Assessing the Effectiveness of a Personal Development Plan (PDP) for First-Year Students: A Mixed-Method Approach

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Presentation Overview

- Assessment Purposes and Approaches
- Introduction to the ePDP
- ePDP assessment strategies
- Outcomes
  - Quantitative
  - Qualitative
- Implications and Future Assessment Efforts
Assessment Purposes and Approaches
Electronic Personal Development Plan (e PDP)

- A flexible online portfolio and web-page presentation tool that allows students to plan, mark progress, and reflect on their college experience.
- Implemented in first-year seminars and is easily adapted to courses, departments, and programs so that students can continue to use the PDP throughout their college experience to guide their learning.
- Components of the PDP include a semester in review, personal learning goals, and a semester-by-semester plan.
  - (Buyarski, 2011)
Purposes of Assessment

- Determine if the program (e.g., ePDP process) is attaining intended goals and student learning outcomes.
- Determine if students learn through process of structured reflection and completing prompts (e.g., about self, integrative learning, critical thinking, writing).
- Enable students to assess own strengths.
- Allow more opportunities to improve teaching and learning.
- Help institution demonstrate accountability or determine worth and value of programs.
- Make data-based decisions.
Assessment Approaches

- Seek involvement of key stakeholders in planning, implementation, and deployment.

- Select outcome measures that are valid, reliable, aligned with program goals and learning outcomes.

- Understand what processes lead to particular outcomes: the why and the what.
Assessment Approaches

- Employ qualitative and quantitative methods.
- Employ multiple measures from different sources.
- Employ summative and formative approaches.
- Take steps to ensure results are linked to planning and decisions.
## Formative vs. Summative Assessment

<table>
<thead>
<tr>
<th>Formative Assessment</th>
<th>Summative Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluations intended - by the evaluator - as a basis for improvement (Scriven, 1996).</td>
<td>Seeks to monitor educational outcomes, often for purposes of external accountability.</td>
</tr>
<tr>
<td>Typically conducted during the development or improvement of a program or product and it is conducted, often more than once, for in-house staff of the program with the intent to improve.</td>
<td>Assessment of learning and is contrasted with formative assessment, which is assessment for learning.</td>
</tr>
<tr>
<td>It typically involves qualitative feedback (rather than scores) for both student and teacher that focuses on the details of content and performance.</td>
<td>Provides information on the product's efficacy (its ability to do what it was designed to do). For example, did the learners learn what they were supposed to learn after participating in a program using the instructional module.</td>
</tr>
</tbody>
</table>
Mixed-Method Approaches

- Allows researchers to:
  - Triangulate findings from multiple sources.
  - Converge or corroborate findings.
  - Strengthen the internal validity of the studies.
  - Create elaborated understandings of complex constructs such as “understanding self” or “integrative learning.”
Quantitative and Qualitative Methods

- Multiple Methods and Measures are Employed to Assess Program Processes and Outcomes
- Complementary Techniques
- Work Best in Dialogue
Qualitative Assessment

• Brings Awareness Of Program Implementation Differences

• Provides In-Depth Understanding of Student Responses and Interactions

• Represents Part of a Long Term Strategy of Formative Evaluation
ATLAS.ti

Methodologically, coding is more than merely indexing data. Coding is simply the procedure of associating code words with selections of data. In ATLAS.ti’s framework, the foundation of “coding” is the association between a quotation and a code.

http://www.atlasti.com/uploads/media/007_basic_coding_EN.m4v
Quantitative Assessment

- Conduct quasi-experimental designs employing multivariate analyses of covariance, repeated measures MANCOVAs, and hierarchical regression procedures.
- Conduct analyses to determine program effects on academic performance, retention rates, and DFW rates.
- Describe retention rates and GPAs in defined populations over semesters and years.
- Examine participants compared to non-participants with regard to GPA and retention while adjusting for academic preparation and background differences.
- Examine predicted vs. actual retention, course grades, and DFW rates.
- Administer student surveys to assess student needs, satisfaction, engagement, program impacts, reasons for leaving, etc.
Employ Multiple Methods to Assess Learning

1) Direct
   - Projects, papers, tests, observations

2) Indirect
   - Questionnaires, interviews, focus groups
   - Unobtrusive measures such as Grades, Syllabi, and Transcripts
Introduction to the ePDP
Liberal Education and America’s Promise (LEAP) of Association of American Colleges and Universities (AACU)

- The Essential Learning Outcomes
- The Principles of Excellence
Principles of Excellence

Principle Two: Give Students a Compass

Focus each student’s plan of study on achieving the Essential Learning Outcomes and assess progress.
What is a Personal Development Plan?

Personal development planning is a **process** which will enable first year students at IUPUI to understand, implement, and mark progress toward a degree and career goal by creating and following a personalized plan that is open to revision and reevaluation every semester in collaboration with an academic advisor, faculty member, or mentor.
Why are we implementing the PDP?

The personal development plan is designed to foster:

1. **Goal commitment** (student commitment to earning a degree)
2. **Academic achievement** (through goal setting and planning)
3. **Curricular coherence and meaning** in the first-year seminar
4. Each of these goals is a way to foster student development
Five Learning Outcomes for the PDP

1. **Self-Assessment:** Students identify success-related competencies

2. **Exploration:** Students research and identify realistic and informed academic and career goals

3. **Evaluation:** Students analyze their academic progress over the semester in terms of progress toward academic and career goals

4. **Goal Setting:** Students connect personal values and life purpose to the motivation and inspiration behind their goals

5. **Planning:** Students locate programs, information, people, and opportunities to support and reality test their goals.
Framework for the ePDP

- Began conceptualizing the ePDP as part of an electronic document that students will carry with them and update as they move through their college experience.

- Focus on using the PDP to help students create coherence and meaning around their college experience and understand how the college experience helps develop their sense of self and shapes their future.
My IUPUI Experience

- Pre-Orientation
- First-Year Seminars
- Entry into Major
- RISE Experiences
- Capstone
- Personal Development Plan Sessions
Why an electronic portfolio?

- Easier to manage the portfolio process
  - Access
  - Presentation
  - Duplication
  - Evaluation
  - Storage

- Hypertext links allow clear connections between information presented and portfolio artifacts

- Motivational for students and addresses ownership issues of student-created work

- Creating an electronic portfolio can develop skills in using multimedia technologies

(Barrett, 1997; Rogers & Williams, 2001; Wetzel & Strudler, 2006)
Key Discussion Points

• How do we create a presentation format / process that students will find engaging and that they will “own”?

• What can we reasonably expect from first-year students? How can we honor student’s personal and cognitive development and build a framework that will be suitable as they learn and mature?

• How can we build a framework that may allow other programs to utilize the tool?
Components of “ePDP”

- About Me
- Educational Goals and Plans
- Career Goals
- My Academic Showcase
- Campus and Community Connections
- My College Achievements
- Resume
Hello, my name is Ariana Casale and welcome to my portfolio! I was born in New Brunswick, New Jersey, lived in Howell, New Jersey for three years, then I moved to Jackson, New Jersey where I lived there for six years, and finally on July 28, 2000, I moved to Fishers, Indiana. I have a mom, dad and an older brother name Lenny. My nationality is 3/4 Italian and 1/4 Polish. My hobbies would include collecting many objects such as seashells, rocks, and many more. My interests would include writing poems, drawing landscapes, playing video games, reading books/manga, watching anime, playing different sports for fun. I am currently a freshman student at the School of Informatics at IUPUI in Indianapolis. For my area of specialization I want to do Media Arts & Science and I would like to do Intergrated Media. The person I would like to seek to become is someone who is a dedicated and realiable girl with a solid knowledge of computers.

Did you know that 1 out of 5 people in the U.S. has a learning disability? I am one of those people. However, I do not let this disability affect me because it made me realize I have strengths, knowledge, abilities and values that I bring to my life. One of the strengths it brings is that it makes me a hard worker. In everything I do, school, color guard, homework, and etc I always give my 110% and do my hardest no matter what the circumstance is. For example, when I was in the color guard there was an award called the Becky Lee Award. The Becky Lee Award is given to someone who has a positive attitude, great leader, always helpful, and a most importantly a hard worker. I received that award in all of the 4 years I was in color guard. I believe this strength will bring me success at IUPUI because the teachers will see how I am a hard worker in homework assignments, projects, writing assignments and other activities rather than a student who doesn’t do anything. I believe this will help my career success because whatever job I get I want my boss to know they made a right decision to hire a hard working employee. Another strength I have is trustworthy. You can ask any of my friends and they will tell you how they can always trust and depend on me for anything. This would include help, advice, someone to talk to, or anything else. The third strength I have is responsible. I believe this is key for everything, doing homework, completing it, working on the job doing everything, making good choices and not regret them later. I have lots of other strengths, but these are the main ones but I am positive that when I look back I know I made goals that are realistic and very important for the rest of my life.

If I were to receive a “Lifetime Achievement Award” at the end of my time, I would love to get recognize for overcoming my disability. What I mean by that is for all those that suffer from a learning disabilities to be inspire them and show them that you can achieve anything. Also I would like for my family members to be very proud on how far I have come.
A Cyclical not Linear Process

Assessment

Outcomes  Pedagogy
32 reviewers participated in 2 hour workshop to increase inter-rater reliability

Reviewed 64 PDPs for which we had informed consent

Raters reviewed PDP independently and submitted scores; scores tallied and discrepancies identified

Met again to use discrepancies to focus on revision of the prompts and rubrics (not student learning)
# Assessing Learning: Section Rubrics

<table>
<thead>
<tr>
<th>Section: ABOUT ME</th>
<th>Beginning</th>
<th>Developing</th>
<th>Competent</th>
<th>Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Strengths</td>
<td>Identifies my strengths</td>
<td>Explains what each strength means in my own words such that someone who doesn’t know me will understand them</td>
<td>Gives examples of how each strength plays out in my life as a student</td>
<td>Relates these strengths to my success as a student this semester and beyond - how does or might they contribute to my success as a student?</td>
</tr>
</tbody>
</table>
Lessons Learned

- Diversity of faculty perspectives and experience

- Teaching and Pedagogy

- Is the sum greater than the parts when it comes to assessment? If so, how do we assess so as to document the “greater-ness”?

- Should our rubrics be Bloom based? Critical Thinking based? Both? Other?
ePDP Assessment Strategies
ePDP Assessment Methods

- Employ multiple sources and methods:
  - Use questionnaires to understand students’ perceptions and self-reported learning outcomes.
  - Focus groups with advisors and instructors
  - Actual grade performance and retention data
  - Directly assess student work
    - Building Evaluation Capacity
      - Developing Rubrics
      - Developing Content Review Process
      - Revising Prompts
Guiding Theoretical Frameworks and Prior Research
Tinto’s Model of Student Departure
Hope is defined as the process of thinking about one’s goals, along with the motivation to move toward those goals (agency) and the strategies to achieve those goals (pathways).

- Research has shown hope to be positively associated with academic success.

### James Marcia’s Model of Identity Status

#### Career/Major Exploration

<table>
<thead>
<tr>
<th>Career/Major Exploration</th>
<th>No crisis</th>
<th>Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>No</td>
<td>Identity diffused</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>Foreclosed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moratorium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identity Achieved</td>
</tr>
</tbody>
</table>
Assessment Outcomes

QUANTITATIVE AND QUALITATIVE
A total of 346 first-year students participated in ePDP first-year seminar sections.

The ePDP sections included the following: two Business, three Engineering, two Informatics, three Nursing, two Psychology, one Technology, and three University College.

Faculty members participated in a summer institute that included technology training and an overview of the pedagogy of the ePDP project.
## 2010 ePDP Compared to Not ePDP First-Year Seminar Sections: Student Characteristics and Academic Success Indicators

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Avg. H.S. GPA</th>
<th>Avg. SAT Score</th>
<th>Avg. Course Load</th>
<th>Avg. Fall GPA</th>
<th>% Fall GPA below a 2.0</th>
<th>Fall DFW Rate</th>
<th>Fall – Spring Retn Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ePDP</td>
<td>346</td>
<td>3.32</td>
<td>1032</td>
<td>13.74</td>
<td>2.95</td>
<td>13%</td>
<td>12.10%</td>
<td>91%</td>
</tr>
<tr>
<td>Not ePDP</td>
<td>1936</td>
<td>3.30</td>
<td>1012</td>
<td>13.72</td>
<td>2.78</td>
<td>18%</td>
<td>17.23%</td>
<td>89%</td>
</tr>
<tr>
<td>Overall</td>
<td>2282</td>
<td>3.30</td>
<td>1015</td>
<td>13.72</td>
<td>2.81</td>
<td>18%</td>
<td>16.45%</td>
<td>89%</td>
</tr>
</tbody>
</table>
The One-Year Fall to Fall Retention rate for students who completed an ePDP (80%) was significantly higher than for students who did not complete an ePDP (72%).

Based on binary logistic regression. Cox & Snell $R^2 = .066$, $p = .003$

HS GPA, SAT Score, and Gender were entered in the first step.

First-Year Seminar Students formed Comparison Group.
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Average Fall GPA</th>
<th>Adjusted Fall GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-PDP</td>
<td>323</td>
<td>2.95</td>
<td>2.89</td>
</tr>
<tr>
<td>Not e-PDP</td>
<td>1825</td>
<td>2.78</td>
<td>2.79</td>
</tr>
<tr>
<td>Overall</td>
<td>2148</td>
<td>2.80</td>
<td></td>
</tr>
</tbody>
</table>
### Fall 2010 ePDP Compared to Not ePDP First-Year Seminar Sections: First Year Grade Point Average

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Average Fall GPA</th>
<th>Adjusted Fall GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-PDP</td>
<td>324</td>
<td>2.76</td>
<td>2.73</td>
</tr>
<tr>
<td>Not e-PDP</td>
<td>1853</td>
<td>2.61</td>
<td>2.62</td>
</tr>
<tr>
<td>Overall</td>
<td>2177</td>
<td>2.64</td>
<td></td>
</tr>
</tbody>
</table>

*Based on ANCOVA Results (p < .05, Adjusted for HS GPAs, SAT Scores, and Course Load, Partial $\eta^2 = .002$ (very small effect size).
Completing PDP (Electronic or Paper) Significant Differences Compared to Not Completing (p < .05)

<table>
<thead>
<tr>
<th>Item</th>
<th>PDP Completed</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Succeed academically</td>
<td>ALL Complete</td>
<td>234</td>
<td>2.72</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>Not Complete</td>
<td>188</td>
<td>2.47</td>
<td>1.19</td>
</tr>
<tr>
<td>Adjust to college life</td>
<td>ALL Complete</td>
<td>233</td>
<td>2.88</td>
<td>1.24</td>
</tr>
<tr>
<td></td>
<td>Not Complete</td>
<td>185</td>
<td>2.57</td>
<td>1.23</td>
</tr>
<tr>
<td>IUPUI’s Principles of Undergraduate Learning (PULs)</td>
<td>ALL Complete</td>
<td>233</td>
<td>3.06</td>
<td>1.10</td>
</tr>
<tr>
<td></td>
<td>Not Complete</td>
<td>185</td>
<td>2.68</td>
<td>1.22</td>
</tr>
<tr>
<td>My personal goals</td>
<td>ALL Complete</td>
<td>232</td>
<td>3.07</td>
<td>1.09</td>
</tr>
<tr>
<td></td>
<td>Not Complete</td>
<td>186</td>
<td>2.80</td>
<td>1.10</td>
</tr>
<tr>
<td>Feel connected to IUPUI</td>
<td>ALL Complete</td>
<td>234</td>
<td>2.80</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>Not Complete</td>
<td>186</td>
<td>2.48</td>
<td>1.24</td>
</tr>
<tr>
<td>Feel able to meet the demands and expectations of college</td>
<td>ALL Complete</td>
<td>233</td>
<td>2.99</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>Not Complete</td>
<td>186</td>
<td>2.56</td>
<td>1.19</td>
</tr>
<tr>
<td>Made a successful transition to IUPUI</td>
<td>ALL Complete</td>
<td>234</td>
<td>2.99</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>Not Complete</td>
<td>186</td>
<td>2.62</td>
<td>1.23</td>
</tr>
<tr>
<td>Overall, how satisfied were you with this class?</td>
<td>ALL Complete</td>
<td>235</td>
<td>2.54</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>Not Complete</td>
<td>187</td>
<td>2.26</td>
<td>1.12</td>
</tr>
<tr>
<td>For the next academic year, to what degree do you plan to return to IUPUI?</td>
<td>ALL Complete</td>
<td>232</td>
<td>5.77</td>
<td>1.91</td>
</tr>
<tr>
<td></td>
<td>Not Complete</td>
<td>176</td>
<td>5.24</td>
<td>2.08</td>
</tr>
</tbody>
</table>
ePDP Pilot: Top Rated Items (% Agree or Strongly Agree)

1. Chosen a major or career that supports my interests and personal values (90%).
2. Goals are measureable, achievable, and realistic (91%).
3. Chosen a major or career that matches my strengths, skills, and competencies (85%).
4. I know what obstacles I have to overcome to succeed in college (80%).
5. Clearly understand my academic strengths, skills, and competencies (85%).
Please List Three Specific Things You Learned From Completing an ePDP: (N = 146)
Understanding Self / Self Awareness

- “Who I am.”
- “My personality.”
- “Self-knowledge.”
- “How to improve myself.”
- “Learned more about myself.”
- “More about myself by completing modules.”
- “I have learned where I need to improve.”
Self: Identifying Strengths & Weaknesses

- “I learned my strengths and weaknesses.”
- “Certain strengths about myself I wasn't aware of.”
- “I learned who I was as a student at IUPUI, as well as my strengths and weaknesses.”
Self: Identifying Personal Knowledge, Skills, and Abilities (KSA)

- “I learned what skills, knowledge, and abilities I need to develop.”
- “How my PULs are incorporated with the KSAs.”
- “Certain skills I will need to get through college.”
Self: Values and Ethics

- “What my specific values are.”
- “How to express my values.”
- “I need to apply my morals and strengths to my career goals.”
Academic Planning

- “How to schedule classes.”
- “How to complete a plan of study.”
- “Planning a semester.”
- “What classes I need to take for my major.”
- “I learned how to plan my four years at IUPUI.”
- “I made a plan of every course I must take within the next four years.”
Goal Setting and Commitment

• “My Goals.”
• “I set goals for myself.”
• “Long term goals in detail with a plan.”
• “To break your goals down to achievable goals.”
• “What my academic and career goals are.”
• “I have learned to set realistic goals and how to attain them.”
• “I realized just how much IUPUI can help me to achieve my goals.”
"I learned more about my major that I didn't necessarily understand before completing the PDP."

"Majors that interest me."

"What major I want to pursue."

"I learned what majors are out there for me."

"Further confirmed why my major is a good fit for me."
Career Decision Making

- “Career opportunities.”
- “How to research careers.”
- “I learned more about my career.”
- “What kinds of jobs will fit my ability.”
- “I learned what kinds of jobs will fit my interest.”
- “I learned details about the career I wanted to get into.”
RISE and Co-Curricular Experiences

- “What RISE is all about.”
- “RISE Challenge.”
- “RISE initiative-how to get involved.”
- “What places I can volunteer at.”
- “I learned about internships.”
- “Possibilities for extracurricular activities.”
- “Explored different options of getting involved at IUPUI.”

*RISE – High Impact Practices (undergraduate Research, International study, Service Learning, Experiential Learning)
Writing and Reflection

- “How to write detailed papers.”
- “How to improve my writing.”
- “I learned how to organize my writing.”
Success Strategies

- “Ways to be successful in college.”
- “I was able to see what I need to work on in order to succeed and how to be successful.”
Implications and Future Assessment Efforts
Why Effective?

- Enhance Self-Awareness and Goal Commitment
- Promote Sense of Belongingness and Commitment to IUPUI
- Tool for Active and Engaging Pedagogy
- Fosters Integration of Learning and Reflection
- Provide Students with a Sense of Purpose
- Enhance Career Decision Making Self-Efficacy
Major Implications

- Students who completed all parts of the PDP, whether online or paper, were significantly more likely to intend to persist in their education at IUPUI compared to students who only completed some parts of the PDP.
- The Gestalt perspective of the “whole being greater than the sum of parts” may have important implications for the effectiveness of the PDP process for improving students’ learning and success outcomes.
- The PDP process seems to help students in understanding themselves, gaining a sense of purpose, goal setting, deciding on a major or future career, and academic planning.
Lessons Learned

- Diversity of faculty perspectives and experience

- Teaching and Pedagogy

- Is the sum greater than the parts when it comes to assessment? If so, how do we assess so as to document the “greater-ness”?

- Should our rubrics be Bloom based? Critical Thinking based? Both? Other?
Assessment Next Steps

- Continue to assess and use results for improvements.
- Consider questions of sustainability and expanding beyond the first-year.
- Build evaluation capacity to directly assess student learning (integrative learning, critical thinking, writing, and reflection).
References


