Assessment Resources

Articles/Assessment Tips

Transparency in Learning and Teaching; Thriving in Academe, NEA Higher Education Advocate

Continuous Program Improvement: A Work in Progress, Assessment Update

Relating Students’ Grades and Measures of Specific Outcomes, Assessment Update

Do Grades Make the Grade for Program Assessment? (source: www.abet.org website)


Assessing Student Learning: Worksheet

Assessment Worksheet for Departments, Example by Penn State

Assessment Workshops: Spring 2016

Sponsored by the USM Assessment Committee and the Center for Collaboration & Development

Friday, March 11: “Understanding Proficiency-Based Grading” by Flynn Ross

Friday, March 18: “Reflective Assessment for the College Student” by Paul Caron
“Assessing Student Learning Outcomes” by Julie Canniff

*Please contact the Office of Academic Assessment for the specific workshop materials listed above. If you would like to review additional resources related to the assessment process, please see the assessment website: www.usm.maine.edu/assessment click on Assessment Tools/Literature.
Transparency in Learning and Teaching

Faculty and students benefit directly from a shared focus on the processes of learning and teaching.

Using assessment data to improve teaching and learning

In this world of increasing accountability and shrinking resources, assessments of teaching performance and learning outcomes are commonplace on college and university campuses. But such assessments all too often produce data that all too rarely trickles down to sustainable improvements in learning and teaching practices. When was the last time assessment data actually informed your teaching? How many of your students understand how institutional assessments enhance their learning?

The Illinois Initiative on Transparency in Learning and Teaching is an innovative, grassroots assessment program that helps teachers and students collaborate to improve their higher education teaching and learning experiences through two main activities:

- promoting students' conscious understanding of how they learn, and...
- enabling faculty to gather, share and promptly benefit from current student assessment data by coordinating their efforts across disciplines, institutions and countries.

The Initiative engages students and teachers in explicit (or transparent) conversation about beneficial learning and teaching practices. First, faculty and students experiment with various methods of examining learning/teaching processes (see Best Practices on page 8), and then they measure the results through a four-and-a-half-minute online survey, which asks students about the current and future learning benefits they are gaining. Their answers, which quickly point to the most effective learning and teaching methods for particular disciplines and student groups, can be shared and immediately acted upon.
Assessment Exhaustion?

Faculty, students and administrators all feel the strain of complying with mandated assessments. Unfortunately, so much attention to compliance can deplete our energy for applying any wisdom gained from assessment data. In a national assessment study conducted by the Wabash Institute, schools readily admitted that they didn’t review assessment data for ways to improve students’ learning. [Blaich and Wise 2011] But when institutions don’t parse, summarize and share data in ways that benefit learning and teaching, instructors are on their own with their course data. Consequently, their efforts are usually isolated from the larger context of information about learning practices that work best for students in similar courses in their discipline — the kind of bigger picture that makes their own evaluation results more meaningful. The process doesn’t need to be so isolating and exhausting!

To combat these limitations, hundreds of instructors from the U.S. and abroad have begun using the Illinois Initiative for Transparency in Learning and Teaching to gather and share information about how students’ learning experiences are improved by teaching methods that promote their understanding of their own learning processes. The project also removes other common barriers to faculty participation in assessment, including lack of control over the process, lack of expertise, insufficient time, lack of short-term benefits to teaching and learning practices, and concerns about privacy. Participating instructors implement one of the suggested methods (see Best Practices) at their own discretion, and then

TABLE FROM REAL LIFE > THE PROCESS ORIENTED CLASSROOM

A priest, a lounge singer and a plumber walked into a classroom — my classroom, actually. Like many of their classmates, they were “non-traditional” students, ranging from all walks of life. What did they have in common? They all would be asked to work collaboratively to research and produce a high-quality museum catalogue. Pedagogical research told me they needed specific examples of what such work looked like. So I hunted down museum catalogue entries and articles and shared those with the students. Step by step, I identified the required tasks, in sequential order. Despite my best efforts, the students floundered. What was standing in the way of their progress?

Publications on how novices and experts approach intellectual problems helped me understand that the students’ thinking processes might be hindering their work. And conversations with the students revealed overwhelming self-doubt in their ability to succeed at this sort of work. But it wasn’t until we explicitly and frankly discussed how and why novice learners struggled in new disciplines, or how and why their learning processes might be different, that breakthroughs occurred.

One outcome was a scholarly museum catalogue — the goal of the course. The other, more important outcome was my own learning about the benefits of being transparent with students about the hows and whys of the learning and teaching process.
measure the impact on students' learning experiences with an online survey that takes students about four and a half minutes to complete. Time-consuming tasks like conducting data analysis and obtaining ethical research approvals are completed by Transparency staff, so faculty can focus their time on students. Since 2010, this grassroots project has involved more than 18,000 students at twelve institutions in five countries.

Because participating faculty share their results quickly and broadly (and anonymously, with appropriate approvals), it is already possible to identify ways that an explicit focus on learning and teaching methods can benefit students in specific disciplines at the introductory, intermediate and advanced levels.

In the Social Sciences

In introductory, undergraduate social science courses, at least three methods have shown statistically significant benefits (p < .01) for student learning. They are: discussing the assignment's learning goals and design rationale before students begin; using in-class peer work to gauge students' understanding of new concepts; and conducting in-class discussions about graded tests and assignments.

However, their efficacy depends in class size. As class size grows from 66 to 300, the second method, "peer work," seems to become less effective, while the first grows more so. In classes above 300, "debriefing" seems most effective.

AN EXPLICIT FOCUS ON LEARNING AND TEACHING METHODS CAN BENEFIT STUDENTS.

At the intermediate level in social science courses with 30 or fewer students, another method seems beneficial. That is explicitly connecting the data around "how people learn" to course activities at difficult transition points. (For examples, see Bass, Bloom, Bransford, Gregorc, Light, Perry at: www.teachingandlearning.illinois.edu/components_of_transparency.html.)

In courses at this level, students also report that "gauging of students' understanding" is significantly less helpful. This suggests that explicit discussions about understanding at the intermediate level may be redundant and unnecessary. For graduate students, "debriefing" appears to be the most effective method for enhancing learning value.

In the Physical Sciences

Here in the U.S. in introductory, undergraduate physical courses, some of those same methods also work well. Specifically, they are: explicitly connecting "how people learn" data with course activities at difficult transition points, and discussing an assignments' learning goals and design rationale before students begin those assignments.

In introductory physical science courses, students also report benefits from the method of "gauging students' understanding," but less so when class size tops 300.

Current and Future Learning Benefits

Last weekend, a colleague bumped into a former student who said, "Your course was so hard, I dreaded it. But now I use what I

BEST PRACTICES > SOME TRANSPARENT METHODS WITH PROMISING RESULTS

Discuss assignments' learning goals before students begin each assignment
- Chart out the skills students will practice in each assignment in the course.
- Begin each assignment by defining the learning benefits to students: skills practiced, content knowledge gained.
- Provide criteria for success in advance.
- Offer examples of successful work, and annotate them to indicate how criteria apply. This discourages copying and encourages original work.

Gauge students' understanding during class via peer work on questions that require students to apply the concepts you've taught
- Create scenarios/applications to test their understanding of key concepts during class.
- Allow discussion in pairs, instructor's feedback, and more discussion.

- Provide explicit assessment of students' real-time understanding, with further explanation if needed, before moving on to teach the next concept.

Engage students in applying the grading criteria that you'll use on their work
- Share criteria for success and examples of good work (as above in #1), then ask students to apply these criteria in written feedback on peers' drafts.

Explicitly connect "how people learn" data with course activities when students struggle at difficult transition points
- Offer research-based explanations about concepts or tasks that students often struggle to master in your discipline.

See additional methods at www.teachingandlearning.illinois.edu/components_of_transparency.html
learned from you all the time!" Wouldn't we all like to measure students' views of our courses years later? Like my colleague, many of us wish we could measure students' views of our course years later. Well, now we're in luck — almost. The Transparency Initiative has indicated two benefits that its recommended methods can offer: 1) current value of the students' learning experience, and 2) future learning benefits (based on students' identification of lifelong learning skills they gained from a course). The latter provides a "win-win" for teachers and students.

While instructors get a satisfying indicator of their long-term impact, students gain awareness of how the skills they are practicing in class assignments may benefit them long after course completion. Those long-term skills include communication and collaboration, as well as analytical thinking, synthetic thinking and making evaluative judgments about ideas and evidence.

**Changing How Size Matters**

Most instructors notice that as class sizes increase, the quality of students' engagement and learning often decreases. But in courses with 300-plus students where instructors built awareness of the teaching and learning process, students felt more valued by instructors than students in much smaller classes where transparency methods weren’t implemented. For example, in large social science courses at the introductory level, students exposed to the method of “in-class debriefing discussions” responded significantly more positively than students in control group courses to the question, “How much does the instructor value you as a student?” Results are similar in intermediate and advanced physical science courses using the debriefing and other transparency methods. Even in very large classes, explicit discussion of the learning and teaching methods can make students feel like they matter.

**Promoting Best Practices**

Not only does the Transparency Initiative share data that informs teaching/learning practices, it also implements good practice while it collects that data. This makes the process of researching the methods valuable even before the findings are shared.

The recommended methods (see Best Practices) are compatible with the “Principles of Excellence,” “Essential Learning Outcomes” and “High Impact Practices” defined by the Association of American Colleges and Universities’ Liberal Education and America’s Promise initiative, and with research on learning and teaching practices. [Ambrose 2010, Nilson 2010]

**REFERENCES & RESOURCES:**


Calkins, S. and Marina Micari. “Less-Than-


Illinois Initiative on Transparency in Teaching and Learning in Higher Education


Continuous Program Improvement: A Work in Progress

Elayne Proesel Colón, Thomas Dana

Programs must change and improve over time to receive continued accreditation. "Continuous improvement" has become a mantra in the accreditation and accountability world of higher education. No longer is it acceptable for a high-quality program or institution to remain the same. Improvement is expected and implies systematic change. Of course, every academic program can improve—improve admission to enrollment yield, increase the number of underrepresented students, realign curriculum with professional exams, and produce higher-quality graduates with better outcomes than before.

Over time, faculty indeed make changes to their programs. Changes may emerge from oral feedback that students provide in class, exchanges in a faculty meeting, or even from casual hallway conversations with colleagues. The changes may or may not be documented through personal notes, in meeting minutes, or related program materials. But if one were to ask, faculty can provide a host of examples of changes made to their courses, the curriculum, or a program of study during a specific period of time.

Contrast these informal changes with a formal request to program faculty to set concrete program improvement goals, identify formal or informal assessments to measure the attainment of those goals, and document progress toward meeting the program goals over a specified period of time. Accrediting bodies almost uniformly require that programs document systematic change, or "continuous improvement," over time. The data often exist but are not readily available as evidence of documented change.

In the past, these activities often were distinct: faculty informally made changes to their program over time, and administrators pushed systematic goal setting and program changes for accreditation purposes. Past practices are no longer acceptable, as accountability demands have increased and accrediting bodies expect copious documentation.

Sometimes decisions to make programmatic changes are based on feelings, intuition, or anecdotal information when, in fact, data often also exist to support these claims and justification for change. So there exists a disconnect between data collected and changes made to programs. Data are required to be collected and reported for accreditation purposes in the spirit of "continuous improvement," but what is valued and
used by faculty in these program improvement efforts? How can we move to streamline or unite the informal and formal activities so that authentic change can be documented and based on the plethora of data that is annually collected and reported? These were the questions we were asking ourselves.

In the Beginning

We started in 2007 by selecting the data that made the most sense, getting us all moving toward continuous improvement. In a first attempt to enable and track continuous improvement within programs, three-ring binders containing aggregated data were compiled during the summer and presented to program coordinators for program faculty to review early in the fall semester. Data included admissions, candidate performance on key tasks aligned with program competences, disposition reports, exit survey results, student and employer satisfaction surveys, and graduation rates. Program Changes templates were created where faculty could document results of faculty and stakeholder reviews of program data. A sample from this exercise for one of our programs is captured in Table 1.

<table>
<thead>
<tr>
<th>Table 1. Sample Program Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Year</strong></td>
</tr>
<tr>
<td>2007–2008</td>
</tr>
</tbody>
</table>

(continued on page 14)

Call for Contributions

The editor welcomes short articles and news items for Assessment Update. Guidelines follow for those who would like to contribute articles on outcomes assessment in higher education.

- **Content:** Please send an account of your experience with assessment in higher education. Include concrete examples of practice and results.
- **Audience:** Assessment Update readers are academic administrators, campus assessment practitioners, institutional researchers, and faculty from a variety of fields. All types of institutions are represented in the readership.
- **Style:** A report, essay, news story, or letter to the editor is welcome. Limited references can be printed; however, extensive tables cannot be included.
- **Format:** In addition to standard manuscripts, news may be contributed via letter, telephone, or fax (317) 274-4651. The standard manuscript format is a 60-space line with 25 lines per page. Articles may be sent to auupdate@iupui.edu as a Microsoft Word attachment. Please include your complete postal mailing address.
- **Length:** Articles should be four to eight typed, double-spaced pages (1,000–2,000 words). Annotations of recent publications for the Recommended Reading feature should be 200–500 words in length. Short news items and content for the Memos section should be about 50–200 words long.
- **Copyright:** Articles shall not have been registered for copyright or published elsewhere prior to publication in Assessment Update.
- **Deadlines:** Each issue is typically planned four months before its publication.

Please address mailed contributions and comments to Trudy W. Banta, Editor, Assessment Update, Suite 4049 University Hall, 301 University Blvd., Indianapolis, IN 46202–5146.
Continuous Program Improvement: A Work in Progress (continued from page 2)

Continuous Improvement Continuously Improves

We have refined our continuous improvement process every year since 2008 to improve faculty understanding of expectations, accumulate more accurate and useful data, and generate products that adequately reflect the good work that faculty are doing to improve their programs over time. Whenever possible, we have attempted to centralize data collection processes (e.g., centrally administer exit surveys) in order to reduce the burden on program faculty. But there are certain data elements that are not gathered centrally and tend to be located in departmental offices in paper files, such as signed qualifying examination forms or completed portfolio evaluation instruments. All of these pieces are important to the overall process and must be considered in program improvements. Often, it is most effective to invoke the notion of a shared responsibility for continuous improvement of candidate preparation (Heafner et al. 2014) and work collaboratively to compile necessary data.

We have taken some intentional steps to facilitate and scaffold the change and documentation process. In 2011 we revised the template for program faculty to complete each fall as part of the continuous improvement process. We now refer to this document as the Continuous Improvement Plan (CIP), and a sample template is provided in Table 2. Each year the goals from the previous year are provided in the Educational Goals column, and programs complete the template by filling in the content of the cells for the Assessment Method, Analysis, and Resulting Program Changes columns. They do this based on data provided to them and other data collected within their departments. Finally, they complete the Measureable Goals column for the next academic year by determining whether to continue the same goal or complete the goal and write a new one. While Table 2 details what a row of the template might look like once it is submitted to us, only a completed column 1 (Measureable Goals written the previous year) is provided at the outset.

In 2013, in addition to the CIP template, we offered program faculty specific examples of goals, assessment methods, analyzes, and use of results. Table 3 shows two completed rows of the template as an exemplar so as to offer specific words faculty might use in their own CIPs and offer insight into the level of detail we were expecting.

In 2014, we continued to improve our process by encouraging programs to examine data from multiple measures in response to previously set goals. We created “trend reports” where we aggregated and synthesized data across multiple measures into an additional report for their consideration. We chose the theme across all our educator preparation programs this year of “candidate and completer use of assessment data to make professional decisions” and created a trend report for each program that included data from summative field experience evaluations, exit surveys, certification exam results, and graduate and employer satisfaction surveys. We extracted data from these various measures that specifically addressed this theme and presented it in one data report. This alleviated the burden on faculty to review multiple reports of data and make connections across reports. In addition, we wrote a goal and included it on each CIP, so that each program was required to review the trend report, write an analysis of the results, and determine ways in which they might use the results for future program changes.

Lessons Learned

To summarize, below is a listing of changes we have made to merge and streamline activities at our institution in order to promote a unification of the continuous improvement process that is based on data and represents authentic program changes in a way that can be documented to satisfy accrediting bodies and deemed acceptable by faculty. Requests for data or other documentation about our programs are received from external constituents at least monthly. We have made a conscious and intentional shift from constantly being in a reactive state to being proactive and

<table>
<thead>
<tr>
<th>Table 2. Continuous Improvement Plan (CIP) Sample Template</th>
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<tbody>
<tr>
<td><strong>Educational Goals for 2011–2012</strong></td>
</tr>
<tr>
<td>At least 25% of course syllabi will exhibit evidence of the integration of technology.</td>
</tr>
</tbody>
</table>

14
prepared. The process has been implemented over a period of eight years, and we’ve managed to align the accreditation and accountability demands of national, regional, state, and institutional entities into one activity completed by programs each fall semester. We are then able to extract information supplied by program faculty to report to various stakeholders. As Ndoye and Parker (2010) implore, “...leaders must support assessment initiatives; more importantly, leaders must ensure that adequate time is devoted to assessment planning and implementation so that assessment is built into the institution’s schedule and activities” (36).

1. Process. The CIP process is “launched” each September with a face-to-face meeting where program coordinators gather to discuss the task and receive instructions. They typically have one month to gather program faculty, analyze the data made available to them for goals set the previous academic year, document any program changes based on the data, and set new goals for the current academic year.

<table>
<thead>
<tr>
<th>Educational Goals for 2012–2013</th>
<th>Evaluation/Assessment Method</th>
<th>Results/Analysis (Identify Strengths and Areas for Improvement)</th>
<th>Use of Results/Resulting Program Changes</th>
<th>Progress—Ongoing OR Completed</th>
<th>Measureable Educational Goals for 2013–2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty will increase recruitment efforts both on campus and off campus as measured through the development and circulation of advertising materials as well as engage in onsite and online recruitment sessions for prospective students.</td>
<td>Recruitment materials; listing of recruitment venues (online and/or face to face); number of recruitment sessions; number of attendees in webinars; number of meetings with undergraduate coordinators across campus; applied, admitted, enrolled data</td>
<td>The following materials were developed: brochure, updated web page on COE site, Facebook posts, webinar. COE faculty and/or staff partnered with RRMA and participated in the following sessions: table at FERA, AERA conferences; College Nights; presentations in three undergrad UF courses, meetings with three dept. advisors. Increased new admits for 2013–2014 by 15%.</td>
<td>Will continue with similar efforts during 2013–2014 academic year.</td>
<td>Ongoing</td>
<td>Faculty will increase recruitment efforts both on campus and off campus as measured through the development and circulation of advertising materials as well as engage in onsite and online recruitment sessions for prospective students.</td>
</tr>
<tr>
<td>Faculty will increase the number of applications in 2012–2013 (to be newly enrolled during the 2013–2014 academic year).</td>
<td>Number of applications, number of minority applications.</td>
<td>Number of applications for fall 2013 = 162 (increase of 12%); number of minority applications for fall 2013 = 14 (increase of 24%). Successful strategy appeared to be increased and timely faculty responses to inquiries from potential applicants.</td>
<td>Communication strategies used to yield increases will be maintained. Program will continue to track and monitor increases.</td>
<td>Completed</td>
<td></td>
</tr>
</tbody>
</table>
2. **Data.** A password-protected web-based portal has been developed to display organized data that are collected at the unit level on behalf of programs. This portal can be accessed by all program faculty and is updated annually, typically each summer prior to the CIP launch in September.

3. **Infrastructure.** It has taken several years to build the infrastructure that we have today to support data collection and analysis, slowly building the culture of making programmatic decisions based on data, and documenting the continuous improvement of our programs. This infrastructure includes faculty and staff who routinely interact with key stakeholders in various offices at the institution to access (and understand and interpret) "official" campus data.

4. **Reports.** Newer to the process is a "trend report." The trend report promotes the examination of a specific aspect of a program by analyzing data obtained from multiple measures.

5. **Progress.** Each year our personal goal for the CIP process is to move each program forward—even if just a bit. Every program has its own unique dynamics, complexities, and challenges. Each program begins the new year in a different place; our intention is to design the process in such a way that each program's ability to review and interpret program data and document continuous improvement is improved from the year before. The goals grow increasingly more measureable over time, the analyses deeper and more thoughtful, and the use of results truly based on data.

**References**

Elayne Proesel Colón is director of Assessment and Accreditation, and Thomas Dana is professor and associate dean for Academic Affairs in the College of Education at the University of Florida.

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**Outcomes assessment isn’t going away.**

Trudy Banta and Catherine Palomba address the timeless and timeliest issues in higher education accountability, all in one book.

"The Contents list alone could function as an annual checklist for healthy assessment practice in colleges and universities."

—Jillian Kinzie, associate director, Indiana University Center for Postsecondary Research

"It's hard to improve on a classic, but Banta and Palomba have done so with this updated edition of Assessment Essentials, which is replete with examples of what effective assessment work looks like in different types of institutions."

—George D. Kuh, director, National Institute for Learning Outcomes Assessment (NILOA)

Available at www.josseybass.com/highereducation or your favorite online bookseller.
Because of the subjective nature of grades, they are largely ignored when assessing student learning outcomes. However, information may be gained by correlating assessment results with course grades. While faculty members are often asked to view disaggregated data within their own institutions and make decisions to improve learning, the issues they face are not always limited to local issues. Achievement gaps are well documented between majority and minority students. In addition, a rising number of working adults are attending postsecondary institutions, creating age diversity in our classrooms. Gender issues have been noted as well, primarily by discipline. Use of technologies in courses and their impact offer still more variables to study. Formative assessment in concert with grade correlations could provide a means of gathering the information necessary for improving learning for these diverse groups in postsecondary institutions (Business-Higher Education Forum 2004, 11).

In this study, correlations between student grades and assessment scores in a community college general sociology course provided some interesting points of analysis. Academic objectives in this course were firmly established and their outcomes assessed to determine if the objectives were being met and if students were achieving the appropriate outcomes. This course-level assessment was designed so that the data could be aggregated across the department and information regarding the effectiveness of the course could be determined. Once the data were aggregated, they could be disaggregated along a variety of salient lines to gain insight as to the rate of student success based on demographic information and teaching methods.

Methodology
This is a quantitative study of formative, course-level learning outcomes assessment. Data describing outcomes mastery and grade distribution correlations were used to create clear intervention recommendations. The specific course analyzed was a general education sociology course intended to introduce eight objectives from a common course syllabus.

The intent of this study was first to determine if data analysis of an in-house-developed assessment instrument would provide information leading to clear and advisable interventions to improve student learning in a formative assessment process. In addition, the study was designed to determine if a correlation existed between grade distributions and success rates on the assessment instrument in hopes of gathering more information on student achievement based on demographics and teaching strategies.

In most courses, it would be unlikely that a single test would summarize all the criteria used to evaluate a student.

67

Students to the basics of social science research and allow them to apply specific social constructs to their own lives. This course is taught on multiple campuses, by both adjunct and full time professors, to over three hundred students each semester.

The sociology faculty chose a multiple-choice pre-/posttest for their assessment instrument. The test questions were developed and agreed upon by a team of faculty and matched to the main objectives of the course. To further establish validity of the instrument, the exam and a list of course objectives were sent to an external consultant for feedback. Suggestions from the external consultant were integrated into a revised exam. The exam consisted of forty-five questions based on
defining a student's grade, such as quality of oral or written communication, class participation, and collaborative learning opportunities.

Because one purpose of this study was to explore differences in outcome achievement based on demographics and teaching strategies, there was a need to compare the outcomes of African American students to those of their white counterparts. This is of particular interest to the community college involved in this research as it attempts to close its achievement gap. However, African Americans are not the only demographic subgroup that has consistently demonstrated lower scores on previous academic assessments. Therefore, age and gender were also studied. In addition, two instructional modes were used in teaching the sociology course: the traditional on-campus approach and an online approach. Disaggregation of student grades and assessed outcomes based on teaching strategy was included in the analysis. Finally, data were broken down by topic area to see if improvement occurred from pretest to posttest for all objectives.

The pretest was administered to sociology students on the various campuses sometime during the first week of the semester. All students taking the course online represented one of the campuses and were designated accordingly. The same exam was readministered as a posttest as part of the students' final exam. Only students with matched pre- and posttest scores were used in this study. This resulted in a total of 338 students, 267 from the campuses using on-campus teaching and 71 from the campus using online teaching.

Results

The breakdown of the demographics of the sample involved in the sociology course-level assessment project showed that the subjects were predominantly white females of traditional college age. The grade distribution data demonstrated a positively skewed curve, indicating that the sociology students at this community college received high grades. This positive skew was more pronounced for students enrolled in the online course.

When t-tests were run to compare pretest scores to posttest scores, the results were found to be statistically significant for all students regardless of ethnicity, gender, or instructional type. No difference was found between the posttest scores of any of these subgroups. Although African American students have historically achieved lower grades than majority students in most academic arenas at this community college, this was not found to be the case in this sociology course.

A regression analysis was run between grades and the assessment posttest. The results demonstrated a weak but statistically significant relationship. This suggested that students who achieved higher grades were, in general, more successful at achieving expected outcomes. There was variability, however, in the relationship between grades and the posttest assessment scores when considering teaching strategies. While a significant correlation existed between grades and assessment outcomes for students taught in the on-campus courses, there was no apparent correlation between grades and the assessment scores for students taught online.

Additional t-tests were run to determine significant differences between the pretest and posttest means for each of the eight objectives. Overall, there was significant change for every objective, although the change was not as great for students taught online.

Discussion

Using assessment of specific course-level objectives enabled faculty to evaluate a number of variables related to this general education sociology course. As expected, there was a significant relationship, though not always strong, between grades and assessment scores. Pretest to posttest scores improved at a statistically significant level for all students except for those taught exclusively online. These results may open some points of discussion between professors of online courses and traditional on-campus courses in regard to requirements and content mastery.

One possible explanation for the discrepancy may be that in online courses there is more emphasis on participation, on rewarding students for posting responses and ideas, rather than for their achievements of skills, knowledge, and competence. This warrants study. Enrollment in online courses is on the rise in postsecondary institutions, increasing approximately 20 percent annually among public postsecondary institutions in recent years (Carlson 2004, A30). Yet faculty are developing pedagogical practices that may be in conflict with current accountability practices that test for specific outcomes. As a result, students may show higher levels of class participation in online courses but may not always demonstrate the same level of learning outcomes as their peers in traditional classes (Ven groff and Bourbeau 2006, 10).

While faculty had not expected significant differences among assessment scores based on age or gender, they had been led to believe that their African American students might have lower scores on the posttest than their white students. This was not the case. In fact, since the pretest scores for the African American students on one campus were actually lower than those of Caucasian students, there may have been more learning among this demographic group.

Because this is a formative assessment, our community college faculty will administer a subsequent assessment once appropriate interventions have been determined and implemented. However, a formative assessment is also about increasing faculty engagement—about increasing discussions, awareness, and sharing. As many questions as answers have been raised by this process. For ex-

(continued on page 15)
ample, in this course-level assessment, faculty discussed such topics as: How many questions are enough to determine if a student has truly mastered a particular topic? Has any unintentional test bias been introduced into this in-house developed exam? How much should class participation count toward a student’s overall grade? What is an acceptable minimal level of mastery for course completion? The discussion included how to ensure that course delivery methods do not affect student outcomes negatively.

One suggestion emerging from faculty discussion about ways to gain additional information and insight into student learning was to link an attitudinal survey with the learning outcomes assessment instrument. Questions about whether students feel they are mastering the content and are engaged and academically challenged could be included. Further data should and will be collected and analyzed for this course. A successful formative assessment should lead to growth and plans to gather additional information.

References

ington, DC: BHEF.

Tara Eisenhauer Ebersole is professor of biology and STEM liaison at the Community College of Baltimore County in Maryland.
Do Grades Make the Grade for Program Assessment?

Assessment Tips With Gloria Rogers

One of the most common questions from faculty when discussing outcomes assessment is, “We are already assessing students in courses; why can’t we just use student grades as an indication of what our students know or can do?”

Grades represent the extent to which a student has successfully met the faculty member's requirements and expectations for a course. Because many factors contribute to an assigned grade, it is almost impossible to make inferences about what a student knows or can do by only looking at the grades for a course.

In outcomes assessment at the program level, the primary question that needs to be answered is, “Can students demonstrate the ability to perform at an acceptable level in each of the program outcomes?” Program assessment focuses on providing evidence that students can demonstrate knowledge or skill directly linked to specific program outcomes. Grades per se do not provide that information.

One reason why course grades are not appropriate for program assessment is that course content for any given subject may vary among faculty members teaching the same course. When developing a course, the faculty member has to make many decisions. These include decisions about course content and course management. When deciding what topics and concepts to include in the course, the faculty member needs a clear view of how the course is aligned with other courses in the curriculum (e.g., introductory, elective, required, lower/upper division, major, or service course). Decisions about course content are constrained by several factors: the amount of time the faculty member has to deliver the course, the knowledge and skills that students bring to the course, and the expectations other faculty have for learning brought to follow-on courses. Content may also vary with the individual faculty member's beliefs about what is important (topics, concepts, and levels of cognition students must demonstrate for each concept), the textbook chosen, and the faculty member's expertise and interests. Decisions are also made about how the course is managed, for instance the mode of delivery, number and types of tests, attendance policy, and grade structure. All of these variables contribute to the grades students receive, further confounding the ability to interpret the relationship of the grade to specific student knowledge or abilities.

Another reason why grades do not provide adequate information for program assessment is that the grading policy in any course is dependent on the individual faculty member. This is generally true even when there are multiple sections of the same course with common exams. Some faculty choose to give (or take away) points or partial credit for things that are not related to student learning (for example, attendance, class participation, and course evaluation). Some faculty grade on a curve; others have a fixed standard. Letter grades or numeric scores reflect the student’s relative standing within the class or among other tests – relative to a set scale or relative to other students. They do not, however, tell the person interpreting the assigned grade/score what the student knows or can do, nor do they provide information about what topics or concepts he or she did not understand or how his or her learning can be improved.

Assessing program learning outcomes for the curriculum differs from assessing classroom learning outcomes in several ways, most notably the following:

When developing a curriculum, faculty collectively consider the objectives of their students will need to achieve after graduation. Once the objectives are identified, faculty decide what students should know or be able to do by the time of graduation in order to meet them. After the program outcomes are set, the curriculum is developed/modified to represent a well articulated and aligned set of major and general education courses. Students are introduced to key concepts in the lower division courses. Then these concepts are applied in courses throughout the rest of the curriculum, as students move from knowing and understanding a concept to developing an ability to apply that knowing and understanding in various ways, in multiple settings. This process illustrates the cumulative learning effect of specific concepts and skills taught through individual courses. The assessment of program outcomes should reflect student-achievement-specific outcomes as a culmination of several classes and activities throughout the curriculum.
Just as faculty cannot include in a course everything associated with the subject matter of that course, a program cannot include in its curriculum every concept or skill set that is in the realm of possibilities for that curriculum. As in course preparation, several decisions need to be made by program faculty when determining the program outcomes to be assessed and managing the assessment process. These include deciding what learning outcomes are central to achieving the objectives, how many and what performance criteria\(^1\) will be assessed for each outcome, where in the curriculum students are getting the opportunity to demonstrate the desired performance criteria associated with the outcome, how often the outcomes will be assessed, how the outcomes are going to be assessed, and how the data gathered can be used for program improvement. As in classroom assessment, these decisions are constrained by factors related to the context of the program. Some of these factors include the nature of the objectives, type of institution/program, available resources and time, and make up of students served.

For program assessment, a numeric score that is directly linked to students' performance on a specific performance criteria can be used as evidence of program learning outcomes. For example, for the outcome, “Students have an understanding of ethical responsibility,” one of the performance criteria could be, “Students will demonstrate the ability to evaluate the ethical dimensions of a problem in their engineering discipline.” Faculty could develop a rubric to score student performance. A rubric is a descriptive rating scale with several different observable levels of performance possible for each performance criteria being assessed. Each performance level is described and assigned a numeric score (for example, 1 = exemplary, 2 = good, 3 = adequate, 4 = marginal, and 5 = unacceptable). The number of points on the scale will depend on the level of cognition or skill that the outcome requires — but that is a discussion for a later time. Reporting the percent of students who score at each of the levels provides data that are linked directly to the anticipated outcome and focus the evaluation and strategies for improvement. It is a numerical score that provides a great deal of information about what students know or can do — but it is not a grade.

Grades will continue to be an important part of the higher education culture and should be understood for what they represent. However, for program assessment, where the purpose of the assessment is to provide information about student learning at the program level, grades in courses generally have little use. This is not to say that students cannot demonstrate program outcomes in a classroom setting. But, the measure used to assess those outcomes should be used consistently, should reflect specific student knowledge or skills, and should be directly linked to specific performance criteria. It is important to remember that the focus is not a score or grade, but the student knowledge or skill that is represented by that score or grade.

\(^1\)Objective here is defined as the expected accomplishments of graduates during the first few years after graduation.

\(^2\)Outcome here is defined as what a student knows or can do by the time of graduation.

\(^3\)Performance criteria here are defined as the specific, measurable statements identifying the specific knowledge, skills, attitudes and/or behavior students must demonstrate as indicators of achieving the outcome.
Does Assessment Make Colleges Better? Let Me Count the Ways

By Joan Hawthorne | AUGUST 19, 2015

Erik Gilbert’s recent commentary in The Chronicle, "Does Assessment Make Colleges Better? Who Knows?" raises an important question about the value of assessment. As one who has worked in education for 15 years and dutifully assessed learning in his classes, Gilbert now wonders if that measurement has been a worthwhile use of time. He’s not certain that the tweaks he’s made (and they’ve been mostly tweaks) have been meaningful enough to merit the time all that assessing has required.

Gilbert’s question itself contains an argument for the value of assessment. And he may have missed that value because it occurred where he wasn’t expecting to find it.

In the first decade of my work in higher education (roughly the 1990s), I encountered very few faculty members who even thought about learning outcomes. Many cared deeply about students, but college was about what professors professed rather than about what students learned. After 2000, when we began hearing the words "learning outcomes" on campuses, teachers often countered that what students learned in their classes and through their degree programs was ineffable, unnamable; to try to name it was to diminish it. Moreover, the responsibility for learning it was on the student.
In fact, there was no reason for teachers to name what students learned in those pre-assessment days. What mattered was what professors taught, typically defined as what was covered in their course syllabi. The number of books in the library epitomized the kind of data that accreditors were expected to find meaningful. Higher education was about inputs, and being a "good" institution meant having the right number of classrooms, the right square footage of space for the (bolted down) desks and the students who sat in them, the right faculty-student ratio, and, and the right student population, understood to mean those who had the best SAT/ACT scores and greatest likelihood of achieving postcollege success.

Higher education has moved away from that undesirable situation, and I credit assessment for that. The effort to develop assessment plans required us to struggle with naming what we wanted students to gain from the programs of study they completed, and the process of doing so proved surprisingly useful. We had to get beyond that first inclination to say, "We can't name it." It turned out to be important to get that naming right.

If we named in reductive terms, we wrestled with that language every time we tried to assess and then analyze the results. If we named better, we might have findings to look at that were interesting and worth examining. We had to think about the difference between wanting students to "know" and wanting students to "do" — and we came to recognize that, in an era of Wikipedia and smartphones, "knowing" doesn't seem all that crucial compared with doing.

Another surprise: There are lots of kinds of doing. Our graduates might be expected to apply what they know in designing a simple bridge, to analyze what makes a bridge fail, to evaluate a bridge design and determine its flaws and limits.
Which outcome, really, names what new graduates should be ready to do? Even faculty members in traditional arts-and-sciences programs like history learned that the application of knowledge, and not just knowledge itself, matters.

They began to talk about the balance between dates and battles students need to "know" for historical context, and the kinds of analysis a student with a history degree may be expected to do. What intellectual tasks should a senior history major be able to complete by the time she graduates? Should she be able to define the historical context for a given event, to analyze the event from competing perspectives within that context, to evaluate how that event compares with another in an entirely different context, or to imagine how that event would play out if many of the same forces occurred in a contemporary context?

We had to ask ourselves, "If students achieve the right kind of learning in my class or our degree program, what would it look like and where would we see it?"

Strategies for getting students to create demonstrations of learning had to be imagined and developed. We had to wonder where we might build opportunities to practice that kind of learning. We had to ask if the essay tests, papers, problem sets, and exams that were traditional in many fields were appropriate measures to demonstrate "doing." We had to talk to students about why multiple-choice tests were OK in some settings and for some purposes but were often insufficient for either practicing or demonstrating specific kinds of learning that mattered.

We had to become more purposeful about what happens in our programs of study and our classes. Talking about assessment provoked discussions about the value of backward design: Rather than plan a class by choosing a text and then dividing the semester into segments corresponding with chapters, we recognized that learning might be better achieved if we named what students should get
from a class, figured out how we’d like to see them demonstrate that learning, and structured the semester to prepare students for doing that demonstration. We had to think about what students would do rather than what we’d say.

These are huge improvements in teaching and learning practices in higher education. While I can’t say that they are ubiquitous, many faculty members now take this kind of thinking about their teaching for granted. Of course we name intended learning outcomes. Of course we think about what those outcomes should be before we write the syllabus.

There is one additional improvement that needs to be acknowledged. Thinking about the work we do in these ways requires talking to one another about it. In some departments, the result is that we construct a program curriculum so that learning in sophomore classes feeds into the junior-year classes those students take. We discover that the reason seniors can’t write a report or make an argument in a presentation is because none of our lower-level courses provided practice in that.

Who knew? But now that we know, we can talk about how to fix those problems. We can engage in discussion about curriculum, sequencing, and learning outcomes. Our shared interest takes on an urgency beyond the "What’s wrong with students today?" discussions that are a default topic of mutual interest.

So is assessment "effective"? Yes. I’ve heard of many cases in which professors really do find something about their program or their course that they can fix once it’s been identified. Those fixes can be substantial; faculty members at my institution changed general education, and a major piece of the motivation for that work was evidence from assessments. (Is the new program better? That’s a question we’re still answering. We do know it’s better in some ways — and we know that because of assessment.)
Regardless of the scale of a fix, assessment is effective for promoting greater thoughtfulness and purpose in teaching — and for focusing our attention on learning. That matters. On that basis alone, assessment works.

Joan Hawthorne is director of assessment and regional accreditation at the University of North Dakota.
Assessment Worksheet for Departments

Instructions:

The purpose of this workbook is to walk a Department or Program through the student learning assessment process. By completing each of the following steps, you will be assessing your program and determining what it is you expect of students. This should be done in junction with all faculty involved in the program because they are an integral part of the educational experience.

It is also important to seek input from other stakeholders such as students, alumni, employers, etc. in order to ensure you are covering all the program expectations. Please contact the Office of Academic Assessment for assistance with a departmental survey.

Once you have completed this workbook, you should be in a good position to draft an assessment plan based on your responses. This plan will simply be a text document tying together all of your worksheet responses.
Worksheet A
Goal Development Exercise

Learning goals or program goals are broad statements of the skills, attributes, knowledge, etc. that students will develop during the course of study in their major.

1. Meet with the program faculty, and discuss the expectations for students in the major.
What can students do after successfully completing your program? Think in terms of knowledge, skills, attitudes, abilities, etc. What kinds of discipline-based knowledge should students develop in the program? What are the skills (lab, communication, technical, computer, etc.) should the graduates have acquired? What kinds of attributes should the students develop (appreciation for diversity, understanding student learning styles, etc.) during the program of study?

If you are having difficulty developing these, ask the faculty who teach courses what are goals from individual courses, especially capstone or other key requirements.

2. List Goal statements below:
Ex. Students will develop effective oral and written communication skills.
1.  
2.  
3.  
4.  
5.  
6.  
7.  
8.  

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From Goals to Objectives

Objectives or student learning outcomes are statements derived from the program goals; more specifically, define the components of the goal, circumstances in which goal will be achieved, and criteria for achievement. One goal may lead to multiple objectives. Objectives should be precise statements that lead naturally towards measurements.

<table>
<thead>
<tr>
<th>List goals here.</th>
<th>Ex. Students will develop effective oral and written communication skills</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective A</td>
<td>Ex. Students will demonstrate effective written communication skills through use of memos, reports, and other documents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective B</td>
<td>Ex. Students will demonstrate effective oral communication skills in formal presentations and extemporaneous speaking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. List Goals in top row of table. Ask if each goal is composed of actions that a student can successfully demonstrate or characteristics that they will exhibit. If not, think of how to break the goal into pieces, elements, or action that a student can demonstrate. List each actionable item under the objectives. Think in terms of action verbs (see next page for examples of action verbs for different knowledge levels-Blooms Taxonomy).
# Bloom's Taxonomy: Examples of Action Verbs

<table>
<thead>
<tr>
<th>Level</th>
<th>Definition</th>
<th>Action Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNOWLEDGE</td>
<td>The knowledge level of learning calls for objectives that require simple recall of previously learned material.</td>
<td>define, describe, identify, label, list, match, outline, reproduce, select, state</td>
</tr>
<tr>
<td>COMPREHENSION</td>
<td>The comprehension level of learning calls for objectives that require the learner to restate or reorganize material in a literal manner to suggest they understand the meaning.</td>
<td>convert, defend, distinguish, estimate, explain, extend, generalize, give example, infer, paraphrase, predict, rewrite, summarize</td>
</tr>
<tr>
<td>APPLICATION</td>
<td>The application level of learning objectives require learners to use previously learned material to solve problems in new situations.</td>
<td>change, compute, demonstrate, discover, manipulate, modify, operate, predict, prepare, produce, relate, show, solve, use</td>
</tr>
<tr>
<td>ANALYSIS</td>
<td>The analysis level of learning objectives requires the learner to break down an idea into its component parts for logical analysis.</td>
<td>break down, differentiate, discriminate, distinguish, identify, illustrate, infer, outline, point out, relate, select, separate, subdivide</td>
</tr>
<tr>
<td>SYNTHESIS</td>
<td>The synthesis level of learning objectives requires the learner to combine ideas into a statement, plan, product, etc. that is new for them.</td>
<td>categorize, combine, compile, compose, create, devise, design, explain, generate, modify, organize, plan, rearrange, revise, categorize, combine, compile, compose, create, devise, design, explain, generate, modify, organize, plan, rearrange, revise, rewrite, summarize, tell, write</td>
</tr>
<tr>
<td>EVALUATION</td>
<td>The evaluation level of learning objectives require the learner to judge something based on some criteria.</td>
<td>appraise, compare, conclude, contrast, criticize, discriminate, explain, justify, interpret, relate, summarize, support</td>
</tr>
</tbody>
</table>
Worksheet C
List of courses in your program

<table>
<thead>
<tr>
<th>Course Suffix and Number</th>
<th>Course Name</th>
<th>Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex. ENG 202</td>
<td>Writing for Domain X</td>
<td>K. Small &amp; B. Jones</td>
</tr>
</tbody>
</table>

Develop list of required and optional courses for your program. Where possible, list instructor(s) for these courses. Ask instructors which program goals or objectives are addressed in each course, and use this information for next worksheet.
**Worksheet D**  
**Matrix of Objectives Linked to Courses**

<table>
<thead>
<tr>
<th>Program Objectives/Student Learning Outcomes</th>
<th>ENG 202</th>
<th>BUS 477</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex-1. A. Students will demonstrate effective written communication skills through use of memos, reports, and other documents</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Faculty may simply use an "X" to identify courses, or may want to develop other identifiers, such as I for Introduction, A for Application, etc.
Worksheet E
Measurement for Objectives

There are numerous assessment methods of measuring your objectives. The key is to find the best fit. By answering the following questions, you should have a better idea of what you need to do to demonstrate your students are meeting your program objectives/outcomes. Once you have completed this worksheet, it will be time to think about what methods you want to use to collect data. There are many books outlining methods you can use. Some examples of these methods include: standardized exams, classroom exams, class writing assignments (papers, short exercises, etc.), case studies, research papers, group projects, surveys, focus groups, concept maps, portfolios, etc.

Examine each of your objectives and answer the following questions in the worksheet below:

1. Are the objectives measurable?
   a. Think about the types of activities you might use to demonstrate these actions. Sometimes we have ideas for objectives but they are too vague to measure.
   b. If they don’t seem measurable, try re-writing the objectives with refined language (look at action verbs from Worksheet B).

2. Do you have any measures currently in place to gather the data needed to examine this objective?
   a. If yes, use embedded assessment as much as possible
      - Embedded assessment is highly encouraged because it is more efficient than introducing new methods.
      - Embedded measures may include a specific quiz, class exercise, exam or section of exam, etc.
   b. If no, you will need to begin identifying appropriate measures
      - Start by looking at existing measures that you might be able to adapt for your use.
      - If there are no existing measures available, you might have to draft your own.
   c. Remember, some objectives may require multiple measures, perhaps in different courses. An objective may be introduced in one class (sophomore or junior level) and further refined in another (e.g. senior course or capstone).
   d. If objective is covered in multiple courses, you may want to identify different measures for each course.

3. How will you determine whether you have been successful with each objective?
   a. You will need a standard or criteria to hold yourself to when thinking about your objectives. Perhaps you would like to see 80% of the students pass a particular exam in order to show that students have successfully mastered a concept in your program.
   b. If you have multiple measures for the objective, you will need to identify the standards or criteria for each.

4. Who would be the best target population for measuring this objective?
   a. This might be all current students in the program or a specific group of students (seniors for example). Or it might be alumni or possibly their employers.
   b. If you have multiple measures for the objective, you will need to identify the target population for each.
### Worksheet E
Measurement for Objectives

<table>
<thead>
<tr>
<th>Objectives</th>
<th>A. Measurable (Y or N)</th>
<th>B.1. Embedded Assessment #1</th>
<th>B.2. Embedded Assessment #2</th>
<th>C.1. Success for #1</th>
<th>C.2. Success for #2</th>
<th>D.1. Participants for #1</th>
<th>D.2. Participants for #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex. Students will demonstrate effective written communication skills through use of memos, reports, and other documents</td>
<td>Yes, but need to define effective</td>
<td>**ENG 202-students will write two different memos 1) Analysis of issue 2) Persuasive memo</td>
<td>**BUS 477-Students will draft a business plan, and a report on implementation successes and problems</td>
<td>80% of students will get C or better on both memos</td>
<td>80% of students will meet satisfactory criteria in rubric for each document</td>
<td>ENG 202 students in BA program</td>
<td>All Seniors in BUS 477</td>
</tr>
</tbody>
</table>

The Example “Students will demonstrate effective written communication skills through use of memos, reports, and other documents” may need to be revised to make it easier to measure.

**In the example, we are assuming the assignments were already ongoing as part of the existing course.
Worksheet F
Implementation of Measurement

a. How will your results be used?
   - You will need to consider this when choosing your measures. Otherwise, it is possible to choose a measure that does not fill the necessary purpose. For example, e-portfolios might not be appropriate to provide data for a quantitative report though both methods might meet your objective.

b. What is the timeline for doing your measures?
   - Will you test your seniors once a year to see if they have mastered a component of your program?
   - Will you survey your alumni students every three years to see if they have the skills needed to function in the job market?

c. Who will be responsible for the different parts of measuring these objectives/outcomes?
   - This is an important question in order to keep your assessment process ongoing.
   - Who will take charge of ensuring that you continue to survey your alumni?
   - Who will make sure that the appropriate methods are being administered in the classrooms?

d. Related to all of these questions, do you have the resources in place to make this work?
   - What resources are needed for implementation and evaluation?
   - If you would like to have each of your graduating seniors take a standardized test, you will need to identify test and cost. Then request support from your Dept Chair (who may in turn request support from the Associate Dean).
   - If there are alumni or employer surveys, these may be combined with surveys from other programs, contact the Office of Academic Assessment for assistance.
   - Also remember some methods are more time consuming than others, so choose assessment methods that can be sustained in your program/department.
<table>
<thead>
<tr>
<th>Objectives/Outcomes</th>
<th>B.1. Embedded Assessment #1 (From worksheet E)</th>
<th>B.2. Embedded Assessment #2 (From worksheet E)</th>
<th>A. Use of results</th>
<th>B. Timeline</th>
<th>C. Leadership</th>
<th>D. Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex. Students will demonstrate effective written communication skills through use of memos, reports, and other documents</td>
<td>ENG 202-students will write two different memos 1) Analysis of issue 2) Persuasive memo</td>
<td>BUS 477-Students will draft a business plan, and a report on implementation successes and problems</td>
<td>Results will be shared with program faculty</td>
<td>Annually at Fall Semester meeting</td>
<td>Faculty from ENG 202 &amp; BUS 477 will gather information and provide to Program Coordinator/Chair</td>
<td>Time for BUS faculty to prepare rubric; Time for annual fall program meeting</td>
</tr>
</tbody>
</table>
Worksheet G
The Assessment Feedback Loop

a. Again you need to consider, how will your results be used?
   • Place results from Worksheet F (Col A) into Worksheet G, Col. A
   • Assessment is a process and you constantly want to be thinking about how to make improvements to your program.

b. Who will review results? Will it be the Program Coordinator/Chair, faculty, outside group (employers, advisory board)?

c. How will the results be disseminated to the reviewers (in Col. B)? Once a year via email? In annual meeting?

d. Is the standard achieved (Y or N)? If yes, you can move on to next objective/outcome.

e. If no…or the standard is not achieved (see Col. D), what action will be taken?
   • For example, if you find you are not meeting the standards you have set, what will you do? It is possible that the objective/outcomes will need to be rewritten. Or further information may be needed (a focus group to understand why students aren’t achieving the standard). Or the faculty may need to consider how that material is taught and make changes to the course or curriculum, so that more students can obtain the outcome. (Please remember that this assessment process is meant to improve student learning).

f. Timetable for action-when will the action in Col. E be taken? The next semester, the following year?
   • You need to consider when actions can be taken, and work on timetable for follow-up.

g. Leadership-who is responsible for taking action?
**Worksheet G**  
The Assessment Feedback Loop

<table>
<thead>
<tr>
<th>Objectives/Outcomes</th>
<th>A. Use (from Worksheet F)</th>
<th>B. Who Reviews</th>
<th>C. Sharing results</th>
<th>D. Standard Achieved (Y or N)</th>
<th>E. Standard Not Achieved: Action Taken</th>
<th>F. Timetable for Action</th>
<th>G. Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex. Students will demonstrate effective written communication skills through use of memos, reports, and other documents</td>
<td>Results will be shared with program faculty</td>
<td>Program Faculty</td>
<td>Annual meeting</td>
<td>No</td>
<td>Examine teaching techniques and exercises in support of objective; focus group with students (?)</td>
<td>Review over fall, and make changes for spring</td>
<td>Faculty &amp; Program Coordinator or Chair</td>
</tr>
</tbody>
</table>

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