



University College



An Action Research Approach to Assessing First-Year Programs

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IUPUI Context

- Large Urban, Public University.
- Many incoming students possess characteristics that place them at a greater risk for academic failure and attrition.
- Many students have not completed a rigorous high school college-preparatory curriculum.
- Attend classes part-time.
- Majority live off-campus.
- Significant off-campus work commitments.
- It is difficult for students to make the necessary connections with other students and faculty.
- Over one-half of Fall Beginning Freshmen report they are first-generation college students (neither parent completed a four year college degree).
- Almost one-half of Fall Beginning Freshmen report that they plan to work more than 20 hours per week while attending school.



University College

- Academic Unit Formed in 1997 To Provide Gateway to Academic Programs for Entering Students.
- Houses Numerous First-Year Programs and Services Including Advising, Orientation, Math Assistance Center, Writing Center.
- Develops and Implements Academic Support Courses Including Learning Communities, First-Year Seminars, Critical Inquiry, Structured Learning Assistance.
- Serves Over 8000 students.



Historical Perspective on Assessing First-Year Programs at IUPUI

■ In the Beginning:

- New academic unit housing first-year programs. There was a lot of visibility and need to demonstrate program effectiveness as well as value added to the university.
- Focus on summative evaluation, program development, needs assessment.
- Engaged in active learning about what works in the first-year of college - participated in site visits, consulted with experts, and learned from other institutions regarding how to effectively implement first-year success programs.
- Qualitative studies were conducted to improve understanding of learning outcomes and students' perceptions of programs.



Historical Perspective on Assessing First-Year Programs at IUPUI

■ **Current Approaches:**

- Using assessment to prove and improve programs: summative and formative evaluation.
- Employing multiple measures of student learning and academic success - moving beyond retention.
- Using program evaluation methodology: understanding needs, processes, and learning outcomes.
- Understanding the dialogue between qualitative and quantitative research – using approaches as complements rather than two independent strands of research.
- Seeking involvement of key stakeholders in assessment planning, implementation, and deployment.



Assessing First-Year Programs at IUPUI

■ The Future:

- Employ approaches to continuously link results to improvements, decision making, and strategic planning.
- Use more rigorous research designs (e.g., pre-post methodology, time series) to assess learning gains and identify intervening variables that contribute to academic success
- Employ Action Research and Action Learning strategies on a larger scale.
- Continue to develop assessment approaches to enhance understanding of how programs impact learning levels in first year [students submit work to demonstrate levels of Principles of Undergraduate Learning (PULs) achieved during first year; collected via electronic portfolio].
- Conduct retrospective interviews with students to enhance understanding of how First-Year programs and courses helped improve academic success and persistence to the major.
- Continue to be responsive for campus-wide needs for assessment results.



Qualitative Assessment of First-Year Programs at IUPUI

- Brings Awareness Of Program Implementation Differences.
- Provides In-Depth Understanding of Student Responses, Interactions, and Learning Outcomes.
- Part of a Long Term Strategy of Formative Evaluation.
- Several Qualitative Assessments Conducted: First-Year Seminars, Learning Communities Critical Inquiry, Summer Bridge, Orientation.



Quantitative Assessment of First-Year Programs at IUPUI

- Conduct analyses to determine program impact on academic performance, retention rates, and DFW rates.
- Describe retention rates and GPAs in defined populations over semesters and years.
- Examine participants verses non-participants with regard to GPAs and retention while controlling for background differences.
- Examine predicted vs. actual retention, course grades, and DFW rates.
- Administer student surveys to assess student learning outcomes, needs, satisfaction, engagement, reasons for leaving, etc.

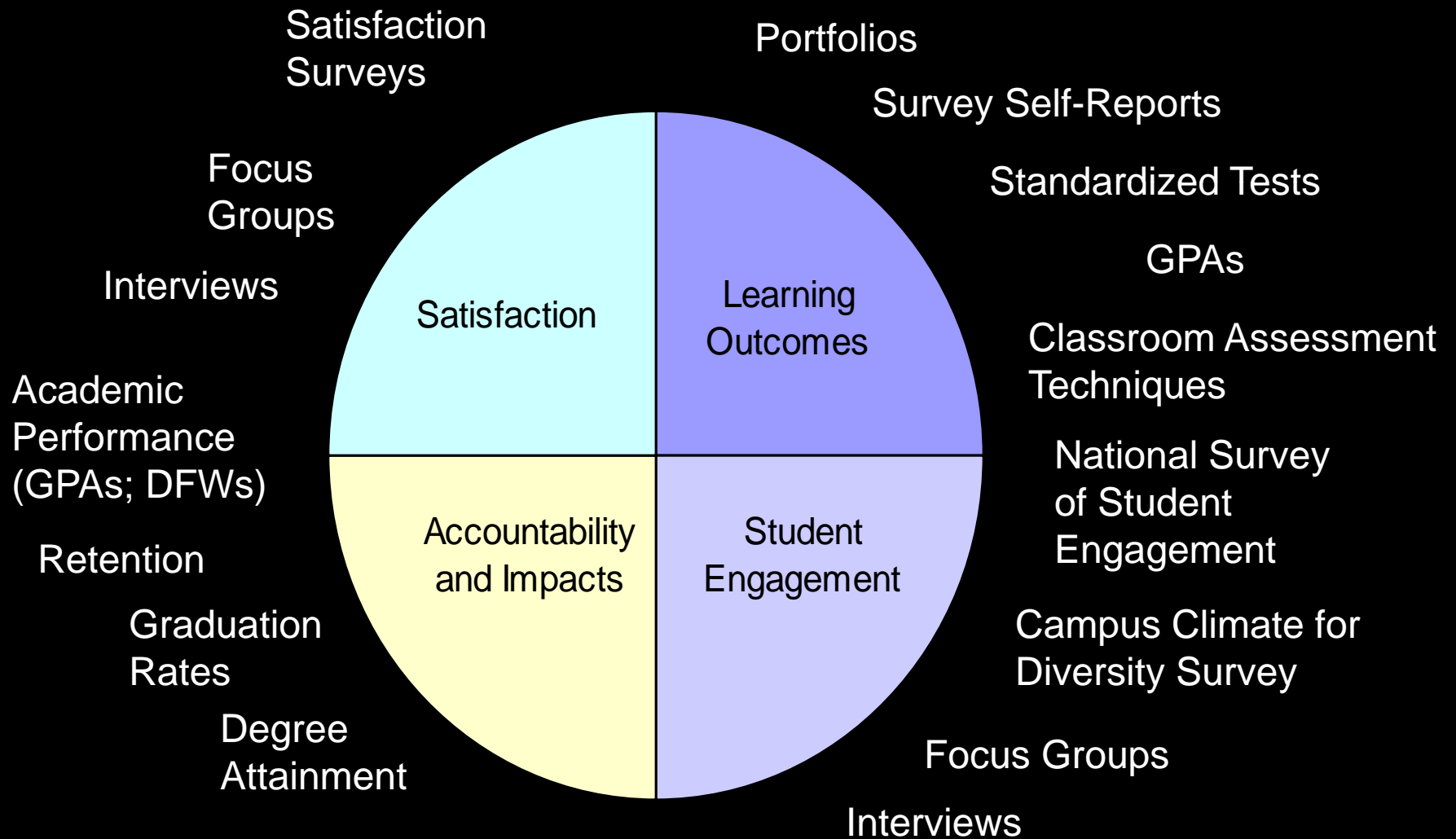


Improving: Fostering On-Going Internal Learning

- On-Going Communication of UC Mission, Program Goals, and Assessment Findings
- Program Reviews
- Faculty Fellowships
- Gateway Group
- Involvement in Foundations Of Excellence in The First College Year National Project



UC Outcome Assessment Framework: Employment of Quantitative and Qualitative Methods





Background and Literature Review

- Kurt Lewin credited with coining term “Action Research” in the 1940s. Described as a cyclical process of inquiry that involves key stakeholders in all stages of investigation. Does not separate research from the action needed to solve complex social problems (as cited in Ferrance, 2000).
- Stephen Corey among first to apply action research in educational settings. Believed that scientific method would facilitate improvements in instruction if educators were involved in the research and application of findings (as cited in Ferrance, 2000).



Background and Literature Review

- Elements of action research apparent in Argyris and Schon's theory on action and learning (Dick and Dalmau, 2000).
- Contemporary adaptations of action research – underlies most current approaches to planned organizational change and the practice of organizational development (Cummings and Worley, 1997).
- Current Applications of the Action Research Model – Implementing change in education and health care settings (e.g., Barker & Barker 1994; Brotherson, Sheriff, Milburn, & Schertz, 2001; Dymond, 2001; Kember, 2000).



Definition of Action Research

- “The action research model focuses on planned change as a cyclical process in which initial research about the organization provides information to guide subsequent action. Then the results of the action are assessed to provide further information to guide further action, and so on...iterative cycle of research and actions involves considerable collaboration between [researchers and practitioners]” (Cummings & Worely, 1997, p. 27).



Action Research Paradigm: Basic Tenets

- Continuous cycle of data collection → data analysis → data feedback → action plans → data collection
- Stakeholder empowerment through active and on-going participation.
- Data feedback (qualitative and quantitative) meetings promote collaboration, dialogue, and collective analysis.
- Active learning and discovery fostered by critical reflection process.
- Data-driven action plans developed = research linked to action.



Action Research Approach Contrasted with Traditional Approaches

Traditional Information Support Approach	Action Research Approach
Research Question and Evaluation Focus	
“Given” to researcher either as a top-down directive, or a bottom-up request. There will often be some discussion to clarify the question and the context for use.	Developed together between researcher and stakeholders. The questions and focus are often deferred until appropriate vested parties are brought together as a team to consider the issues and possible spheres of influence and impact
Data Collection	
Researcher responsible for finding available information and collecting new information where needed. Researcher ultimately held accountable for integrity of information.	Stakeholders often have role in collecting data and work with researcher to understand nuances of available information. Responsibility for integrity of data is shared.
Data Analysis and Interpretation	
Researchers often entirely responsible up through dissemination. She/he may consult with stakeholders to gain insight into the results.	Researcher involves stakeholders in stages of data analysis. Preliminary results presented and discussed. Further analyses shaped by those discussions.
Report Presentation and Dissemination	
Researchers prepare and often present results to stakeholders.	Presentation and report writing responsibilities shared by researcher and stakeholders. Presentations involve more discussion compared to traditional approach.
Follow-up	
Some additional analyses may be requested or perhaps some clarification - often the end of the process	Key stakeholders design an action plan based on results. Data collection included in follow-up plan so that actions can be monitored and evaluated for effectiveness. Further lines of inquiry established for next cycle of research.

Note: Table adapted from Hansen and Borden, 2003



Application One: Using an Action Research Approach for Assessing New Student Orientation

- Focus: Assessment of new students' needs, program processes, and student learning outcomes related to orientation.
- Sought perspectives from all major stakeholders (faculty, advisors, student affairs, and students)
- Data Collection: Focus groups with all major stakeholders and questionnaires administered to students three months after start of fall semester.
- Data Deployment: shared with orientation planners and stakeholders in a series of meetings.
- Development of Action Plans: strategies developed to make orientation process more efficient, expanded tour and technology, increased opportunities for interactions and making connections, and implemented more in-depth advising model.
- Continuous Cycle of Data Collection and Improvement: Questionnaires administered again to assess effectiveness of changes implemented and student learning outcomes.



Application Two: Using an Action Research Approach for Assessing Advising

- Focus: Assessment of advising processes, and student learning outcomes related to advising.
- Working collaboratively with advising assessment committee comprised of faculty, advisors, administrators.
- Data Collection: Web-based survey, focus groups with students, pre-post questionnaire designed to assess learning gains.
- Data Deployment: (in process) data will be shared with advisors, orientation planners and faculty stakeholders in a series of meetings.



Potential Barriers

- Role ambiguity and comfort level of administrator (in role of researcher) and researcher (in role of administrator).
- Participation is fundamental and essential, but may not be perceived as positive by all stakeholders (role overload, role conflict, and more meetings!).



Potential Barriers

- Emotional barriers (action learning/research can challenge assumptions and frames of references)
- Political obstacles (opposing forces)
- Managerial Control Imperatives (due to external demands and economic issues)

Seo, M. G. (2003). Overcoming emotional barriers, political obstacles, and control imperatives in the action-science approach to individual and organizational learning. *Academy of Management: Learning and Education*, 2(1), 7-21.



Overcoming Potential Barriers

- Clearly explain roles and expectations.
- Establish atmosphere of openness and trust.
- Up-build positive affect.
- Leverage opposing forces.
- Bring external legitimacy to the organization.



Why Employ an Action Research Approach?

- Unrelenting requests for assessment data and technological advances have resulted in large amounts of information.
- Useful paradigm for linking assessment data with action.
- Powerful data deployment/sharing approach.
- Effective approach for minimizing resistance to change – fostering support and commitment through participation in the collection and interpretation of data.
- Accreditation – emphasis on implementing improvements based on outcome assessments.
- Effective paradigm for conducting formative program evaluations, meeting accreditation requirements, and implementing organizational change.
- Notable mechanism for involving faculty in the assessment of and improvement of student learning.



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