

2022-2023 Psychology Department Assessment Report

Date of Meeting: April 25, 2023 (11:10 am-12:00 pm)

Participants: Jericka Battle, Lindsay Kennedy, Carmen Merrick, Jennifer Peszka, Leslie Templeton¹

Learning Goals Assessed this Year:

- (2) **Scientific inquiry and critical thinking.** Students should be able to
 - (2.1) use scientific reasoning to interpret psychological phenomena,
 - (2.2) demonstrate psychology information literacy,
 - (2.3) engage in innovative and integrative thinking and problem solving,
 - (2.4) interpret, design, and conduct basic psychological research, and
 - (2.5) incorporate sociocultural factors in scientific inquiry.
- (4) **Communication.** Students should be able to
 - (4.1) demonstrate effective writing for different purposes,
 - (4.2) exhibit effective presentation skills for different purposes, and
 - (4.3) interact effectively with others.

Data Collected: The data collected this year reflect our current SAP, submitted to the Assessment Committee on April 27, 2022. Data were collected in the three spring sections of Research Methods (which majors typically take in their second year) and the two spring sections of our senior capstone course (History & Systems and Theories of Psychotherapy). New rubrics were developed for assessment of these goals in Research Methods and Theories of Psychotherapy. These rubrics are presented in the Appendix, in order of reference in this report.

Direct Evidence:

Scientific Inquiry and Critical Thinking	Communication
<i>Research Methods:</i> Final Project paper <i>Capstone:</i> Curation Project presentation	<i>Research Methods:</i> Final Project paper and presentation <i>Capstone:</i> Curation Project presentation

Indirect Evidence: Scaled & open-ended Senior Survey responses

Supplemental Evidence: Number of students giving presentations at conferences, giving presentations in class, earning W2 credit, and completing internships and engaged learning experiences

¹ Our faculty in term positions (Ernst and Hawkins) did not attend this meeting. Leslie Zorwick was ill and Jennifer Penner was pulled away for Area Chair responsibilities.

Explanation of Data:

Learning Goal: Scientific inquiry and critical thinking

Final Project paper for Research Methods: These data come from three sections of PSYC 295: Research Methods. All students worked in small groups to design an experimental research proposal to test a novel research question. Each student then wrote their own research report summarizing the relevant background literature; their hypothesis(es); details of their design and proposed analyses; and a discussion of the implications, strengths, weaknesses, and future directions of their project. As such, the research report rubric we currently employ in that course is an excellent source of direct assessment data for scientific inquiry and critical thinking. As a note, all sections of this course utilize specifications grading.

Summary data (N = 42)			
	Exemplary (A)	Competent (B or C)	Basic (D or F)
Section 1	9	6	0
Section 2	12	0	2
Section 3	4	8	1
TOTAL	25 59.5%	14 33.3%	3 7.1%

Curation Project presentation for History and Systems: These data come from one section of our Senior Capstone course (PSYC 425: History and Systems; Cluster C). Specifically, these data come from a rubric used to assess students' performance on a semester-long group project that profiles either an influential woman or influential research study in psychology. Six students were enrolled in this course, which also utilized specifications grading.

Exemplary: 3 (50.0%)

Competent: 3 (50.0%)

Basic: 0 (0.0%)

Final Presentation for Theories of Psychotherapy: These data come from one section of our Senior Capstone course (PSYC 397: Theories of Psychotherapy; Cluster C). Specifically, these data come from the professor's rating of the extent to which each student met each of the 5 subgoals of this learning goal. This is the first year we have assessed learning goals in this course. Twenty students were enrolled in this course, which did not utilize specifications grading.

Exemplary (meets all 5 subgoals): 5 (25.0%)

Competent (meets 3-4 subgoals): 10 (50.0%)

Basic (meets 0-2 subgoals): 5 (25.0%)

Senior Survey data: These data come from both scaled and open-ended questions included in our annual Senior Survey (administered in April 2023). Scaled questions were assessed on a 1 (*strongly disagree*) to 5 (*strongly agree*) Likert scale. A total of 18 students responded to this year's survey.

My experiences in psychology courses contributed to my ability to:	2021 N = 26 M (SD)	2022 N = 24 M (SD)	2023 N = 18 M (SD)	Weighted mean
use scientific reasoning to interpret psychological phenomena	4.54 (0.69) Range: 2-5	4.63 (0.48) Range: 4-5	4.61 (0.49) Range: 4-5	4.58
demonstrate psychology information literacy	4.46 (0.57) Range: 3-5	4.67 (0.47) Range: 4-5	4.56 (0.50) Range: 4-5	4.56
engage in innovative and integrative thinking and problem solving	4.65 (0.55) Range: 3-5	4.67 (0.47) Range: 4-5	4.56 (0.50) Range: 4-5	4.63
interpret, design, and conduct basic psychological research	4.27 (0.81) Range: 2-5	4.42 (0.70) Range: 2-5	4.39 (0.68) Range: 3-5	4.35
incorporate sociocultural factors in scientific inquiry	4.62 (0.68) Range: 2-5	4.71 (0.54) Range: 3-5	4.50 (0.50) Range: 4-5	4.62

Open-ended responses were provided in response to the following prompt: *“Every year, the department assesses a subset of our departmental learning goals in depth. This year, one of those learning goals is scientific inquiry and critical thinking. Please comment on specific ways in which your experiences as a Psychology major have helped or not helped you achieve this learning goal.”*

Full text of all provided responses
All my classes in the Psychology department helped me develop scientific inquiry and critical thinking, but some were better than other. I found that the neuroscience courses and research methods did this best. Psychology of Evil in particular was great in terms of critically discussing published literature. We would read primary literature and then discuss the biases of the author, limitations, and valid points. Behavioral Neuroscience was also great for the development of this learning goal! Dr. Peska had us make brochures for scientifically dubious treatments where we would read empirical sources and other sources to develop a conclusion about the treatment. I learned a lot both about the topic I selected and the process of developing critical scientific claims.
The Psychology department at Hendrix has taught me not just to interpret a study's methods and results, but to be actively critical of them and other potential, hidden flaws that may impact how reliable a study actually is. I think that was extremely helpful for me.
Being a psychology major at Hendrix, I got the opportunity to be in class and group discussions where we assessed intentions and motivators of published articles, concepts, the work from some of the pioneers in the field. Also thinking of how research has and is still benefiting the intended populations.
I think that a lot of the essay assignments that have incorporated a reflective component have allowed me to make connections between all of the fields in psychology.
The psychology major absolutely contributed to this skill. I find myself thinking critically and like a scientist about almost everything now, and I think the biggest contribution has been to how often I am able to apply the scientific knowledge in this major to real world outlets
The lab classes helped me significantly in this goal. it helped me think more scientifically and helped improve my critical thinking skills in how to solve problems faced during lab and research projects.
The ability to adapt a question in which I can explain it to others without the use of jargon was nice in the context of critical thinking.
Every course, I've taken has made it a point to acknowledge that no matter the topic or concept, we are taking a scientific approach (which in turn requires us to ask questions, apply that knowledge to life outside the classroom, and therefore critically think). This was especially true in Psychology and Law, Cross-Cultural Psychology, and Emotions!
I am more than satisfied with what I learned in research methods that added to my scientific inquiry and critical thinking but statistics I still feel less than knowledgeable about.
The psychological department has helped me to really re-engage and become interested in scientific inquiry and critical thinking again. After being in school for so long (including high school), the desire to truly learn, acquire, and interact with knowledge decreases. However, through my classes in the psychology department (as well as others at Hendrix), I've been able to regain that desire to take hold of my education such as through research projects of my interest and the provision of research articles

and information in and outside of the classroom. Citations of sources of information in lectures and other formats helps to reinforce the idea that our knowledge and understanding of us and the world around us is constantly growing, both individually and as a society. The writing prompts in assignments and tests in the psychology department also strongly helped my critical thinking abilities by providing room to reflect and make connections in the different fields of psychology, biology, neuroscience, and more.

Specifically with my Social Psychology & Psychology & Law classes, I had multiple cases to apply critical thinking to my assignments. I really enjoyed how these classes allowed me to use skills that applied real world cases to papers and concepts from class. I feel as though I really used the scientific inquiry goal within my research methods class, by creating my own research topic.

Research methods and comparative animal behavior have helped with scientific inquiry while psychology and law, social psych. and brain and behavior has helped with critical thinking

SUMMARY:

These data indicate that 92.8% of our students in Research Methods were competent (33.3%) or exemplary (59.5%) with respect to their scientific inquiry and critical thinking. These percentages were markedly lower at the capstone level, with 80.8% of those students rated competent (50.0%) or exemplary (30.8%) with respect to their scientific inquiry and critical thinking. I suspect this is because the final project in Research Methods—typically, students' very first psychological research project—is far more scaffolded and supported by the instructor than the final projects in our capstone courses, which are more independent. Regardless, these data strongly support that our students are meeting this learning goal.

Furthermore, our indirect data demonstrate that, over the past three years, the vast majority of our students *agree* or *strongly agree* that they are meeting the learning goal of scientific inquiry and critical thinking and all of the sub-goals encompassed within, with all averages at or above 4.27 out of 5.00. In their open-ended responses, students gave rich examples of how their experiences within our major have built their ability to think scientifically and critically, many of which students linked to writing assignments and/or lab courses.

From the indirect assessment data, one observation stands out: Students feel that their experiences in our major least contributed to their ability to interpret, design, and conduct basic psychological research, of all the subgoals. Although this average is still quite high (weighted average = 4.35), this should be a topic of discussion at our next assessment meeting.

Learning Goal: Communication

Because this learning goal contains three quite distinct subgoals (writing, presenting, teamwork), multiple instruments were used in two of our three courses (Research Methods and Theories of Psychotherapy) to assess this learning goal. Because the final project in our two capstone courses is a group presentation without a paper, the first subgoal of writing is not directly assessed in those courses. Assessment of this learning goal through one or more subgoals within each course will be reviewed in turn.

Final Project for Research Methods: These data come from three sections of PSYC 295: Research Methods. The final project for this course is a group project that culminates in an individual paper and a group presentation. A rubric (found in the Appendix) was used to evaluate

each student on the first two subgoals; ratings of teamwork come from peer assessments. Total students across all sections was 42.

Subgoal	Section	Exemplary	Competent	Basic
demonstrate effective writing for different purposes	1	8	7	0
	2	4	8	1
	3	10	3	1
	TOTAL	22 (52.4%)	18 (42.9%)	2 (4.8%)
exhibit effective presentation skills for different purposes	1	4	11	0
	2	9	4	0
	3	10	3	1
	TOTAL	23 (54.8%)	18 (42.9%)	1 (2.4%)
interact effectively with others	1	14	1	0
	2	12	0	1
	3	12	2	0
	TOTAL	38 (90.5%)	3 (7.1%)	1 (2.4%)

Curation Project presentation: These data come from one section of our Senior Capstone course (PSYC 425: History and Systems; Cluster C). Specifically, these data come from a rubric used to assess students' presentation of a semester-long group project that profiles either an influential woman or influential research study in psychology. Six students were enrolled in this course, which also utilized specifications grading.

Exemplary: 3
Competent: 3
Basic: 0

Final Presentation for Theories of Psychotherapy: These data come from one section of our Senior Capstone course (PSYC 397: Theories of Psychotherapy; Cluster C). Specifically, these data come from the professor's rating of each student's performance in their final presentation, using the rubric in the Appendix. This is the first year we have assessed learning goals in this course. Twenty students were enrolled in this course, which did not utilize specifications grading.

Exemplary: 10 (50.0%)
Competent: 5 (25.0%)
Basic: 5 (25.0%)

Additionally, students rated their group members on teamwork using the same form used in Research Methods. Overall averages were compared to the rubric used for to assess this subgoal in Research Methods. Only 14 out of 20 students completed this form.

Exemplary (overall average from groupmates between 4.00 and 5.00): 15 (75.0%)
Competent (overall average from groupmates between 2.00 and 3.99): 5 (25.0%)
Basic (overall average from groupmates between 1.00 and 1.99): 0 (0.0%)

Senior Survey data: These data come from both scaled and open-ended questions included in our annual Senior Survey (administered in April 2023). Scaled questions were assessed on a 1 (*strongly disagree*) to 5 (*strongly agree*) Likert scale. A total of 25 students responded to this year's survey.

My experiences in psychology courses contributed to my ability to:	2021 N = 26 M (SD)	2022 N = 24 M (SD)	2023 N = 18 M (SD)	Weighted mean
demonstrate effective writing for different purposes	4.42 (0.63) Range: 3-5	4.50 (0.65) Range: 3-5	4.67 (0.47) Range: 4-5	4.51
exhibit effective presentation skills for different purposes	4.46 (0.80) Range: 2-5	4.63 (0.48) Range: 4-5	4.67 (0.47) Range: 4-5	4.58
interact effectively with others	4.58 (0.63) Range: 3-5	4.63 (0.48) Range: 4-5	4.50 (0.69) Range: 3-5	4.58

Open-ended responses were provided in response to the following prompt: *“Every year, the department assesses a subset of our departmental learning goals in depth. This year, one of those learning goals is communication. Please comment on specific ways in which your experiences as a Psychology major have helped or not helped you achieve this learning goal.”*

Full text of all provided responses

Many classes have a presentation aspect that I found very helpful in developing my skills in communication. Comparative Animal Behavior with Dr. Penner was particularly helpful, we had two short presentations on complicated topics, which required a strong understanding of the presentation in question and the ability to explain complicated concepts quickly and effectively. Psychology of Evil with Dr. Merrick had a 20-minute final presentation that I also found difficult because I had to narrow the scope of the presentation to particular character moments or attributes that directly supported my claims and connected to course content. Learning that reduction in information, what is critical or not critical in a presentation, has been my biggest development.

I think the more discussion-based courses helped this aspect the most.

The faculty in the Psychology department are some of the most understanding and I have learned to communicate more with my professors especially when I am struggling in any way that affects my academic performance.

I feel that my time with the psychology department has led to me facilitating better conversations as well as more effectively communicating my thoughts.

I feel completely confident in my scientific communication skills because of this major. I really enjoy being able to share psychological findings to my friends using language they will understand.

Most of my elective classes helped me with communication. Emotions and Health Psychology gave me ways to communicate effectively.

Professors always made a point to communicate learning goals and ideals.

Even in online-COVID related Teams classes, we were encouraged to communicate using all the options we had available if we could not audibly speak (thumbs up buttons, emoji's for attendance, chat). Communication through small group reviews and article discussions was utilized in about 80% of my psychology courses, and was beneficial for scientific analysis development and general comfort with classmates. This embrace of communication has fundamentally made psychology courses more accessible!

I had to write a TON to qualify for a Psychology degree from Hendrix. I liked that communication was learned through several ways-- presentations, literary reviews, small groups. My favorite way to learn communication-- and the way I think best for people in science-- was writing communicating science papers throughout my degree. Learning to communicate scientific articles to people that aren't in school or don't understand basic psychology helped me condense and understand information better myself and helped me learned how to effectively share that with other people. I cannot express how important I've found communicating science papers to be.

Psych of evils final presentation gave me a wonderful experience in presenting something I was very knowledgeable about and helped me express and prepare my knowledge and convey it properly.

There has been a variety of ways that communication has been involved in the Psychology major. My communication with others was enhanced through office hours and advising meetings where I had the opportunity to interact with professionals while also practicing my abilities to effectively communicate either my interests or areas of struggle. There was also much communication in and outside of the classroom with peers through study groups, group assignments, and classroom discussions. When communicating with peers I was able to expand my ability to express differing opinions, leadership positions, and collaboratively work with others of differing styles. Through the assignments, the high standards of the psychology department has allowed me to strengthen my communication of knowledge and the ability to effectively condense and make information accessible to those who may be unfamiliar. This last point specifically will help me after I leave college and will be interacting with others who have not been in the academic field for the past several years; learning to communicate in a way that is accessible to those of differing backgrounds but still as informational is an important skill to have.

Communication from my advisor has been top tier, my entire four years at Hendrix. Dr. Kennedy has always helped me get tasks finished in a timely manner and she has always looked out for me. Dr. Peszka has ALWAYS responded to me within minutes and has been such a blessing throughout my career. I have worked with her on two research projects and not only has she helped me in the classroom but outside the classroom. Each professor effectively demonstrates rubrics and presentation expectations very well. In some cases, there are professors within the department who are not as easy to get ahold of or stay on top of meetings. communicating through the psychology teams for the MFT guided my studying.

SUMMARY:

These data indicate that the vast majority of our students assessed are meeting each subgoal of our communication learning goal that the competent level or above (75-100% across all assessments and courses), with the modal category being “exemplary” across all assessments and courses. Students seem to be doing particularly well with respect to their ability to interact effectively with others. Although these were peer ratings (and, thus, likely inflated), the results are still a strong indication that our students are excelling in their achievement of this learning goal.

Furthermore, our indirect data demonstrate that, over the past three years, the vast majority of our students *agree* or *strongly agree* that they are meeting the learning goal of communication and all of the sub-goals encompassed within, with all averages at or above 4.42 out of 5.00. In their open-ended responses, multiple students identified the following factors as contributing to their achievement of this learning goal: having multiple writing and presentation assignments throughout the major, participating in discussion-based courses, and learning through the examples of effective communication set by department faculty. With the weighted mean for each subgoal above 4.50, we have strong evidence that students believe they are meeting this learning goal through their participation in our major.

Supplemental data

As a department, we also keep records of how many students give professional and in-class presentations, complete internships and/or experiential learning projects, and earn W2 credit each year as another way of quantifying experiences students are having in and out of the classroom that contribute to their achievement of departmental learning goals. Data from this year are presented below.

Internships and experiential learning projects:

PL Odyssey projects: 10

UR Odyssey projects: 10

GA Odyssey projects: 14

SW Odyssey projects: 41
SP Odyssey projects: 2

Professional presentations: 37 students

In-class presentations: 503 total

PSYC 225-01: <u>Psychology and Religion</u>	27 presentations
PSYC 210-01: <u>Developmental Psychology</u>	28 presentations
PSYC 230-01: <u>Social Psychology</u>	30 presentations
PSYC 230-01: <u>Social Psychology</u>	25 presentations
PSYC 335-01: <u>Sensation and Perception</u>	15 presentations
PSYC 360-01: <u>Behavioral Neuroscience with lab</u>	11 presentations
PSYC 360-01: <u>Behavioral Neuroscience with lab</u>	15 presentations
PSYC 295-01: <u>Research Methods with Lab</u>	30 presentations
PSYC 295-02: <u>Research Methods with Lab</u>	24 presentations
PSYC 295-03: <u>Research Methods with Lab</u>	28 presentations
PSYC 319-01: <u>Cognitive Psychology</u>	19 presentations
PSYC 490-01: <u>Psychology of Evil</u>	15 presentations
PSYC 295-02: <u>Research Methods with Lab</u>	26 presentations
PSYC 425 01: <u>History and Systems</u>	5 presentations
PSYC 300 01: <u>Comparative Animal Behavior with Lab</u>	28 presentations
PSYC 220 01: <u>Brain and Behavior</u>	90 presentations
PSYC 220 02: <u>Brain and Behavior</u>	87 presentations

W2 credits earned: 80

These supplemental data indicate that our department is providing students with ample opportunity to develop *scientific thinking and critical inquiry* and *communication* skills. Our courses prioritize writing- and presentation-based assignments that not only help students practice their communication skills, but also require them to engage in scientific inquiry and critical thinking, as the content of these assignments are based in the critical consumption and distillation of scientific research. From the 2023 Senior Survey data, it is apparent that students notice and appreciate the opportunities they have to develop these skills through our courses.

Changes Planned based on Data or Explanation of Decision to Continue Current Practice:

Overall, the department continues to find our new SAP provided useful quantitative *and* qualitative data. However, one major issue that we ran into at this year's assessment meeting is that data for the current year's assessment cycle are all linked to final projects across three courses and the Senior Survey, which had just closed that morning; that is, the assessment data for the current year was not yet available to discuss. We ran into a similar problem last year, but were unable to hold an extra meeting dedicated to assessment in the fall. Because of this, the focus of our annual assessment meeting this April was on our data from the previous year, wherein the following two learning goals were assessed:

1. Ethical and social responsibility in a diverse world
2. Professional development

The majority of our discussion was on the full results of our 2022 Senior Survey. The following points were discussed:

- Two of our lowest ratings across all scaled items (both $M_s = 3.48/5.00$) was on the provision of graduate and career advising. This is a regular discussion point in our department. Because we typically carry large advising loads, it is challenging to give intensive future-oriented mentoring to all of our majors. During this meeting, we discussed that additional programming through Psych Club could be an efficient way to address this issue.
- In terms of skill development, students rated their ability to use statistical software to analyze data lower ($M = 4.04$) than any other skill we asked about. We suspect this is because this cohort of students largely took Statistics online.
- Because one of the issues we identified in last year's assessment report was that students largely linked their achievement of the learning goal, *ethical and social responsibility in a diverse world*, to a small subset of our courses, we will adjust the text of the open-ended assessment of this learning goal in future assessment cycles (beginning next year), to prompt students to think about their achievement of this learning goal both in and out of the classroom.

Because of this timing issue, I (LK, assessment coordinator for the Psychology Department) met with Dr. Carol Ann Downes to discuss how we might better handle this in the future. I recommended that we move our annual assessment meeting to fall semester (still just one per year) and that the meeting always focus on the previous year's assessment report. Dr. Downes supported this plan. Furthermore, she recommended we begin to compile our data as we move forward, which we will be able to do for direct assessments starting next year (which will be the first time we revisit assessment of the same learning goals since our most recent SAP was established). I have already begun to pool data across years for Senior Survey data.

As assessment coordinator for the Psychology Department, I've noted one additional shortcoming to our SAP: need for increased assessment coordination across capstone (Cluster C) courses. For several recent years, we have only been able to offer one section of Cluster C (History and System), so there was no need for coordination across sections. Last year, Dr. Fred Ernst (in the first year of his three-year term) offered Theories of Psychotherapy for the first time; although we counted this as a Cluster C course for our students because of a need for additional capstone seats, this course was not designed to be a proper capstone course until this year. Thus, this was the first year where we had multiple sections of Cluster C under the current SAP. Because Dr. Ernst is in a visiting position, I provided him with rubrics derived from our Research Methods assessment, as he indicated those were a closer fit to his final project than the rubric used in History and Systems. Starting next academic year, we will have the staffing necessary to offer multiple Cluster C courses (Dr. Jennifer Penner will offer a Senior Seminar next fall), even bringing back Cluster C courses that are on the books but have not been taught in years. With these coming changes to our capstone offerings, I will facilitate ongoing conversations among those who teach Cluster C courses to increase the similarity in our assessment approaches.

Despite these shortcomings, the data indicate our students are satisfactorily meeting our learning goals of *scientific inquiry and critical thinking* and *communication*, as evidenced through both our evaluations of them and their evaluations of themselves. We continue to believe the edits we have made to our SAP have given us more valuable qualitative data than in years past and a stronger path forward in terms of

assessing students over time. We will next assess these two learning goals in the 2024-2025 academic year and in that report we will make direct comparisons to this year's report, particularly between data from this year's Research Methods sections and data from 2024-2025 Cluster C students (which should largely be the same group of students). As recommended by Dr. Downes, we will also aggregate these data over time.

On behalf of the Psychology Department, I thank you for your time reviewing our report. Please be in touch if you have any questions or need any additional information.

Lindsay Kennedy