Measuring the Promise: Use of Assessments in Inclusive Postsecondary Education

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Abstract

An increasing number of students with intellectual disability participate in inclusive postsecondary education (IPSE), and there is a growing need for quality, accessible assessments to evaluate outcomes and inform enrollment and planning decisions for students, families, and funders. Staff from 17 IPSE programs completed a survey to describe assessments used to measure outcomes in: Career Exploration, Work Skills, Independent/Community Living, and Self-Determination, and for decision-making on admissions and planning supports. Findings suggest a need for accessible and validated assessments that also allow for individualization. Use of consistent, psychometrically-strong assessments across programs can contribute to stronger evaluation and identification of best practices.

Keywords: inclusive postsecondary education, intellectual disability, assessment, measurement, transition to adulthood

Plain Language Summary

- **What we did in this study:** We asked how inclusive postsecondary programs measure outcomes. Some examples of outcomes are work skills and independent living skills. We also asked about what assessments programs use to make decisions about who to accept to their program and how to plan supports for students. After they shared this information, we made a summary of what people liked and didn't like about the assessments that they were using in their programs.
- **Findings:** Staff from 17 different programs responded to the survey. We learned that different programs use different assessments, and some do not use any assessments. For example, a lot of the programs do not measure skills for independent living. We found that a lot of programs make assessments that are only used for their program.
- **Conclusion:** We think that it would help schools and students if researchers made more accessible assessments to measure success in college. We also think that if programs used the same assessments it would help them to share information about what

works best when they are planning their programs and supporting their students.

An increasing number of students with intellectual disability are participating in inclusive postsecondary education (IPSE). While IPSE programs are often based in a traditional academic setting, hypothesized outcomes of these programs go beyond course grades and attainment of credentials, including securing competitive, integrated employment, expanded social networks, and independent community living (Butler et al., 2016; Grigal et al., 2019; Moore & Schelling, 2015). Programs use different models but often measure outcomes in five domains including academics, community resources, employment, recreation, and community living (e.g., Grigal et al., 2013; Papay & Bambara, 2011). To date, most research supporting these IPSE outcomes is largely qualitative and outcomes such as "community living" and "social connection" are defined differently across programs, which makes it difficult to evaluate such outcomes within and across programs. Without strong data supporting hypothesized outcomes, program staff lack information needed to develop and improve student programming, students and families lack information needed to make enrollment decisions, and funders lack information to evaluate programs.

There are many ways to evaluate hypothesized postsecondary program outcomes. Best practices include the use of formal and replicable processes to measure change. This can include the use of assessments or measurement tools (e.g., Lynch & Getzel, 2013; Sheppard-Jones et al., 2018). Assessments may include standardized or non-standardized assessments, including observational measures, self-reports, and/or proxy reports. These assessments, at a minimum, should clearly define the construct or outcome being measured and include items that operationalize this definition. The choice of assessment should align with the construct being measured and the goal of measurement (Andresen, 2000). When observational reports have strong psychometric values, including inter-rater reliability, they can help IPSE staff quantify observable outcomes (e.g., behaviors/actions) over time. In contrast, proxy reports can only capture information held by the proxy respondent. This respondent may not be present in all the contexts in which a student participates. Further, proxy respondents cannot report on the experience of internal states, as these cannot be directly observed (White-Koning et al., 2005). Self-reports, when made accessible to individuals with intellectual disability, are a strong approach to measuring internal states and experiences across a range of contexts (including those that may not be consistently or appropriately observed) and can help staff understand the perspectives of students. While historically, concerns have been raised about the accessibility and validity of self-reports, there are several strategies for developing self-reports that enhance accessibility and validity for people with intellectual and/or developmental disabilities (e.g., Kooijmans et al., 2022; Kramer et al., 2012; Scott & Havercamp, 2018; Walton et al., 2022). As such, they can be a useful tool, used alone or in combination with other assessment types.

As a starting point to better understanding IPSE outcomes for individual students within and across diverse programs, the field needs clarity and transparency with regard to outcome assessment. As there are more than 300 colleges and universities that offer programs for individuals with Intellectual and Developmental Disabilities (IDD) (Think

College Search, 2024), research and evaluation would be aided by a suite of psychometrically strong and commonly utilized assessments.

Our research questions for this descriptive study were as follows:

1. What assessments do IPSE programs in the United States use to measure hypothesized IPSE outcomes? These outcomes included career exploration, employment and work skills, independent/community living, self-determination, and any "other" outcomes assessed by IPSE programs.
2. What are the perceived advantages and disadvantages of each assessment?

Findings from this descriptive study may inform IPSE programs and prospective students and families in several ways. First, understanding how outcomes for broad constructs such as "self-determination" or "independent living" are measured can help those outside of an individual program understand the specific skills and experience emphasized and/or gained within a program. Second, if program staff adopt commonly used measures, they can better evaluate their program's success relative to other programs, which may help identify best practices. Third, identification of commonly used measures can help researchers identify gaps in outcome measurement in IPSE and spur future measurement development. Accurate measurement of IPSE outcomes is critical to demonstrate its value when advocating for funding and in supporting students and families to make informed decisions.

Method

Participants and Recruitment

We recruited participants between October 1, 2023, and February 15, 2024, through the *Think College* network (a group of individuals with interest in the area of inclusive postsecondary education who may also receive formal technical support through Think College), including email lists, announcements at meetings for programs with current Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSID) funding, and Facebook groups for IPSE professionals. We aimed to recruit a national sample, composed of programs with a range of program formats and funding structures. Inclusion criteria were as follows:

1. IPSE program staff including Project/Program Directors, Program Evaluators, and Coordinators for specific components within an IPSE (e.g., employment, academics, student life, etc.).
2. Experience with selecting and administering standardized assessments to students who are attending IPSE programs.

The survey was not limited to respondents from federally funded TPSIDs, but respondents were asked to indicate whether their program was currently or previously supported by TPSID funding or whether they had never received TPSID funding. The survey was conducted online using Qualtrics. We collected background information about the IPSE program participants worked at (e.g., length of program, number of students,

etc.). The remaining questions were primarily open-ended and sought information about assessments used:

1. to measure outcomes (i.e., change over time after program participation) related to: Career Exploration; Employment or Work Skills; Independent and Community Living; Self-Determination; and "other" outcomes that did not fit in these categories.
2. for the admission process (and whether scores on these assessments are used to make admissions decisions).
3. to develop goals and/or guide individual supports and/or programming (for example, to inform day-to-day services for an individual or to plan for what structures should be in place within a program to support student needs), but not to measure outcomes (i.e., their primary purpose is not to compare change over time).

In each area, respondents were asked to: (a) List all assessments used; (b) Indicate if the measures used were standardized or developed specifically for their program; (c) Describe assessments by name and their purpose; and (d) Describe the strengths and weaknesses of each assessment. If respondents indicated that an assessment was developed specifically for their program, they could choose to share the assessment.

Analysis

Researcher Positionality

We brought our experiences with a newly-established IPSE program to this analysis. The first author works as an evaluator and the second as the Program Director/PI of a TPSID-funded IPSE program that began in 2021. At the time this study was designed and conducted, the evaluator had worked with the IPSE program for 3 years and the Program Director/PI had worked with the program for 1.5 years and had more than 10 years of research experience related to outcome measurement for young adults with intellectual and/or developmental disabilities. The researchers had their own experience of searching for and evaluating assessments for an IPSE program. These experiences informed the design of the study and their analytical framework. For the purposes of this analysis, they bracketed their own experiences with each assessment reported by participants.

Analytical Steps

We calculated descriptive statistics to describe programs. For each outcome area (e.g. employment, self-determination) and purpose (i.e., outcomes, admissions, goals), we counted the number of assessments shared and categorized them as standardized or non-standardized. Because we received limited information about the advantages and disadvantages of each assessment (i.e., most respondents provided no information or a single short sentence), we could not conduct content or thematic analysis. Instead, for each outcome and use, we created tables that captured assessment names, type

(standardized/non-standardized), and their advantages and disadvantages. We examined data within tables to identify common advantages and disadvantages.

Results

Participants

Seventeen participants, representing 17 distinct programs (13 currently receiving TPSID funding, two with past TPSID funding, and two programs that have never received TPSID funding) completed the survey. Respondents held different positions, but the majority self-identified as a Project/Program Director (77%). Additional program characteristics are summarized in Table 1.

Table 1

Respondent Program Characteristics

Total years in operation	Median = 5 (Range: 1 – 16)
Curriculum Length	
Four-Year	n = 8 (50%)
Three-Year	n = 5 (31%)
Two-Year	n = 2 (3%)
Two-Year, optional Third Year	n = 2 (3%)
Student Characteristics	
Current Students Enrolled	Median = 19 (Range: 4 – 33)
Typical Cohort Size	Median = 6 (Range: 2 – 16)
Total Students Graduated to Date	Median = 5 (Range: 0 – 84)

Use of Assessments to Evaluate Student Outcomes

Career Exploration

Eight programs used assessments to support career exploration. Of those, six used standardized assessments. Standardized assessments used to evaluate outcomes related to career exploration included *O-Net Interest Profiler* (n=3; National Center for O*NET Development Interest Profiler, 2025), *Clifton Strengths* (n=1; Rath, 2007), the *Focus2* (n=1; focus2career), and the *Standard Self-Directed Search* (n=1; Holland, 1994). Respondents stated that the O-Net was useful because it is online and while it can be completed by some students independently, they also said that it is "not the most intuitive or accessible assessment." The respondent who used *Clifton Strengths* noted that there are several drawbacks, including a need to give more hands-on assistance to students who are completing it, and that it requires someone who is trained in the tool to interpret results to students. The respondent who used the *Standard Self-Directed Search* noted that the tool gives a booklet of career options based on a student's score but believed that it does not provide a wide enough range of career options.

Two programs reportedly used non-standardized assessments to support career exploration. These included activities such as career exploration assignments in classes, student reflections on work experiences, and a person-centered planning tool that included interest-driven career exploration. They also used site supervisor and employment team member evaluations. Some noted that these non-standardized assessments are easy and free to use, person-centered, and that their frequent use by the same people (e.g., supervisor) made it easy to monitor progress. Respondents who used these approaches noted that they can be subjective depending on who is filling them out and that students may not be accurate in how they self-assess their progress. They said that this can happen in both extremes, stating that students may be "too critical or too complimentary."

Employment or Work Skills

Most respondents (10 of 17) indicated that they did not use any assessments to evaluate outcomes in employment or work skills. Two respondents indicated that their programs used standardized assessments, the *Brigance Comprehensive Inventory of Basic Skills* (French et al., 2010) and the *Focus2* (National Center for O*NET Development, 2025). No strengths or weaknesses were specified for either assessment.

Five respondents used non-standardized assessments, primarily in the form of internship feedback surveys (n=3). Perspectives on this approach were mixed. Advantages include that they provide opportunities for direct supervisor feedback and can be used by students to set goals and to see their own growth and progress during an internship experience. Disadvantages include subjectivity, and the respondent stated that there is potential that they may not cover "all aspects of being an employee." They also stated that their setting-specific nature may preclude generalized skill assessment. Other methods included class assignments (n=1) and the use of an employment rubric completed by supervisors (n=1). A respondent who used employment rubrics stated that the advantage of these rubrics is they can help structure feedback, as, "the specific skills are identified and they are clearly articulated so that students can achieve them." One respondent shared using a combination of approaches (i.e., task analysis to determine proficiency in work related skills, soft skills evaluation, and social skills assessment for the work environment) to develop a highly customizable approach for each student and work environment but said that this approach can be time-consuming and require a high level of expertise to implement.

Independent and Community Living

Most respondents (13 of 17) indicated that they did not use any assessments to evaluate outcomes in independent and community living. Those who did respond included diverse constructs within this category of Independent and Community Living. Of the three respondents who assessed independent and community living, they reported using *Goal Attainment Scaling* (n=1; Kiresuk et al., 2014; Turner-Stokes, 2009), the *ARC Self Determination Scale* (Wehmeyer, 1995; n=1) and the *Adaptive Behavior Assessment System* (n=1; Oakland & Harrison, 2011). Two programs used non-standard assessments to evaluate independent living, with one respondent saying they used their measure "to

assess in context specific skills that have been identified in each year of our program for independent living and are articulated in our course of study" (n=1). They also developed their own Social Inclusion tool, "to assess in context specific skills that have been identified in each year of [the] program for social inclusion" (n=1). Respondents shared that non-standardized assessments allowed them to evaluate program-selected skills, but that these assessments might be improved by allowing students to provide evidence in different formats (e.g., a video of their skills in action).

Self-Determination

Most respondents (11 of 17) indicated that they did not use any assessments to evaluate outcomes in self-determination. Two respondents shared that their program used standardized assessments, including one program that used the *ARC Self Determination Scale*, (Wehmeyer, 1995) and one that used the *Self-Determination Inventory: Adult Report* (SDI-AR) (Shogren et al., 2021). The respondent whose program used the *SDI:AR* found that it can be confusing to some students and said that many students "tend to rate themselves perfectly" on all items. Two programs used non-standardized assessments, including behavioral observations and reflections during Person Centered Planning.

"Other" Outcomes

Four respondents reported evaluating other outcomes. These outcomes included academic progress and post-graduate outcomes (not-specified). Academic progress was evaluated by faculty for each course based on the extent to which specified standards were met. Another respondent shared that their program used personalized action tools to plan and track student outcomes when it is discovered that there is a need for additional assessments. These assessments were developed for individuals to track specific progress over time, yet the respondent shared that they "could benefit from a more systematic approach." The respondent whose program reportedly used a post-graduation outcomes survey did not provide details on strengths or weaknesses.

Assessment Incorporated into Application Process

Most respondents (14 of 17) indicated that they did not use assessments during the program application process. Two programs assessed independent living as part of admissions decisions. One of these programs used a checklist of independent living skills, and the other reported using a previously developed measure, but the respondent did not provide the name of the measure. One respondent noted that their program used what they called "baseline performance assessments" and assessments about services needed that neither were used to make admissions decisions. Neither program reported any advantages or disadvantages of these assessments.

Assessments to Develop Individualized Goals & Guide Supports

Most respondents (11 of 17) indicated they did not use assessments to develop goals or to guide individualized supports. One respondent indicated that their program

has used multiple standardized assessments, the *Brigance Comprehensive Inventory of Basic Skills* (French et al., 2010), the *Behavior Assessment System for Children* (Merenda, 1996) and non-standardized assessments (social skills assessment, executive functioning measure, and curriculum-based assessments) to identify potential areas in which students may want to improve and to receive extra support. Another indicated that they used an "Apartment Living Skills Assessment" developed by the program to understand student skills for independently living in an apartment. They noted that it has the advantage of being very detailed and stated that they have only recently started to use the tool so are not yet sure of the weaknesses. Two respondents indicated that their programs used a person-centered planning tool, but no formal assessments.

Discussion

Use of Assessments

This study provides a summary of assessments utilized by 17 IPSE programs across a range of hypothesized IPSE outcomes. In all areas, many programs opted to use their own program-specific assessments as opposed to evidence-based standardized assessments; and in many cases, programs were not using any formal or standardized assessments to measure outcomes. A lack of consistent, quality assessments is concerning because programs that do not collect data on outcomes may not have the necessary information to develop or adjust programming to fulfill student needs and goals. Further, lack of formal data may make it difficult to provide evidence of their program's success to students, families, and funding sources.

Challenges to Use of Assessments and Formal Outcome Evaluation

There may be several reasons that programs are not using formal assessments and, among those who are, are primarily relying on non-standardized ones. First, program staff may not feel confident administering or interpreting results of standardized assessments, perhaps due to lack of training (Foster et al. 2018; Santana et al., 2015). Comments from some respondents suggested that the need for an "expert" to implement some standardized forms of assessment was considered a drawback of those assessments. Therefore, staff in IPSE programs may benefit from training on administering and interpreting standardized assessments, including how to share results with individuals with disabilities. Training would help to ensure standardized measurement and may increase staff confidence in searching for, critically evaluating, selecting, and utilizing standardized measures.

Second, as in our own experience, after exploring currently available standardized assessments, staff may feel that limited accessible assessments are available that comprehensively evaluate constructs of interest, and may have difficulty finding these instruments. We encourage programs to provide education on the use of evidence-based assessments, when they are available. When they are not, approaches such as *Goal Attainment Scaling*—a standardized approach to measuring individualized goals—may be appropriate (Kiresuk et al., 2014; Turner-Stokes, 2009).

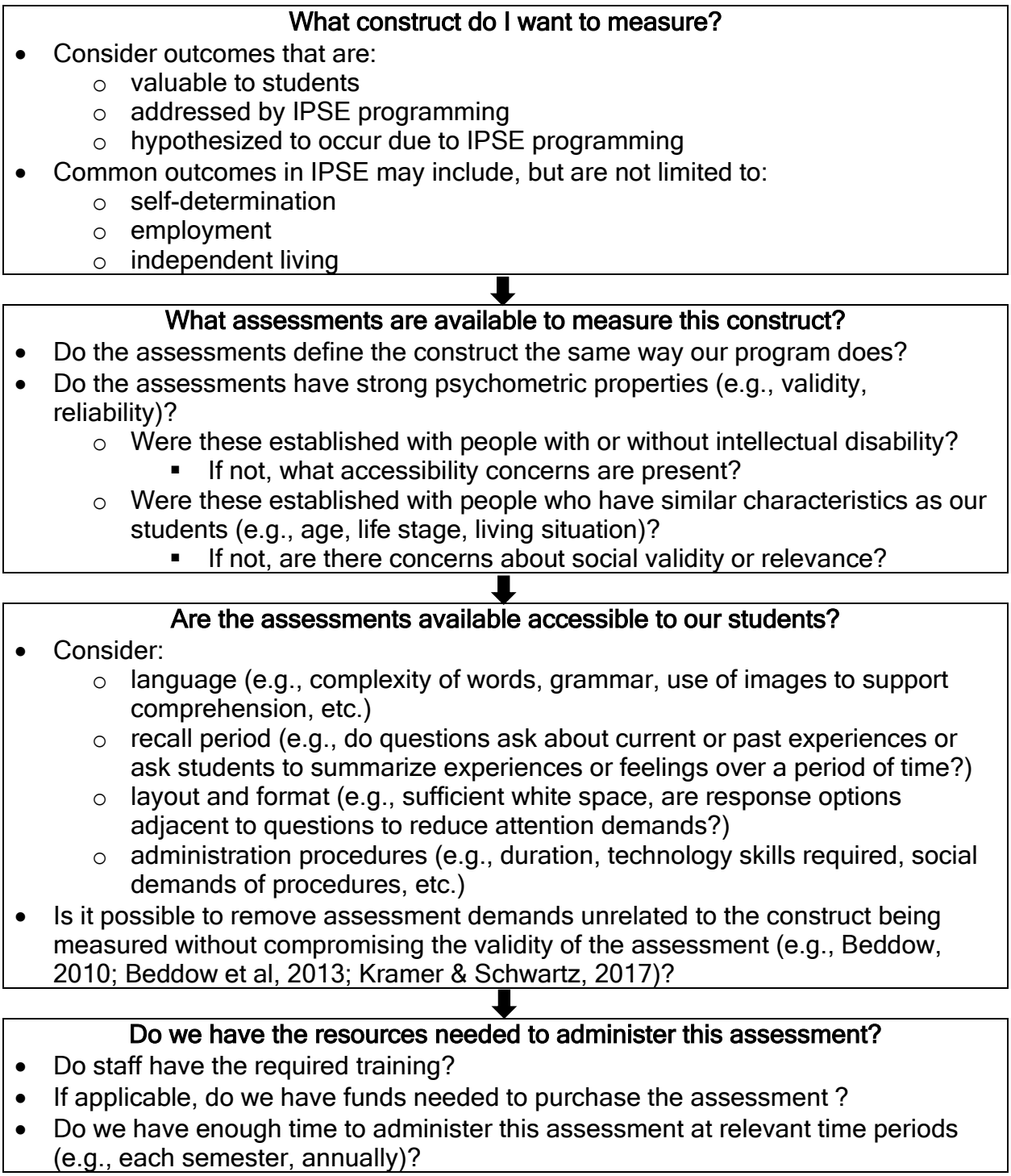
Third, staff may have philosophical concerns about using proxy-reports when they are the best option available. For example, the *PEDI-CAT Responsibility Domain* (Kramer et al., 2012) measures transfer of responsibility of life tasks (i.e., including independent living) for individuals up to age 21, thereby capturing outcomes relevant to IPSE. However, it is a parent report which poses philosophical challenges for IPSE programs, given the emphasis on self-determination and self-advocacy. Parent reports can also pose practical challenges, as family members may not observe the skills students enact during IPSE programming. Finally, staff may have concerns about burden associated with the administration of an assessment battery comprehensively capturing all outcomes and may want to avoid putting students in a situation where they feel scrutinized. This may be especially salient when they are not sure how to incorporate assessment results into advising and learning activities, as most assessments do not produce score reports that are meant to be accessible to respondents with intellectual disability.

There are numerous challenges to using standardized assessments when considering academic and non-academic outcomes that are crucial to a high-quality inclusive postsecondary education program. One such challenge is that existing options for standardized assessment are limited and may not fit the needs of every program. Because relatively few individuals with intellectual and/or developmental disabilities have access to postsecondary education programs, assessments focused on college and career-related outcomes are generally not designed with the needs of students with intellectual and/or developmental disabilities in mind. Often, assessments may not be accessible: They may contain cognitive demands related to item and response scale wording, layout (e.g., requirements to shift attention and visually scan), and/or may have high attention and social demands (Kramer & Schwartz, 2017; Walton et al., 2022).

As many staff in IPSE programs do not have advanced training in evaluation, it may be daunting to work through these challenges. However, IPSE staff do have a strong understanding of desired outcomes, students' goals, and students' support needs. Therefore, they have information that is foundational to selecting standardized assessments, and, when necessary, to develop their own formal approaches to outcome evaluation. Figure 1 provides guiding questions to support selection of assessments. This set of guiding questions can be used to support IPSE staff to think through evaluation of each outcome, one-by-one.

Figure 1

Flow Chart to Support Assessment Selection



If there is not an existing assessment that meets our needs, can we develop a formal plan to assess the construct?

- Have we developed an operational definitoin of the construct?
  - Consider: Conducting a literature review, expert panels, and/or focus groups
- What is the best approach to measure the construct?
  - Consider: Qualitative and quantiative assessment
  - Consider: Proxy-report, self-report, observation
- Can we draw upon any existing assessments to develop items, response scales, or methods for a program-specific assessment?
- How frequently should we measure the outcome?
  - In what time period would change be expected?
  - What schedule is feasible?
- If using a proxy-report approach, how we will ensure the same respondents are available at each time point?
- What approach will be accessible, meaningful, and engaging for students?

Gather feedback

- What was the experience of using the assessment?
  - What did students and staff think about the process?
- Did assessment outcomes match qualitative observations of the outcome (construct)?
- Did the assessment provide information that was useful to the students and/or program?
- Did the assessment successfully evaluate the full range of construct we intended to measure?

Recommendations

Develop Assessments That Capture Outcomes From IPSE Participation.

Results from survey responses suggest that programs may benefit from the development of new assessments that:

- address performance of skills across a range of contexts;
- allow for the use of multiple modalities for administration and for responses (e.g., written, verbal, video recordings, visual cues, etc.);
- are accessible to students with intellectual and/or developmental disabilities, for example use simple language, evaluate current actions or perspectives, etc. (Clark et al., 2017; Kramer & Schwartz, 2017; McDonald et al., 2022);
- presume competency and prioritize self-reported information. IPSE students can provide valid reflections on IPSE outcomes.
- support training for IPSE staff. Staff may benefit from instruction in critically evaluating and selecting assessments. They may also benefit from training in how to utilize an assessment manual to administer

assessments in a standardized manner, as well as how to document and interpret results;
- provide a way to compare outcomes over time and compare across similar programs;
- are easy to administer to students;
- provide tools or reports that support explanation to students so they can use results to act. For example, so they can adjust plans to reach goals, identify needed supports, etc. (e.g., Camacho et al., 2024); and
- can be tailored for program-specific outcomes or individualized in other ways.

Development of these assessments should be grounded in best practices in assessment development, ranging from exploratory qualitative research to clarify constructs to large-scale psychometric studies. Inclusion of IPSE students and staff in these processes will enhance validity and accessibility (PROMIS, 2013).

Enhance Evaluation Requirements.

While the lack of evidence-based, standardized, and accessible assessments relevant to IPSE outcomes remains a barrier, funders have the opportunity to help drive more rigorous outcome evaluation processes. Currently, TPSID-funded programs are not required to utilize standardized assessments to report outcomes or to measure change in student outcomes (e.g., self-determination, independent living, etc.) over time. Rather, TPSID reporting requirements are limited to student opportunities (e.g., independent living, career development, academic, person-centered planning), credentials, and outcomes (e.g., employment status during and after program completion). For a detailed description of outcomes see: Grigal et al., 2025. Further, requirements to become a Comprehensive Transition Program or to receive accreditation from The Inclusive Higher Education Accreditation Council (IHEAC) do not include use of standardized outcome assessments. Rather, programs have the opportunity to describe their evaluation processes including tools used, evaluation schedule, and data analysis approach (National Coordinating Center Accreditation Workgroup & Inclusive Higher Education Accreditation Council, 2024).

Expectations at the level of funders could prompt increased identification and uptake of standardized assessments. We do not suggest that funders require use of specific assessments, but rather rigorous standards for outcome evaluation. These standards may include clear explication of outcomes being measured, measurement approaches (with an emphasis on standardized assessments, when possible), practical and actionable measurement schedules, and internal evaluation of evaluation processes (e.g., every five years) to ensure relevance and utility. Further, the standards could include requirements and guidance for program-specific assessments (e.g., operational definitions of constructs, decision-trees to determine proxy- vs. self-reported outcomes, standards for item development, etc.). Such standards may drive development of assessment and, in the absence of available evidenced-based standardized assessments, support programs to systematically and carefully develop replicable/manualized approaches to collecting outcome data.

In addition to the development of standardized assessments, the field may benefit from an assessment repository to facilitate more consistent measurement of outcomes across programs; use of the same measures across programs can contribute to stronger evaluation and subsequent identification of best practices. For example, the Rehabilitation Measures Database (https://www.sralab.org/rehabilitation-measures) is free to use and provides information about assessments including purpose and psychometrics. EBSCO provides a similar database of psychology-related measures called PsycTests. A comparable database, specific to outcomes relevant to IPSE students, may facilitate rigorous assessment in IPSE.

Limitations

The present survey included a relatively small sample, so it is not possible to generalize this group to every IPSE program in the United States, but these respondents were willing to provide considerable detail about their use of assessments. In the future, the information in this study could be used to develop a more specific set of questions for a future survey that gathers a larger, more representative sample of IPSE programs.

Most respondents represented current or former TPSIDs; this may be due to our recruitment approach, which relied heavily upon Think College, the National Coordinating Center for TPSIDs. Programs without this funding might have different assessment approaches. These programs are not as closely linked to the larger Think College structure which provides technical assistance to TPSIDs and a network of similar programs that can share assessments and procedures with each other. Additionally, responses were primarily collected from IPSE program directors. Other staff may have valuable opinions on the strengths and weaknesses of assessments used within their programs. Further, students with intellectual and/or developmental disabilities who are attending these programs may have their own perspectives on which assessments have been most useful to them in reaching their goals and may differ in their opinions on how to define their own outcomes and their "success" in the program. Future studies should include IPSE students as participants to gain the perspective of those with lived experience on what assessments might be the most beneficial, accessible, and acceptable. An inclusive research approach may support the development of an accessible survey that includes questions most relevant to IPSE students, and long-term, the development of salient and accessible assessments for IPSE programs.

Implications for Future Research and Practice

Results suggest that across IPSE programs, there is a need for psychometrically-strong, consistent assessments to measure outcomes, make admissions decisions, and plan around student support needs and curricula. Several respondents appeared to be satisfied with their assessment methods; the field of IPSE may benefit from resource sharing so programs can learn from each other's successes and challenges around assessment. We encourage readers to utilize tools from related fields to identify evaluation measures (e.g., Rehabilitation Measures Database, PsycTests).

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