Illinois Wesleyan University Student Learning Assessment

THE ASSESSMENT REPORT (approximately 5 to 9 pages) - due on the final Monday in September at the close of the academic unit's 1-3 year reporting cycle. Academic units are asked to address six topics (1-6, listed below) and to also submit a separate summary of the Assessment Report. As with the Strategic Assessment Plan, throughout the report there should be a strong interlocking narrative among the parts. In other words, each piece should connect conceptually with every other piece—goals with mission, measures with goals, and feedback mechanisms with learning outcomes. Please refer to the <u>Guidelines for the Assessment of Student Learning</u> for a fuller description of each topic required in the Assessment Report.

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| Department Name:_ | Psychology | Assessment Liaison_ | Jason Themanson |
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1. Recounting the Assessment Cycle.

Attached is our department's Assessment Calendar of Activities. We made some modifications to the plan due to the timing of our department's assessment activities. In our department's original assessment plan, we listed many assessment activities to fall in the same academic year. However, this workload is unrealistic to complete in one academic year and we have revised our assessment calendar to stagger these assessments in a more even distribution. Similarly, we have staggered the laboratory (EXP) course assessment as well as the thesis/writing flag assessments to more evenly distribute our assessment workload across academic years (each of these assessments is on a four-year rotation). Following from these changes, assessing statistics shifted to the 2018-2019 academic year. Additionally, we have attached our YeAP for 2019 that details this assessment.

2. Describe assessment measures that were used.

<u>Student learning Goal 1</u>: Incoming psychology majors taking Psychology 100 should understand basic research methodology and key concepts in the field to prepare them for 200 level classes delving into more specialized areas of Psychology.

We developed a direct assessment method to broadly evaluate student learning outcomes in the required general psychology class for psychology majors. We are interested in the degree to which students are able to learn and retain pertinent information with respect to core areas/topics in General Psychology that they will encounter in subsequent classes in Psychology. These areas include:

- History/Foundations of Psychology
- Methods of Psychology
- Biological/Neuro Psychology
- Learning
- Sensation and Perception
- Memory
- Developmental Psychology
- Social Psychology
- Psychopathology

The assessment data comes from 18 multiple-choice items that are embedded within course exams given throughout the semester. This assessment is given to the section of our General Psychology course that is reserved for Psychology majors during the Fall semester of each academic year, with departmental discussion of the results occurring in the subsequent spring semester. Because the questions were embedded in a regular class exam, our response rate was 100% on this assessment measure. The questions included two items from each of the nine content areas listed above (for a total of 18 items). Through this instrument, we have a direct

assessment of our psychology majors during their initial interaction with the field of psychology on the IWU campus. Because the assessment items are exam questions administered during the course of the General Psychology class, they are assessed while the content is relevant to the students in relation to their course goals and outcomes. This helps to ensure that all students are taking the content seriously and complete the assessment, which enhances the validity and reliability of our assessment of the General Psychology course. We also assessed the Research Experience Program (REP) data from one section of Psychology 100 to examine the program's ability to provide students with first-hand exposure to scientific research methodologies in the field.

<u>Student learning Goal 2</u>: Psychology majors will develop an understanding and application of basic research methods such as research design, data analysis, and appropriateness of conclusions derived from psychological research.

Student Learning Goal 3: Psychology majors will develop critical thinking skills in psychology.

<u>Student Learning Goal 4:</u> Psychology majors will be able to apply psychological principles to everyday life and social issues, recognize the complexity of these situations and issues, and identify appropriate applications of psychology.

<u>Student Learning Goal 5:</u> Psychology majors will develop their values in psychology by recognizing the necessity for ethical behavior, respecting human diversity, and understanding the limitations of psychological knowledge.

To assess these learning goals, we used a senior survey (indirect measure). The survey measured the degree to which students feel they have learned the department's student learning goals (critical thinking, application of their work to personal and social issues, etc.) as well as their opportunities to engage in research projects and their post-graduate preparation. Surveys were administered at the end of students' senior year. Further, we assessed our Statistics course, which is a 200-level course required for psychology majors. It is geared toward sophomores and juniors and provides students with a foundational background in the scientific methodologies related with analyzing data from psychological research and data interpretation competencies used in psychological research and reporting. This is a very rigorous class and covers not only a significant amount of information, but also requires a lot of skill-building in the students taking the course. This course relates to all aspects of our student learning goals (understanding research methods, design, and analysis, developing critical thinking, applying psychological knowledge, recognizing the need for ethics and understanding the limitations of psychological knowledge, etc.). For the Statistics assessment, the instructors of Statistics decided, for this round of assessment, to complement our typical assessment procedure for the course with a more subjective, higher level examination of course goals and pedagogy related with the revision of the course content and textbook.

- 3. Summarize the data/results from your measures.
- 4. Describe the process by which you evaluated your data.
- 5. Describe what you learned as a result of the evaluation process.

Below please find the summary of our data/results, the descriptions of the evaluation process as well as information on what we learned from our assessment evaluation.

<u>Student learning Goal 1 results</u>: Incoming psychology majors taking Psychology 100 should understand basic research methodology and key concepts in the field to prepare them for 200 level classes delving into more specialized areas of Psychology.

| Area of Psychology | Fall 2018 Correct Response Rate (%) | |
|-------------------------------------------------|-------------------------------------|--|
| History/Foundations of Psychology | 83 | |
| Methods of Psychology | 75 | |
| Biological/Neuro Psychology | 85 | |
| Learning | 86 | |
| Sensation and Perception | 83 | |
| Memory | 97 | |
| Developmental Psychology | 91 | |
| Social Psychology | 85 | |
| Psychopathology | 94 | |

| Area of Psychology | Fall 2017 Correct Response Rate (%) | |
|-------------------------------------------------------|-------------------------------------|--|
| History/Foundations of Psychology | 81 | |
| Methods of Psychology | 86 | |
| Biological/Neuro Psychology | 86 | |
| Learning | 81 | |
| Sensation and Perception | 91 | |
| Memory | 100 | |
| Developmental Psychology | 95 | |
| Social Psychology | 81 | |
| Psychopathology | 86 | |

| Area of Psychology | Fall 2016 Correct Response Rate (%) | |
|-------------------------------------------------|-------------------------------------|--|
| History/Foundations of Psychology | 70 | |
| Methods of Psychology | 85 | |
| Biological/Neuro Psychology | 90 | |
| Learning | 85 | |
| Sensation and Perception | 80 | |
| Memory | 100 | |
| Developmental Psychology | 95 | |
| Social Psychology | 75 | |
| Psychopathology | 83 | |

In relation to the REP direct measure, one section of Psychology 100 students from the 2018-2019 academic year was randomly selected to determine the extent to which they actively engaged in psychological research. From this section of 31 students, 97% of the students engaged in the psychological research process as a participant in at least one research study. Further, 28 of the 31 students earned all of their research experience credits (8 credits, or 4 hours of research) as participants. The remaining 2 students earned their credit through a combination of

participating in research projects or writing reports summarizing classic research methodologies in the field of psychology.

<u>Student learning Goal 2</u>: Psychology majors will develop an understanding and application of basic research methods such as research design, data analysis, and appropriateness of conclusions derived from psychological research.

Student Learning Goal 3: Psychology majors will develop critical thinking skills in psychology.

<u>Student Learning Goal 4:</u> Psychology majors will be able to apply psychological principles to everyday life and social issues, recognize the complexity of these situations and issues, and identify appropriate applications of psychology.

<u>Student Learning Goal 5:</u> Psychology majors will develop their values in psychology by recognizing the necessity for ethical behavior, respecting human diversity, and understanding the limitations of psychological knowledge.

Results

<u>Description of the Senior Survey</u>: The survey contained 21 likert items and 7 free response items distributed across six major content sections. Although a number of the questions were aimed at helping our department understand students' overall experiences as Psychology majors (questions on departmental environment, student development – personal growth, academic advising and departmental relations), the questions listed below specifically addressed issues related to the student learning goals for students in our major.

| Extent your Psychology classes helped you prepare for a future career _ | (%) |
|-------------------------------------------------------------------------|-----|
| • 1 - very little | 0 |
| • 2 | 0 |
| • 3 | 11 |
| • 4 | 56 |
| • 5 – very much | 33 |
| Extent your Psychology classes helped you write more effectively_ | (%) |
| • 1 - very little | 0 |
| • 2 | 0 |
| • 3 | 0 |
| • 4 | 33 |
| • 5 – very much | 67 |
| Extent your Psychology classes helped you understand the | |
| scientific nature of psychology_ | (%) |
| • 1 - very little | 0 |
| • 2 | 0 |
| • 3 | 0 |
| • 4 | 22 |
| • 5 – very much | 78 |
| Extent your Psychology classes helped you think critically | (%) |
| • 1 - very little | 0 |
| • 2 | 0 |
| • 3 | 22 |
| • 4 | 22 |
| • 5 – very much | 56 |

| For how many research projects outside of class did you help fellow students or faculty | ty in conducting the |
|-----------------------------------------------------------------------------------------|----------------------|
|-----------------------------------------------------------------------------------------|----------------------|

| research? | (%) |
|------------------------------------------------------------|-----|
| • 0 | 11 |
| • 1 | 44 |
| • 2 | 33 |
| • 3 or more projects | 11 |
| Did you feel there were enough opportunities for research? | (%) |
| • 1 - very few | 0 |
| • 2 | 33 |
| • 3 | 22 |
| • 4 | 33 |
| • 5 – very many | 11 |
| Was it easy to get involved in research if interested? | (%) |
| • 1 – not at all easy | 11 |
| • 2 | 33 |
| • 3 | 11 |
| • 4 | 22 |
| • 5 – verv easv | 22 |

Statistics Assessment:

Our typical departmental method for assessing statistics is to evaluate student performance on the final lab practical exam. However, because the statistics course is undergoing a major revision in 2019-2020, such an assessment would not be useful (i.e., it would capture what was done in the past, not where we are headed). Instead, this assessment of the statistics course is focused on the course revision that is underway.

Why Revise PSYC 227? Over the past few years, there seem to have been an increasing portion of students who struggle more with mastering the basic material of the course. While there are still students who perform very well (A's and high B's), there has been a rise in the number of students who perform poorly (drops, D's and F's). In addition, students have had increasing difficulty engaging with the course text, with many not reading it at all. Finally, although the course has always included active learning (e.g., gathering and analyzing class data), the majority of in-class time has been lecture centered. Thus, it seemed time to revise the course with the goals of (a) better meeting students where they are and (b) to more actively engage students in the learning process.

What's Changing? The Revision. The primary statistics instructor (Linda Kunce) is in the process of revising statistics during the 2019-2020 academic year.

On the one hand, some course characteristics remain unchanged. For example, most of the same content is covered (albeit somewhat differently). Further, there is still a series of out-of-class homework/lab assignments that students self-correct with the guidance of course teaching assistants and keys written specifically for students in the class.

On the other hand, several changes are underway to make the course more accessible and increase student engagement. These include:

- 1. Using a streamlined ("basic essentials") edition of the primary textbook that presents key concepts in a more succinct and accessible manner.
- 2. Providing students with chapter study guides in advance of in-class sessions.
- 3. Expecting students to read the text <u>and</u> to complete a low stakes, online quiz <u>before</u> class.
- 4. Decreasing the amount of class time spent on lecture while increasing time spent on interactive work with problems and peers.
- 5. Moving the class from a CNS classroom (with its fixed rows of seating) to a SFH classroom (with seating that facilitates small group work)

- 6. Taking advantage of the new classroom location (SFH 122, computer lab) to include some direct instruction and practice with relevant technology (i.e., having students use SPSS to analyze data).
- 7. Making adjustments to the in-class exam structure (4 regular exams vs 3 class exams and one cumulative final), allowing for more time to be spent on specific topics.

Substantial effort has gone and will continue to go into this revision (e.g., creation of weekly online quizzes, development of study guides, revision of class activities/lectures, creation of a new set of keys lab assignments, new exams, etc.) Many of the components are in place and being piloted for the fall semester and will continue to be refined in the spring semester.

Conclusion. While it is too early to assess student learning outcomes, we believe that the planned revisions will better promote the types of *active and engaged learning* that should be a hallmark of an IWU education.

6. What does your academic unit plan to do with the information it has evaluated?

Student Learning Goal 1 plan: Incoming psychology majors taking Psychology 100 should understand basic research methodology and key concepts in the field to prepare them for 200 level classes delving into more specialized areas of Psychology.

For Student Learning Goal 1, we are not yet ready to make major changes to our curriculum based on the assessment results. This type of direct measure needs multiple years of data points in order to determine if the results are a one-year anomaly or a consistent trend that needs to be addressed. Overall, the results indicate that our curriculum is successful in achieving its goals. In subsequent years, we also plan to address the effectiveness of our current assessment procedure (e.g., do we need to add more questions to each subfield; should we incorporate essay questions into our assessment instead of relying solely on multiple choice questions).

<u>Student learning Goal 2</u>: Psychology majors will develop an understanding and application of basic research methods such as research design, data analysis, and appropriateness of conclusions derived from psychological research.

Based on the results of our Statistics assessment, our curricular change to the class is being implemented successfully. Future assessments will be needed to address the effectiveness of the updated course. Instructors felt that this goal was explicitly addressed through the alterations in the course content.

Student Learning Goal 3: Psychology majors will develop critical thinking skills in psychology.

Based on the results of our Statistics assessment, it appears no major curricular change is needed to address student development in terms of critical thinking skills in the field. Instructors felt that this goal was explicitly addressed through the alterations in the course content and materials.

<u>Student Learning Goal 4:</u> Psychology majors will be able to apply psychological principles to everyday life and social issues, recognize the complexity of these situations and issues, and identify appropriate applications of psychology.

This learning goal is fundamental to Statistics and the instructors ensure students achieve this goal in a number of ways. Students are charged with understanding the nuance and complexity of research and statistical analyses in psychology and the application of research findings to larger psychological hypotheses, theories, and goals.

<u>Student Learning Goal 5:</u> Psychology majors will develop their values in psychology by recognizing the necessity for ethical behavior, respecting human diversity, and understanding the limitations of psychological knowledge.

A significant portion of the Statistics course explicitly addresses ethical concerns related to psychological research and also ethical concerns related to the appropriate design, implementation, and reporting of research findings. The proper application of science and data analyses in psychology is of the utmost importance in the Statistics class. Further, this process of student discovery is guided by the relentless principles in science that there are no perfect studies, every design element and protocol has its inherent strengths and weaknesses or limitations and the instructors of this course battle with being able to address all of these areas of content and import in the limited time they have with students.

7. Provide a summary of your Assessment Report.

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 and updating our Statistics course 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.