

Contents

- 1 High-Impact Educational Practices
- 3 Wooster Highlights
 - Grant Cornwell: COFHE Statement on Assessment
 - Gary Gillund & Claudia Thompson: Pathways to Learning
 - Pamela Pierce: Tutorial Education
 - William Morgan: Logic Models
- 7 Assessment Briefs
 - CURE Survey
 - AAC&U VALUE Project
 - Critical Writing Assessment
 - Academic Affairs Assessment
 - Assessment Committee
- 8 Calendar

Contact

Anne Gates
Chair, Assessment Committee
Assistant Dean of Students and
Director of International Student
Affairs
agates@wooster.edu
(330) 263 - 2545

Theresa Ford
Director of Educational Assessment
tford@wooster.edu
(330) 263 - 2517

Cynthia Harris
Administrative Assistant
charris@wooster.edu
(330) 287 - 1932

Assessment Matters is a quarterly newsletter produced by the Office of Institutional Research, Assessment, and Planning of The College of Wooster.

www.wooster.edu/assessment

Inside AM

Grant Cornwell, President of The College of Wooster, is among 90 signatories to the **statement on assessment**, *Assessment: A Fundamental Responsibility*, prepared by a task force convened by the Consortium on Financing Higher Education.

Grants are available to faculty using and assessing **innovative, research-based pedagogies** through the Pathways to Learning Collegium, an initiative of the Great Lakes Colleges Association, which is funded by the Teagle Foundation. Gary Gillund and Claudia Thompson, Associate Professors of Psychology, are serving on the Collegium.

Collaborating with faculty from Lawrence University and Williams College, Pamela Pierce and Nancy Grace, College of Wooster Professors of Mathematics and English, respectively, are working on a project to research assessment methods in tutorial education funded by the Teagle Foundation. Professor Pierce attended a weekend workshop at Lawrence University, where faculty began to articulate and define the learning goals for tutorial education with the objective of developing a **Shared Assessment Model**.

William Morgan, Professor of Biology and Director of the Undergraduate Science Education Program, funded by a 4-year Howard Hughes Medical Institute (HHMI) grant, and HHMI Program Steering Committee members plan to use **Logic Models** as a conceptual framework to develop a plan to assess student learning and program outcomes of the multifaceted program.

High-Impact Educational Practices

George D. Kuh, Chancellor's Professor and Director at Indiana University Center for Postsecondary Research, identifies high-impact educational practices and discusses access to and the impact of these educational practices in a recently published AAC&U LEAP publication. In her introduction to the publication, Carol Geary Schneider, President of AAC&U, integrates the high-impact practices with the essential learning outcomes identified in AAC&U's ten-year initiative, Liberal Education and America's Promise (LEAP). By connecting the goals with the practices, more "purposeful pathways" are created for students and "more intentional institutions" are fostered so that students can achieve the goals.

Continued on page 2

Continued from page 1



AAC&U's *High-Impact Educational Practices* by George D. Kuh

Kuh describes the growing evidence that some programs and activities, when done well, raise students' performance across a range of positive outcomes. These practices include first year seminars and experiences, common intellectual experiences,

learning communities, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity/global learning, service learning, community-based learning, internships, and capstone courses and projects. These high-impact practices are beneficial for students from many backgrounds.

Kuh discusses why these practices are effective for students. First, given the time and effort devoted to these tasks, students become more invested in them as well as in their academic program. Second, the nature of these activities often demands interaction with faculty and peers about substantive matters usually for long durations. Third, participating in one or more of these practices increases the likelihood that students will experience diversity and be challenged to develop new ways of thinking. Fourth, students typically receive frequent feedback about their performance in all of these activities. Fifth, these practices generally provide opportunities for students to practice what they have learned in different settings on and off campus. Finally, these experiences can be life changing and can help students understand themselves better in relation to others and to the world.

Although these practices are beneficial for students of any background, underserved students tend to benefit more than most students. For example, the effects for students of color and students who begin college at lower achievement levels are greater than the effects for

white students. The personal gains from faculty-student research for first generation and African American students are more significant than for students of other backgrounds. Table 1 summarizes the strong positive effects associated with participation in student-faculty research and senior students' self-reported gains in general, personal, and practical learning outcomes, and in engagement in deep approaches to learning (see Table 2 for specific characteristics associated with deep learning). Deep learning emphasizes acquiring information and understanding the underlying meaning of it. Students who use these approaches tend to earn higher grades and retain, integrate, and transfer information at higher rates.

Table 1

| Relationships between Student-Faculty Research, Deep Learning, and Self-Reported Gains by Student Background Characteristics | | | | |
|--|---------------|---------|----------|-----------|
| Seniors | Deep Learning | Gains | | |
| | | General | Personal | Practical |
| Male | +++ | ++ | ++ | ++ |
| Female | +++ | ++ | ++ | ++ |
| First Generation | +++ | ++ | +++ | ++ |
| African American | +++ | ++ | +++ | ++ |
| Hispanic | +++ | ++ | ++ | ++ |
| White | +++ | ++ | ++ | ++ |
| Asian/Pacific Islander | +++ | ++ | ++ | ++ |

+ p < .001, ++ p < .001 & Unstd B > .10, +++ p < .001 & Unstd B > .30

Source: George D. Kuh, *High-Impact Educational Practices*, AAC&U, LEAP (2008), pp. 25-27.

However, some groups of underserved students, such as first generation and African American students, are less likely to participate in these practices. Kuh concludes that nearly every college or university offers high-impact practices, but at many institutions only small numbers of students are involved in them. Although student engagement is not a silver bullet, Kuh contends that engaging in high-impact educational practices helps level the playing field – and increases the likelihood of any student to attain his or her educational

and personal goals, acquire the skills necessary for the challenges of the twenty-first century, and enjoy the intellectual and monetary gains associated with the completion of a college degree.

Table 2

| NSSE Deep/Integrative Learning Characteristics |
|---|
| <ul style="list-style-type: none"> • Integrating ideas or information from various sources • Including diverse perspectives in class discussion/writing • Putting together ideas from different courses • Discussing ideas with faculty members outside of class • Analyzing the basic elements of an idea, experience, or theory • Synthesizing and organizing ideas, information, or experience • Making judgments about the value of information • Applying theories to practical problems or in new situations • Examining the strengths and weaknesses of your own views • Trying to better understand someone else's views • Learning something that changed how you understand an issue |

Source: Thomas F. Nelson Laird, Rick Shoup, George D. Kuh, and M.J. Schwarz, "The Effects of Discipline on Deep Approaches to Student Learning and College Outcomes," *Research in Higher Education* 49, no. 6 (2008): 469-494.

Link to the AAC&U press release of the publication at: http://www.aacu.org/press_room/press_releases/2008/KuhBook.cfm, or order a copy at: <https://secure.aacu.org/source/Orders/index.cfm?section=unknown&activesection=Orders>.

Wooster Highlights



COFHE Statement on Assessment

Grant Cornwell and 89 other college and university presidents have endorsed a statement on assessment, *Assessment: A Fundamental Responsibility*, prepared by a task force convened by the Consortium on Financing



Grant Cornwell, President
The College of Wooster

Higher Education. Signatories include all 31 COFHE-member institutions as well as 59 other public and private higher education institutions ranging from small liberal arts colleges to large research universities. The

statement reaffirms the basic responsibility of colleges and universities to assess the effectiveness of their programs, including short-term achievement and longer-term impact. Schools that endorsed the statement were invited to submit an example of the types of assessment that they employ on their campuses. The College of Wooster's submission appears below.

The College of Wooster: Since 1948, a senior project, "Independent Study" has been the culmination of a Wooster Education. All students at The College of Wooster are required to complete a faculty-mentored research project in one of 36 academic programs or in a self-designed major. The liberal arts program, including both the general education curriculum as well as the discipline-specific curricula, is designed to prepare students for this significant at least year-long undertaking. Often students present the results of their research at professional meetings in their discipline, publish results in peer-reviewed journals or in creative periodicals, or continue their research in graduate school. Although Independent Study is the culmination of a Wooster Education, it is the stepping stone to the process of lifelong learning upon graduation from the College.

Given the nature of Independent Study at the College, most academic departments and interdisciplinary programs have chosen to assess their majors through Independent Study. Both the written thesis and the process of maturation into an independent researcher are assessed. Thesis development, experimental design and reflection, revision, and independence of mind are critical to the process of Independent Study. The final

thesis should display evidence of creative and critical thinking, disciplinary knowledge, appropriate written and oral communication, as well as other abilities and skills important within the discipline and necessary to engage in lifelong learning. These goals are assessed systematically, findings are documented, and improvements are made in a continual cycle of assessment at The College of Wooster.

To read the full COFHE statement on assessment and to view a list of signatories and the submitted samples on assessment activities, link to:

<http://www.assessmentstatement.org/index.htm> .

Pathways to Learning



The Great Lakes Colleges Association (GLCA) began supporting projects involving research-based innovative pedagogies in the social sciences, humanities, and natural

sciences with a grant from the Teagle Foundation this fall. In February, 2008, the GLCA was awarded one of four grants from the foundation's Fresh Thinking *Collegia* on Student Learning program for consortia of liberal arts colleges. Shortly thereafter, approximately two dozen faculty from GLCA member colleges, including Gary Gillund and Claudia Thompson, Associate Professors in the Psychology Department of The College of Wooster, met and identified the following set of research-based learning principles:

- increasing the transfer of knowledge,
- building foundations of expertise,
- strengthening long-term retention of knowledge,
- metacognitive strategies: instilling habits of structured reflection,
- engaging the social contexts of learning, and
- engaging and strengthening different learning processes.

These principles are intended to be reference points to assist faculty who may be interested in writing a grant proposal to the Pathways to Learning program.

Proposals will be sought from GLCA faculty for courses being taught from fall 2008 to winter 2010.

In addition to contributing to the development of the general guidelines for the proposals, the roles of the *Collegium's* members are to create awareness about the program and to be a resource for the project on the home campus. A final conference in summer 2010 will provide an opportunity for the *Collegium* to analyze results from the experimental course modules.



Claudia Thompson,
Associate Professor
of Psychology

Claudia Thompson has a metacognitive project in the program. She is applying the principles of metacognition to improve learning and reflection about learning by students in Introductory Psychology classes. In addition to providing instruction and modeling on aspects of metacognition, student activities will include one-minute papers to evaluate understanding, application, and analysis of

important concepts; test debriefing that provides students with the opportunity to examine which questions they missed and why; and small-group metacognitive reflection activities. Students' performance on tests, a scoring method to evaluate metacognitive engagement in reflection papers and small-group activities, and a questionnaire given at the end of the semester to measure students' perceptions of change will be used to assess the effects of instruction and student activities.

For more information about the Pathways to Learning program and the request for proposals, contact Gary Gillund at ggillund@wooster.edu or Claudia Thompson at cthompson@wooster.edu or visit the GLCA project website at:

http://www.glca.org/Programs,%20Groups%20&%20Services/Programs/?p_id=310 .

Workshop on Tutorial Education

by Pamela Pierce

The College of Wooster is currently participating in a two-year Teagle Foundation-sponsored project designed to assess the important work done in tutorial education with Lawrence University and Williams College. The first workshop was held at Lawrence University, where faculty from the three participating schools began to define and articulate learning goals for tutorial education. The goal is to develop a Shared Assessment Model (SAM) for tutorials and to begin testing it over the next two years.

The three institutions do not share the same model for tutorial education. Williams, for example, uses the



Williams College

would sign up to take a course with a professor, who pairs the students for weekly meetings with the professor. Each week the students read a collection of essays or articles. One student writes a 5-7 page paper reacting to the readings and presents the main arguments of the paper in the weekly meeting. The other student writes a critique of the paper, and discusses, challenges, and critiques the paper in the weekly meeting. Typically, the conversation raises interesting and important questions for further study and analysis.



Lawrence University

Oxford model to offer several courses in each major that a student may elect to take as a tutorial. These courses may be at any level and may be designed for majors or non-majors. A maximum of ten students

Lawrence University is committed to personalizing a student's education, and seeks to do this through its Freshman Studies. These are small seminars offering inquiry-based

learning, collaborative learning, and opportunities for small group research experiences. Individual tutorials are negotiated between professors and students, and occur frequently in the arts.

Wooster has Independent Study, a one-on-one faculty



The College of Wooster

mentored research project in a student's major. Independent Study differs from the other tutorial models in duration, lasting at least a full academic year, as well as in tutorial structure, with a faculty member rarely meeting

with multiple students at the same time.

Although there are several varieties of tutorial education at the three schools, the models do share several features that are critical in defining a valuable tutorial experience: research, writing, one-on-one discussion, and oral presentations. Despite the variation in the models, tutorial experiences offer opportunities for significant growth and learning. "The superiority of one-on-one tutoring over traditional classroom instruction has been well documented," wrote Hacker and Graesser (2007). Yet there are no studies that identify the particular aspects of the tutorial that are most beneficial.

The working group on tutorial education assessment spent much time during its first weekend meeting discussing the desired outcomes of tutorial education. The group agreed on goals such as independent thinking, creativity, and intellectual maturity. The more difficult question is how to measure and assess these qualities and habits of mind. The Lawrence University group leaders, Robert J. Beck, Visiting Professor of Education, and William F. Skinner, Director of Research Education, will review the transcripts of the discussion and develop a first vision of a Shared Assessment Model (SAM-1). The working group will review the model and revise it by email. Then participants will be asked to test the model over the

next year with their own tutorial students. In early Fall 2009, SAM-2 will be developed, and by 2010, the final version of the model (SAM-3) will be developed and delivered to the Teagle Foundation.

To learn more about the project, contact Pamela Pierce at ppierce@wooster.edu or Nancy Grace at ngrace@wooster.edu or link to the project website at: <http://www.lawrence.edu/conference/tutorials/>.

Logic Models

In May 2008, The College of Wooster was awarded a four-year, \$1,000,000 grant from the Howard Hughes Medical Institute (HHMI) Undergraduate Science Education Program to build on the College's history of undergraduate research and recent advances in science education, facilitated by previous HHMI funding. The major goal of the program is to leverage Wooster's vast infrastructure of coursework, financial support, faculty expertise, and a culture of research to build bridges between scientific disciplines to further enhance undergraduate science education. The program emphasizes integrating the life sciences with the quantitative and physical sciences. The four core program components are:

- Student Research and Broadening Access to Science
- Faculty Development
- Curriculum, Equipment, and Laboratory Development
- Pre-College and Other Outreach



William Morgan,
Professor of Biology

William Morgan, Program Director and Professor of Biology at The College of Wooster, attended a workshop on program evaluation, focusing on Logic Model design and development, with other HHMI program directors. HHMI is promoting the Logic Model as a conceptual framework for grant recipients to evaluate their program and learning outcomes. The Logic

Model is a tool for evaluation planning and reflection. It identifies a series of hypotheses or assumptions about a program that are open to investigation and revision. Development of a Logic Model is viewed as one of the seven steps in the evaluation process. Table 3 describes the components of a Logic Model.

Table 3

| Logic Model Template | |
|----------------------|--|
| Inputs | all the resources necessary for supporting a program; e.g. money, time, expertise, experience, leverage, facilities, technology, etc. |
| Strategies | the specific activities, services and/or programs that serve a particular target audience; e.g., curriculum, after-school programs, faculty, etc. |
| Outputs | an immediate measure of program strategy implementation; e.g. number of participants, frequency of educational opportunities, types of educational activities/events provided, etc. |
| Outcomes | the short- and longer-term effects of program strategies on behaviors, attitudes, knowledge, and/or perceptions; e.g. improved knowledge, motivation to apply better study skills, belief/attitude toward particular content, etc. |
| Short Term | Learning: awareness, knowledge, attitude, motivation, skills, opportunity |
| Medium Term | Action: behavior, practice, policies, decision-making, social action |
| Impact | the long-term and aggregate effect of a sustained program, service, or activity on the overall target audience |
| Long Term | Conditions: social, economic, civic, environmental |

Source: Allison Crean and Chantell Johnson, TCC Group, "Using the Logic Model to Plan for Evaluation: HHMI Professors and Undergraduate Program Directors Meeting," October 21, 2008.

There are several benefits of developing and using a Logic Model as a framework for evaluation planning.

The logic model:

- becomes a reference that facilitates planning, evaluation, communication, participation, and decision-making for the program,
- describes what you want regarding your program,
- builds consensus on the program initiative, and
- allows for baseline documentation, measurement of change, and understanding of results over time.

William Morgan and the HHMI Steering Committee will be working on developing Logic Models for each component of the HHMI program. Beginning with the Student Research and Broadening Access to Science component, they have identified the inputs, strategies, outputs, learning and program outcomes, and impacts. The next step in the evaluation process will involve specifying the evaluation questions, indicators and measures, sources of information, and data collection methods.

A good resource for Logic Model development is the *Logic Model Development Guide* published by the W.K. Kellogg Foundation as a companion publication to its *Evaluation Handbook*. The *Guide* can be ordered or viewed online at:
<http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf>.

Assessment Briefs

CURE Surveys

The Classroom Undergraduate Research Experience (CURE) survey is a pretest-posttest or posttest only survey to measure student experiences in "research like" or other science courses. David Lopatto, the Samuel R. and Marie-Louise Rosenthal Professor of Natural Science and Mathematics, in the Psychology Department of Grinnell College, administers the survey, collects the data, and reports the aggregate results.

Pretest questions include:

- Demographic questions
- Reasons for taking the course
- Level of experience on various course elements
- Science attitude questions
- Learning style questions

The posttest survey is parallel to the pretest. Questions include:

- Estimate of learning gains in the course elements
- Estimates of learning benefits that parallel questions in the SURE surveys
- Overall evaluation of the experience
- Science attitude questions

Science faculty at The College of Wooster were invited to participate in the CURE Survey during fall semester. Faculty and students in Environmental Studies and Neuroscience Programs and in Geology and Psychology Departments are participating.

AAC&U VALUE Project

The summer 2008 issue of *Assessment Matters* summarized the AAC&U's VALUE project, in which faculty across the country are developing metarubrics for the essential learning outcomes identified in the AAC&U LEAP initiative. Several of the rubrics have been developed and will undergo a brief period of evaluation during December 2008. In early 2009, the rubrics will be revised and applied to e-portfolios at identified leadership campuses.

The project is seeking faculty to evaluate rubrics for creative thinking, ethical reasoning, foundations and skills for lifelong learning, inquiry and analysis, oral communication, quantitative literacy, and teamwork. These rubrics as well as the evaluation form and VALUE program overview are posted on The College of Wooster assessment website. You may also get copies of the evaluation form or the rubrics from Theresa Ford, tford@wooster.edu or Nancy Grace, ngrace@wooster.edu. Evaluation forms should be submitted to Wende Morgaine, VALUE Initiative Manager, [wendemm@gmail.com](mailto:wendem@gmail.com) [(503) 577-7712].

Critical Writing Assessment

The Writing Advisory Board tested the critical writing assessment rubric and suggested minor revisions to the rubric during the fall writing placement. The first set of papers for the Critical Writing Assessment during the fall semester has been collected, and courses have been identified for spring semester. William Macauley, Director of Writing and Associate Professor of English, will work with Writing Advisory Board faculty and Writing Center consultants to assess the fall papers during the winter break.

Academic Affairs Assessment

Many Academic Affairs Offices and Departments at The College of Wooster have assessment plans in place and some have implemented their plans. By the end of the 2008-09 academic year, all departments and offices in Academic Affairs and Support will have developed assessment plans. Mission statements and program and learning goals are being developed during the fall 2008 semester. Jessica Duplaga, Director of International and Off-Campus Programs, Nicola Kille, Coordinator for the Ambassadors Program, and William Macauley, Director of Writing and Associate Professor of English will serve as exemplars in assessment during the process of assessment plan development for academic affairs and support offices and departments. Early in the spring semester, a brown bag lunch focusing on assessment measures with examples from academic support areas will be held. Check Wooster Headline News for date and time. The assessment website will also be posting resources developed for Academic Affairs, Student Affairs, and Academic Support areas as well as internal plans and components of plans as they are completed to assist those who may be seeking models and examples from which to develop plans.

Assessment Committee

The Assessment Committee (AC) is chaired by Anne Gates, Assistant Dean of Students and Director of International Student Affairs. Fall meeting times are the following Mondays at 3:30 p.m. in the VPBF Conference Room in Galpin: Aug. 25; Sep. 8, 22, and 29; Oct. 20 and 27; and Nov. 10 and 24. Meeting minutes are posted on the assessment website.

The Assessment Committee has submitted a proposal to restructure itself as a faculty-appointed committee to the Committee on Committees. The AC is also in the process of reviewing the annual assessment reports of academic departments and programs and providing feedback to them as well as reviewing plans from Academic Affairs offices. The AC has created an inventory of all assessment-related projects on campus.

Assessment Matters is written by Theresa Ford, who encourages you to provide feedback on the newsletter, to share your ideas for the newsletter, and to submit materials to include in the newsletter.

Assessment Calendar

Meetings, Events, Conferences, & Deadlines

| | |
|------------------|--|
| Sep-Oct | College of Wooster's participation in AAC&U VALUE Project |
| Sep 10 | New Chairs Luncheon |
| Oct 3 | College of Wooster Academic Affairs Assessment Meeting |
| Oct 6 | Annual Assessment Reports due from academic departments and programs |
| Oct 15 | College of Wooster Student Affairs Assessment Meeting |
| Oct 26-28 | The 2008 Assessment Institute Indianapolis, IN |
| Nov 14 | Assessment plan goals due from new academic programs and Academic Affairs/Support programs to VPAA |
| Nov 21 | Critical Writing Assessment Luncheon |
| Dec | College of Wooster faculty evaluate AAC&U VALUE Project rubrics |
| Jan 7 | WAB Critical Writing Assessment |
| Jan | Assessment Matters Brown Bag Lunch "Methods of Assessment," date TBD |
| Jan | Chairs Meeting on Assessment |
| Feb 2 | Faculty vote on Assessment Committee restructuring |
| Feb 2 | Assessment plan measures due from new academic programs and Academic Affairs/Support programs to VVPAA |
| Feb 26-28 | AAC&U, General Education, Assessment and the Learning Students Need, Baltimore, MD |

Assessment Committee Members, Fall 2008
Anne Gates, Chair, Assistant Dean of Students,
Director of International Student Affairs

Iain Crawford, VPAA
Theresa Ford, Assessment
Elys Kettling Law, Library
William Macauley, English
John Neuhoff, Psychology

Ellen Falduto, AVPRAP
Laura Hazlett, '11
Richard Lehtinen, Biology
Katharine McCarthy, '09
Pamela Pierce, Mathematics