What’s a KPI?

An impromptu survey of faculty and staff revealed that few know the meaning of the Acronym KPI. One person, who shall remain nameless (ok-it’s Carolyn Elphingstone) suggested KPI stands for “Kiss a Pig Instantly.” In actuality, KPI stands for Key Performance Indicator.

KPIs are an integral part of the Jefferson College Strategic Planning process, which provides for assessment at the institutional level. Through the Strategic Planning process, aims have been established in seven areas: Student Learning, Student Support, Community Collaboration, Support for Employees, Facilities and Infrastructure, Financial Responsibility, and Assessment. A set of objectives for each aim and the relationship of each aim to Board Goals and Higher Learning Commission (HLC) Criteria are explicitly stated in the Strategic Plan. KPIs will be used to indicate the extent to which the seven aims are being met. To this end, several possible KPIs have been identified for each aim, and for each KPI, a Benchmark (Baseline) and Target is established, against which actual Jefferson data is compared.

Average Class Size, County Degree Attainment, College Level Course Enrollee Success, Course Pass Rate at UMSL, Undergraduate Cumulative GPA earned at UMSL, Student Satisfaction on the SACE, and Employer Satisfaction with Graduates are possible KPIs for the Student Learning aim, “Jefferson College, as a learning-focused college, will support positive learning outcomes by delivering quality, current and relevant curriculum to all students and maintaining and developing excellent instructors and academic support.” Fall-to-Fall Student Persistence Rates, Completion or Transfer Rates for Full-time Students, and CTE Completers Related Job Placement Rates are possible KPIs for the Student Support aim, “Jefferson College will facilitate quality support services to maximize student learning and success.” To see all seven aims and corresponding KPIs, please visit the Strategic Planning tab in STARS.

According to the Jefferson College Strategic Plan, programs and departments annually may submit proposals for new initiatives, resulting from a re-examination of Institutional Assessments (formerly known as Institutional Effectiveness Reviews), to the Assessment Committee. The proposals will then be forwarded to the Program and Facilities Planning Committee which “will hold hearings on proposals that require additional college resources or a reallocation of existing resources. Priorities will be determined by their alignment to the College Mission, Board Goals, Strategic Aims and Objectives” (Jefferson College Strategic Plan). KPIs will provide a measure of the efficacy of adopted initiatives.
The English Department met in Fall 2008 to discuss departmental multi-section assessment needs and selected ENG 101: English Composition I for a pilot project that began in the Fall 2008 semester. Two outcomes were selected for assessment across sections: 1) Unity, which was assessed by scoring the effectiveness of the essay’s thesis statement and topic sentences, and 2) Organization, which was assessed by scoring the essay’s overall structure and its transitions. Project parameters called for the holistic scoring of the four components as exhibited in anonymous compare/contrast essays using the following scale: 4 = Excellent, 3 = Satisfactory, 2 = Needs Improvement, and 1 = Unsatisfactory. For the pilot, full-time faculty submitted copies of all their students’ compare/contrast essays with all instructor and students’ names removed. Copies were made prior to instructor grading so that instructor comments and grades would not influence the scorers. Five essays were randomly chosen from each section for scoring.

Scoring of the pilot resulted in average scores of 2.75 for Thesis Statement, 2.58 for Topic Sentences, 2.79 for Overall Essay Structure and 2.62 for Transitions. Based on the pilot results, the English Department concluded that the majority of students were succeeding in all areas, by at least one scorer’s judgment, but improvement was needed in all areas. Logistically, the pilot project went smoothly, so the department decided to go forward with all sections (taught by both adjunct and full-time faculty) in the Spring 2009 semester. From Spring 2009 through Spring 2010 (three semesters) data were collected and analyzed. Responses and solutions were researched and discussed each semester as new data came in. Analysis across all three semesters demonstrated that scores went down in most categories when adjunct-taught courses were added to the mix. The department did note possible problems with the Spring 2010 data and determined that essays from several sections were likely missing.

Analysis of the data and anecdotal evidence suggest that even full-time faculty do not always agree on what constitutes “Satisfactory” (3) versus “Needs Improvement” (2). Reflection on the logistics of the English multi-section assessment project yielded the following observations: 1) Scoring was burdensome with the increased number of essays, and 2) Since there was no control for when (at which point during the semester) assessed essays are assigned and collected, students may be assessed before learning has taken place. To clarify, essays from students whose instructors assigned and collected the compare/contrast assignment early in the semester would not reflect learning that occurred later in the semester. Though the process likely needs to be tweaked, the data clearly shows that improvement is needed.

To address the need for improvement, a Writing Program Coordinator position was created and has already been staffed. The coordinator trains, monitors, and mentors adjuncts, especially new ones, to help ensure consistency across sections. Shanie Latham is currently serving as the coordinator. A sub-committee of full-time faculty is working on solutions to be implemented in the Fall 2011 semester. One solution in progress is the development of a detailed rubric to ensure consistent grading and expectations. Another solution in progress is the creation of a Blackboard site for all composition course instructors (adjunct and full-time), which will include folders for faculty to post prompts and teaching ideas, and a discussion forum where faculty can ask questions, share ideas, and post classroom successes.
Spotlight on Faculty Assessment Efforts
MULTI SECTION ASSESSMENT

Associate Professor Dedric Lee is conducting a multi-section assessment of PSC102: U.S. and Missouri Governments and Constitutions. The project addresses the extent to which Jefferson students are meeting the state objectives for the course. The design of the project calls for students to take a 50 question multiple choice test during week 2 or 3 of the semester as a pre-test and to take the test again as a post-test during week 14 or 15. Students have one hour to take the pre and post tests which are available to them on Blackboard for seven days. To encourage students to take the tests, extra credit toward the final course grade is awarded to those who complete the tests. Blackboard was chosen as the format for the assessment because of its convenience. Specifically, utilizing Blackboard provides a way to conduct multi-section assessment without using class time. Further, Blackboard allows the tests to be open for several days, makes it easier to gather data, makes life easier for adjunct instructors and allows students to take the tests at their leisure.

As a pilot for the project, in the Fall 2010 semester, students in sections taught by Dedric and Adjunct Instructor Eric Bequette (total of 4 sections) were asked to take the pre and post tests. Even though students earned extra credit for taking the tests, barely over 50% of the students did so. Dedric is considering options to improve participation rates without using class time to administer the tests and is working with Instructional Designer Vickie Morgan to analyze the data. In the Fall 2011 semester all PSC 102 instructors will make the tests available to students.

ACTION RESEARCH: THE RESULTS ARE IN

The November 22, 2010 issue of Assessment Update spotlighted Biology Instructor Marialana Speidel’s action research investigating the impact of technology based activities on student learning in the area of intracellular processes and protein synthesis. In that issue, a description of the technology based activities and the research design are provided. Marialana collected additional data this semester and compared it to Summer 2010 data. Through the comparison of Summer 2010 and Fall 2010 Scantron item analyses, Marialana surprisingly found that the students in the Summer section of General Biology, who were not provided with technology based activities, did just as well or better than students in the Fall 2010 sections, who were provided with the technology based activities, on a set of multiple choice test items addressing intracellular processes and protein synthesis.

However, in a comparison of student comments, Marialana found that students who were provided with technology based activities better understood protein synthesis than those students who were not provided with the activities. Marialana is currently considering whether the results may have been impacted by the possibility that students in the summer section were better prepared academically. Additionally, she hypothesizes that in a comparison of short answer responses that measure higher order thought, students in the section with technology based activities would outperform students who were not provided with the activities.

Marialana remains a believer in the efficacy of technology based activities such as interactive, animations, simulations, videos and online practice sets to generate student learning. Her students are also enthusiastic about the activities and she believes anything that gets students excited about learning is worthwhile. Marialana continues to investigate the impact of technology based activities on student learning; this semester she is tracking students’ short answer responses on questions pertaining to protein synthesis.
Jefferson College, along with the rest of Missouri Community Colleges, beginning with the Summer 2011 semester, will be implementing common College Readiness Standards. This means there will be common test scores used at all the community colleges in Missouri to place students in college level courses. This initiative is meant to improve student success by ensuring the student has the necessary skills to be successful in college level courses. The common course placement standards provide a uniform score for placement with regards to college level reading, writing and math based on the student's score from the ASSET, ACT, COMPASS or SAT standardized tests. A study done by the college's previous director of Research and Planning confirms the need to adjust placement scores as this study looked at a number of college level courses and, in most cases, found a statistical difference in COMPASS placement scores between students who failed these college level courses and students who succeeded.

English Composition I is the course which defines College Ready in the college's writing sequence. The current ACT score used to place into English Comp I, 20+, will be adjusted downward to a score of 18+. The COMPASS score used for writing course placement will be adjusted upward, from 65+ to 70+.

College Algebra is the course which defines “College Ready” in the college’s math sequence. A previous ACT score of 20 placed a student into College Algebra. Now, a score of 23+ will place students into this course. The COMPASS score used for College Algebra placement will not change.

Given these changes, not only will enrollment in the “College Ready” courses be affected but the prerequisite courses, and other courses in the discipline may be affected as well. The initiative includes an ongoing review of the success rates in the courses affected in order to ensure students are being placed optimally with the best chance of being successful in the course. Curriculum will also be reviewed as part of this initiative since adjusting placement scores can translate into different expectations for coursework as well as a difference in students’ skills.

Lastly, the College Readiness standards define a COMPASS score of 81+ as College Ready with regards to reading. The current ACT score of 18+ will not change. However, up until this time, the reading course placement was only a recommendation for Jefferson College students, not a requirement. As the new College Readiness standards define the standard for reading, Jefferson College is working to implement a reading requirement with the start of the Fall 2012 semester. The College is currently working to determine the specifics for how to implement this new reading requirement in such a way that it best promotes student success, not only in reading courses, but throughout the student’s academic career.

A link to details about the process for determining and implementing the cut-off scores is available on the CTL website: http://www.jeffco.edu/ctl/. The current Jefferson College Advising Course Placement Chart can be viewed online at: http://vega.jeffco.edu/cnash/ADVISING_COURSE_PLACEMENT_CHART.doc.
Career and technical education (CTE) prides itself on preparing technically skilled workers. In the past, the WorkKeys assessment was the only exit exam required for CTE graduates. The WorkKeys assessment is a valuable part of student employment in that it identifies an individual’s level of academic preparedness and job skill. It ensures individuals are ready for work. Career and technical education program completers will continue to take the WorkKeys assessment. However, graduates will also take a second exam upon completion of a certificate or degree program titled the technical skill assessment. The technical skill assessment is another valuable piece included in employment portfolios as it illustrates technical proficiency specific to the student’s program of study. For Nursing, Fire Science, Emergency Medical Technology, Law Enforcement Academy, and Veterinary Technology graduates, the state licensure exam serves as an appropriate technical skill assessment. For all other CTE programs, instructors were asked to select a Department of Education approved assessment that tests technical ability required in their field of work.

This fall, Jefferson College made a first attempt at testing every career and technical education graduate. The technical skill assessments measured student knowledge and skills related to success in each career area. The following exams were selected from the National Occupational Competency Testing Institute (NOCTI), a national leading provider of high-quality written and performance assessment: Administrative Assisting; Computer Repair; Criminal Justice; Early Childhood Care and Education; General Management; Heating, Ventilation, Air Conditioning, and Refrigeration; Hospitality Management; Industrial Electronics; Visual Communications and Multimedia Design; and Welding.

For two-thirds of career and technical education completers, the technical skill assessment was administered in a course by Tech Prep. The remaining one-third of students was tested in the Testing Center. Passing scores were determined by an industry cut score and compared to state and national averages. The cumulative scores from this fall revealed that most of Jefferson College’s career and technical education programs are performing at or above the state cut score and state or national average. Instructors are taking a closer look at the data reports, which break down student technical competence by duties, so that eventually they may identify gaps in instruction.

In some cases, the assessment selected was not an appropriate measure of expected job performance for graduates of the program. Instructors are working to identify an assessment that is meaningful, affordable, and that accurately measures the attainment of technical skills for their area. When possible, instructors want to select assessments that are based on industry-recognized standards and that include industry certification; therefore, this spring some program completers may take a different assessment than the fall graduates. For example, next semester CIS- Graphics and Web Development graduates will take the Adobe certification exam and in the future the Automotive program hopes to give the National Automotive Technicians Education Foundation exam; the Heating, Refrigeration, and Air Conditioning program wants to give the HVAC Excellence exam; and the Welding program plans to use the American Welding Society exam.

Once additional students are tested both at Jefferson College and statewide, a more accurate picture of student performance will be measured. For now, the technical skill assessments provided instructors with a preliminary evaluation of instruction and conveyed proof of skill mastery to potential employers. Eventually, these examinations and the data provided by them will be used to enhance the transition of students from secondary to postsecondary education to the world of work and will be used for overall career and technical program evaluation and improvement.
Learning through Service

Seven of the ten faculty members in the Service Learning Colleagues group, mentored by Christy Cornelius, Professor of Early Childhood Education, included a Service Learning project in one or more Fall 2010 semester courses. Faculty members assessed the Service Learning components of the courses in a variety of ways including instructor observation of student presentations, student surveys, student written reflections and community partner surveys.

The Service Learning project in Sandy Basler’s ECE 107: School Age Childcare course required students to deliver professional development to area childcare workers. By participating in workshops designed and presented by Jefferson College students, fifty-eight community childcare providers from eleven area centers each earned 3 clock hours of training on the research-based Strengthening Families Initiative. After a review of evaluations from participants in which they indicated what they learned in the workshop, Sandy concluded that students provided a valuable service to the community. This conclusion is supported by interest from Laura Malzner, program coordinator for the Children’s Trust Fund in Missouri, who mentioned the possibility of using the Jefferson project model as a means of delivering the Strengthening Families approach to childcare workers in other parts of the state and nation. But did the project help students meet the expected learning outcomes for the course? Through observation of her students’ workshops, Sandy determined that students had exceeded learning expectations. She also notes that students felt a “sense of pride” in their work.

Tammy Reaves compared student learning in two sections of EDU 210: Foundations of Education, of which only one included a Service Learning component. For the Service Learning project, Jefferson students tutored elementary students in local schools. After reviewing student reflections and projects, she found that students in the section with a Service Learning component worked with concepts related to the course objectives at a higher level than students in the section without a Service Learning component. Terry Kite also included the same Service Learning project in his sections of EDU 210. His analysis of student reflections, projects and student surveys revealed that the Service Learning project helped students master the following course Expected Learning Outcomes: examining characteristics of effective/ineffective instructional strategies, evaluating current instructional strategies and daily lesson planning. Additionally, many of his students chose to continue volunteering after completion of the project, demonstrating social growth, which the College seeks to promote in its students (Jefferson College Mission Statement).

Amy Kausler, Pat Bryant, Stephanie Cage and Christy Cornelius also concluded that the Service Learning projects in their courses helped students to effectively meet course expected learning outcomes while providing valuable service to the community. After a comparison of assignments submitted by students at the beginning of the semester to assignments submitted at the end of the semester, Christy realized that Service Learning is an especially effective strategy for her poorly academically prepared students. She believes the hands-on experience of step-by-step interaction with children is what clarified concepts for the poorly prepared students. Bryan Peters, Suzie Welch and Lisa Armbruster are teaching courses this semester that include a Service Learning component and will assess their effectiveness at the end of the semester.

A comparison of the 85.1% retention rate for students enrolled in Jefferson College courses with a Service Learning experience in Fall 2010 and the 75.2% retention rate for all other students enrolled in Jefferson credit bearing courses in Fall of 2010 provides support for the strength of service learning as a means to increase student retention. For this comparison, retention is defined as re-enrollment the next semester, Spring 2011. It's important to recognize that the small sample size and the possible impact of other variables upon students’ persistence warrant a more rigorous study of the connection of Service Learning as a teaching and learning strategy to increased student retention.
Assessment in Non-Academic Areas of the College

Jefferson College Arnold and Jefferson College Northwest: Providing Quality Education in Northern Jefferson County

Jefferson College Arnold and Jefferson College Northwest support the mission of the college by functioning as a part of a “student-centered comprehensive community college, committed to providing an accessible, quality college experience as it strives to meet the diverse needs of the students and the community.”

When Jefferson College opened Jefferson College Northwest in 2005 and the “new” Jefferson College Arnold in 2007, it showed the community the college’s commitment to serving the entire county in a comprehensive manner. This commitment was also acknowledged in the College’s 2009 HLC Assurance Report, which stated:

"Through its more than forty years of growth and service, the College has always been responsive to the development and changes in the community, evidenced by the development and growth of the Arnold and Northwest sites and the acquisition of prime acreage for expansion where growth in the county has already begun. Both the Arnold and Northwest sites involved a Blue Ribbon Commission and Report, effectively engaging the citizens of the county and securing their commitment to expansion for service."

In April 2010, a short survey was given to a sample of students and all faculty at Arnold and Northwest to assess their needs and how they are being met at Jefferson College Arnold and Northwest. For Arnold, the results of that survey show that students are very pleased with the faculty and staff, class offerings, and facilities. There were concerns voiced regarding availability of food service in the facility and lack of career and technical education. CTE has since expanded its offerings in BIT and CIS. The food service concerns identified in the survey responses were brought to the attention of the Programs and Facilities Planning committee, but other more mission-driven projects were given priority. (It was noted that sufficient food service is readily available nearby in the community.)

Students at Northwest had nothing but positive things to say about the helpfulness and courtesy of the staff as well as the competency and courtesy of faculty. The only areas of concern were students wanting a science lab at Northwest and for the parking lot to be expanded and/or repaired. Our recent move to Cedar Hill has taken care of the parking issues and there are future plans for a science lab.

Faculty are extremely pleased with the facilities and equipment at both Arnold and Northwest. Faculty teaching at Arnold repeatedly made positive comments on the following:

- Technological Resources
- Staff support and friendliness
- Well designed
- Cleanliness of facility
- Library Staff
- Well maintained

Northwest faculty are also pleased with the facilities and services, especially the capable and courteous staff. They also enjoy the small environment where they can get to know the students and staff more closely.

Arnold and Northwest support the core values of the college. Student-centered services are provided at both locations. Faculty and staff fully support the growth, diversity, and success of all Jefferson College students attending these locations. Both locations offer students testing services, Learning Center courses, tutoring services, and ongoing academic support. Honors courses were expanded to Jefferson College Arnold in fall 2009 because of students’ requests. The primary focus is to make students’ experiences with Jefferson College at the off-campus locations as simple and seamless as possible from the time students walk through the doors until the time they walk across the stage at commencement.

Overall, both locations are serving their students and the community at a very high level. As the 2010 survey attests both locations are meeting the needs of students, faculty and community by providing accessible educational opportunities to the northern part of Jefferson County.
In my Literary Appreciation: Poetry and Short Story class, I have struggled with how to use small group presentations effectively. Each group is responsible for presenting the terminology in a chapter and leading the discussion of the literature. Their discussions are supposed to clarify and enhance the material from the book. I ask the students to include a visual aid with their presentations; possibilities include Power Points, poster board displays, or handouts. Following the presentation, they are to hand in a brief typed summary of their presentation and their contributions to the group.

When I first taught the class, it was a night class, and some of the group presentations impressed me with their creativity and thoroughness. For instance, I remember one group that brought in a DVD of Shrek and played clips to illustrate some of the terms in the “Character” chapter. In the past few semesters, since I’ve been teaching the class during the day, I have been frustrated by the lack of imagination and attention to detail in the presentations.

Many students fail to bring visuals. Some skip class on the day their group presents. Sometimes the students create Power Point presentations that are flashy but lack substance. Often they just transcribe terminology from the book or retell the short story.

Last year, I decided that I hadn’t made my expectations clear enough, so early in the semester, I focused on modeling the types of presentations I wanted them to do and explained to them that I was doing so. I also fleshed out the rubric and added details that laid out the point value for various levels of effectiveness. The results were still disappointing. With a couple of exceptions, the presentations were at best boring and at worst incomplete or even inaccurate. I had to reteach much of the material the groups were supposed to present.

This semester, prior to assigning the group presentations, I tried to be more explicit about the benefits of good presentations and the problems with bad ones. We talked about the types of presentations that don’t work, and I held the book up by my nose, read it aloud to them, and told them that they don’t want to watch a presentation like that, so they shouldn’t give a presentation like that. I also wondered if 25 points were not sufficiently motivating for them to try to excel, so I upped the point value to 50 for the presentations.

Unfortunately, I’m still not seeing much improvement. So far this semester, we have had three or four presentations that have both held my interest and helped the rest of the class learn material. I am tempted to jettison the presentations altogether. I see no point in taking up valuable class time if the students do not learn from giving presentations or hearing them.

– Susan Todd

ASSESSMENT RESOURCE

Park University Center for Excellence in Teaching Using Journals to Promote Reflective Thought

http://www.park.edu/cetl/quicktips/journals.html

This website offers guidelines for the effective use of journals to assess students’ “ability to observe, challenge, speculate, doubt, question, self-reflect, problem solve, and explore.” The website provides ideas for different types of student journals; tips for grading student journals, including two rubric options; and the advantages and disadvantages of using journals.