context. Implementation of UDL/UDI may require a systems approach; Edyburn (2010) suggests using a model and allowing it to be implemented in phases.

Successful implementation of UDL/UDI should begin by reviewing whether the needs of the students are being met (Black et al., 2015). Student improvement should be evaluated. According to Guskey (2014), teachers may be reluctant to implement a new

practice without seeing evidence of support of positive outcomes. There must be a

process in place to allow teachers to see whether or not a practice is working.

Black, et al., (2015) said that this need

> suggests the importance of raising awareness and improving training and
> education in IHEs targeted at increasing familiarity in meeting the needs of
> students with disabilities through UDL/UDI. One approach to improve practice in
> this area, in addition to education and training, is establishing mentorship
> programs to build awareness and increase familiarity for faculty in relation to
> working with students with disabilities (p. 18).

Purpose of the Study

The principal purpose of this study was to conduct a multiple case study of TPSID

and/or CTP inclusive postsecondary programs at IHE across the United States to examine

training provided to instructors teaching students with IDD enrolled in typical college

courses. The focus was the development, implementation, and evaluation of training

provided to instructors teaching IPSE program students in typical college courses.

Guiding Research Questions

Four research questions guided this study and shaped the process for interviews,

training observations, and document analysis.

1. How is the training for instructors teaching IPSE program students in typical

college courses developed?

2. What are the components of the training for instructors teaching IPSE program

students in typical college courses?

3. How is the training for instructors teaching IPSE program students in typical

college courses implemented?

4. How is the training for instructors teaching IPSE program students in typical

college courses evaluated?

Research Method

A qualitative, multiple case study design was used. Five IPSE programs across the United States comprised the sample. Two types of sampling were used in this study: convenience sampling and non-probability or purposeful sampling. Convenience sampling was used to select the five IPSE programs based on their willingness to participate and to provide the needed documents for analysis. Purposeful sampling was used to select the interview participants based on their ability to provide the most insight and understanding of the instructor training processes.

Interviews of the training affiliates, training observations, and document analysis were conducted within the five programs to examine the four research questions about the training development, components, implementation, and evaluation processes for instructors teaching IPSE program students in typical college courses.

Themes and Subthemes

Four key themes and several subthemes were identified based on the research questions and the theoretical and conceptual framework. The themes and their associated subthemes follows:
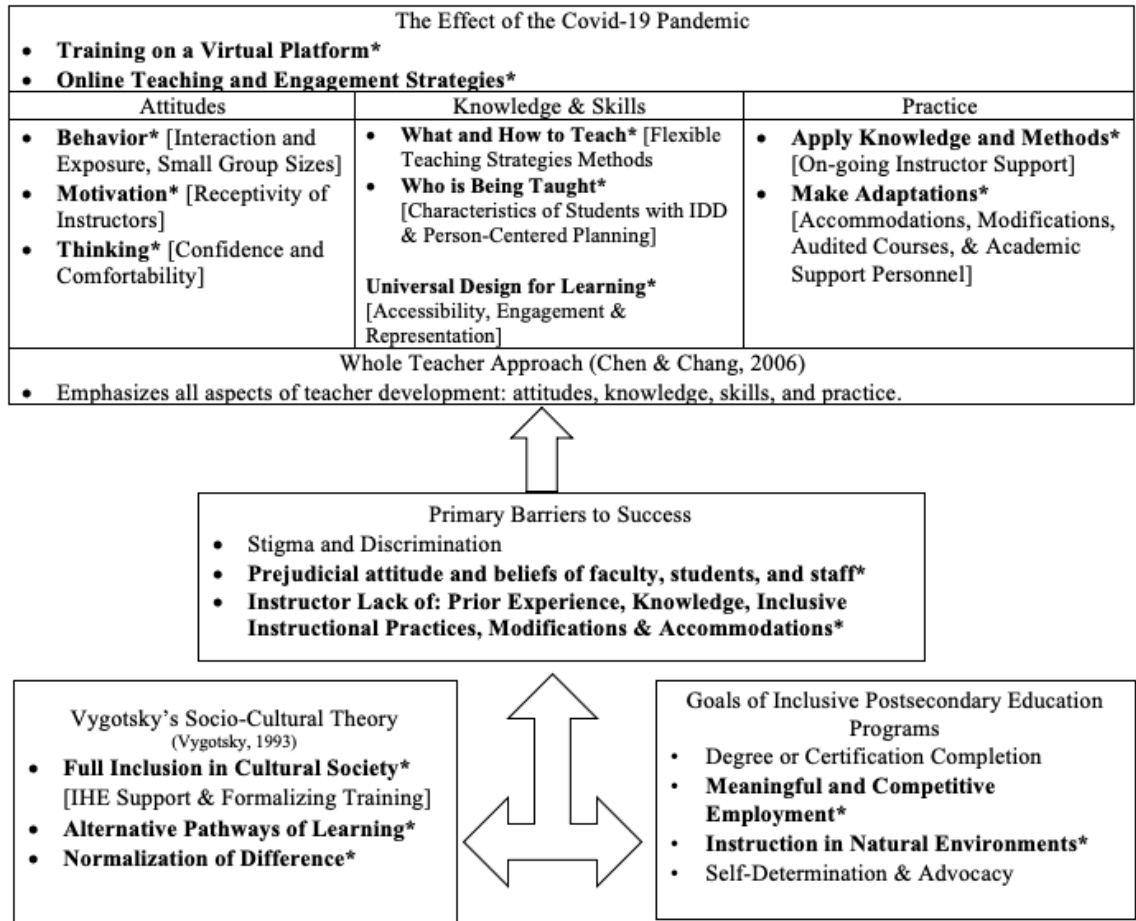
1. Attitudes
    a. Lack of prior experience
    b. Receptivity of instructors in training,
    c. Instructor confidence and comfortability
    d. Interaction and exposure, and small group sizes
2. Alternative pathways to learning
    a. Instruction in natural environments

    b. Normalizing differences

    c. Accessibility

    d. Engagement and representation

    e. Flexible teaching methods

    f. Course audit challenges

    g. Person-centered planning

    h. Academic support personnel

    i. Ongoing instructor support

3. Full inclusion in cultural society

    a. Meaningful employment

    b. Formalizing training

    c. Institution of higher education support

4. The effect of the Covid-19 pandemic

    a. Virtual platform

    b. Teaching and engagement strategies

Figure 2 demonstrates how these themes relate to the theoretical and conceptual framework of the study.

Figure 2

Findings Related to the Theoretical and Conceptual Framework

The Effect of the Covid-19 Pandemic		
• **Training on a Virtual Platform*** • **Online Teaching and Engagement Strategies***		
Attitudes	Knowledge & Skills	Practice
• **Behavior*** [Interaction and Exposure, Small Group Sizes] • **Motivation*** [Receptivity of Instructors] • **Thinking*** [Confidence and Comfortability]	• **What and How to Teach*** [Flexible Teaching Strategies Methods • **Who is Being Taught*** [Characteristics of Students with IDD & Person-Centered Planning] **Universal Design for Learning*** [Accessibility, Engagement & Representation]	• **Apply Knowledge and Methods*** [On-going Instructor Support] • **Make Adaptations*** [Accommodations, Modifications, Audited Courses, & Academic Support Personnel]
Whole Teacher Approach (Chen & Chang, 2006)		
• Emphasizes all aspects of teacher development: attitudes, knowledge, skills, and practice.		

Primary Barriers to Success
- Stigma and Discrimination
- **Prejudicial attitude and beliefs of faculty, students, and staff***
- **Instructor Lack of: Prior Experience, Knowledge, Inclusive Instructional Practices, Modifications & Accommodations***

Vygotsky's Socio-Cultural Theory
(Vygotsky, 1993)
- **Full Inclusion in Cultural Society*** [IHE Support & Formalizing Training]
- **Alternative Pathways of Learning***
- **Normalization of Difference***

Goals of Inclusive Postsecondary Education Programs
- Degree or Certification Completion
- **Meaningful and Competitive Employment***
- **Instruction in Natural Environments***
- Self-Determination & Advocacy

*Indicates Findings from the Study

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Recommendations

Implications for Practice

The following four recommendations were derived from the key themes identified

in this research and take into consideration the constraints of the IHE and disability law.

The recommendations were (a) create a method for evaluating the effectiveness of

program collaboration, (b) develop an instructor training resources hub, (c) develop a best

practices instructor training model, (d) formalize training through the IHE professional

development database, and (e) provide inclusive training in new hire orientation.

Develop an Instructor Training Resource hub

Training affiliates in this study developed their training using resources gathered

from several locations including online resources, prior experience, professional

development sessions, and other program training documents. To increase access to

training material and streamline the training development process, instructor training

resources should be made available on the IPSE Think College database. PowerPoint

presentations, videos, and other resources used in the various programs could be

categorized and made available to increase accessibility.

Formalize Instructor Training Evaluation

One of the challenges some of the programs faced was the inability to determine

the effectiveness of the instructor training. Although the majority of the programs in this

study evaluated their training formally or informally, only one program offered formal

evaluation of the instructor training. The Think College Standards for Inclusive Higher

Education require that instructor training be evaluated formally to determine

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effectiveness of instructor training in conjunction with program coordination and internal and external collaboration.

Develop a Best Practices Instructor Training Model

These findings can assist with the development of best practices in instructor training in IPSE programs, thus improving their ability to meet the needs of a diverse learning population and to promote inclusive teaching and learning strategies in higher education. According to McGuire & Scott (2006) and what still rings true with the postsecondary setting, "there is no unified approach to faculty preparation or ongoing professional development that includes preparation for teaching students with diverse learning needs" (p. 126). Although the programs in this study offered instructor training that was customized to the needs of the program, a model of instructor training best practices would be useful. Such a training model could be developed by a team of IPSE program members and could serve as a model or beginning point for new programs or programs which are starting to develop their instructor training.

Formalize IPSE Training through the
Institution of Higher Education

Program directors face the challenge of instructor attendance and participation in training, even though it is essential to the success of students in inclusive courses. Through the formalization of the training through the IHE professional development credit system, instructors could receive credit towards their professional requirements for this training. Certified credit through the IHE might provide an incentive to attend. This would demonstrate collaboration between the program and IHE, indicating support from administration toward inclusive initiatives.

Provide Inclusive Training in new Hire
Orientation

The UDL teaching and learning practices identified in the instructor training in

the five programs studied proved beneficial for students both with and without IDD. An

abbreviated form of the IPSE instructor training could be presented during orientation of

newly hired faculty members to address the increasingly diverse higher education

learning population. Students in a study by Black et al. (2015) expressed concerns about

the ability of faculty and staff to execute accommodations properly and a lack of

awareness and training about the needs of students with disabilities.

Suggestions for Future Research

The key themes of this study indicate directions for future research:

1. A qualitative study of instructor responses regarding the inclusion of IPSE
   program students in their courses;

2. A mixed-methods study of the evaluation strategies used in the IPSE
   programs to determine how effective the training was in improving IPSE
   student success in the classroom;

3. A mixed-methods study of the teaching strategies used by instructors in
   typical IHE courses;

4. A qualitative study on the impact of training on instructor teaching
   strategies;

5. A mixed-methods study of the changing climate of students in the higher
   education learning environment.

Researcher Reflections

At the beginning of this study, the researcher sought understanding of the components and processes of the development, implementation, and evaluation of training provided to instructors teaching IPSE program students in inclusive courses. There was very little documentation of the training practices for instructors in the field of inclusive postsecondary education. As a former elementary school teacher and a current education professor, she wished to learn more about inclusive instructional practices in higher education. In her higher education teaching experience, K-12 inclusive best practices were not used widely in the learning environment despite the learner benefit.

CTP and TPSID programs are required to offer some form of training to instructors, but the training is not monitored or evaluated closely. The goal of this study was to examine the development, implementation, and evaluation of training programs for instructors teaching IPSE program students in inclusive courses.

The original assumption of the researcher was that there would be correlations between training, development, and implementation, and the evaluation process. The researcher was surprised to learn that some of the programs do not evaluate their instructor training formally or even offer formal training. She learned that each program had a unique way of conducting its training, but that on a whole, the training components and considerations were similar. Although the researcher is proposing a best practices training model and access to general resources, there is an understanding that each program is unique, and must be adapted to meet the climate and culture of the IHE.

Conclusions

The landscape of higher education is changing to provide inclusive learning opportunities to a more diverse group of students. There is hope that IHEs will adopt teaching and learning practices known to meet the needs of a new and growing group of learners. Although there has been some progress, much work needs to be done to equip instructors to support the success of students with IDD and other diverse learners.

After the HEOA of 2008 was instituted, students with disabilities were accepted more readily into IHEs. IPSE programs are actively developing, implementing, and evaluating instructor training to equip instructors with inclusive teaching and learning strategies rooted in UDL principles. Even with the changing landscape in the higher education learning community, instructor training was still conducted at the program level, with little support from the IHE. Each program studied here has been able to institute its own training in an autonomous way while gathering resources from past experiences, other programs, and online resources. This finding supports that of McGuire & Scott (2006), who found that within the postsecondary setting, "there is no unified approach to faculty preparation or ongoing professional development that includes preparation for teaching students with diverse learning needs" (p. 126).

The 2020 Think College standards are moving toward implementing measures of the effectiveness of programs, including collaboration, cooperation, and implementation of UDL principles. These standards may help unify instructor training and allow programs to receive more support from the IHE, both to enhance instructor participation and to implement teaching strategies that benefit students with disabilities and other diverse learners.

APPENDICES

APPENDIX A

IRB APPROVAL

December 16, 2020

Enoh Nkana
Tel. 901-238-9095
Email: enoh@andrews.edu

RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

> **IRB Protocol #:**20-112 **Application Type:** Original **Dept.:** Curriculum and Instruction
> **Review Category:** Exempt **Action Taken**: Approved **Advisor:** Luana Greulich
> **Title:** A multiple case study of the training of instructors teaching inclusive postsecondary education program students in catalog courses.

Your IRB application for approval of research involving human subjects entitled: "*A multiple case study of the training of instructors teaching inclusive postsecondary education program students in catalog courses*" IRB protocol # 20-112 has been evaluated and determined Exempt from IRB review under regulation CFR 46.104 (2)(i): Research that includes survey procedures in which information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subject. You may now proceed with your research.
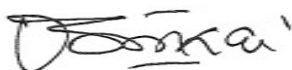
Please note that any future changes made to the study design and/or informed consent form require prior approval from the IRB before such changes can be implemented. Incase you need to make changes please use the attached report form.

While there appears to be no more than minimum risks with your study, should an incidence occur that results in a research-related adverse reaction and/or physical injury, this must be reported immediately in writing to the IRB. Any research-related physical injury must also be reported immediately to the University Physician, Dr. Katherine, by calling (269) 473-2222.

We ask that you reference the protocol number in any future correspondence regarding this study for easy retrieval of information.

Best wishes in your research.

Sincerely,

Mordekai Ongo, PhD.
Research Integrity and Compliance Officer

Institutional Review Board – 8488 E Campus Circle Dr Room 234 - Berrien Springs, MI 49104-0355
Tel: (269) 471-6361 E-mail: irb@andrews.edu

APPENDIX B

CONSENT FORMS

Andrews University
Curriculum and Instruction Department
Enoh Nkana, Researcher and PhD Candidate
4325 Medallion Drive
Silver Spring, MD 20904
enkana@andrews.edu/ 901.238.9095

Research Title: A Multiple Case Study of the Training of Instructors Teaching Inclusive Postsecondary Education Students in Typical College Courses

Introduction of Researcher: I am Enoh Nkana, a PhD candidate in Curriculum and Instruction at Andrews University. Should you have any questions about this project at any time, feel free to contact me at enoh@andrews.edu or 901.238.9095. You may also contact my dissertation chair, Dr. Luana Greulich at luana@andrews.edu or 574.387.0844.

Research Purpose

The principal purpose of this research is to conduct a multiple case study of TPSID and/or CTP inclusive postsecondary programs at institutions of higher education across the United States in order to examine the training provided to instructors teaching students with intellectual and developmental disabilities enrolled in typical college courses. It will also describe the roles of the training affiliates in the development, implementation, and evaluation of the training. This study may help to fill the research gap specific to training components for this specific inclusive higher education student and instructor demographic. The results of this research may be used to develop a universal training model for IPSE programs.

Explanation of Procedures

The research consists of observation of the instructor training, document analysis, and a 30-minute interview with 2-3 training affiliates (program director, assistant director, trainer, etc.) from your institution who are willing to participate. As a participant, I will request that you share a copy of all the training materials used in order

to prepare college instructors for teaching students in your IPSE program as well as information regarding the audited class policies and procedures of your institution. These materials may be in hard copy and/or electronically forms. The interview participants will participate in a 30-minute, virtual interview with the researcher. With your permission, the interview may be audio and/or recorded.

Study Benefits

This study seeks to provide an analysis of the college instructor training that is provided to instructors teaching students with intellectual and developmental disabilities in higher education. Additionally, it will provide insight into the challenges college instructors face as they develop an inclusive environment to meet the diverse needs of students.

As a participant, it will afford you an opportunity to see how your institution's inclusive training methods benefit the college instructors as well as identify possible areas of improvement. This information may prove very useful as you revise your training sessions. It may also help you understand the challenges that the college instructors are facing in their responsibilities pertaining audited classes and inclusive practices. In recognition of your assistance, I would be happy to email you a copy of the results. If you wish to receive a copy, please check the appropriate box below and provide your email address.

Confidentiality Statement

In order to protect the identity of the interview participants and the institutions, the data will be coded with a pseudonym. The data will be stored in both electronic and paper form labeled with an assigned name. The data will be published collectively in the

format of a doctoral dissertation and may also be represented at professional meetings.

All non-digital documents will be scanned and stored on the researcher's password

protected computer and backed up on a Google Drive. All data will be destroyed at the

end at the conclusion of the research study.

Video/Audio Recording of Interview

_____(initial). I consent for my interview to be video, and audio recorded.

If you do not consent, the interview can still be conducted. If you consent, the identity of both the interviewee and institution will not be identified.

Freedom to Withdraw from Study

Your participation is completely voluntary. If you choose to withdraw from the study, the information gathered at that point will be destroyed and you will not be penalized.

Please confirm your participation in the interview process by signing and returning the attached consent form to enoh@andrews.edu by <u>January 6, 2021.</u>

| _____ | _____ | _____ |
| Name of Participant | Signature | Date |

| _____ | _____ | _____ |
| Name of Researcher | Signature | Date |

APPENDIX C

SOLICITATION LETTER

Andrews University
Curriculum and Instruction Department
Enoh Nkana, Researcher and PhD Candidate
4325 Medallion Drive
Silver Spring, MD 20904
enoh@andrews.edu/ 901.238.9095

December 17, 2020

To Whom It May Concern

As the director of the [insert name of program] inclusive postsecondary education (IPSE) program, I am contacting you to solicit your participation in my dissertation research. I am currently an assistant professor in the education department at a small private university in Maryland and a Ph.D. candidate in the Curriculum and Instruction program at Andrews University. My research is a multiple case study which focuses on the training of instructors teaching typical college courses to students in TPSID and CTP IPSE programs such as yours. The goals of the research study are to 1) examine the training of instructors teaching IPSE program students in inclusive catalog courses, and 2) discover how the training is developed, conducted, and evaluated.

The research consists of non-participant observation of an instructor training session, training document analysis, and a 30-minute virtual interview with the program director and willing training affiliates such as assistant directors and administrative assistants from your IPSE program. Your participation is greatly appreciated. All information will be kept strictly confidential. Your anonymity and that of your program will be preserved. This study is beneficial for you and your institution. As a participant, it will afford you an opportunity to have a comprehensive look at the IPSE program instructor training sessions and may also prove useful in the revision and development of

the before-mentioned training. In recognition of your assistance, I would be happy to email you a copy of the results.

   If you wish to participate, please respond to this solicitation email by January 3rd and you will receive an official letter of consent. If you have any questions, please do not hesitate to email me at enoh@andrews.edu or call 901.238.9095. You may also contact my Dissertation Chair, Dr. Luana Greulich at Andrews University. Dr. Greulich may be reached at luana@andrews.edu or 574.387.0844. Your participation is greatly appreciated.

Sincerely,

Enoh Nkana

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VITA

ENOH NKANA

EDUCATION

Andrews University	2021	Ph.D., Curriculum and Instruction
Southern Adventist University	2010	M.Ed., Inclusive Education
Collegedale, TN	2007	B. A., Elementary Education

PROFESSIONAL EXPERIENCE

Washington Adventist University	2016-Present	Education Internship Coordinator
	2017-Present	Assistant Professor of Education
	2016-Present	Adjunct Professor of Education
John Nevins Andrews	2015-2017	Assistant to the Principal
Elementary School	2014-2017	Elementary Teacher
Memphis Junior Academy	2012-2014	Assistant Principal
	2007-2014	Elementary Teacher
Southern Union of	2010-2013	Inclusion Program Coordinator
Seventh-day Adventists		

PROFESSIONAL CREDENTIALS

Maryland Teacher Certification (1-6);
      Endorsements: Reading and Special Education
Tennessee Teacher Certification (Grades K-6)
Member of Council for Exceptional Children