Family Evaluation of Postsecondary Programs for Students with an Intellectual Disability

Margo Izzo, Ph.D. Professor Emeritus, Psychiatry

Amy Shuman, Ph.D. Jessie C. Green, Ph.D Andrew Buck, Ph.D. The Ohio State University Nisonger Center University

> Eric Anderson, Ph.D. BCBA Bowling Green State University

> Diane E. Weinbrandt, Ed.D. University of Cincinnati

Abstract

Numerous postsecondary programs for students with intellectual disability have emerged, as have standards to improve the quality of those programs (Grigal et al., 2011). We used the Think College Standards for Inclusive Higher Education to develop a family survey to evaluate and improve programs within the Ohio Statewide Consortia (OSC). Overall, family responses were positive for most of the standards and indicated that students gained self-advocacy as well as technology and employment skills. Families indicated that programs can improve on two standards: coordination/collaboration with adult services, and career development. Perspectives from families provide critical information that enhances the quality of postsecondary programs.

Keywords: program evaluation, students with intellectual disabilities, postsecondary education, family survey, state alliance

Plain Language Summary

- What we did in this study: We sent a survey to families of students in our college programs. We asked them 49 questions to find out if families thought the programs were successful. For example, we wanted to know:
 - If the programs helped the students to be self-advocates.
 - About the courses the students took.
 - About the employment parts of the programs.
- **Findings:** We learned that most of the families were very satisfied with the programs. The families said that we should improve some areas. For example, the families want:

- College programs to improve how they help students find the right job.
- More help with building relationships with adult services.
 Families need to know who to call if their student needs help with job-to-job transitions.
- **Conclusion:** The families were very glad to participate in the survey. Everyone agrees that families are very important partners in postsecondary programs.

Historically, families have been instrumental at the federal policy level, as well as critical members of students' education and transition planning meetings at the local level. Since the passage of the Education for All Handicapped Children Act of 1975 (PL 94-142), reauthorized as the Individuals with Disabilities Education Improvement Act of 2004 (PL 108-446), and the more recent Higher Education Opportunity Act of 2008 (PL 110-315), families have advocated for appropriate educational services and supports for students with disabilities. Families were instrumental in advocating for policies and funding to create inclusive postsecondary education (IPSE) programs across the country included in the Higher Education Opportunity Act (HEOA). Families continue to advocate for needed alignment of services among secondary, postsecondary, and adult agencies so students with an intellectual disability (ID) can attend college, access greater employment opportunity.

A report developed by the Inclusive Higher Education Committee (Lee et al., 2018) recommended that the U.S. Department of Education issue new guidance clarifying that education and vocational rehabilitation (VR) funds may be used to support students with ID in postsecondary education. The Workforce Innovation Opportunity Act of 2014 (WIOA; PL 113-128) clarified that a variety of VR services, including vocational training and supports, may be provided to students with ID in college programs. In fact, WIOA mandated Pre-Employment Transition Services (Pre-ETS) for students with disabilities between the ages of 14-24 that included "counseling on opportunities for enrollment in postsecondary education programs at institutions of higher learning" (p. 13). Finally, WIOA emphasized interagency collaboration, including the delivery of Pre-ETS and other VR services, to assist students with their transition into college and careers.

Despite these legislative acts and policy recommendations, Grigal et al. (2022) stated in the 2020-2021 model demonstration project's annual report for cohort 3 that only "119 students (31%) were enrolled in their state VR program, and 107 students (28%) received VR services provided by or purchased by VR" (p. 18). The Transition and Postsecondary Programs for Students with Intellectual Disability (TPSID) model demonstration program was funded by the Office of Postsecondary Education as five-year grants. The first two cohorts, funded in 2010 and 2015, received competitive preference points for establishing working partnerships with their state VR program. Yet less than 30% of college students with ID received VR services while attending college.

Most state VR agencies understand that VR funds can be used to pay for Pre-ETS, tuition, and other VR services (National Coordinating Center Accreditation Workgroup, 2021). Yet, the authors reported that VR supports vary significantly from one IPSE

program to another due to a multitude of reasons, including mistakenly believing that support is not allowed for students in IPSE programs if the credential received is not an "industry recognized credential," a lack of interest in supporting IPSE programs due to the cost and time commitment when compared to more "common" VR approaches, and a lack of awareness of the positive long-term employment outcomes of IPSE graduates (p. 37). VR is a vital partner in supporting both students' job exploration and development as well as the financial investment students and their families make in attending IPSE programs (Lee et al., 2018). If students are not able to access funding from numerous public sources, we are at risk of inequitable access to programs for families with limited financial means and continuing the abysmal employment outcomes that persons with ID traditionally experience.

Transition-age students with ID often experience greater difficulties obtaining postschool employment than students with other disabilities (Baer et al., 2011). The analyses of the National Longitudinal Transition Study-2 (NLTS-2) data reported that high school graduates with ID were employed at a rate of 46%, as compared with 79% of students with learning disabilities (Newman et al., 2011). For adults with ID, employment outcomes are considerably bleaker. One national study involving more than 23,000 adults with ID residing in 31 states reported that only 15% were in competitive employment (Hiersteiner et al., 2016). According to the 2019 National Core Indicator data, only 19% of adults with developmental disabilities (DD) had a paid job in the community in 2018-2019. In comparison, Grigal et al. (2021) reported that one year after program completion, 59% (n= 275) of respondents were employed. In addition, Grigal et al. (2021) indicated that 66% (n = 150) of respondents to the two-year outcome survey had a paid job two years after exiting their postsecondary program. Clearly, postsecondary education programs for students with ID increase employment outcomes.

Numerous researchers reported that families with high expectations are more engaged in their students' education and, as a result, their students have improved postschool outcomes (Carter et al., 2012; Cheatham et al., 2013; Mazzotti et al., 2021; Papay & Bambara, 2014; Prohn & Kelley, 2018; Test et al., 2009). Test et al. (2009) first identified family expectations as an evidence-based practice (EBP) from a systematic review of experimental studies that examine the effects of a strategy (i.e., family expectations as the independent variable) on a particular behavior (i.e., improved student achievement as the dependent variable). In 2021, Mazzotti et al. reported that family expectations are a research-based transition predictor of post-school success.

Transition predictors were determined from a systematic review of correlational studies that examine how certain activities (i.e., empowering families to have high expectations) positively correlate with post-school success in education, employment, and independent living. For example, high family expectations correlated with improved post-school employment outcomes (Blustein et al., 2016) and enrollment in college (Doren et al., 2012). Furthermore, family involvement was a significant predictor of postsecondary education attendance between 2 and 4 years out of high school as compared to youth whose families were not involved (Papay & Bambara, 2014). Family expectations are among the strongest predictors of college enrollment and improved employment outcomes after high school.

Emerging research supports a positive relationship between college and employment. In a large dataset involving more than 9000 adults with ID, Cimera et al. (2018) reported that 70% of respondents who had some postsecondary education were employed in a wider range of occupations than adults with no postsecondary education. Also, NLTS-2 data has also shown a positive association between postsecondary education and employment for students with ID (Grigal et al., 2011). Postsecondary education serves as an additional pathway to employment that often increases the quality of life and independence of students with ID.

Ohio's Statewide Consortium and Think College Standards

Ohio's Statewide Consortium (OSC) is a consortium of nine inclusive postsecondary education programs (IPSE) for students with ID that received federal funding from either a 2000 or 2015 U.S. Department of Education, Office of Postsecondary Education grant and/or private support. The directors of Ohio's IPSE programs meet monthly to share strategies and enhance program operations and student outcomes. They also meet together with representatives from state and local agencies including vocational rehabilitation (VR) and the developmental disabilities (DD) system.

The Think College Standards for Inclusive Higher Education (Think College standards) were developed to guide the development and improve the quality of postsecondary programs (Grigal et al., 2011). The eight Think College standards, each with multiple benchmarks providing both essential practices and examples of the data needed to substantiate the standard, document progress towards meeting each standard. The standards assist IPSE staff to determine the quality of the program as well as to improve services. The eight standards are: 1) academic access, 2) career development, 3) campus membership, 4) self-determination, 5) alignment with college systems, 6) coordination and collaboration, 7) sustainability, and 8) evaluation. The Think College standards serve as the basis of the family survey developed to conduct this study.

OSC directors discuss strategies to implement Think College standards and EBP, which repeatedly advocate for involvement of families throughout the transition process. However, Whirley et al. (2020) identified only 13 studies to date in which families of college students with ID were able to provide their voices. Given the importance of families in obtaining improved outcomes for transition-age students, the purpose of the present study was to determine family satisfaction levels with Ohio's IPSE programs and how these programs can increase family satisfaction. This study was part of a larger evaluation study, in which students and employers were interviewed, and program staff were surveyed, all guided by the Think College standards. Therefore, the following two research questions are proposed.

Research Question 1: What are family satisfaction levels with how Ohio's postsecondary programs are implementing the Think College standards?

Research Question 2: What are the quality indicator practices of Think College standards that inclusive postsecondary education programs need to implement to increase family satisfaction?

Method

Participants

Five Ohio Statewide Consortium (OSC) programs were invited to participate, and of those, four programs volunteered to recruit family members to participate in an online survey. Following approval of a university institutional review board, a link and email script were shared with program directors at each program site to forward to families of current and former students. The email described the purpose of the study, the approximate duration of participation, and a link to the Qualtrics study for families who were interested.

Consent to participate in the study was collected using the Qualtrics survey. Specifically, the first question of the survey was the institutional review board approved consent form, which outlined the purpose of the survey, the duration, the risks and benefits of participation, and the contact information for study personnel. Participants had to select "Yes" electronically to provide consent and continue the survey.

Survey Items

To answer our research questions, we designed a survey to be able to gather data quickly and easily on the experiences of families, as well as decrease total time commitment for our participants. We designed the survey items through an iterative process (Boateng et al., 2018). First, the research team reviewed the Think College standards to identify which aspects of the OSC program should be evaluated by families. Then we drafted the survey with both demographic information and item prompts using each standard's benchmarks, essential practices, or suggested evidence. We shared this draft with a family member of a former student for feedback on item clarity and overall accessibility of the Qualtrics survey. Responding to this feedback, we refined the survey. For example, we used the term VR/DD to include items that addressed either vocational rehabilitation (VR) or developmental disabilities (DD), since a local DD program is sometimes the VR vendor who may deliver VR services. Also, some students may not be eligible for VR nor DD services because the family doesn't want to apply for the respective services. Unless we are specifically referring to only one adult service agency, we used VR/DD services in the survey and throughout the remainder of this article.

The survey was comprised of 49 items, each related to either demographic information (12 items) or Think College standards (37 items). For the first demographic questions, family members identified the program site that their student attended. All other demographic questions included text boxes for family members to provide short responses (e.g., What was most important to you about the program?). For the 37 items related to Think College standards (e.g., My student took college courses related to developing career skills. My student learned to use technology in the program.), family members responded about their student's program experience by selecting one of four responses: a.) *Yes;* b.) *No;* c.) *Yes, but could be improved;* or d.) *I don't know/I don't remember.*

Data Collection

Data were collected using Qualtrics online survey software over a period of eight weeks from mid-December 2020 to early February 2021. To protect confidentiality of the families, surveys were sent by each program's leadership via email. We believe approximately 120 family members were invited to respond to the survey. Staggered reminder emails were sent after 5 days and again at 2 weeks.

Analysis

All responses were downloaded and input into SPSS, coded, and cleaned for descriptive analysis (Fowler, 2014). Specifically, nominal variables were coded as numeric variable (e.g., *"Yes"* was coded as "1" and *"Yes but could be improved"* was coded as "2," etc.) to calculate percentages and compare survey item responses by question. Additionally, across all responses, there was an average of 1.8% of missing data (range = 0 - 11.7%). We conducted Little's MCAR test to determine if the missing data were missing at random. The MCAR test was not significant, which provides evidence that the data were missing at random. When data are missing at random, use of pairwise deletion is less likely to alter estimates based on the remaining data (Baraldi & Enders, 2010). As such, respondents with less than an 80% item completion were removed. Missing item data among the remaining respondents was assumed to be completely at random, and using pairwise deletion, individual items were removed from respondents. Primary analyses consisted of compiling summary data for the entire sample and grouping of survey items by Think College standards.

Results

Sample Description

Demographic information indicated that most respondents were from two of the largest OSC programs: University of Cincinnati with 43.3% and Ohio State University with 43.3% of the responses. Families from two of OSC's smaller programs also responded: Columbus State Community College with 11.7% and Youngstown State University with 1.7%. Respondents who completed a minimum of 80% of the questions were included in the analysis, resulting in a sample of 60 family members across four OSC programs. Of the respondents, 23 family members listed their students as a current student, 23 listed their student as having completed their program, six listed their student as leaving the program without completing, and eight families did not respond to this question, so they were coded as missing data.

Survey Results

Table 1 provides the number and percent of family responses to each survey item organized by standard, survey prompt, and rating broken into three categories: a) *Yes*; b) *Yes, but can be improved*; and c) *No*. Responses of *I don't know* were low across all items (e.g., 7% of total responses and typically only one or two per item). Due to the low number

of *I don't know* responses and ease of viewing Table 1, these responses were removed from the table.

Research Question 1: What are family satisfaction levels with how Ohio's postsecondary programs are implementing the Think College standards?

Family respondents indicated that postsecondary programs can increase family satisfaction by improving the practices associated with the quality indicators of three standards: career development and employment, coordination and collaboration, and sustainability. Both the quality of IPSE programs and family satisfaction would increase if IPSE programs assured that all students participated in paid work experiences related to their career goals, such as paid internships, work-study, service learning, or other paid work on or off campus. Although 47% of families indicated that their student did have paid internships, 15% indicated this quality indicator can be improved and 15% indicated that their student did not have paid work experiences.

As Table 1 indicates and previously discussed, families reported their lowest levels of satisfaction with how IPSE programs connect students with VR/DD services both during and after students complete IPSE programs. Both IPSE and VR programs are required to deliver employment services. The quality indicators of the career development standard suggest connecting students with rehabilitation services. The quality indicators of the coordination and collaboration standard suggest having a designated person to coordinate with other agencies and provide outreach to parents. Yet 52% of families reported that the IPSE program did not connect students with VR/DD services. The quality indicators of the sustainability standard suggest using diverse sources of funding including Medicaid waiver funds and VR funds. Although 53% of respondents indicated that they did receive information about other sources of funding, 25% indicated that they were not informed of other sources of funding, and the remaining respondents said that this indicator can be improved. These quality indicators may be improved with increased synchronization of employment services with VR/DD agencies. As Table 1 indicates, IPSE programs can improve the implementation of the following quality indicators to improve family satisfaction: schedule and implement interagency team meetings/advisory meetings that include disability-specific agencies such as VR/DD; provide training and supervision for educational coaches, job coaches and job developers; provide information to students and families on sources of funds including Medicaid waiver and vocational rehabilitation. Finally, family satisfaction would increase if IPSE programs improved how they share their exit data and student follow-up data after students complete their program with both parents and VR/DD professionals.

Discussion

Overall, the family responses were positive for most of the quality indicators of the Think College standards, with at least two-thirds of the families indicating yes rather than no for most of the survey items for the following standards: alignment with college systems; coordination and collaboration (primarily communication with project staff); self-determination; academic access; and campus membership. Families' responses

indicated that improvements would enhance the quality of programs in the following areas: coordination and collaboration with VR and/or DD agencies and career development.

All the standards are, of course, interconnected, but self-determination (SD) is both an EBP and transition predictor (Mazzotti et al., 2021). Over two-thirds of the families indicated that their students improved self-advocacy and decision-making skills during the program, and 73% reported that students developed self-advocacy skills. Students were involved in actively participating in the PCP meetings, selecting their own courses, determining their own schedules, navigating campus, monitoring their own progress, and asking for help, whether in the classroom or in employment settings. Regarding family participation in PCP meetings, 72% of families participated in these meetings where they observed students demonstrating their SD skills. During program meetings, the families observed that attending inclusive classes helped their students to become more responsible and better at time management, along with developing other skills that they needed to be successful in the workplace.

Table 2 provides recommended strategies to improve family satisfaction by the eight Think College standards. A number of strategies extend the EBP and transition predictors identified in the secondary transition literature. We are confident that EBP, such as teaching SD skills (see Table 2, 1g, 4a-h), result in improved student outcomes when incorporated throughout IPSE programs. Also, transition predictors such as coordinating transition services with VR and/or DD agencies (see Table 2, 2b-k, 5a, 6c-e, 7d) and parent involvement/expectations (see Table 2, 2j, 4d, 5a, 8a) improve IPSE program services and student outcomes (Mazzotti et al., 2016; 2021; Test et al., 2009). For example, teaching families about the correlation between high SD skills and positive adult outcomes can raise parental expectations, and, in turn, increase student outcomes.

Challenges of Coordination and Collaboration with Adult Agencies

One of the greatest challenges revealed by our survey was the difficulty families faced in establishing connections with VR/DD adult service agencies both during IPSE programs and after students graduate. Connecting students and families with VR/DD adult services during the postsecondary program is a quality indicator of two standards: coordination and collaboration, and sustainability. Program staff must continue to develop relationships with VR/DD service providers. Professionals from IPSE programs and VR/DD agencies must collaborate to assure that students gain quality employment services that lead to gainful employment. Often the VR/DD professionals bring essential expertise to students' PCP meetings to assure that the students develop the essential skills needed to gain and maintain employment. Once VR/DD professionals are involved in the PCP meeting, the family and student have the opportunity to build relationships with the VR/DD professionals from the state and local levels on your IPSE program Advisory Committees and inviting them to participate during students' PCP meetings will enhance the quality of your program and improve family satisfaction as well.

Five strategies are suggested to improve interagency collaboration among VR/DD agencies, IPSE programs, and their students and families.

- 1. Deliver plain-language short descriptions of your IPSE program using VR/DD terminology (e.g., job exploration counseling, work-based learning experiences including internships) and highlighting the positive employment outcomes that your students and graduates obtain in non-traditional occupational areas.
- 2. IPSE programs are encouraged to become VR providers so students entering the program can receive as many of the five Pre-ETS services as needed, as well as traditional VR services such as job development and job coaching.
- Teach students self-directed PCP meeting facilitation and support them in inviting their families and VR/DD counselors and service providers to their PCP meeting.
- 4. Teach students how to apply for VR/DD services and support students in being active participants in the VR/DD planning meetings (e.g., Individual Service Plan [ISP], Individual Plan for Employment [IPE]).
- 5. Provide training and support to families/students on EBP associated with Pre-ETS and interagency collaboration including how to navigate the adult service system both during the program and after the student graduates.

IPSE programs are works in progress that require collaboration among all the partners to improve programs and student outcomes on an ongoing basis. Perhaps most importantly, our survey demonstrated the commitment that the families have toward enhancing these programs so that their students gain employment and independent living skills.

Conclusion

Limitations of Existing Research

A major limitation of this study is that family respondents did not represent a random sample drawn from a larger population, which limits the extent to which the findings may be generalized to other parents of college students with ID. Survey respondents volunteered to participate in the survey from an email invitation from the program manager of each of the four participating programs. Due to inactive or bounced emails, an exact number of surveys distributed could not be calculated. Future studies need to differentiate the perceptions of families of current students versus those students who graduated or dropped out. Structured interview data collection methods may be more appropriate for families of dropped students. The time it takes to collect structured interview data was prohibitive in the current study.

Directions for Future Research

We recommend that future researchers use the Model Accreditation standards that were published in 2021 (The National Coordinating Center Accreditation Workgroup, 2021) instead of either the 2011 or 2022 Think College standards. By using the most recent standards, IPSE programs will become more familiar with the accreditation process and the survey itself will support the accreditation process.

During the analysis, we did not have adequate responses in either the graduates or currently enrolled categories to justify conducting separate analyses of each category. In future research, we recommend recruiting a larger sample size from each of the participant groups within families. With larger samples, researchers could compare and contrast the family perspectives of graduates, current students, and dropped students to improve services.

We asked families if their students "had the necessary support for courses," but we did not ask for clarification about what kinds of support students needed; nor did we ask about who can provide these supports most effectively. Future research can clarify the types of supports that families believe are necessary to assist students with ID to succeed in college, in both academic and employment settings. In addition, more research is needed on effective models of collaboration of postsecondary programs with VR and DD agencies. Our survey prompts combined VR and DD agencies as one entity. However, some students may have received VR services but not DD services, or vice versa. Gaining more information about the types of services, is critical to increasing the quality of postsecondary programs and student outcomes beyond graduation. Finally, as Rossetti et al. (2016) suggest, future research should include the perspectives of persons with disabilities themselves. Students who participate in IPSE programs should be included in an evaluation of these programs.

Families have an essential voice in improving the quality of postsecondary education programs. Their experiences and perceptions are extremely helpful in understanding how to enhance the quality of the overall college experience, as well as the ultimate employment outcomes achieved by students with ID. The Think College standards are an excellent framework to gain families' perceptions of the college experience. A family survey serves as a valuable communication tool to assess how postsecondary programs can better help individuals with ID to gain inclusive employment and acquire the necessary social skills to move forward with their lives as contributing members of a community. Doing such surveys regularly, in addition to holding workshops and webinars, is an essential strategy for engaging families in improving the quality of postsecondary programs. In other words, empower families to become informed and engaged in evaluating postsecondary education both during and following these programs to maximize employment and independent living outcomes for young adults with ID.

References

- Baer, R. M., Daviso, A. W., III, Flexer, R. W., McMahan Queen, R., & Meindl, R. S. (2011). Students with intellectual disabilities: Predictors of transition outcomes. *Career Development for Exceptional Individuals, 34*(3), 132-141. <u>https://doi.org/10.1177/0885728811399090</u>
- Baraldi, A. N., & Enders, C. K. (2010). An introduction to modern missing data analyses. Journal of School Psychology, 48(1), 5-37. https://doi.org/10.1016/j.jsp.2009.10.001
- Blustein, C. L., Carter, E. W., & McMillan, E. D. (2016). The voices of parents: Post-high school expectations, priorities, and concerns for children with intellectual and developmental disabilities. *Journal of Special Education, 50*(3), 164-177. https://doi.org/10.1177/0022466916641381
- Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. *Frontiers in Public Health, 6*, 149. <u>https://doi.org/10.3389/fpubh.2018.00149</u>
- Carter, E. W., Austin, D., & Trainor, A. A. (2012). Predictors of postschool employment outcomes for young adults with severe disabilities. *Journal of Disability Policy Studies, 23*(1), 50-63. <u>https://doi.org/10.1177/1044207311414680</u>
- Cheatham, G. A., Smith, S. J., Elliott, W., & Friedline, T. (2013). Family assets, postsecondary education, and students with disabilities: Building on progress and overcoming challenges. *Children and Youth Services Review, 35*(7), 1078-1086. <u>https://doi.org/10.1016/j.childyouth.2013.04.019</u>
- Cimera, R., Thoma, C., Whittenburg, H., & Ruhl, A. (2018). Is getting a postsecondary education a good investment for supported employees with intellectual disability and taxpayers? *Inclusion, 6*(2), 97-109. https://doi.org/10.3233/jvr-201079.
- Doren, B., Gau, J. M., & Lindstrom, L. E. (2012). The relationship between parent expectations and postschool outcomes of adolescents with disabilities. *Exceptional Children, 79*, 7-23. https://doi.org/10.1177/001440291207900101
- Fowler, F. J., Jr. (2014). The problem with survey research. *Contemporary Sociology: A Journal of Reviews, 43*, 5. <u>https://doi.org/10.1177/0094306114545742f</u>
- Griffin, M. M., McMillan, E. D., & Hodapp, R. M. (2010). Family perspectives on postsecondary education for students with intellectual disabilities. *Education and Training in Autism and Developmental Disabilities, 45*(3), 339-346. <u>https://www.jstor.org/stable/23880108</u>
- Grigal, M., Hart, D., & Migliore, A. (2011). Comparing the transition planning, postsecondary education, and employment outcomes of students with intellectual and other disabilities. *Career Development and Transition for Exceptional Individuals, 34*(1), 4-17. <u>https://doi.org/10.1177/0885728811399091</u>
- Grigal, M., Hart, D., Papay, C., Choiseul-Praslin, B., & Lazo, R. (2022). *Annual Report of the Cohort 3 TPSID Model Demonstration Projects (Year 1, 2020-2021).* University of Massachusetts Boston, Institute for Community Inclusion.
- Grigal, M., Hart, D., Papay, C., Wu, X., Lazo, R., Smith, F., & Domin, D. (2021). Annual report of the cohort 2 TPSID model demonstration projects (Year 5, 2019-2020). University of Massachusetts Boston, Institute for Community Inclusion.

Grigal, M., Hart, D., & Weir, C. (2011). *Think College standards, quality indicators, and benchmarks for inclusive higher education*. University of Massachusetts Boston, Institute for Community Inclusion.

www.mass.edu/strategic/maicei/documents/think-college-standards.pdf

Hiersteiner, D., Butterworth, J., Bershadshy, J., & Bonardi, A. (2016). Working in the community: The status and outcomes of people with intellectual and developmental disabilities in integrated employment-Update 2 (NCI Data Brief, April, 2016). Human Services Research Institute. <u>https://www.thinkwork.org/sites/thinkwork.org/files/files/NCI_DataBrief_Employm</u> ent_Update_2014_2015%200516.pdf

Lee, S., Rozell, D., & Will, M. (2018). Addressing the policy tangle: Students with intellectual disability and the path to postsecondary education, employment, and community living. Inclusive Higher Education Committee. https://www.ndsccenter.org/wp-content/uploads/Addressing-the-Policy-Tangle-Report-PDF.pdf

- Mazzotti, V. L, Rowe, D. A., Kwiatek, S., Voggt, A., Chang, W. H., Fowler, C. H., Poppen, M., Sinclair, J., & Test, D. W. (2021). Secondary transition predictors of postschool success: An update to the research base. *Career Development and Transition for Exceptional Individuals, 44*(1), 47-64. <u>https://doi.org/10.1177/2165143420959793</u>
- Mazzotti, V. L., Rowe, D. A., Sinclaire, J., Poppen, M., Woods, W. E., & Sherer, M. L. (2016). Predictors of post-school success: A systematic review of NLTS2 secondary analyses. *Career Development and Transition for Exceptional Individuals, 39*(4), 196-215. <u>https://doi.org/10.1177/2165143415588047</u>
- National Coordinating Center Accreditation Workgroup (2021). *Report on model* accreditation standards for higher education programs for students with intellectual disability: A path to education, employment, and community living. University of Massachusetts Boston, Institute for Community Inclusion. <u>https://thinkcollege.net/sites/default/files/files/TCreport_accred_modelstandards_2021.pdf</u>
- National Core Indicators (2019). 2018-2019 In-person survey: Work. National Association of State Directors of Developmental Disabilities Services and Human Services Research Institute. www.nationalcoreindicators.org/upload/coreindicators/Employment 4 16.pdf
- Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., Shaver, D., Wei, X., with Cameto, R., Contreras, E., Ferguson, K., Greene, S., & Schwarting, M. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school. A report from the National Longitudinal Transition Study-2* (NLTS2). SRI International.

https://ies.ed.gov/ncser/pubs/20113005/pdf/20113005.pdf

- Papay, C. K., & Bambara, L. M. (2014). Best practices in transition to adult life for youth with intellectual disabilities. *Career Development and Transition for Exceptional Individuals*, 37(3), 136-148. <u>https://doi.org/10.1177/2165143413486693</u>
- Prohn, S. M., Kelley, K. R., & Westling, D. L. (2018). Students with intellectual disability going to college: What are the outcomes? A pilot study. *Journal of Vocational Rehabilitation, 48*(1), 127-132. <u>http://dx.doi.org/10.3233/JVR-170920</u>

- Rossetti, Z., Lehr, D., Pelerin, D., Huang, S., & Lederer, L. (2016). Parent involvement in meaningful post-school experience for young adults with IDD and pervasive support needs. *Intellectual and Developmental Disabilities, 54*(4), 260-272. <u>https://doi.org/10.1352/1934-9556-54.4.260</u>
- Sheen, J., Aller, T., Morgan, R., & Currier Kipping, K. (2022). Parent perspectives on preparing students with intellectual disabilities for inclusive postsecondary education. *Journal of Inclusive Postsecondary Education*, *3*(2). <u>https://doi.org/10.13021/jipe.2021.2947</u>
- Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Kortering, L., & Kohler, P. (2009). Evidence-based secondary transition predictors for improving post-school outcomes for students with disabilities. *Career Development and Transition for Exceptional Individuals 32*(3), 160-181. https://doi.org/10.1177/0885728809346960
- Whirley, M. L., Gilson, C. B., & Gushanas, C. M. (2020). Postsecondary education programs on college campuses supporting adults with intellectual and developmental disabilities in the literature: A scoping review. *Career Development and Transition for Exceptional Individuals, 43*(4), 195-208. <u>https://doi.org/10.1177/2165143420929655</u>

Table 1

Family Responses with Think College Standards Survey Items

| | | | Yes, but | | | |
|--|-----|--------------|----------|--------|----|-------------|
| Standard and survey item | Yes | | can be | | No | |
| | | | improved | | | |
| | п | % | п | % | п | % |
| 1. Academic Access | | | | | | |
| We received information about our | | 0 =0/ | | | • | 4.004 |
| student's progress and/or experiences | 40 | 6/% | 11 | 18% | 8 | 13% |
| My student took inclusive academic | | | | | | |
| courses with other college students | 41 | 68% | 10 | 17% | 8 | 13% |
| without disabilities | | | | | | |
| My student benefited from taking non- | | | | | | |
| inclusive courses with other students | 40 | 67% | 11 | 18% | 5 | 8% |
| in the program | | | | | | |
| My student learned to use technology | | 720/ | 0 | 100/ | c | 100/ |
| in the program | 44 | 13% | ŏ | 13% | 0 | 10% |
| My student received needed support | 12 | 70% | 16 | 270/ | c | 20/ |
| for the courses | 42 | 10 /0 | 10 | 21/0 | Ζ | 570 |
| 2. Career Development & Employment | | | | | | |
| My student took college courses | 21 | E-20/ | 0 | 1 5 0/ | 16 | 200/ |
| related to developing career skills | 31 | JZ 70 | 9 | 15% | 10 | 20% |
| My student had the supports needed | | | | | | |
| to obtain paid employment while in | 30 | 50% | 10 | 17% | 10 | 17% |
| college | | | | | | |
| My student had paid work experiences | | | | | | |
| related to personal choice and career | 28 | 47% | 9 | 15% | 16 | 27% |
| goals | | | | | | |
| 3. Campus Membership | | | | | | |
| My student joined college clubs | 29 | 18% | 6 | 10% | 21 | 35% |
| related to his/her own choice | 23 | 40 /0 | 0 | 10 /0 | 21 | 5570 |
| My student used technology such as | | | | | | |
| email, texting, and social media to | 46 | 78% | 10 | 17% | 2 | 3% |
| increase social communication with | 10 | 10/0 | 10 | 17 /0 | - | 0,0 |
| peers | | | | | | |
| My student used transportation to | 38 | 63% | 3 | 5% | 14 | 24% |
| navigate to classes and worksites | | | _ | | | - |
| During the program my student was | 40 | 070/ | | 000/ | 0 | F 0/ |
| invited to do things socially with other | 40 | 67% | 14 | 23% | 3 | 5% |
| Students in their classes | | | | | | |
| friends in their classes | 50 | 83% | - | - | 8 | 13% |
| | | | | | | |

| 4. Self-Determination My student participated in a self- directed plan for course selection, career development and campus 31 52% 15 2% 6 10% |
|---|
| My student participated in a self- directed plan for course selection, career development and campus 31 52% 15 2% 6 10% |
| directed plan for course selection, career development and campus 31 52% 15 2% 6 10% |
| career development and campus |
| |
| activities Our family participated in student |
| planning meetings |
| My student developed self-advocacy |
| skills such as managing their own 1/1 73% 11 18% 3 5% |
| schedule and monitoring their own |
| progress in class and at work |
| We received written policies about the 39 65% 3 5% 6 10% |
| role and responsibilities of the family |
| educational rights and privacy act 41 68% 4 7% 2 3% |
| (FERPA) consent practices |
| My student's ability to make decisions |
| and/or advocate on their own behalf 42 70% 4 7% 6 10% |
| as a result of attending this program |
| 5. Alignment with College Systems The admission processes were clear |
| and fair 50 83% 8 13% 1 2% |
| I received the code of conduct that |
| explains student behaviors and my 45 75% 4 7% |
| student's rights and responsibilities |
| My student had access to academic |
| advising provided by the college that 40 67% 11 18% 5 7% |
| graduate on schedule |
| My student had access to advising |
| provided by the program that kept my |
| son/daughter on track to prepare for 39 65% 14 23% 6 10% |
| and sustain employment following graduation |
| It is important to me that my student |
| received a meaningful credential |
| recognized by the college and |
| employers at the end of the program |
| During the program, college staff |
| maintained contact with our family 43 72% 14 23% 3 5% |
| We had meaningful involvement with 15 75% 13 22% 2 3% |
| staff from the program |
| about what we might expect each year 41 68% 11 18% 8 13% |

| Journal of Inclusive Postsecondary Education | | | | Volu | me 6, | Issue 1 |
|---|----|-----|----|------|-------|---------|
| The postsecondary program connected my student with a VR counselor or DD service coordinator to provide additional services | 16 | 27% | 5 | 8% | 23 | 38% |
| contacted to collect follow-up information about employment and their living situation after they exited the program | 20 | 33% | 2 | 3% | 14 | 23% |
| 7. Sustainability | | | | | | |
| We received information about scholarships or other sources of funding to pay for tuition and other costs | 30 | 50% | 13 | 22% | 14 | 23% |
| I he program connected the student and the family to adult services such as VR/DD that provide supports after college graduation | 18 | 30% | 4 | 7% | 16 | 27% |
| My student completed the program | 25 | 42% | - | - | 27 | 45% |
| 8. Evaluation | | | | | | |
| We received information at least annually about the successes of the program | 40 | 67% | 8 | 13% | 6 | 10% |
| My student is currently living at home | 38 | 63% | - | - | 19 | 32% |
| My student is currently employed | 28 | 47% | - | - | 30 | 50% |
| | | | | | | |

Note. All percentages are calculated out of 60 to reflect possible respondents.

Percentages are rounded to the nearest whole number. *I don't knowl I don't recall* responses accounted for 7.76% of responses on average (range = 0-30%)

Table 2

Strategies to Improve Family Satisfaction with IPSE Programs by Standard

Standard and Recommended Strategies

| 1. A | Academic Access |
|------|---|
| а. | Ensure students select and enroll in a wide array of inclusive college courses |
| b. | Build relationships with administrators to ensure procedures (e.g., enrollment, |
| | grading) are similar to process for students w/o disabilities |
| C. | Orient students to campus and provide supports until they can navigate campus |
| | safely |
| d. | Provide students with ongoing travel training using visual support/video |
| | |
| e. | Provide supports (e.g., peer mentoring, academic coaching, tutoring and |
| , | |
| Ť. | Provide instruction on now to access disability services to gain needed |
| ~ | accommodations |
| g. | these skills |
| h | Teach students how to access and use needed technology to participate in |
| | academic classes |
| i | Provide support for faculty on purpose of IPSF & Universal Design for Learning |
| | strategies |
| j. | Create credit-bearing internships for degree-seeking students to serve as |
| , | mentors/coaches |
| k. | Inform all college programs about IPSE and ways to collaborate |
| | (internships/mentors, etc.) |
| I. | Collect/analyze academic progress data with intervention plans to support |
| | student growth |
| m. | . Ensure students understand IPSE programs' SAP requirements |
| 2 (| Career Development & Employment |
| | Access existing college career resources/services whenever possible |
| b. | Use career assessment(s) and VR services to identify employment goals |
| C. | Use person centered planning (PCP) to record and update employment goals |
| | annually |
| d. | Validate employment goals and explore related careers through work-based |
| | experiences |
| e. | Use job developers to build employer partnerships aligned with students' career |
| | goals |
| f. | Empower all IPSE staff to use EBP to teach skills needed to gain/sustain |

- employment g. Support employers and natural supports to implement EBP to teach skills for employment
- h. Gain VR services to assist with career assessment, internships, job coaching, and transition
- Coordinate VR/DD services through students' PCP meetings i.

- j. Explain to families that VR and DD services are available to provide life-long supports; assist in applying for services
- K. Gain support/input on job match process from student, families, IPSE, VR/DD staff

3. Campus Membership

- a. Provide to student organizations, student life offices, and academic affairs about IPSE program
- b. Support students to participate in campus events aligned with interest
- c. Document in PCP student's goals for participating in campus events/organizations
- d. Provide orientation on how to find campus social, service, club and sport organizations
- e. Determine supports for IPSE student participation, including trained coaches/peer mentors
- f. Identify service events on campus that all students, including IPSE students can participate
- g. Build relationships with mental health/wellness services so IPSE students gain services
- h. Provide direct instruction to students using EBP on how to access all facilities/support

4. Self-Determination

- a. Use EBP to prepare students to facilitate and participate in their own PCP meetings
- b. Assess self-determination (SD) skills, and provide numerous opportunities for choice-making and opportunities to ask for help
- c. Provide rigorous training to IPSE staff on SD so they support student SD growth daily
- d. Orient families on research that correlates high SD skills with positive outcomes
- e. Establish student directed SD goals in PCP and teach students to self-regulate
- f. Establish goals for increased student independence and decision-making
- g. Allow students to make choices and experience the dignity of risk with reflection
- h. Provide opportunities for students to discuss how they are self-advocates

5. Alignment with College Systems

- a. Form Advisory Committee (e.g., admin, faculty/staff, VR/DD, families, alumni/students)
- b. Establish an educational credential encompassing student outcomes of the IPSE program
- c. Assess academic advising resources & support academic advisors to assist IPSE students
- d. Assure access to resources (e.g., ID cards, meal plans, recreation facilities, health services)
- e. Assure that the IPSE program appears in IHE's website and communications
- f. Define graduation requirements, SAP, and monitor progress through PCP annually

- 6. Coordination and Collaboration
 - a. Build relationships with campus services/offices through Advisory Committee
 - b. Assure students utilize campus services/offices and troubleshoot, as needed
 - c. Build relationships with liaisons from VR/DD agencies through state/regional alliances
 - d. Become a VR provider to deliver PRE-ETS/VR services resulting in employment
 - e. Become a DD provider to deliver independent living services/supports

7. Sustainability

- a. Establish a budget and a cost-recovery program to assure a fiscally sound operation
- b. Establish a development account and recruit donations to support student scholarships
- c. Access federal financial aid with comprehensive transition & postsecondary program status
- d. Utilize Advisory Committee (see 5a, 6a) to review sustainability plans/braid funding
- e. Utilize service learning, field prep programs to build capacity of student mentors

8. Ongoing Evaluation

- a. Conduct surveys/focus groups with families to gain feedback on operations/outcomes
- b. Conduct interviews/focus groups with students/alumni to get input on operations/outcomes
- c. Review data with Advisory Committee to determine ongoing program improvements
- d. Align program with Think College Standards and become accredited once available
- e. Gather/analyze formal and informal evaluation data for program improvement