

University College Assessment Report

March, 2002

University College (UC) is unique among academic units at IUPUI in that it does not have an extensive curriculum, offer degrees or attempt to prepare students in specific disciplinary perspectives. That, coupled with the relative recency of its creation, results in an approach towards assessment that is distinctive from other academic units.

Some of the characteristics that condition and characterize UC's approach to assessment include

- Programmatic collaboration with other schools. Virtually all of University College's programs, including orientation, advising, student mentoring, learning communities, academic support for gateway courses and honors, are done in cooperation with other undergraduate units. Because of this, working directly with the Office for Professional Development, and the Office of Information Management and Institutional Research is integral to UC's assessment initiatives.
- Relationship to the Principles of Undergraduate Learning. Other academic units have the expectation of taking a longitudinal and developmental approach to the Principles of Undergraduate Learning (PUL's). University Colleges' role with regard to student learning and the Principles of Undergraduate Learning is more general and foundational. Within the context of our programs, the PUL's are introduced and students begin to develop in all of them, but the goal and the ability to measure substantial results over time will be limited due to the fact that students quickly move from University College into the schools that include their major field of study.
- Assessment is an integral feature of University College work. A high visibility and quantity of new initiatives makes us publicly accountable. The newness of our creation has allowed us to develop assessment as an essential aspect of our structure and process. Because of these two issues, we have developed an assessment plan that frames our strategy. That strategy includes a three-phase approach to assessment, including a needs assessment, process assessment and outcome assessment. In addition, University College values a qualitative assessment of all its programs, particularly the first-year course and the Critical Inquiry course.

Three-Phase Assessment Model

University College employs a comprehensive assessment model to determine the impact of the various programs it offers. Shown in Appendix A is UC's three-phase approach to assessment: assessment of needs, processes, and outcomes.

Needs Assessment. University College gathers information (e.g., student, staff, and faculty perceptions) to determine what programs and services students need. For instance, the "Entering Student Survey" is administered to incoming students to collect a wealth of information regarding students' needs, expectations, educational goals, and intentions. The data collected via this survey further enables faculty and staff in their efforts to introduce students to the academic culture and help them achieve their goals.

Process Assessment. Process assessments are conducted to determine if programs are implemented as conceptualized, to monitor who uses the programs and services, and to ensure that the intended populations are participating in the programs. Qualitative approaches such as focus groups, interviews, and questionnaires are used to gather in-depth information about program components and processes.

Outcomes Assessment. Outcome assessments are employed to answer fundamental questions about the value of programs such as: Do programs do what they intend to do? Results from comprehensive outcome assessments help to further understanding about how UC programs ease students' transitions to college, enhance student learning, and impact academic performance and retention.

Ongoing Formative Assessment. University College conducts on-going internal formative evaluations to continuously improve programs. Through these internal evaluations, program directors may identify an unmet need, implement a program to better serve the need, monitor the program implementation, and conduct an outcome assessment once a program component/service is in operation. For example, orientation program implementers discovered that students were not satisfied with the amount and quality of advising students received during "New Student Orientation." New advising strategies were implemented and an "exit survey" was designed to assess the impacts. Survey results indicated that the majority of the students were satisfied or very satisfied

(82% - 90% based on the 2001 exit survey results) with the new advising strategies.

IMIR Reports and Analyses

The office of Information Management and Institutional Research (IMIR) provides a series of reports and analyses to support UC assessment. Appendix B displays the IMIR reports produced to enhance understanding of student program participants' background characteristics and demographics, program participation rates and program impacts. Areas assessed include program impact on performance, GPAs, DWF rates, retention, and persistence, with comparisons between participants and non-participants.

IMIR reports that examine the impact of Learning Communities are shown in Appendix C. For example, in order to understand program-related effects participants in Learning Communities were compared to non-participants with regard to academic performance (Fall GPAs) and one-year retention rates while controlling for background characteristics. Results suggest that Learning Community participation has positive impacts on academic performance during the first semester. Copies of various reports are available on IMIR's Web site at <http://www.imir.iupui.edu>.

Qualitative Assessment

University College has sponsored extensive qualitative assessment its First-Year Seminar---a Learning Community course---employing interviews with both faculty and students. Findings, summarized in Appendix D, indicate that the complexity of the template for the First-Year Seminar resulted in instructor variation in emphasis on different learning outcomes, although extended, integrative assignments helped somewhat to reduce the problem of coordinating many short assignments aimed at specific outcomes. In response to these findings, the template for the First-Year Seminar was simplified and clarified, and recommendations on effective practices are being disseminated among First-Year Seminar instructors. Similar assessment is in process for University College's new Critical Inquiry Course, and Summer Bridge Program.

Assessment of Other Academic Support Programs

University College is also assessing the effectiveness of its other academic support programs, including supplemental instruction, structured learning assistance, the writing center, math assistance center, and departmental support program. Generally, students have found that the most valuable aspects of these experiences are the opportunities to get to know others, have regular contacts with advisors and instructors, and learn their way around IUPUI. Future reports will describe findings and their use in program improvement.

Appendices

- A University College 3-Phase Assessment Framework**
- B University College Assessment: IMIR Reports and Analyses**
- C IMIR Standard Reports for Learning Communities**
- D Qualitative Studies of University College Programs**

Appendix A

University College 3-Phase Assessment Framework

Needs Assessment	Entering Student Survey
	*Continuing Satisfaction and Priorities Survey
	IMIR Enrollment Reports
	Non-Returning Student Survey
	Task Forces (e.g., Transitional Education, Learning Center)
	Faculty Fellowships: advising, mentors, U110 Template
	**Gateway Program
Process Assessment	Qualitative Assessment of Program Processes (e.g., focus groups, personal interviews, questionnaires).
	Reports Displaying Participation Rates by Basic Demographics
	*National Survey of Student Engagement
	Course Participation and Enrollments
	Faculty Fellowships and Instructional Teams
	Self-Studies (e.g., RUSS)
Outcome Assessment	Program Impact on Retention and Persistence
	Program Impact on Academic Performance (GPA's)
	Self-Reported Learning Outcomes (focus groups, interviews, questionnaires, surveys)
	Student Satisfaction
	Student Engagement
	External Reviews (e.g., RUSS)

* Some campus-wide surveys appropriately serve to help understand students' needs, student activities and engagement, program processes, and the program outcomes.

** Internal on-going program assessments are a critical component of the UC Assessment Framework. These formative assessment activities involve all 3 phases: needs, processes, and outcomes.

Appendix B

University College Assessment

IMIR Reports and Analyses

IMIR provides a series of reports that provide an enhanced understanding of student characteristics, program participant profiles, and program impacts.

Student Profiles and Program Participation Rates

Student Profile - beginners vs. other, full-time vs. part time, ethnicity, admission status (conditional, regular, dual). IMIR also provides additional information including age, school, entry date, financial status, etc.

Number of Students Enrolled in Select Academic Support Programs

Number of Students Enrolled in Learning Communities

Course-Taking Patterns for Freshmen.

Freshman Courses with High DFW Rates or Enrollments

Program Impacts and Implementation Effectiveness

IMIR produces a series of on-going reports that examine program impacts on student retention and academic performance. In order to understand program-related effects, we examine participants versus non-participants with regard to Fall GPA and retention while controlling for background differences. Additionally, we examine predicted vs. actual retention, course grades, and DFW rates.

The following programs are examined by a series of analyses and reports:

Learning Communities - student participation rates by LC type, student participant demographics and background characteristics, program impact on academic performance, retention rates, and DFW rates, comparisons of learning communities by sponsoring school controlling for mentors' presence in the classroom, instructor type, etc.

Supplemental Instruction – program impact on course grade and course withdrawal rates.

Structured Learning Assistance – program impact on course grade and course withdrawal rate.

Critical Inquiry - program impact on course grade, course withdrawal rate and semester academic performance.

Gateway Courses - program impact on DFW and one-year retention rates for full-time freshmen; grade distributions and analysis of trends in select courses.

Summer Bridge Program – program impacts on student engagement (over-sampled on NSSE), Fall semester GPA, and retention (compared to a matched control group).

Administrative Withdrawal - initial review of policy implications (will continue to monitor implications of this policy with a series of reports and analyses).

Advising – student satisfaction with advising (advising satisfaction survey, Continuing Satisfaction and Priorities Survey)

Orientation – orientation exit surveys (program review currently in progress).

Performance Indicators – beginning freshmen matriculants’ participation in remedial courses, academic performance (avg. hours attempted, % hours passed, mean GPA, mean GPA in writing and math courses) and retention.

Block Scheduling – method of evaluation of block scheduling has not been planned. However, we foresee doing on-going analyses and reports similar to those produced for assessing Learning Community impact.

Student Surveys

Entering Student Survey

Continuing Satisfaction and Priorities Survey

National Survey of Student Engagement (NSSE)

Lilly Freshmen

Non-Returning Student Survey

Alumni

Advising

Orientation Exit Survey

Appendix C

IMIR Standard Reports for Learning Communities

Understanding Learning Community Participant Characteristics (Needs and Process Assessment)

Shortly after the Fall semester census, we produce a series of reports on participation in Learning Communities at IUPUI. These reports display the number of students enrolled in Learning Communities by section and compare their demographics with those of non-participants. Table 1 and Table 2 are illustrative excerpts from these reports.

Table 1 – Example of Learning Community Participants

Course		Sect.	Beginning Freshmen	Transfers	Other Students	Total
AHLT W101		A037	26	2	0	28
		A039	25	4	0	29
BUS X103		A770	20	4	4	28
		A771	19	4	4	27
		A772	17	3	8	28
		A773	13	6	5	24
		A774	14	2	11	27
		A775	17	1	7	25
		A776	9	1	17	27
		A777	13	3	10	26
		A778*	26	0	0	26
		A779*	8	3	1	12
		A780	9	9	9	27
		A781	20	3	3	26
		A782	8	8	6	22
		A783	13	5	4	22
.....
EGTC	CNT 105	B569	16	4	2	22
	CPT 102	B469	20	0	0	20
		B471	17	3	0	20
		B474	13	4	1	18
	EET 103	B932	15	3	1	19
	ENGR 195	B971	26	2	1	29
		B972	21	4	2	27
		B973	35	0	0	35
		V004	26	4	1	31
	MET 101	C770	18	4	1	23
		C771	16	6	0	22
.....
*Part of block scheduling						

Table 2 - Example of Beginning Freshmen Participants vs. Non-Participants in Learning Communities

Fall xxxx Beginning Freshmen					
		Total Beginning Freshmen	Learning Community Participants	Non-Participants	Pct. Participating in Learning Community
Total Beginners		100	80	10	80%
Gender	Female	60	45	15	75%
	Male	40	35	5	88%
Ethnicity	Afrn Amer	10	8	2	80%
	Asian Amer	5	3	2	60%
	Hispanic Amer	5	2	3	40%
	Natv. Amer	1	1	0	100%
	White Amer	107	82	25	77%
	International	5	4	1	80%
	Unknown	1	0	1	0%
Entry Type	Dual Admit	20	19	1	95%
	UC Regular	20	15	5	75%
	UC Conditional	60	46	14	77%

Note: Data are not real. This is just a sample report

Understanding the Impact of Learning Communities on Academic Performance and Persistence (Outcome Assessment)

Following a review of the Learning Community participants and non-participants we will determine the appropriate analyses to conduct to examine the impacts of LC participation on academic performance and retention. Shown in Table 3 are the types of analyses we will employ if it is deemed appropriate to compare participants with non-participants. In this series of reports, we will examine participants versus non-participants with regard to Fall GPA and retention while controlling for background differences.

Table 3 – Example of Report Comparing Participants with Non-Participants

Impact of Participation in a Learning Community:

Average First Semester GPA

	Learning Community	N	Average Fall GPA	Adjusted Fall GPA
<i>Regular Admits</i>	Non-Participants	219	2.68	2.70
	Participants	560	2.63	2.63
	Overall	779	2.65	
<i>Conditional Admits</i>	Non-Participants	397	1.88	1.89
	Participants	1067	2.00	2.00
	Overall	1464	1.97	

Note: Adjusted controlling for differences in demographics, enrollment, and academic preparation.

Differences in GPA among participants and non-participants are marginally significant for Conditional Admits ($p < .10$)

Data suggests that participation in a Learning Community adds on average of .118 points to Fall GPA - after controlling for background characteristics (conditional admits).

Impact of Participation in a Learning Community:

One-Year Retention

	Learning Community	N	Retention Rate	Adjusted Rate
<i>Regular Admits</i>	Non-Participants	274	67%	71%
	Participants	609	75%	73%
	Overall	883	73%	
<i>Conditional Admits</i>	Non-Participants	429	45%	51%
	Participants	1105	57%	55%
	Overall	1534	54%	

Note: Adjusted controlling for differences in Fall GPA (no LC) and Fall Hours taken.

Differences in retention among participants and non-participants are not significant for Regular or Conditional Admits.

We also examine academic performance and retention rates of conditional and regular admit students by LC Type. An example of this type of report is shown in Table 4. In an effort to identify those sections that are performing well and alternatively those sections where improvements may be needed, a series of reports are provided that display the expected versus actual retention rate, Fall course grade, and DWF Rate for each LC Type. An example of this type of report is presented in Table 5. Finally, shown in Table 6 is an example of a report on LC program impact on long term retention.

**Table 4 – Example of Report Displaying Retention
by LC Type and Admit Type**

One Year Retention Rates for Learning Community Participants: Regular Admits

Learning Community	N	Retention Rate	Adjusted Retention Rate
Allied Heath	21	81%	79%
Business	100	74%	76%
Engr Teaching	52	69%	68%
Herron	63	84%	78%
Journalism	13	92%	98%
Liberal Arts	10	40%	51%
Nursing	21	90%	77%
Science	92	71%	75%
Public & Env Aff	33	70%	74%
Social Work	2	100%	98%
Tourism, Conv., Event Mang.	11	82%	84%
University College	191	76%	75%
Overall	609	75%	

Note: Adjusted controlling for differences in enrollment (Fall GPA and Fall Hours taken).

One Year Retention Rates for Learning Community Participants: Conditional Admits

Learning Community	N	Retention Rate	Adjusted Retention Rate
Allied Heath	45	58%	63%
Business	242	60%	60%
Engr Teaching	112	60%	57%
Herron	3	100%	71%
Journalism	22	55%	66%
Liberal Arts	29	45%	53%
Nursing	42	55%	54%
Science	40	48%	50%
Public & Env Aff	77	48%	53%
Social Work	12	67%	56%
Tourism, Conv., Event Mang.	36	50%	57%
University College	445	58%	56%
Overall	1105	57%	

Note: Adjusted controlling for differences in enrollment (Fall GPA and Fall Hours taken)
And academic preparation (units of math taken).

Table 5 - Example of Report Displaying Expected Versus Actual DFW Rates By LC Type

	Actual	Predicted	Difference
MET	20.0%	36.4%	-16.4%
CNT	16.7%	31.3%	-14.6%
SWK	14.3%	23.7%	-9.4%
CIMT	26.7%	36.0%	-9.3%
ENGR	14.1%	19.7%	-5.6%
NURS	31.8%	36.2%	-4.4%
AHLT	33.3%	36.7%	-3.4%
BUS	15.6%	17.6%	-2.0%
UCOL	24.9%	26.1%	-1.2%
TECH	27.5%	27.8%	-0.3%
HER	8.0%	7.6%	0.4%
SCI	21.8%	21.1%	0.6%
JOUR	32.8%	29.8%	3.1%
CPT	30.6%	26.0%	4.6%
SPEA	40.6%	30.6%	10.0%
RHIT ¹	50.0%	36.5%	13.5%
PSY	33.3%	19.7%	13.6%
SLA	57.4%	43.5%	14.0%

Table 6 – Example of Report Examining LC Impact on Long-Term Retention

Learning Communities - Retention to Spring 1999
 "New to IU" Beginning Students - Conditional Admits

Cohort	Population Size		% Retained to Spring 1999		p. level ¹	Sig .
	Participants	Non-Participants	Participants	Non-Participants		
Fall 1995	133	924	21.8%	27.8%	0.145	
Spring 1996	95	262	33.7%	22.1%	0.026	*
Fall 1996	309	1193	34.3%	29.8%	0.130	
Spring 1997	164	299	28.7%	24.4%	0.319	
Fall 1997	558	619	47.7%	41.7%	0.039	*
Spring 1998	179	123	45.8%	37.4%	0.146	
Fall 1998	823	751	80.6%	71.2%	0.000	*

¹p.level associated with chi-square test for independence of retained versus non-retained student by group (df=1)

Note: Non-participants include students enrolled in non-learning community sections of courses offering learning communities.
 Excludes Educ X150 learning communities.

Potential Follow-Up Studies and Inquiries (Process Assessment)

Learning Community implementation varies greatly across academic units and schools. In order to further understand what implementation strategies and components are contributing to differences in academic performance and retention, process evaluations and plans for further inquiry should supplement these standards reports. An integration of process data will facilitate understanding of why particular sections are successful and conversely why other sections are less successful. This integration will provide context and is likely to result in a better understanding of outcomes.

Another source of data that could be potentially used to understand student learning outcomes (self-reported) by section is the U110 Evaluation Form. Results that could be traced back to an individual instructor would not be reported.

Appendix D

Qualitative Studies of University College Programs

Assessing First-Year Seminar Processes and Outcomes

In order to assess the University College First-Year Seminar, the qualitative research coordinator studied both processes and outcomes.

- Processes:
 - Instructors' Interpretation and Prioritization of Outcomes: University College's template for the First-Year Seminar included a list of complex learning outcomes. Given the limitations of a one-credit-hour course, instructors were given discretion in how they addressed the outcomes. It was deemed important to discover what priorities instructors were choosing, because such choices reveal instructors' learned awareness of student needs.
 - Instructors' Experience with Pedagogical Strategies: Given that instructors were encouraged to apply and develop their own approach to teaching the First-Year Seminar, it was deemed important to document the instructional activities that they had found effective.
 - Students' Perception of Valuable Components: The qualitative studies also attempted to capture students' perceptions and reactions to class process
 - Students' Criticism of Seminar: Given that the First-Year Seminar is required of all first-year students and is taken as a one-credit class in addition to a full load of academic classes, it was deemed important to find out how students felt about the requirement and what if any changes they would recommend.
- Outcomes:
 - Instructors' Ratings of Outcome Attainment: Given that standard measures of seminar learning outcomes are in the early stage of development, instructors were asked how well they felt their sections had attained each of the eight general outcomes.
 - Students' Reports of Improvements in Ability: Students were given a list of specific outcomes based on the template and asked to check whichever they felt the seminar had improved.
 - Students' Reports of Changes in Behavior: Students were also asked to describe how they behavior as a student had changed as a result of the seminar.

The qualitative study of the First-Year Seminar proceeded in two phases, both focusing on the fall semester, when most students enroll in the seminar. In early 2001, retrospective, open-ended interviews were conducted with 18 faculty and 22 other members of instructional teams of Fall 2000 sections. In Fall 2001, open-ended, voluntary, and anonymous surveys and group discussions were conducted with 221 students in 15 sections; feedback on the class as a whole was provided to instructors after the end of the semester.

With regard to course processes, interviews with instructional team members revealed that instructors' outcome priorities among the eight outcomes varied widely (see Table 1), and some instructors de-emphasized low-priority outcomes, in part because attempting to cover all the outcomes led to a lot of short-term student assignments that were difficult to coordinate. Instructors varied in their approaches to several outcomes but did report success with some common activities, especially extended integrative assignments that addressed several goals.

 Table 1. Instructors' Prioritization of Learning Outcomes

	<u>Min</u>	<u>Max</u>	<u>Mdn</u>
• Values of Higher Education	1	8	4.0
• Positive Learning Environment	1	8	3.5
• Communication Skills	1	8	4.0
• Critical Thinking	1	8	4.0
• Use of Library	2	8	4.0
• Use of Information Technology	1	8	6.0
• Self-Awareness as Learner	1	8	5.0
• Full Use of IUPUI Resources	1	8	7.0

(1=most important; 8=least important; n=18)

Focus groups with 221 students in Fall 2001 about their experience in the First-Year Seminar revealed that 51% reported a positive experience, 28% a mixed experience, and 21% a negative experience. The aspects of the seminar they valued most included getting to know each other, regular contact with advisors and instructors, and learning to find their way around IUPUI. Students were critical of some activities for lack of evident payoff, especially in other courses.

With regard to the eight official outcomes of the First-Year Seminar, interviews with instructors yielded the ratings of outcome attainment shown in Table 2.

Table 2. Instructors' Ratings of Student Attainment

	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>S.D.</u>
• Values of Higher Education	3	5	3.78	.81
• Positive Learning Environment	2	5	4.22	.94
• Communication Skills	2	5	4.17	.92
• Critical Thinking	1	5	3.39	1.09
• Use of Library	2	5	3.72	1.18
• Use of Information Technology	1	5	4.08	1.11
• Self-Awareness as Learner	1	5	3.94	1.11
• Full Use of IUPUI Resources	1	5	3.53	1.04

(1=low attainment; 5=high attainment; n=18)

With regard to student perceptions of course outcomes, a short checklist indicated that at least half the students felt they had improved on ability to find campus resources, use the library, seek help when needed, and use online resources. The full list is shown in Table 3.

Table 3. Students' Report of Improvement in Abilities (n=221)
(Percentages checking each ability)

• Find resources at IUPUI	62%
• Use the library	53%
• Seek help when needed	52%
• Use online resources	51%
• Understand course expectations	47%
• Participation in class discussion	47%
• Manage own time	39%
• Cope with stress	28%
• Write for course assignments	24%
• Think critically	23%

Focus groups also elicited numerous comments on changes in student behavior resulting from the seminar. About half the 221 students reported changes in one or both of two clusters of attitudes and behavior: becoming a better student and becoming more outgoing. Students felt they became better students by taking course demands more seriously, developing better study habits, and organizing their time better. They felt that they had become more outgoing in trying to get to know students and instructors in other courses and by having more self-confidence to express themselves with others.

The program implications of these findings for the First-Year Seminar were as follows:

- Simplify, clarify template learning outcomes (accomplished in spring 2002)
- Front-load seminar in semester
- Differentiate, clarify, and integrate team member responsibilities
- Improve preparation and ongoing support for faculty
- Clarify relationship to linked academic course
- Give students more feeling of having accomplished something
- Make amount of work appropriate for one credit course
- Treat students like college students, not children

In addition, several of the instructors' recommendations about effective practices will be the focus of classroom action research projects scheduled for the 2002-2003 academic year.

Assessing Summer Bridge Program

In addition to the First-Year Seminar, University College assessed the first year of a new Summer Bridge program to bring new students onto campus two weeks before the beginning of the fall semester and give them a chance to get up to speed in basic academic subjects by the time school started. Qualitative assessment was conducted by an open-ended survey and discussion with students, which revealed that students were highly appreciative of the experience, especially the opportunity of getting to know each other and IUPUI before the semester started. Students reported that program had increased their self-confidence about doing well in college and recommended that University College make the program available to more first-year students. One suggestion for improvement was to individualize the math instruction to accommodate differences in student preparation.

Assessing Pilot Year of Critical Inquiry Course

University College also carried out qualitative research on processes and outcomes in the pilot sections of its new Critical Inquiry course, which is closely linked to an academic course taken concurrently, in Fall 2000 and Spring 2001. Open-ended surveys and discussions were conducted with students in 8 sections, with post-semester feedback to instructors. Regarding course processes, many students reported that progress in the linked academic course was facilitated by increased class time and development of study skills, although skill focus varied with subject area of linked course. Regarding course outcomes, 90% of students would recommend the Critical Inquiry course to a new student, and 75% would take another CI section linked to another course. Some students, however, were uncertain about meaning of critical inquiry and the purpose of the course and expressed doubts about its value. In response to assessment findings, University College's critical inquiry task force further refined the conceptual model of critical inquiry and improved collaboration between the CI instructor and the academic course instructor.