Summaries of Assessment Presentations from the Fall 2013 Faculty In-Service

At the Fall 2013 Faculty In-Service, the Assessment Committee hosted a presentation of successful assessment projects from several departments across campus. The presentations showcased methodologies, results, and improvements made as a result of assessment at Jefferson College. Several faculty members who shared their assessment efforts have provided summaries of their presentations for review. They represent the following areas:

- College Algebra
- Early Childhood Education
- Educational Psychology
- General Psychology
- Library Research Skills in Introduction to College Courses
- Veterinary Technology

College Algebra Assessment
By Connie Kuchar and Skyler Ross

In 2007-2008, the math faculty developed five questions to address major outcomes for College Algebra. The full-time faculty piloted this common portion of the College Algebra Final in Fall 2008, copying and saving ungraded student work for review in Spring 2009. A random sample of the work was selected and then team-scored based on a departmentally developed rubric. With the baseline and process established, it was decided that all sections of College Algebra would include the common portion every fall, beginning Fall 2009. Results from that assessment indicated a need to better address use of technology in the course. The results were shared with all faculty, along with additional resources involving use of the graphing calculator. The results from Fall 2010 did show improvement in that outcome. Results were once again communicated with all faculty. In Fall 2012, MyMathLab was incorporated into all sections, with common homework assignments required to ensure consistency across sections in the hope of improving outcomes. The results from the Fall 2012 common final showed minimal changes, and discussion began on reviewing the purpose and scope of the assessment effort. Currently, faculty are developing a new assessment tool to be given at the beginning of the College Algebra course and then correlated with final grades and course outcomes. The goals for this assessment are: 1) identify predictive indicators for success in college algebra; 2) use the results to review and adjust intermediate algebra as needed; and 3) establish a common threshold for students to earn a C or better in intermediate algebra.
Early Childhood Education Multi-Section Assessment  
_by Christy Cornelius_

A multi-section assessment in Early Childhood Education was completed in two consecutive semesters during the 2012-13 academic year. The two sections of ECE 103, Child Health, Nutrition, and Safety—one an online section and the other face-to-face—were compared. One assignment required for both sections was used for this assessment. The assignment was evaluated on six different criteria. Students in both sections scored similarly on four of the criteria, but scores on the last two showed dramatic differences. The online students scored significantly lower on each of those criteria, necessitating changes to the weekly lessons leading into this assignment. It was determined that online students needed more examples and instructor explanations to help improve learning and scores. Dialog including examples and explanations seemed to occur spontaneously in the face-to-face section while online learners relied on reading assignment instructions and following those directions on their own. They did not request the assistance of the instructor as often nor have the advantage of listening to classmates’ questions during class. The faculty member in the online section acknowledged the differences in scores between the two sections and has added more information to the lessons preceding the assignment. A discussion board was also added for students to comment and better prepare for this assignment. Results will be evaluated again during the current academic year.

Evaluation of Educational Psychology  
_by Terry Kite_

In Educational Psychology, the largest and final project, entailing the greatest amount of time spent in the course, is on lesson planning and development. Students are required to create a lesson for a topic that is relevant to the course and present their findings in the form of a structured lesson plan. Amongst the different sections of Educational Psychology, the instructors have planned coursework together and used consistent methods of evaluation. The one area that has the greatest chance of divergence in evaluation is the final evaluation of this final project (the inquiry lesson). Since much of the material is subjective, it is beneficial to use a multi-section assessment to evaluate to what extent consistency and student learning may be improved upon in future semesters.

After tracking student scores on each of the project criteria over three semesters, instructors have found that students are consistently meeting the requirements set forth in this project and in doing so are meeting the course objectives. This multi-section assessment has included scores from the adjunct professor and the two full-time professors that teach all sections of EDU 225 Educational Psychology.

The multi-section assessment reassured the instructors that planning, expectations, scoring and overall evaluation of the students are consistent. This is a direct result of the collaboration between the full-time and part-time faculty within the Teacher Education department. The faculty members are constantly calling, e-mailing and meeting to discuss ways to improve instruction, compare instructional strategies and compare and clarify expectations in the courses taught. With the results collected over the past three semesters, students have consistently scored an average of 3.0 or better on a 4-point scale on each of the individual aspects of the project. This indicates that the students are meeting the course objectives as outlined in the project requirements. Based on the past three semesters, there is not a specific area that would be considered consistently weak between sections or semesters, indicating no need for changes at this time.
Multi-Section Assessment in General Psychology
By Amy Kausler and Leslie Buck

Beginning in Spring 2009, as a pilot, students in the sections of General Psychology taught by full-time faculty (Kausler and Buck) completed exams with nine multi-section assessment items. These items were selected because they already appeared on both instructors’ exams. Then beginning in Fall 2009, students in all sections of General Psychology (including those taught by adjunct faculty) completed exams with the same nine multi-section assessment items. During the analysis of the data in Spring 2010, it was recognized that these items, though convenient, did not coordinate well with the learning outcomes for the course.

As a result, beginning in Fall 2010, new items were written to tie directly to the course learning outcomes. These items were used for two years from Fall 2010 through Spring 2012 in all sections of General Psychology. During the analysis of the data in Spring 2012, it was recognized that one particular item related to learning (classical versus operant conditioning) demonstrated consistently low scores.

As a result, beginning in Fall 2012, five items were written to directly assess knowledge of learning in order to determine exactly which part of this concept was most difficult or challenging and/or if the original exam item was invalid. These items will be used for two years from Fall 2012 through Spring 2014 in all sections of General Psychology. At the end of these two years, the data will be analyzed to determine which hypothesis is correct.

Also discussed were the challenges of implementing multi-section assessment with all faculty and using the results of the data analysis to improve the teaching of this material. These challenges include overcoming adjunct fears that poor performance by their students will reflect on their teaching, managing the time consuming nature of the project, and collecting and analyzing the data, including remembering to administer the items.

Introduction to College Research Skills Assessment
By Lisa Pritchard

Beginning in Fall 2011, all students in the COL 100, 101 & 102 and Mastering the College Experience classes who visited the Library for instruction were pre-tested to find out about their research knowledge and experiences. During a fifty-minute session, librarians presented basic concepts of college-level research skills, and students practiced using these skills in class. At the end of the session students were tested to see if they were able to demonstrate basic knowledge of the research concepts presented. The ability to find a book in an online catalog, locate an article in a library database, and evaluate a website for appropriateness for college-level research are basic skills that students need to have to be successful in college (and to complete the COL 101 assignment).

These assessment efforts allowed the librarians to better gauge the skills with which students were entering Jefferson College and modify library instruction to make sure students were helped to become familiar with the differences between everyday web research and the habits and skills needed for college-level research. Findings indicated that approximately 20% of all students had no previous research experience and fewer than 6% had advanced research skills. Also, problems with literacy and critical thinking skills were documented. Many changes have been made, but three significant changes include 1) alterations to the assignment to help students to see more clearly how they were to construct their answers, 2) presentation of some concepts in a handout instead of a PowerPoint in order to allow for additional hands-on practice time in class, and 3) simplification of instruction to focus students’ attention on key concepts. Additional assessment efforts are planned to measure retention and use of research skills in subsequent course work for classes such as Sociology and English.
Veterinary Technology Capstone Course
By Dana Nevois

The Veterinary Technician National Examination (VTNE) is used to evaluate entry-level veterinary technicians’ competency to practice and to be credentialed. Missouri requires a passing score on the VTNE as one criterion for credentialing. Jefferson College Veterinary Technology began experiencing a major decline in the number of graduates passing (the VTNE) in 2007. (Potential factors that could be contributing to this trend include the addition of four new Veterinary Technology programs in the extended St. Louis area, decreased student quality, and changes implemented by the American Association of Veterinary State Boards with regards to how the VTNE is given and when the VTNE is offered.) The goal of the Jefferson College Veterinary Technology program is to remain at or above the national average for first-time takers of the VTNE. The current national average for first-time takers of the VTNE is 77%.

The Veterinary Technology program has implemented several changes in the past few years, including raising the required pass rates in all VAT courses (for students to remain in the program) and incorporating online board review courses offered by the Veterinary Support Personnel Network (VSPN) or the VetMed Team. In Fall 2013, minimum required COMPASS scores in reading, writing, and math were raised, and computer-based testing within the existing curriculum was incorporated to introduce students to the computer-based testing format.

The program has also implemented a capstone course to help students analyze all course material covered in previous semesters to aid in preparation for the national and state board examinations, improving the application and synthesis of program materials. The course involves assignments, case studies, in-class discussions, in-class quizzes, and in-class exams. In addition, students will be required to take two VTNE online practice tests. The first test will be administered at week 8 of the semester and the second exam will be administered at week 16 of the semester. These tests are offered through the American Association of Veterinary State Boards and are designed to assess a candidate's strengths and weaknesses in each of the seven content areas of the VTNE. Candidates are provided with diagnostic information by practice domain to assist in planning and preparing for the actual VTNE. Areas of weakness will be remediated during the last 8 weeks of the review course.

The course was offered as a pilot course in Spring 2013. All students participated and took both of the VTNE online practice tests. The pass rate on the VTNE increased from a 27% in July-August 2012 to a 100% in July-August 2013. The program received a lot of positive feedback from the students, saying they felt more prepared and liked the fact that they knew what type of questions to expect on the VTNE.

The course is being offered Spring 2014 and is optional for the Spring 2014 graduates. The course will become a mandatory part of the veterinary technology curriculum in Spring 2015.
Jefferson College Quality Matters Training Begins

In its continued efforts to evaluate the quality of its online courses, Jefferson College has begun the Quality Matters (QM) pilot. Training in QM begins with Applying the Quality Matters Rubric. In this two-week workshop, participants are trained in the process of using the QM Rubric to review the design of both online and hybrid courses. The rubric, which includes a set of eight general standards and 41 specific standards, is used to evaluate the alignment of key components, including learning objectives, assessment measures, instructional materials, learner engagement, and course technology. Faculty and staff participating in the initial training include the following:

Deborah Allen (Biological Science)
Mary Baricevic (Business Administration)
Leslie Buck (Psychology)
Lori Kovarik (Academic Computing)
Connie Kuchar (Mathematics)
Andrea St. John (English)
Niki Vogelsang (Health Information Technology)
Allan Wamsley (Academic Computing)

According to Quality Matters, QM Rubric standards are based in best practices and supported by research. Additional information is available on the QM website:

Scholarly Research That Informed and Supported the Development of the 2011-2013 Quality Matters Higher Education Rubric

A Detailed Introduction to and History of QM

Anyone with questions regarding the Quality Matters training at Jefferson College should contact Allan Wamsley, Director of Online Learning and Instructional Technology.

QM Did You Know?

• The Quality Matters Program is an international organization representing broad inter-institutional collaboration and a shared understanding of online course quality.

• Quality Matters has trained more than 23,000 faculty and instructional design staff and maintains a registry of courses that have met Quality Matters’ rigorous design standards.
2013-2014 Assessment Committee

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