

Annual Assessment Report Summaries 2015-2016

Biology

This AAR presents data from the assessment of the four-year curriculum in the department of biology. The assessment focused on two major aspects of student learning – an established knowledge base within the biological sciences and a demonstrable competency in regard to the analysis of data and the application of biological concepts. Data were collected from responses of senior students to a locally produced examination that emphasized a knowledge of fundamental concepts and the analysis of presented data. Overall, the results indicate that our students have proficiency in both areas; however, a majority of students were found to be of greater proficiency in one area versus the other – specifically, many still struggle with the ability to analyze data and apply their knowledge. Overall, the results suggest that there is room for continued growth in how our curriculum serves our students. We are currently evaluating our curriculum, assessing its strengths and weaknesses, and finding ways that the curriculum can more uniformly serve our students in all valued aspects of the biological sciences.

Computer Science

The Department of Computer Science administers the Major Field Test (MFT) to graduating seniors. Our main expectation is that students perform roughly equivalently in the three areas (Programming and Software Engineering, Discrete Math and Algorithms, and Architecture and Systems). This has not been the case. This is due at least in part to the small number of students participating and the resulting high variance in scores. We do see high scores in the “Discrete Math and Algorithms” subject area with relative consistency (just one year below the highest quartile). We believe this area to be a good predictor of overall performance in the major, and it is a strong focus of our program. Perhaps the most important conclusion to draw from this observation is the need for the program to maintain a strong discrete math requirement.

Economics

Over one full day in early June all the members of the Economics Department collaborated in the scoring of 22 Senior Project papers according to a rubric reflecting three of our student learning goals. The same rubric was employed during the assessment exercise conducted over the last four years. On average, our students demonstrated a high level of capable achievement in all the examined areas. The dispersion of the scores was small. Considered individually, slightly less than half of the assessed papers received an aggregate mean score of either “strong” or very “strong”. The pedagogical and curricular implications of this exercise continue to be refined. These strategies to close the feedback loop would be extensions of our ongoing efforts on curricular reform. Finally, the evidence accumulated through our repeated assessment exercises has informed some aspects of our proposal for “signature work.”

Educational Studies

All licensure candidates in the elementary and secondary Teacher Education Program were assessed on each learning goal using the Final Student Teaching Evaluation, Education Teacher Performance Assessment (edTPA), ISBE Assessment of Professional Teaching (APT), and the Senior Exit Survey.

The data results demonstrated that our licensure graduates performed well with regard to the student learning goals the Department identified as being particularly important to measure in 2015-2016: the ability to plan and design instruction, the ability to differentiate one's instruction to meet the needs of diverse learners, and the ability to demonstrate professionalism in the classroom as a student teacher. The edTPA or Teacher Performance Assessment was a new electronically based portfolio assessment that was externally scored for the first time. The fact that all of our students passed the assessment without having to resubmit any of its 15 sub-tasks on their initial attempt was gratifying. We did notice some variation in scores for elementary and secondary candidates with regard to their performance on the edTPA rubrics, related to learning goals 1 and 2, and this bears further watching in the future. However, we are cognizant of the fact that instructional planning in particular involves a set of skills that are not naturally intuitive for many of our students. We have standardized lesson plan and unit plan formats for our elementary education majors and believe that we will continue to see our students progress in this area in the future. These results comport with our other assessment measures, particularly our student teaching evaluation form that summarizes data collected through direct observation, and the exit survey. Because of some miscommunication, our exit survey results were not as robust as we had expected and we will make efforts to insure a greater response rate in 2016-2017.

English

During the 2015-16 academic years, the English department followed up its effort to assess student learning goals in creative writing at the 300 level with an assessment of these same goals at the 200 level, the course level at which English majors typically enter the creative writing concentration. We employed the same rubric as was employed to assess 300- and 400-level courses, and applied it to drafts of work done early in the term (Spring 2016) in English 201, Writing Fiction; English 202, Writing Poetry; and English 206, Creative Nonfiction. The data reveal that, in general, students in these foundational creative writing courses produce work that falls within the "high-emerging"/"low-developing" range. With this information, the department is developing a snapshot which indicates a significantly positive trajectory for student learning in creative writing: from "high-emerging"/"low-developing" at the 200 level to "high-developing" at the 300 level to "low-mastering" at the 400 level. This information will be shared more broadly (especially with prospective students and parents) and factored into the unit's ongoing conversations about pedagogy (including specific examination of a new resource, *Studying Creative Writing Successfully*), curriculum (including the possibility of offering a creative writing minor), and scaffolding, the thoughtful sequencing of elements that students need to develop the skills and awareness necessary to successfully navigate creative writing courses.

Mathematics

The mathematics department uses the Mathematics Major Field Test, William Lowell Putnam Mathematical Test, Society of Actuaries (SOA) Exam, and an Exit Interview form to assess how well students meet the Student Learning Goals.

As was the case in previous years, the results of both direct and indirect measures indicate that we continue to successfully meet our goals and produce graduates who are well prepared in their major. We are especially pleased with our success in meeting the goals that address analytical and problem-solving skills, and conceptual development. Our majors' comments confirm this success.

Following an earlier recommendation from the Assessment Committee that we separate embedded goals from our previous two goals, we developed a set of five goals. We also made information about the goals more accessible to students. The goals are now available on the department webpage. In addition, we discuss them in our classes and with our teaching assistants. From the exit survey results, it is clear that our majors are better informed about the goals and recognize that, for the most part, the goals were addressed in their classes.

The exit survey data indicate that our seniors continue to wish for courses with content specific to certain careers, e.g., a course on financial mathematics for students interested in actuarial science, and a course targeted at future secondary math teachers. Majors also wished for more courses with real- world applications, and also for opportunities to further develop their computer skills.

This year we are preparing a CC proposal to move our 400 level, proof- based courses to the 300 level (while keeping the same course contents) and move some of our applied courses to the 400 level. This change will not only ensure continuity from sophomore to junior in terms of teaching concepts and proof writing, but it will also provide an opportunity for offering applied courses with more theoretical content.

Finally, we are rethinking the direct assessment tool that we have used at the senior level and we are designing a new direct assessment tool to be used at the end of the sophomore year.

Music

The School of Music continued to evaluate student achievement in performance skills through assessment of end-of-semester performance exams (“juries”), although reduced enrollment in some results will need to be collated over multiple years in order to be valid for assessment. The average of the four aspects of performance that were evaluated in voice students in their last semester was 3.55 out of a possible 4.

This was the first cycle of assessment in the Music History program. Results of this study show that students demonstrate “very incipient understand” or “solid understanding” in each of the elements evaluated. The rubric developed by Music History faculty will be applied to future courses focusing on different historical periods in order to acquire a more complete picture of student achievement in the gamut of courses in this area.

Nursing

Two direct measures of student learning used within the School of Nursing are the NCLEX-RN first time pass rates and critical thinking as measured by changes in the pre and post CCTDI scores from first year to graduation. Additional indirect measurement of critical thinking is obtained through survey data.

Although the School of Nursing has an established history of exceeding state and national pass score averages, for two consecutive years, IWU pass rates simply met the standards. In response to this, the outcome of the 2013 School of Nursing Fall Retreat was to implement an enhanced preparatory program with active involvement from academic advisors to maximize NCLEX-RN® outcomes. The revised plan included enhanced resources and time devoted to preparation, while maintaining the two predictor exams. The preparatory program was put into place August 2013. NCLEX-RN® pass rates of 2014 and 2015 graduates provide support for the effectiveness of the revised preparatory plan. Unanimous agreement was reached to continue the HESI/Saunders Online Review for the NCLEX-RN® program in the 2015-2016 academic year.

Analysis of the correlation between CCTDI scores and other variables (e.g., ACT scores, collegiate GPA, performance on the HESI Pharm and E2, and NCLEX-RN®) is ongoing, although preliminary findings do not support strong correlations. The School of Nursing Curriculum Committee formed a workgroup to examine the effectiveness of critical thinking evaluation and curricular modifications that could enhance critical thinking. A decision to retain the CCTDI was made to assure analysis across decades of data and because no superior direct measure was identified. Consensus was reached by the School of Nursing to continue using the CCTDI in the 2016-2017 academic year.

Political Science

This is now our second year to assess the following goal: Know the processes, institutions, and contexts that shape politics at local, national, transnational, and international levels. We conduct this assessment each May or June by reading papers generated during the just-completed year. This June, as in past years, we read two small collections of papers from two very different classes. We typically select a sample of papers stratified in accordance with the overall distribution of grades for that class. Each paper was read by two faculty members who were not the instructors who gave the assignment. The majority of papers fell into the lower and higher developing categories (less in the mastered category). This strikes us as appropriate for the course level and the expectation that many of the students in the class will be lower classmen, who are, by definition, still developing their knowledge and skills. Overall, we are heartened that all of the papers delivered to some level on our learning goal (institutions, processes, and contexts). We see two specific areas of common weakness that can be addressed in our teaching practices, and we believe that upper level courses should build on the start students are gaining in 100 and 200 levels courses. First, many of the papers showed difficulty summarizing the Varshney model in a concise manner that would allow them to focus on civil society and move on to application and analysis. Perhaps we can first ask the students to write a summary or a series of short summaries of a model or of particular readings. We saw a related problem in the next three categories of the rubric. Students were often heavy on description, including details that seemed to go nowhere. To the extent that our students have trouble identifying and understanding causal mechanisms we should continue to explicitly offer instruction and assignments that hone this skill, which is so central to what we will ask our students to do at the 300 and 400 levels in our major. Another discussion point that emerged regards the importance of selecting student work that squarely addresses the learning goal or goals under consideration in a given cycle of assessment. Our partial failure to be very clear among ourselves about what to look for in the papers and how parts of those papers fit with the learning outcomes better than other parts stands as a warning to do better next year.

Psychology

This past year we assessed the following student learning goals: the learning of key concepts in our psychology 100 class, the ability to critically think about and applying psychological principles related to research design and analysis, as well as principles applying psychological outcomes to everyday life and social situation in the context of appropriately using ethics to understand the limitations of psychological knowledge. The data suggests students were successfully exposed to a psychology curriculum that demonstrates these learning goals. Direct measures from the introductory level course in psychology suggest students demonstrated knowledge of most subfields in Psychology. Indirect measures from a senior student exit survey

and a survey of faculty teaching upper-level laboratory (EXP) courses in the department also suggest students have been exposed to a consistent level of instruction regarding the critical analysis, interpretation, reporting, and execution of scientific inquiry within the science of psychology. In the future, we will directly measure student outcomes and experiences in our EXP courses to better determine if that aspect of our curriculum is meeting our student learning goals and whether or not we need to make adjustments in our EXP curriculum to better serve students as well as better achieve learning outcomes.

Religion

The Religion Department assessed the following goal: Students will develop an in-depth understanding of the culture and history of at least two religious traditions, as well as an awareness of the most significant themes in comparative religious studies. The measure used in this assessment is a direct one. It assesses the “content knowledge” using the portfolios of the religion majors who graduated before 2015. It assesses, more specifically, the student papers produced in the Religion capstone course, REL 490: Senior Seminar in Religion.

What might we change? Our main response to this question is that we should engage in further discussion on our “Signature Work” as expected this semester. We think that a thorough-going discussion of course design and expectations for the Senior Seminar will help us understand how we can discover students’ strengths and their familiarity with the breadth and depth of human religious experiences.

The student papers overall achieve our stated learning goals of study in breadth and depth, but those who fall short do so because of several challenges in the structure of the institution, our major, and the course itself. We do not see all of these as problems, so we do not recommend that we change our curriculum to “fix” them. Also, the course and its assignments are not designed to provide all of the answers to our assessment questions. We see that most students have some knowledge of other religions, but avoid advanced comparative discussions--and we think that this is appropriate. These individual papers may not be the right materials in which to search for achievement of so many complex goals.

We might change the assignments to include a short reflection paper written by the students on their own path to the Senior Seminar and how they have in fact achieved this and other goals of the major. We might emphasize the use of primary sources in the senior seminar research papers and encourage the instructor in a given year to give priority to such work in more focused research. We might also change how we do assessment.

Sociology

In AY 2013-2014, the sociology program undertook an assessment of our 2013 senior writing, in order to measure one aspect of our student learning goals, that students can “complete an original research paper from conceptualization to analysis and reporting.” This year, we finished this 4-year cycle by conducting a direct assessment of senior writing, using the same assignment and rubric, in order to determine whether the changes we implemented based on the assessment of 2013 papers had achieved their the desired effect. The results indicate that we had indeed improved on the 4 measures that our recent assessment work had indicated as deficient. Most of the results clustered around a score of 2, which indicates that our students are approaching mastery. Unlike in our assessment of the 2013 cohort’s papers, we did not feel that the papers themselves lacked sociological focus or relevance. In short, we learned that our efforts to close the gap in our student learning outcomes by implementing course-level assignment goals helped

to improve student learning! On this basis, we plan to make these course-level assignment goals a permanent part of our collective efforts in order to assure student success.

Spanish

In 2015-2016 academic year the Hispanic Studies Department assessed the cultural knowledge of students in our three culture classes using a department-wide direct measure. Preliminary results show that our students are meeting our goals. Hispanic Studies is considering the creation of assessable learning goals for the obligatory study abroad requirement and also creating a signature work project.

Theater Arts

At SoTA's annual all school jury event, which takes place every January, every student in the School of Theatre Arts presents work samples to a faculty panel. These panelists evaluate individual students, and critical commentary is shared with each student to guide and enhance individual growth. The data is provided to SoTA faculty in each degree area for their analysis and commentary, for the purpose of collectively developing strategies to address deficiencies and close the loop.

BFA Music Theater

The raw data, as expected, illustrates that students are progressing through the various aspects of the program and growing reasonably toward mastery. Within context, the ballet combination was particularly challenging given the time constraints, and so it is understandable that the scores are depressed in that area. However, this does not indicate a functional issue within the program that needs to be addressed. The only surprise was that the freshmen, as a cohort, showed better than traditionally in this particular aspect of performance. More discussions were provoked in looking at individual outliers than programmatic gaps this year.

BFA Acting

The average scores demonstrate measureable improvement from freshman to sophomore year and from junior to senior year. There is, however, a significant drop from the sophomore to junior years. Long term--We are discussing the possibility of expanding our number of voice/speech classes from our current 2 semesters (four 7-week classes) to 3 semesters. This will require additional staffing and/or reassignment of current teaching loads. Short term--Performance faculty will work together to develop sequenced articulation and diction warm-ups and exercises, which will build upon each other and serve to increasingly strengthen the development of consonant articulation in performance.

BFA Design/Technology

All classes showed average scores (ranging 1-6) within the normative range expected of the class. Seniors scores were on the lower end of the acceptable range, but sample size seems to be a major contributor to this low average score. There were only three seniors in this cohort and two of them scored 6 and 5 respectively, but the third scored a 2. This low score was an anomaly. Therefore, analysis of these assessment data does not indicate the need for programmatic modifications in this particular area at this time.

BA in Theater Arts

Christopher Connelly used the degree specific rubric to examine the following learning goal on a six-point scale: Professional Identity: How well does the student articulate his/her professional identity? The freshmen and sophomore numbers are what we would expect - students are starting to focus on areas of interest but most have not clearly begun to customize their specializations.

However, the juniors and the seniors aren't much farther ahead on this trajectory, and this indicates a problem. With the curricular adjustments accompanying the development of the new Signature Work program, the School of Theatre Arts needs to better embed the pedagogy focused on this learning goal in its formal curriculum, rather than relying so heavily on advising to deliver this element of the BA. In addition, faculty advising students in the BA major may need some additional training so that this learning goal does not rely so heavily on the labor of a single faculty member. We will look at this learning goal again in four years to see if these adjustments have resulted in improvement in this area.

Women and Gender Studies

In Fall 2015, following the Yearly Action Plan and Strategic Assessment Plan, the Women's and Gender Studies Program assessed its first learning goal, "Through the major courses in WGS, students will learn to: 1. demonstrate an understanding of feminist perspectives on the human experience and to communicate that understanding through written and oral work." The process for assessment entailed providing a pre-test and post-test to senior WGS majors in the Senior Seminar with two essential questions: (A.) What can we learn from using "feminist perspectives on human experience"? and (B) Give an example of at least one concept or interpretation of ideas that we could identify as a feminist perspective.

Two members of the Women's and Gender Studies Steering Committee reviewed and graded the responses in 2015. Both graders ranked the answers from the first set of questionnaires as mostly "satisfactory" with one "incomplete." The second set were all ranked "satisfactory" or "excellent," with both graders noting the fuller and more perceptive answers given by the students in December. We agreed that this assessment indicated that students were learning about feminism and feminist perspectives in other courses in WGS, but had gained a more accurate and complex understanding by the end of the Senior Seminar. The WGS Steering Committee will review the information at a later date in order to give further advice on assessing student learning.