

Training for Faculty Teaching Inclusive Postsecondary Education Program Students

Enoh Nkana, Ph.D.
Slippery Rock University

Robin Moyher, Ph.D.
George Mason University

Luana Greulich, Ph.D.
Larry Burton, Ph.D.
Andrews University

Abstract

Inclusive postsecondary education (IPSE) programs provide students with intellectual and developmental disability (IDD) the opportunity to enroll in inclusive college courses at institutions of higher education (IHEs). Teaching inclusive college courses presents a new challenge for faculty using traditional teaching methods. Faculty development plays a pivotal role in empowering faculty with skills and strategies to teach effectively and support this increasingly diverse student body in higher education. The purpose of this research was to provide a comprehensive overview of the training provided to faculty teaching IPSE program students in inclusive college courses. A multiple case study of IPSE programs at IHEs was conducted. Interviews of program directors and staff examined their roles in the development and implementation of faculty training, followed by observation of faculty training sessions, and analysis of the training resources. Findings indicated no unified approach to faculty training, but similarities existed in the components presented, implementation processes, and resources used. The similar training components included an introduction/overview of the program, inclusive instructional practices, and accommodations and modifications to course material.

Keywords: faculty development, inclusion, intellectual disability, developmental disability, inclusive postsecondary education

Plain Language Summary

- The components and resources of training programs for college faculty members that teach students with intellectual disabilities were studied.
- **What I did in this study:** I interviewed directors and affiliates of five faculty training programs to understand their roles, what was taught, and how it was presented.
 - Secondly, I observed training sessions for faculty members.

- Finally, I reviewed handouts and documents given to the faculty members, such as handbooks, information sheets, and PowerPoint presentations. Survey questions assessed expectations regarding paid jobs after school, wages, obtaining a regular high school diploma, getting a driver's license, living away from home, and attending postsecondary education.
- **Findings:** Each program had unique aspects. All faculty training programs included an introduction or overview of the program. Changes were suggested to adapt teaching methods and course resources in ways that benefit students with disabilities.
- **Conclusion:** Faculty need to be prepared to meet the unique needs of students with disabilities. Suggestions were provided for further research or the creation of faculty training programs.

Inclusive postsecondary education (IPSE) programs provide students with intellectual and developmental disabilities (IDD) the opportunity to take inclusive college courses in pursuit of a certificate or credential at an institution of higher education (IHE; Stinnett et al., 2023). Currently, 315 IPSE programs exist in colleges and universities across the United States (Think College, 2023). Of these programs, 131 were further classified as Comprehensive Transition Programs (CTPs) and/or Transition Programs for Students with Intellectual Disabilities (TPSIDs), which, with the passage of the Higher Education Opportunity Act (HEOA, 2008), now have the opportunity for federal funding (DOE, 2015).

While programs vary in requirements, activities, enrollment, and program characteristics (Grigal et al., 2012; Plotner & Marshall, 2015), students enrolled in TPSIDs and CTPs must take a minimum of 50% of their coursework in college courses, i.e., courses available to all students enrolled in the IHE (Think College, 2023) and the remaining percentage of courses in IPSE program-specific courses. In addition to this hybrid approach, programs may be fully inclusive, in which all academics, social events, and independent living support take place in the IHE (Pacer Center, 2019).

Students enrolled in IPSE programs may take courses for credit and receive grades in the same way as their peers without disability, while others audit classes (Stinnett et al., 2023). Students with IDD who transition into inclusive college courses for credit and audit often require regular provision of accommodations (Zafft et al., 2004). According to Black et al. (2015), accommodations are tools, structures, or materials that make learning usable and accessible to students with disabilities; these may include the use of equipment, notetakers, readers, or interpreters. Although accommodations are useful in meeting the needs of students with disabilities, Black et al. noted that barriers may occur when accommodations are developed after designing the instructional setting, curriculum, and teaching methods rather than building in the accommodations during the design process.

Many students with IDD report experiencing non-supportive instructional methods, such as moving through class material very quickly (Erten, 2011; Hadley, 2006, 2007) and

providing inadequate time for mastery (Hadley & Satterfield, 2013; Lightner et al., 2012; Troiano, 2003). According to Baker et al. (2012), faculty often need training in providing modifications to course expectations to successfully host IPSE students in audited classes. Moreover, O'Connor et al. (2012) observed that faculty recognized the need to diversify their teaching methods beyond the traditional lecture-based format if they were to meet the varied needs of students.

Comparatively, teachers in the K-12 setting are often trained specifically on how to meet the needs of diverse learners, whereas postsecondary faculty (e.g. professors and teaching assistants) are generally content specialists rather than pedagogy experts (McGuire & Scott, 2006 and may have little experience both with instructional strategies focused on pedagogy and with varied delivery systems (McKee & Tew, 2013). Madaus et al. (2003) discovered that highly effective instructional strategies are comparable to principles found in Universal Design for Learning (UDL), a curriculum design framework that accentuates multiple ways of representation, expression, and engagement (CAST, 2013a Pliner & Johnson, 2004). Black et al. (2015) noted that when UDL strategies were used by faculty, students found the strategies useful in cultivating their success in higher education.

Faculty need to be equipped to prepare, adapt, and facilitate inclusive college courses for all students (Hart et al., 2010). Hendrickson and colleagues (2013) noted that the talent and expertise of all faculty, staff, administrators, and students within the IHE community can be utilized to improve the learning outcomes of both students with IDD and their peers. Banks (2014) observed that the most important influencers of academic performance for students with a disability were faculty support and personnel from the university counseling center. Accordingly, McKee and Tew (2013) emphasized the essential role that faculty members play in expanding the educational enterprise; faculty development should be considered a necessity for them to be fully engaged and prepared. Teaching inclusive college courses presents a new challenge for faculty using traditional teaching methods. Unfortunately, faculty often lack the training needed to meet the needs of students with IDD (Baker et al., 2012). In one study, a faculty member emphasized the benefits of having awareness and background knowledge of the disabilities and needs of the students with IDD who audited their class; knowing this facilitated engagement opportunities for all students (O'Connor et al., 2012), illustrating the importance of such lessons as part of IHE faculty training. Therefore, one goal of faculty training is to help them embrace approaches catering to a broader spectrum of individual learning needs (Lightfoot et al., 2018).

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 that study agreed that regardless of the content or structure of professional development, there is often a lack of direction, cohesiveness, or purpose. According to Guskey, for decades, institutions have conducted professional development without focusing on clear outcomes. 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. Goals must be identified and clarified before considering the appropriateness of the professional learning activity (Guskey, 2014).

Purpose of the Research

The primary purpose of this study was to conduct a multiple case study of CTP programs at IHEs across the United States to (a) examine the training provided to faculty who were teaching students with IDD enrolled in inclusive college courses and (b) describe the training components and delivery of the faculty training. This research added to the limited number of studies about training for faculty teaching IPSE program students, a weakness observed through the review of the literature.

Conceptual Framework

This study acknowledged the complexities associated with inclusive training practices that allow faculty members to meet the needs of students with IDD. The purpose was to examine three factors of IPSE program training for inclusive college courses: (a) components, (b) resources, and (c) implementation. The conceptual framework as the basis for the study included Chen and Chang’s (2006) Whole Teacher Approach (WTA) to professional development and UDL principles. The WTA is a professional development framework that “targets multiple dimensions of teacher development” (p. 2). The components of UDL form a framework for the knowledge and skills dimensions of the WTA. The three components of Chen and Chang’s (2006) WTA to professional development, (a) attitudes, (b) knowledge and skills, and (c) practice, were evidenced in the key themes identified throughout the IPSE program development of training components and implementation practices.

Research Questions

The key questions guiding this study were: (a) How was training for faculty teaching IPSE program students in inclusive college courses developed? (b) What were the components of training for faculty teaching IPSE program students in inclusive college courses? and (c) How was training for faculty teaching IPSE program students in inclusive college courses implemented?

Method

A qualitative, multiple case study research design was utilized to examine the characteristics of professional development programming provided to faculty members teaching IPSE program students in inclusive college courses. The study was conducted according to the Institutional Review Board (IRB) standards and policies. The IRB application, protocol, and research documents were submitted for review and approval. Program directors from the 131 IPSE programs classified as TPSID and/or CTP were contacted through their email addresses on the ThinkCollege.net public domain site; additional participants affiliated with the training were identified through the program director. Training affiliates included but were not limited to: (a) the IPSE program directors

and assistant directors, (b) IPSE program trainer(s), and (c) any other participants in training preparation such as program staff.

Time and availability of the respondents guided the selection of the programs (Creswell 2007; Miles & Huberman, 1994; Patton, 2002); data collection included (a) training session observation, (b) interviews of the director and any additional training affiliate(s), and (c) document analysis. Attributes essential to the study included that (a) the organization had an active inclusive postsecondary program for students with IDD, (b) the organization offered training to faculty regarding the integration of IPSE students into inclusive college courses, (c) the program was categorized as a TPSID and/or CTP, (d) the program had a well-established, informative website promoting the inclusion program, and (e) inclusive college courses were available to IPSE program students.

Convenience sampling and non-probability or purposeful sampling were utilized (Patton, 2002). As shown in Table 1, five IPSE programs comprised the sample. Four programs were hosted at public, 4-year IHEs; one was hosted at a private 4-year IHE. Three programs offered 2-to-4-year non-degree certificates, one offered a 4-year certificate, and one offered a 2-year certificate. All five programs were CTPs. For one institution, two individuals were interviewed; for each of the others, only one individual was interviewed. Interviews included four program directors, one assistant director, and one staff member.

Data were collected over a six-week period using three methods: non-participant observation, semi-structured interviews, and document analysis. The interviews were conducted at the end of the fall semester and training sessions observed were available to faculty members prior to the start of the spring semester. Observation of faculty training was conducted at three of the programs. Faculty training provided by these programs was observed and recorded virtually; one recorded training session was viewed. During the training sessions, the researcher was introduced, and the role was disclosed to the participants. Notes were taken on paper during each observation; the researcher did not participate in the training.

The virtual face-to-face interview method allowed flexibility in obtaining specific information from each respondent (Merriam, 2009) and observation of nonverbal cues for a deeper understanding of replies. A total of six virtual Zoom interviews were conducted with training affiliates. Participants were identified alphanumerically to maintain confidentiality. Sample interview questions included (a) What are the goals and objectives of the training? (b) How is the training implemented and (c) What resources are distributed to faculty members?

Purposeful sampling was used for document selection and analysis of the documents and materials related to faculty training, including modules and websites, handouts, notifications, and general correspondence with participants in the training programs. Handouts for faculty were collected from the program director during the training; additional documentation was collected after interviews with respondents. The documents included (a) PowerPoint presentations for four trainings, some with embedded videos; (b) email correspondence with faculty including training information from three

institutions; (c) survey results from three programs providing feedback from faculty who had participated in previous training programs; and (e) a variety of handouts including frequently asked questions and the institutional forms and agreements used to facilitate student participation in an inclusive college course.

Data Analysis

Creswell's (2018) data analysis spiral was used to manage, organize, and represent data after the interviews were transcribed verbatim by the researcher. During the initial reading of the data transcriptions, the researcher engaged in memoing. Notes were made in the margins as the interview transcripts, observation transcripts, and training documents were read and re-read. Phrases, concepts, and ideas were noted to "synthesize them into higher level analytical meaning" (Miles et al., 2014, p. 95) and to determine themes. Using hand coding, the researcher identified the descriptions provided by the interviewees; observation and document analysis allowed the reduction of codes to themes by noting 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 components, resources, and implementation for each case.

Results

The observations, interview transcripts, program documents, and materials were evaluated for commonalities in (a) training components, (b) resources provided, and (c) training implementation.

Training Components

Goals and Objectives

Although not defined consistently, the components of each training program included (a) an overview of IPSE program goals and objectives, (b) the characteristics of students with IDD, (c) the principles of UDL, (d) the types of faculty interactions needed with students with IDD, (e) useful types of accommodations and modifications, and (f) the responsibilities of faculty. Some programs were more explicit about the legal requirements; all discussed the resources available through the program directors, coordinators, and an Office of Accessibility at specific IHEs.

As Training Affiliate A1 stated, "The goals we have are for them [faculty] to learn, we have an overview and understanding of the program, and what their role in helping our students access college looks like." As stated by 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 [to] understand aspects of UDL, and how to implement that in their course."

An important theme stated by Training Affiliate E1 was “building that bridge between my program and the faculty.” Similarly, Program B’s primary goal was to promote community by including students in the full experience of the IHE, describing program goals thusly:

Our biggest goal is for our students to really feel like community members. To really practice intentional inclusive communities, learning environments. So, as much as we are teaching our students how to 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.

Faculty and student exposure to differences through the presence of IPSE program students in inclusive college courses can increase acceptance in the higher education community.

Characteristics of Individuals With IDD

Characteristics of individuals with disabilities discussed included delayed academic performance and language skills, difficulty understanding complex and abstract information, slower learning rate, memory difficulty, attention problems, distractibility, generalization and maintenance difficulty, motivation challenges, and adaptive behavior deficits. Training Affiliate A2 explained each of the characteristics but emphasized that every individual is unique.

Teaching Strategies

A variety of teaching strategies were discussed during faculty training, including performance activities, student research, problem-solving, cooperative learning, small group work, classroom discussion, and direct instruction. The three primary UDL guidelines: engagement, representation, and action and expression, were outlined in Program A’s faculty training as factors supporting instructional and active learning strategies, that is, to (a) engage students actively, (b) provide experiences for success, (c) group students for instruction, (d) scaffold instruction, (e) address forms of knowledge, (f) organize and activate knowledge, (g) teach strategically, and (h) make instruction explicit (Bost & Riccomini, 2006). Active learning strategies discussed in Program A were minute papers (Cross & Angelo, 1988), electronic responses, think-pair-share, fact find, turn and learn, teaching in small groups, work groups (Lang, 2010), plus one, jigsaw (Aronson & Bridgeman, 1979), and debate.

Training Affiliate C1 used teaching strategies to provide an interactive learning experience that actively engaged faculty participants with the material, such as asking questions, presenting scenarios, and providing interactive material. During the training, a scenario was provided for participants to discuss ways they could introduce the concept of diverse learners in the classroom without identifying that there was a Program C student in the course.

Accommodations and Modifications

According to Training Affiliate A2, faculty tended to be challenged by the course modification process for students auditing classes: “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.” A comparative chart was provided with examples of accommodations that could be used during instruction and for assignments.

Training Affiliate B1 assisted students in communicating their accommodations with faculty and as a part of the process; faculty were notified of any IHE students who were registered with the Office of Accessibility for accommodations, which added an extra layer of confidentiality for 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.”

The primary components addressed in Program D’s training were accommodation and modification principles. 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.”

Training Affiliate E1 communicated that he is 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 was available to make or assist with modifications, Training Affiliate E1 explained that “sometimes they [faculty] 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.”

Universal Design for Learning

All programs emphasized UDL principles and provided resources for adapting courses. The three primary UDL guidelines: engagement, representation, and action and expression (CAST, 2013b, were outlined in Program A’s faculty training as factors supporting instructional and active learning strategies. Training Affiliate C1 presented a video about UDL and noted,

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. We really focus our training on UDL, Universal Design for Learning. 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. 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.

Training Affiliate D1 incorporated UDL principles such as alternative means of engagement into the faculty training presentation, “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.”

Training Resources

Each program used a PowerPoint presentation for the main information and provided a plethora of information sources tailored to each institution. Audit agreements, evaluation forms, and forms to document interactions between students and faculty were made available. Some training programs (C and D) provided recordings of the presentation in addition to multiple handouts. Program B included a frequently asked questions form. Program E included quotations from teachers who had interacted with students with IDD before. Program A distributed a faculty handbook complete with topics discussed and multiple resources. Articles, links to websites, videos, and training affiliate contact information were provided to participants during the training programs. Program D provided faculty feedback from previous semesters regarding the benefits and challenges of teaching students in IDD in their courses.

Training Implementation

Programs varied in length depending on the content and resources provided. Faculty attendance in the training was voluntary. Groups varied in size from individual to small groups (e.g., department faculty meetings) to inclusion of new faculty. Thus, the timing, locations, and formality of the training sessions varied. In addition to PowerPoint presentations, some programs used videos tailored to the institution including students and/or former faculty participants. While some programs used a lecture-style presentation, Program C used UDL principles to provide an interactive learning experience, giving faculty opportunities to identify how students can achieve course objectives using UDL principles. Questions were encouraged in all training programs. The roles of staff, student volunteers (e.g., peer mentors), and student workers were delineated. Needed forms were distributed, explained, and discussed. Because most programs distributed videos and/or links along with PowerPoint presentations, the participants could review materials on their own at their leisure.

Discussion

With the evolution of the higher education landscape to include students with IDD, traditional pedagogical practices are becoming less effective. Faculty training in inclusive practices is becoming vital to meet the needs of IPSE program students in inclusive college courses. Moreover, there is limited research on the development and implementation of IPSE training to help faculty navigate inclusive college courses. This qualitative, multiple case study of CTPs provides information for the field through the review of the training provided to faculty teaching IPSE program students in inclusive college courses. The study addressed the development of the training components and the implementation of the training. Several important discoveries have implications for the advancement of inclusive education and faculty development in higher education.

As shown in Table 2, the training components identified in all five programs were (a) a program overview, (b) accommodations and/or modifications, and (c) strategies for teaching students with IDD. No training formats were universal across programs, but at least two programs used each of these training formats: (a) formal group training, (b) informal group training, (c) individualized training, and (d) recorded training. No evaluation methods were used by all five programs; anecdotal feedback methods were used by three programs.

Several faculty members expressed that they had never heard of the IPSE program prior to having a student enrolled in their course, but were willing to support the initiative. According to Chen and Chang's (2006) WTA to professional development, attitudes such as motivation and willingness positively impact faculty training outcomes. IPSE faculty training is voluntary and program directors could face the challenge of faculty attendance. However, Training Affiliate A2 expressed that 60-70% of the faculty teaching IPSE students attend the training. Fortunately, voluntary attendance also demonstrates attendee willingness and desire to improve their instruction and student engagement. O'Connor et al. (2012) found that faculty motivation was driven in part by an aspiration to improve instruction methods when teaching a diverse group of students.

Course accommodations and modifications were training components addressed by all five programs. The respondents specifically emphasized the differences between accommodations and modifications for students auditing a course. However, faculty expressed their surprise that accommodations such as providing lecture notes prior to class or varied means of assessment could benefit all students by adding to the quality and rigor of the course. Although auditing a course is not unique to IPSE program students, most faculty members were unfamiliar with the process. Faculty were also willing to work with IPSE program directors and staff to create modifications based on the course goals and expectations. Prior studies (Bigaj et al., 1999; Leyser et al., 1998; McKeon et al., 2013; Norton, 1997; Vaseck, 2005; Vogel et al., 2006; Vogel et al., 2008), also found that faculty members were willing to provide modifications for students with disabilities and demonstrated a positive attitude toward those students.

Training Affiliate C found that faculty members were often unfamiliar with the UDL framework and the benefits of implementing these principles in their courses (Langley-Turnbaugh, et al., 2013). Lightfoot, et al. (2018) found that UDL strategies and principles can be applied to online learning, lectures, course materials, and standards in higher education. Additionally, the characteristics of students with IDD were a component of two faculty training sessions as Lightfoot et al. (2018) noted; faculty are often unfamiliar with the challenges faced by students with disabilities. The trainers specifically highlighted the importance of discovering each student's individual and unique needs. This coincides with the second component of Chen and Chang's (2006) WTA to professional development: knowledge and skills. When selecting instructional practices, faculty were encouraged to consider the desired course goals and outcomes, varied ways of demonstrating learning, and the needs of their students.

The faculty training was delivered using varied modalities: in-person, face-to-face training, asynchronous, recorded training, and online, synchronous training. Hott and

Tietjen-Smith (2018) identified that faculty members mentioned several beneficial forms of professional development such as face-to-face activities, webinars, and readings. Each program had autonomy on how they implemented the training; their format varied based on the desire to impact the most faculty members. Additionally, trainers reiterated their availability to support faculty after the training as they implemented what they learned. The third component of Chen and Chang's (2006) WTA approach was practice, which was demonstrated as IPSE program trainers introduced and modeled a variety of instructional methods with the goals of engaging students, providing immediate feedback to faculty, structuring implementation, application of concepts in a classroom setting, and providing ongoing classroom support.

Limitations

The results of this study included some limitations. First, this qualitative study employed the use of purposeful and convenience sampling strategies including the participation of IPSE program directors who were available during the period between the fall and spring semesters. This limitation was addressed by documenting the recruitment process and including the details of the sampling criteria. Additionally, purposeful and convenience sampling led to a small sample size, thus the results cannot be generalized to many institutions. Due to low response rates and constraints on research time, this study included only five of the 131 CTPs and no TPSIDs. To mitigate this limitation, a comprehensive report of the faculty training was provided. Future studies should be conducted over an extended period to obtain a more expansive sample.

Another limitation of this study was that the analysis may be interpretive and include bias. To mitigate potential bias, the researcher used a reflection journal to document any expectations, biases, assumptions, and directions to the process; this supported the rigor of qualitative analysis (Morrow & Smith, 2000). Additionally, Creswell's (2018) methods of addressing ethical issues were employed by reporting from multiple perspectives. Finally, the responses of the interview participants may not be sincere due to social desirability bias, fear of judgment, or memory errors, although they are being recorded as such. 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, as recommended by Lincoln and Guba (1985).

Implication for Practice and Future Research

These findings could assist with the development of best practices in faculty training in IPSE programs, thus improving each IHE's ability to meet the needs of a diverse learning population and promote inclusive teaching and learning strategies in higher education. The training affiliates developed their training using online resources, program training documents, their prior experiences, and what they had learned from attending professional development programs. To increase access to training materials and to streamline the training development process, faculty training resources could be made available on the IPSE Think College database. PowerPoint presentations, videos, and

other resources used in existing programs could be categorized and made available for other programs.

Although the programs in this study offered faculty training customized to the needs of the IPSE program and the IHE, a model of faculty training best practices would be useful. As McGuire and Scott (2006) pointed out, which also rings true in 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). Such a training model could be developed by a team of IPSE program trainers, serving as a model or a beginning point for new programs or programs just starting to develop training.

Program directors face the challenge of faculty training attendance. By formalizing IPSE training through the IHE professional development system, faculty could receive credit toward their professional requirements which might provide an additional incentive to attend. This could demonstrate collaboration between the IPSE program and the IHE. Bouwma-Gearhart (2012) insists that IHEs have a responsibility to support faculty in the pursuit of scholarly enrichment. Accordingly, Hénard and Roseveare (2012) state that the IHE can support faculty by providing professional development opportunities and fostering faculty learning communities.

An abbreviated form of IPSE faculty training infused with UDL principles could be used during the orientation of all new faculty members. UDL teaching and learning practices identified for faculty training in the programs studied are beneficial for students with and without IDD (AlRawi & AlKahtani, 2021). Lightfoot et al. (2018) suggested that higher education institutions should begin to adopt instructional practices that benefit the greatest number of students. Additionally, Mckee and Tew (2013) noted that higher education leaders must address changes in the curriculum focus, new directions in campus life, and the inclusion of formerly underserved populations.

Conclusion

Promoting inclusive practices in institutions of higher education requires a concerted effort to empower faculty with the strategies and skills needed to effectively support the needs of a diverse student body. Intentional training and faculty development may equip faculty members to create a truly inclusive educational experience that empowers students to thrive academically and contribute meaningfully to society. IPSE programs are developing, implementing, and evaluating training to equip faculty with inclusive teaching and learning strategies rooted in UDL principles.

Even with the prevalence of IPSE in the higher education community, faculty training was conducted at the program level, with little support from the parent IHE. Each IPSE program studied was able to institute its own training system autonomously while gathering resources from past experiences, other programs, and online resources. This finding supports McGuire and Scott’s (2006) observation, that within the postsecondary setting, a unified approach to faculty development does not exist, especially for interactions with students with diverse needs. This study may advance awareness of the

development and implementation practices of training provided to faculty teaching IPSE students in inclusive college courses, unify faculty training, and allow programs to receive more support to enhance faculty participation and implement instructional strategies to benefit all students.

References

- AlRawi, J. M., & AlKahtani, M. A. (2021). Universal design for learning for educating students with intellectual disabilities: A systematic review. *International Journal of Developmental Disabilities, 68*(6), 800-808. <https://doi.org/10.1080/20473869.2021.1900505>
- Aronson, E., & Bridgeman, D. (1979). Jigsaw groups and the desegregated classroom: In pursuit of common goals. *Personality and Social Psychology Bulletin, 5*(4), 438-446. <https://doi.org/10.1177/014616727900500405>
- Baker, K. Q., Boland, K., & Nowik, C. M. (2012). A campus survey of faculty and student perceptions of persons with disabilities. *Journal of Postsecondary Education and Disability, 25*(4), 309-329. <https://files.eric.ed.gov/fulltext/EJ1002143.pdf>
- Banks, J. (2014). Barriers and supports to postsecondary transition: Case studies of African American students with disabilities. *Remedial and Special Education, 35*(1), 28-39. <https://doi.org/10.1177%2F0741932513512209>
- Bigaj, S. J., Shaw, S. F., & McGuire, J. M. (1999). Community-technical college faculty willingness to use and self-reported use of accommodation strategies for students with learning disabilities. *Journal of Vocational Special Needs Education, 21*(2), 3-14. <https://eric.ed.gov/?id=EJ594402>
- Black, R. D., Weinberg, L. A., & Brodwin, M. G. (2015). Universal design for learning and instruction: Perspectives of students with disabilities in higher education. *Exceptionality Education International, 25*(2), 1-26. <https://doi.org/10.5206/eei.v25i2.7723>
- Bost, L. W., & Riccomini, P. J. (2006). Effective instruction: An inconspicuous strategy for dropout prevention. *Remedial and Special Education, 27*(5), 301-311. <https://doi.org/10.1177/07419325060270050501>
- Bouwma-Gearhart, J. (2012). Science faculty improving teaching practice: Identifying needs and finding meaningful professional development. *International Journal of Teaching and Learning in Higher Education, 24*(2), 180-188. <https://www.isetl.org/ijtlhe/pdf/IJTLHE1201.pdf>
- Brownell, S. E., & Tanner, K. D. (2012). Barriers to faculty pedagogical change: Lack of training, time, incentives, and . . . tensions with professional identity? *CBE—Life Sciences Education, 11*(4), 339-346. <https://doi.org/10.1187/cbe.12-09-0163>
- Carrascal, S., & Rodríguez, Y. G. (2017). The influence of teacher training for the attention of students with intellectual disabilities in the transitional period to adulthood. *Universal Journal of Educational Research, 5*(11), 1863-1868. <http://dx.doi.org/10.13189/ujer.2017.051102>
- CAST. (2013a). *Research and development*. <https://udlguidelines.cast.org/>
- CAST. (2013b). *UDL guidelines version 2.0*. <https://udlguidelines.cast.org/>
- Chen, J. Q., & Chang, C. (2006). Testing the “whole teacher” approach to professional development: A study of enhancing early childhood teachers’ technology proficiency. *Early Childhood Research & Practice, 8*(1), 1-19. <https://eric.ed.gov/?id=EJ1084920>
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Sage. <https://psycnet.apa.org/record/2006-13099-000>

- Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage.
https://www.ucg.ac.me/skladiste/blog_609332/objava_105202/fajlovi/Creswell.pdf
- Cross, K. P., & Angelo, T. A. (1988). *Classroom assessment techniques. A handbook for faculty*. The National Center for Research to Improve Postsecondary Teaching and Learning. <https://files.eric.ed.gov/fulltext/ED317097.pdf>
- Department of Education (DOE). (2015). Transition and postsecondary programs for students with intellectual disabilities.
<https://www2.ed.gov/programs/tpsidi/index.html#:~:text=The%20Model%20Comprehensive%20Transition%20and,inclusive%20model%20comprehensive%20transition%20and>
- Erten, O. (2011). Facing challenges: Experiences of young women with disabilities attending a Canadian university. *Journal of Postsecondary Education and Disability, 24*(2), 101-114. http://www.ahead-archive.org/uploads/publications/JPED/jped_24_2/JPED%2024_2.pdf
- Griffin, M. M., & Papay, C. K. (2017). Supporting students with intellectual and developmental disabilities to attend college. *Teaching Exceptional Children, 49*(6), 411-419. <https://doi.org/10.1177/0040059917711695>
- Grigal, M., Hart, D., & Weir, C. (2012). A survey of postsecondary education programs for students with intellectual disabilities in the United States. *Journal of Policy and Practice in Intellectual Disabilities, 9*(4), 223-233.
<https://doi.org/10.1111/jppi.12012>
- Guskey, T. R. (2001). Helping standards make the grade. *Educational leadership: Journal of the Department of Supervision and Curriculum Development, N.E.A.* 59. 20-27. https://uknowledge.uky.edu/edp_facpub/8
- Guskey, T. R. (2014). Planning professional learning. *Educational Leadership, 71*(8), 10-16. <https://tguskey.com/wp-content/uploads/Professional-Learning-2-Planning-Professional-Learning.pdf>
- Hadley, W. M. (2006). LD students' access to higher education: Self-advocacy and support. *Journal of Developmental Education, 30*(2), 10-12, 14-16.
<http://www.ascd.org/publications/educational-leadership/may14/vol71/num08/Planning-Professional-Learning.aspx>
- Hadley, W. M. (2007). The necessity of academic accommodations for first-year college students with learning disabilities. *Journal of College Admission, 195*, 9-13.
<https://files.eric.ed.gov/fulltext/EJ783943.pdf>
- Hadley, W. M., & Satterfield, J. W. (2013). Are university students with learning disabilities getting the help they need? *Journal of the First-Year Experience & Students in Transition, 25*(1), 113-124. <https://eric.ed.gov/?id=EJ1011443>
- Hahn, T. B., & Lester, J. (2010). Faculty needs and preferences for professional development. *Journal of Education for Library and Information Science, 53*(2), 82-97. <http://www.jstor.org/stable/23249101>
- Hart, D., Grigal, M., & Weir, C. (2010). Expanding the paradigm: Postsecondary education options for individuals with autism spectrum disorder and intellectual disabilities. *Focus on Autism and Other Developmental Disabilities, 25*(3), 134-150. <https://doi.org/10.1177/1088357610373759>

- Hénard, F., & Roseveare, D. (2012). Fostering quality teaching in higher education: Policies and practices. *An IMHE Guide for Higher Education Institutions*, 1(1), 7-11. <https://learningavenue.fr/assets/pdf/QT%20policies%20and%20practices.pdf>
- Hendrickson, J. M., Vander Busard, A., Rodgers, D., & Scheidecker, B. (2013). College students with intellectual disabilities: How are they faring? *Journal of College and University Student Housing*, 40(1), 186-199. <https://eric.ed.gov/?id=EJ1161633>
- Higher Education Opportunity Act (HEOA). (2008). P.L. 110-315. <https://www2.ed.gov/policy/highered/leg/hea08/index.html>
- Hott, B. L., & Tietjen-Smith, T. (2018). The professional development needs of tenure track faculty at a regional university. *Research in Higher Education Journal*, 36(1), 1-12. <https://eric.ed.gov/?id=EJ1194407>
- Jiandani, M. P., Bogam, R., Shah, C., Prabhu, S., & Taksande, B. (2015). Continuous professional development: Faculty views on need, impact and barriers. *National Journal of Integrated Research in Medicine*, 7(2), 43-75. https://www.researchgate.net/publication/315113381_Continuous_Professional_Development_Faculty_Views_On_Need_Impact_And_Barriers
- Lang, N. C. (2010). *Group work practice to advance social competence: A specialized methodology for social work*. Columbia University Press. <https://doi.org/10.1080/01609513.2011.572273>
- Langley-Turnbaugh, S. J., Blair, M., & Whitney, J. (2013). Increasing accessibility of college STEM courses through faculty development in UDL. In S. Burgstahler (Ed.), *Universal design in higher education: Promising practices*. DO-IT, University of Washington. www.washington.edu/doi/increasing-accessibility-college-stem-courses-through-faculty-development-universal-design-learning
- Leyser, Y., Vogel, S., Wyland, S., & Brulle, A. (1998). Faculty attitudes and practices regarding students with disabilities: Two decades after implementation of Section 504. *Journal of Postsecondary Education and Disability*, 13(3), 5-19. https://higherlogicdownload.s3.amazonaws.com/AHEAD/38b602f4-ec53-451c-9be0-5c0bf5d27c0a/UploadedImages/JPED_ARCHIVE/13/JPEDVol13No3.doc
- Lightfoot, A., Janemi, R., & Rudman, D. L. (2018). Perspectives of North American postsecondary students with learning disabilities: A scoping review. *Journal of Postsecondary Education and Disability*, 31(1), 57-74. <https://eric.ed.gov/?id=EJ1182368>
- Lightner, K. L., Kipps-Vaughan, D., Schulte, T., & Trice, A. D. (2012). Reasons university students with a learning disability wait to seek disability services. *Journal of Postsecondary Education and Disability*, 25(2), 145-159. <https://eric.ed.gov/?id=EJ994283>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage. [https://doi.org/10.1016/0147-1767\(85\)90062-8](https://doi.org/10.1016/0147-1767(85)90062-8)
- Madaus, J. W., Scott, S. S., & McGuire, J. M. (2003). *Barriers and bridges to learning as perceived by postsecondary students with learning disabilities* (Tech. Rep. No. 01). Center on Postsecondary Education and Disability.
- Madison, D. S. (2005). *Critical ethnography: Methods, ethics, and performance*. Sage. <https://doi.org/10.4135/9781452233826>
- Madison, D. S. (2011). *Critical ethnography: Methods, ethics, and performance* (2nd ed.). Sage. <https://eric.ed.gov/?id=EJ844629>

- McGuire, J. M., & Scott, S. S. (2006). Universal design for instruction: Extending the universal design paradigm to college instruction. *Journal of Postsecondary Education and Disability, 19*(2), 124-134. <https://eric.ed.gov/?id=EJ844629>
- McKee, C. W., & Tew, W. M. (2013). Setting the stage for teaching and learning in American higher education: Making the case for faculty development. *New Directions for Teaching and Learning, 2013*(133), 3-14. <https://doi.org/10.1002/tl.20041>
- McKeon, B., Alpern, C. S., & Zager, D. (2013). Promoting academic engagement for college students with autism spectrum disorder. *Journal of Postsecondary Education and Disability, 26*(4), 353-366. <https://files.eric.ed.gov/fulltext/EJ1026894.pdf>
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation* (3rd ed). Jossey-Bass. <http://ndl.ethernet.edu.et/bitstream/123456789/49003/1/82.pdf>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage. [https://doi.org/10.1016/s1098-2140\(99\)80125-8](https://doi.org/10.1016/s1098-2140(99)80125-8)
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A sourcebook of new methods* (3rd ed.). Sage. <https://doi.org/10.2307/1163741>
- Morrow, S. L., & Smith, M. L. (2000). Qualitative research for counseling psychology. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology*, (3rd ed, pp. 199-230). Wiley. <https://doi.org/10.1177/0011000006286990>
- Norton, S. M. (1997). Examination accommodations for community college students with learning disabilities: How are they viewed by faculty and students? *Community College Journal of Research and Practice, 21*(1), 57-69. <https://doi.org/10.1080/1066892970210106>
- O'Connor, B., Kubiak, J., Espiner, D., & O'Brien, P. (2012). Lecturer responses to the inclusion of students with intellectual disabilities auditing undergraduate classes. *Journal of Policy and Practice in Intellectual Disabilities, 9*(4), 247-256. <https://doi.org/10.1111/jppi.12009>
- Pacer Center. (2019). *National parent center for transition and employment*. <https://www.pacer.org/transition/>
- Parker, B. (2006). Instructional adaptations for students with learning disabilities: An action research project. *Intervention in School and Clinic, 42*(1), 56-58. <https://doi.org/10.1177/10534512060420011101>
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Sage. <https://doi.org/10.1177/1035719X0300300213>
- Pliner, S. M., & Johnson, J. R. (2004). Historical, theoretical, and foundational principles of universal instructional design in higher education. *Equity & Excellence in Education, 37*(2), 105-113. <https://doi.org/10.1080/10665680490453913>
- Plotner, A. J., & Marshall, K. J. (2015). Postsecondary education programs for students with an intellectual disability: Facilitators and barriers to implementation. *Intellectual and Developmental Disabilities, 53*(1), 58-69. <https://doi.org/10.1352/1934-9556-53.1.58>
- Stinnett, C. V., Lazo, R., & Pound, S. (2023). "Think higher. Think college." A resource guide for inclusive postsecondary education for students with intellectual disability. Institute for Community Inclusion, University of Massachusetts Boston. https://thinkcollege.net/sites/default/files/files/resources/TCcampaign-resource-booklet_R-fixed.pdf

- Think College. (2023). *College search*. <https://thinkcollege.net/college-search>
- Troiano, P. F. (2003). College students and learning disability: Elements of self-style. *Journal of College Student Development*, 44(3), 404-419. <http://doi.org/10.1353/csd.2003.0033>
- Vaseck, D. (2005). Assessing the knowledge base of faculty at a private, four-year institution. *College Student Journal*, 39(2), 307-316. <https://eric.ed.gov/?id=EJ714064>
- Vogel, S. A., Holt, J. K., Sligar, S., & Leake, E. (2008). Assessment of campus climate to enhance student success. *Journal of Postsecondary Education and Disability*, 21(1), 15-31. <https://files.eric.ed.gov/fulltext/EJ822229.pdf>
- Vogel, S. A., Leyser, Y., Burgstahler, S., Sligar, S., & Zecker, S. (2006). Faculty knowledge and practices regarding students with disabilities in three contrasting institutions of higher education. *Journal of Postsecondary Education and Disability*, 18, 109-123. <https://files.eric.ed.gov/fulltext/EJ1083837.pdf>
- Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Sage. <https://doi.org/10.1080/0951839940070407>
- Zafft, C., Hart, D., & Zimbrich, K. (2004). College career connection: A study of youth with intellectual disabilities and the impact of postsecondary education. *Education and Training in Developmental Disabilities*, 39, 45-53. <https://psycnet.apa.org/record/2004-11986-006>

Table 1*Characteristics of Participating Programs*

Program	IHE	Type of program	classification	<i>n</i>	Data sources
A	Public, 4-year	2-4 year non degree certificate	CTP	2	Interviews, PowerPoint, observation, faculty/instructor handbook, survey, email correspondence.
B	Public, 4- year	4-year non degree certificate	CTP	1	Interview, PowerPoint, audit agreement, FAQ form, grade-check form, email correspondence
C	Public 4- year	2-4 year non-degree certificate	CTP	1	Interview, observation, PowerPoint, email correspondence, handout re UDL, audit agreement, post-training survey
D	Private 4- year	2-4 year non-degree certificate	CTP, fully inclusive	1	Interview, PowerPoint, instructor feedback, email correspondence
E	Public 4- year	2 year non-degree	CTP, fully inclusive	1	Interview

Table 2*Components of Participating Programs*

Program Component	A	B	C	D	E
Training Components					
Goals and Objectives	X		X		
Program information				X	
Characteristics of Individuals with IDD	X				X
Teaching Strategies	X	X			
Program overview		X	X		
Accommodations and Modifications		X		X	X
Audited Courses (logistics of)		X		X	
Universal Design for Learning			X	X	
Faculty Roles				X	
Feedback and Advice from former faculty					
Peer Mentors	X				
Training Resources					
Faculty/Instructor Handbook	X				
Satisfactory Academic Performance Indicators Survey	X				
Person-Centered Planning (individualized learning agreement)	X				
Participant Certificate of Attendance	X				
PowerPoint	X	X	X	X	X
Office of Accessibility processes		X			
FAQ form		X			
Audit Agreement		X	X		
Grade-Check form		X			
Questions			X		
Recording			X	X	
Academic Course evaluation (of student)			X		

	Training Implementation			
Duration	90 min		2 hour	17 min
Group size	Whole	As needed	whole	group
Location	On-campus	Faculty meetings		Faculty meetings
Timing	Before semester	Before semester		
Style	Lecture/video	tailored	interactive	
	Evaluation			
Survey			X	