Inclusive Postsecondary Education: PASS it Forward

Lyman Dukes III
University of South Florida St. Petersburg

Joseph Madaus
University of Connecticut

Presentation at the
Florida Center for Students with Unique Abilities Planning Institute
Orlando, FL
January 24th, 2018
About Me

• Lyman

➢ Professor / Program Coordinator / Graduate Program Advisor, Special Education, USFSP
Recognition

- Michael Faggella-Luby
- Nicholas Gelbar
- Adam Lalor
- Allison Lombardi
- Joseph Madaus
Session Objectives

• Explain the rationale for conducting a comprehensive literature review
• Explain the background and methods used for a comprehensive literature review
• Explain the development of the PASS Taxonomy
• Discuss how PASS may be of use in the field of postsecondary education and disability
Project Background

• As of 2012, a comprehensive analysis of the disability and higher education literature had yet to be conducted

• This literature is broad in scope and dispersed across a variety of disciplines (e.g., special education, higher education, psychology, sociology)

• Given the 40-year anniversary of the passage of Section 504 in 2013 and the 25-year anniversary of the ADA in 2015, it was a suitable occasion to review the field’s literature – And consider the following questions –
Project Background

• Questions Asked:
  – What topics have been studied?
  – What methodologies have been employed?
  – What portion of the literature can be defined as data-based?
  – What practices have substantial evidence and support?
  – Can we craft a tool for organizing the existing postsecondary and disability literature?
Our Method

• Every article of the Journal of Postsecondary Education and Disability from 2000-2010 was reviewed with common themes and topics identified.
• The JPED data revealed overlaps, need to determine key terms
  – e.g., “policies and procedures”, “experiences”
  – Where does eligibility “belong”?
  – Difference between institutional and program legal compliance?
  – What about studies of instruments and proposed constructs?
• Initial domains collapsed and updated to become:
  – Student level
  – Program level
  – Faculty/staff level
  – Construct level
• JPED articles from an additional 5 issues reviewed by four coders
• Reliability determined at 75%-85%
• Debriefing resulted in 100% agreement; refinement of terms, inclusion and exclusion criteria
Our Method

- Sorted into domains; reliability measured
  - 88% - 96% for sorting
- Articles provided a broader perspective and led to further refinement of the subdomains
- Validity check by 8 former editors or co-editors of JPED
  - Measured the clarity of domain definitions
    - All were strongly agree or agree that the domain definition was clear
  - Requested suggestions for missing domains
  - Fit of the subdomains
  - Suggestions for missing subdomains and clarification of subdomains
    - (e.g., legal compliance at the program or institutional level)
Inclusion and Exclusion Criteria

• **Inclusion criteria:**
  1. The article is about Postsecondary Education for Students with Disabilities (broadly considered to include faculty, disability services, emerging constructs)
  2. The article is about one of the following topics/populations:
     a. Programs for accepted students into degree granting programs at a 2 or 4 year college or university
     b. Programs, services, or experiences of matriculated students
     c. Articles about the experiences of students with disabilities who have dropped out of degree granting programs at a 2- or 4-year college or university
     d. Articles about the experiences of students with disabilities who are graduates of degree granting programs at a 2- or 4-year college or university

• **Exclusion criteria**
  1. Articles that are primarily about secondary students in transition or transition aged programs and non-matriculating students.
## Domain Descriptions

<table>
<thead>
<tr>
<th>Domain Name</th>
<th>Domain Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student-Focused Support Domain</strong></td>
<td>Experiences and perceptions of students with disabilities in and after higher education.</td>
</tr>
<tr>
<td><strong>Program and Institutional Support Domain</strong></td>
<td>Service provision by the disability services office in a higher education institution. Can also relate to institutional policies and procedures pertaining to students with disabilities.</td>
</tr>
<tr>
<td><strong>Faculty/Staff Support Domain</strong></td>
<td>Knowledge, attitudes, beliefs of faculty and non-disability services personnel to enhance access to higher education for students with disabilities. Also education or support for faculty and staff in this practice.</td>
</tr>
<tr>
<td><strong>Concept / Systems Development Domain</strong></td>
<td>Development, evaluation, or validation of a variable, including development/validation of assessment instruments, evaluation metrics, theoretical models of service delivery, standards of practice, or ethics. The variable must be under proposal, in development, or being used in practice to gather empirical evidence.</td>
</tr>
<tr>
<td><strong>No Fit</strong></td>
<td>Studies that do not relate to any of the above domains.</td>
</tr>
</tbody>
</table>
## Sub Domains

### Student-Focused Support

- Access (physical, cognitive, attitudinal)
- Assistive technology use
- Career development
- Experiences, perceptions, knowledge, attitudes, or beliefs of students with disabilities
- Learning/using study skills, learning strategies
- Mainstream technology use
- Meeting institutional requirements (e.g., degree requirements, foreign language requirements, math requirements)
- Post-undergraduate program experiences and/or outcomes (e.g., graduate school, employment)
- Profiles of students (e.g., diagnostic profiles, profiles of successful and/or unsuccessful students)
- Requesting or using accommodations (e.g., assistive technologies, separate testing location, course substitutions)
- Self-determination skills (e.g., self-advocacy, student goal attainment, self-disclosure, self-management, legal rights and responsibilities)
- Statistics on students with disabilities (e.g., rate of access to postsecondary education, student retention, graduation rate, statistics on accommodation use)
# Sub Domains

## Program/Institutional-Focused Support

- Collaboration with faculty or academic departments
- Collaboration with other campus services
- Experiences, perceptions, knowledge, attitudes, or beliefs of disability service providers
- General or specific descriptions of disability programs and resources and/or recommended program components
- Institutional Policies/Procedures
- Legal compliance (institutional specific)
- Legal compliance (program specific)
- Program development
- Programs for incoming students (e.g., freshmen, transfer students)
- Programs for students transitioning to graduate school or employment
- Programs for specific cohorts of students (e.g., LD, Aspergers, etc)
- Policies and procedures (e.g., determining student eligibility for services, determining reasonable accommodations, determining access to assistive technology)
- Professional development/training for disability services staff
- Program evaluation (e.g., student retention, student use of program related services, student graduation rates)
- Program fit within the institution (e.g., student affairs v. academic affairs)
## Sub Domains

<table>
<thead>
<tr>
<th>Faculty/Staff-Focused Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Campus staff development and training</td>
</tr>
<tr>
<td>• Campus staff knowledge, attitudes and beliefs (e.g., about students with disabilities)</td>
</tr>
<tr>
<td>• Campus staff practices</td>
</tr>
<tr>
<td>• Faculty development and training</td>
</tr>
<tr>
<td>• Faculty knowledge, attitudes and beliefs (e.g., about students with disabilities; about providing accommodations)</td>
</tr>
<tr>
<td>• Faculty teaching practices</td>
</tr>
<tr>
<td>Sub Domains</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td><strong>Concept / Systems Development</strong></td>
</tr>
<tr>
<td>• Assessment instruments (development, validation, use to develop diagnostic profiles)</td>
</tr>
<tr>
<td>• Conceptual models or discussion of issues in disability services (e.g., eligibility for services)</td>
</tr>
<tr>
<td>• Conceptual models of service delivery (e.g., Universal Design, other models)</td>
</tr>
<tr>
<td>• Conceptual models of instruction/assessment of learning</td>
</tr>
<tr>
<td>• Evaluation metrics or methods</td>
</tr>
<tr>
<td>• Instructional practices</td>
</tr>
<tr>
<td>• Standards of practice, performance or ethics.</td>
</tr>
<tr>
<td>• Other (including disability studies)</td>
</tr>
</tbody>
</table>
Method

• 1,346 articles identified thru multiple data base searches (e.g., Academic Search Premier, EBSCO)
• Published between 1955 and 2012
  – 2012 - 2015 also collected for several sub domain topical areas
• Articles grouped into domains, reliability measured
  – Some articles shifted into different domains after coding
Instrument

• An electronic coding instrument was designed and refined employing two pilot examinations using multiple coders.
• The instrument allowed for the researchers to identify:
  – Did the article meet inclusion criteria?
  – Did the article present original data?
  – If not data-based, what type? (e.g., lit review, legal analysis)
  – If data-based, what type? (with multiple layers)
    – What was the setting for the article? (US, Canada, international, 2- or 4-year)
    – Who was in the sample? (numbers, gender, disability, race, etc.)
  – Domain and sub-domain
• Across coding sheet, 148 choices were possible
• To achieve agreement, coders selections must be exact
Inter-Rater Reliability

- Each article coded twice to check for inter-rater reliability.
- Discrepancies discussed and reconciled
- A third coder was used as needed to reconcile disagreements

Frequency and Reliability by Domain

<table>
<thead>
<tr>
<th>Domain</th>
<th>n</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1: Student-Level Studies</td>
<td>431</td>
<td>92%</td>
</tr>
<tr>
<td>Domain 2: Program or Institution-Level Studies</td>
<td>292</td>
<td>88%</td>
</tr>
<tr>
<td>Domain 3: Faculty/Non-Disability Support Staff-Level Studies</td>
<td>132</td>
<td>94%</td>
</tr>
<tr>
<td>Domain 4: Construct Development-Level Studies</td>
<td>138</td>
<td>91%</td>
</tr>
<tr>
<td>No Fit</td>
<td>14</td>
<td>100%</td>
</tr>
<tr>
<td><strong>OVERALL RELIABILITY</strong></td>
<td></td>
<td>91%</td>
</tr>
</tbody>
</table>
Frequency of Articles by Domain Over Time

- Domain 1
- Domain 2
- Domain 3
- Domain 4
- Total

FCSUA Institute
Journals with the Highest Frequency of Articles About Higher Education and Disability Across Domains

Unique Journals: 249
Frequency of Data-Based vs. Non-Data-Based
Student-Focused Support Studies Over Time

FCSUA Institute
Proportion of *Student-Focused Support Studies* by Research Methodology

- **Quantitative (n = 202)**: 56%
- **Qualitative (n = 120)**: 34%
- **Mixed Methods (n = 37)**: 10%

FCSUA Institute
Proportion of *Student-Focused Support Studies* With and Without Control/Comparison Groups

- With Control/Comparison Group (n = 15): 29%
- Without Control/Comparison Group (n = 36): 71%
Proportion of Data-Based Student-Focused Support Studies Including Disability-Related Demographic Information

69% Study Provided Frequencies of Disability Type (n = 201)
18% Study Did Not Provide Frequencies of Disability Type (n = 52)
13% Coder Disagreement (n = 39)
Twelve Subdomains of Student-Focused Support Studies and Their Frequencies

(Articles could be coded as multiple subdomains)

- Experience, perception, knowledge, attitude of SWD (n = 272)
- Profiles of SWD (n = 123)
- Requesting/using accommodations (n = 57)
- Learning/using study skills or learning strategies (n = 56)
- Access (physical/cognitive/attitudinal) (n = 47)
- Statistics on SWD (n = 41)
- Self-determination (n = 38)
- Assistive technology use (n = 23)
- Career development (n = 21)
- Mainstream technology use (n = 15)
- Meeting institutional requirements (n = 11)
- Post-undergraduate experiences or outcomes (n = 9)

FCSUA Institute
Frequency of Data-Based vs. Non-Data-Based Program/Institution-Support Studies Over Time
Proportion of Program/Institution-Support Studies by Research Methodology

- **Descriptive Quantitative** (n = 72)
- **Group Design** (intervention study; n = 1)
- **Mixed Methods** (n = 7)
- **Qualitative** (n = 27)
- **Single Subject** (n = 3)

FCSUA Institute
Sixteen Subdomains of Program/Institution-Support Studies and Their Frequencies
(Articles could be coded as multiple subdomains)

- Descriptions/recommendations of disability programs/resources (n = 97)
- Policy and procedure (eligibility, accommodations, etc.) (n = 68)
- Programs for specific cohorts of SWD (n = 59)
- Institutional policies/procedures (n = 58)
- Legal compliance (Institution specific) (n = 42)

≥ 22

11 – 21

- Experience, knowledge, attitudes, beliefs of DSPs (n = 21)
- Program development (n = 21)
- Collaboration with faculty or academic departments (n = 17)
- Other (n = 16)
- Programs for incoming students (n = 13)
- Collaboration with other campus services (n = 13)
- Programs for students transitioning to grad school/employment (n = 12)

≤ 10

- Legal compliance (program specific) (n = 10)
- Program evaluation (n = 10)
- Program fit within institution (n = 2)
Frequency of Data-Based vs. Non-Data-Based Faculty/Non-Disability Staff Support Studies Over Time

FCSUA Institute
Proportion of Faculty/Non-Disability Staff Support Studies by Research Methodology

- Quantitative (n = 46): 61%
- Qualitative (n = 17): 23%
- Mixed methods (n = 12): 16%
Proportion of Faculty/Non-Disability Staff Support Studies With and Without Control/Comparison Groups

- With Control/Comparison Group (n = 3): 4%
- Without Control/Comparison Group (n = 68): 96%

FCSUA Institute
Six Subdomains of Faculty/Non-Disability Staff Support Studies and Their Frequencies
(Articles could be coded as multiple subdomains)

- **≥ 30**
  - Faculty knowledge, attitudes and beliefs (n = 59)
  - Faculty teaching practices (n = 36)

- **20 – 29**
  - Faculty development and training (n = 24)
  - Campus staff practices (n = 20)

- **≤ 19**
  - Campus staff knowledge, attitudes, and beliefs (n = 19)
  - Campus staff development and training (n = 9)

FCSUA Institute
Frequency of Data-Based vs. Non-Data-Based Concept / Systems Development Studies Over Time

Data-Based
Non-Data-Based

FCSUA Institute
Proportion of Concept / Systems Development Studies by Research Methodology

- **Descriptive Quantitative** (n = 38) - 66%
- **Group Design** (intervention study; n = 2) - 3%
- **Mixed Methods** (n = 5) - 9%
- **Qualitative** (n = 13) - 3%
- **Single Subject** (n = 0) - 0%
Proportion of Concept / Systems Development Studies With and Without Control/Comparison Groups

NOTE: There were two design studies (one with control group) and a third descriptive study with a group for comparison.
Seven Subdomains of Concept / Systems Development Studies and Their Frequencies

(Articles could be coded as multiple subdomains)

≥ 22
- Conceptual models of service delivery (e.g., Universal Design, other models) (n = 52)
- Assessment instruments (development, validation, use to develop diagnostic profiles) (n = 42)

11 – 21
- Conceptual models of instruction/assessment of learning (n = 20)
- Conceptual models or discussion of issues in disability services (e.g., eligibility for services) (n = 14)
- Standards of practice, performance or ethics (n = 13)

≤ 10
- Evaluation metrics or methods (n = 9)
- Other (including disability studies) (n = 3)
No Fit Article Descriptions

• 14 articles were coded as meeting the criteria to be included in the study, but did not fit a domain.

• Examples of article topics:
  – Disability and higher education testing agencies
  – Interviews with researchers studying disability and higher education
  – Disability training and programming for students without disabilities
The PASS Taxonomy

Program and Institutional-Focused Support

Student-Focused Support

Faculty and Staff-Focused Support

Concept and Systems Development

Student Success

FCSUA Institute
PASS Taxonomy and the Planning Tool

Domain 1
- Students know, request, and use accommodations necessary for full participation.

Domain 2
- Faculty and staff engage with program staff to enhance key college and university services.

Domain 3
- Program evaluation is ongoing and used to inform FL/CTP development and improvement.

Domain 4
- The FL/CTP program for students with intellectual disabilities aligns with and or extends the IHE’s mission.
Discussion –
Are we there yet?

• Articles on higher education and disability have been published in 249 unique journals
• These journals have a range of purposes, styles, level of rigor, etc.
• The overall number of published articles in the field has increased considerably from the late 1970s.
• A limited number of studies have clear control/comparison groups ($n = 20$)
Discussion –
Are we there yet?

• Articles on higher education and disability have been published in 249 unique journals

• These journals have a range of purposes, styles, level of rigor, etc.

• The overall number of published articles in the field has increased considerably from the late 1970s.

• A limited number of studies have clear control/comparison groups (n = 20)
Discussion – Are we there yet?

Domain 1 (cont)

• Most popular subdomains:
  – Experience, perception, knowledge, attitude of SWD (n = 272)
  – Profiles of SWD (n = 123)

• Least popular subdomains:
  – Mainstream technology use (n = 15)
  – Meeting institutional requirements (n = 11)
  – Post-undergraduate experiences or outcomes (n = 9)
Discussion –
Are we there yet?

Domain 2

• Data-based articles constitute 37.2% of total
  – First 20 years: <1% of the data-based articles
  – Last 12 years: 57.3% of the data-based articles

• Comparison group design n=0

• Research Method
  – 65.5% Descriptive Quantitative
  – 24.5% Descriptive Qualitative
  – 10% group design, mixed methods or ss (n=11)
Discussion –
Are we there yet?

Domain 2 (cont)

• Most popular subdomains
  – Descriptions/recommendations of disability programs/resources (n = 97)
  – Policy and procedure (eligibility, accommodations, etc.) (n = 68)
  – Programs for specific cohorts of SWD (n = 59)
  – Institutional policies/procedures (n = 58)
  – Legal compliance (Institution specific) (n = 42)

• Least popular subdomains
  – Legal compliance (program specific) (n = 10)
  – Program evaluation (n = 10)
  – Program fit within institution (n = 2)
Discussion – Are we there yet?

Domain 3

- The domain with the fewest articles (n = 132)
- Data-based articles constitute 37.2% of total
  - Prior to 2001: 29.7% of the data-based articles
  - Since 2001: 70.3% of the data-based articles
- Comparison group design 4% (3/71 articles)
- Research Method
  - 61% Quantitative (n = 46)
  - 23% Qualitative (n = 17)
  - 16% Mixed methods (n=12)
**Discussion – Are we there yet?**

**Domain 3 (cont)**

- Most popular subdomains
  - Faculty knowledge, attitudes and beliefs (n = 59)
  - Faculty teaching practices (n = 36)
- Least popular subdomains
  - Campus staff practices (n = 20)
  - Campus staff development and training (n = 9)
Discussion – Limitations

• Not possible to gather every published article
  – Search terms as broad as possible (28 keywords)
  – Use of a range of data-bases
• Domains and codes for data-collection determined by the research team
  – Iterative process
  – Examined multiple journals
  – Feedback from outside experts
• Coding errors
  – Each article double coded
  – Reconciliations
Discussion – What’s next?

• Develop Research Guidelines
  – Seek out the participation of relevant professionals groups / organizations

• Develop PASS 2.0
  – Use either an identical or similar methodology for the development process

• Examine How PASS 2.0 is Employed
  – How are researchers / programs / institutions using the taxonomy
Q & A
Thank you!!