SAINT LOUIS UNIVERSITY.

Program-Level Assessment: Annual Report

Program Name (no acronyms): Master's of Applied Behavior Analysis   Department: Applied Behavior Analysis

Degree or Certificate Level: Master's   College/School: School of Social Work

Date (Month/Year): 10/2023   Assessment Contact: Natalie Parks

In what year was the data upon which this report is based collected? 2022-2023

In what year was the program's assessment plan most recently reviewed/updated? 2023

Is this program accredited by an external program/disciplinary/specialized accrediting organization or subject to state/licensure requirements? Yes, Applied Behavior Analysis International (ABAI); Behavior Analyst Certification Board (BACB)

If yes, please share how this affects the program's assessment process (e.g., number of learning outcomes assessed, mandated exams or other assessment methods, schedule or timing of assessment, etc.): We have incorporated changes to Seminar IV and Thesis this academic year (2023-2024) due to requirements of ABAI accreditation. As such, Seminar IV has been removed and replaced with Thesis, which will be taken across two semesters instead of one semester. These changes will not go into effect until Fall 2023; however, the results of this assessment were considered as those changes were finalized. The program will also introduce a new course, Basic Behavior Analysis, as required by ABAI.

1. **Student Learning Outcomes**

   Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please provide the complete list of the program's learning outcome statements and **bold** the SLOs assessed in this cycle.)

   Student Learning Outcome 1: Students will assess relevant behavior analysis literature and scholarly contributions.
   Student Learning Outcome 2: Students will apply behavioral theories, practices, policies, or research methodologies.
   Student Learning Outcome 3: Students will apply knowledge from ABA to address problems in broader contexts.
   Student Learning Outcome 4: Students will articulate ABA explanations/arguments to a disciplinary/professional audience in both written and oral formats.
   Student Learning Outcome 5: Students will evidence scholarly/professional integrity (ethics) in behavior analysis.

2. **Assessment Methods: Artifacts of Student Learning**

   Which artifacts of student learning were used to determine if students achieved the outcome(s)? Please describe the artifacts in detail, identify the course(s) in which they were collected, and if they are from program majors/graduates and/or other students. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

   For SLO 2, 3, and 5, artifacts collected and included for assessment were all student responses on the Behavior Development Solutions modules that assess fluency in:
   - SLO 2: Behavioral theories, practices, policies, and research
   - SLO 3: Application of ABA knowledge to address problems in broader contexts
   - SLO 5: Ethics

   For SLO 1 and 4, artifacts collected and included for assessment were student scoring on their thesis proposal and defense as well as their written thesis papers.

3. **Assessment Methods: Evaluation Process**

What process was used to evaluate the artifacts of student learning, and by whom? Please identify the tools(s) (e.g., a rubric) used in the process and **include them in/with this report document** (please do not just refer to the assessment plan).

Students complete fluency tests in a software designed to increase their fluency in solving problems (Behavior Development Solutions). There are 46 fluency tests for SLO 2 (Philosophical Underpinnings and Concepts & Principles), 15 fluency tests for SLO 3 (Selecting and Implementing Interventions), and 27 fluency tests for SLO 5 (Ethics). Each student is assigned a score of 0, 0.5, or 1 for each module, as detailed below:

- Pass (+1) for any fluency module score of 100%
- Partial Score (+0.5) for any fluency module of 80-99%
- Fail (+0) for any fluency module 79% or below

SLO 1 is evaluated through thesis proposals are scored according to the proposal rubric by three faculty and field experts. Students earn a score of +2 (exceeds), +1 (met) or +0 (below) expectations on the following items:

- Literature review and use of conceptually systematic language
- Methods and procedures
- Results
- Figures and Tables
- Potential Limitations and Confounds
- Oral Presentation

SLO 4 is evaluated through thesis defenses are scored according to the defense rubric by three faculty and field experts. Students earn a score of +2 (exceeds), +1 (met), or +0 (below) expectations on the following items:

- Literature review and use of conceptually systematic language
- Methods and procedures
- Results
- Figures and Tables
- Discussion
- Oral Presentation

4. Data/Results

What were the results of the assessment of the learning outcome(s)? Please be specific. Does achievement differ by teaching modality (e.g., online vs. face-to-face) or on-ground location (e.g., STL campus, Madrid campus, other off-campus site)?

SLO 1: We had six students propose their thesis in the fall of 2022 and 0 propose in the spring of 2023. A score of 6 is necessary to pass. The scores are as follows:
Fall 2022

- Student 1: 9.5
- Student 2: 8
- Student 3: 10
- Student 4: 11
- Student 5: 11
- Student 6: 11

SLO 2: 5 students took the modules assigned to this SLO. The highest score could be 46 and the average score of the 5 students was 46.

SLO 3: 5 students took the modules assigned to this SLO. This highest score could be 15 and the average score of the 5 students was 15.

SLO 4: We had 1 students defend their thesis in fall 2022 and 6 students defend their thesis in spring 2023. The scores are as follows:
Fall 2022:

- Student 1: 11

Spring 2023
- Student 1: 12
- Student 2: 11
- Student 3: 11
- Student 4: 9.5
- Student 5: 10
- Student 6: 11

SLO 5: 4 students took the modules assigned to this SLO. The highest score could be 27 and the average score of the 4 students was 27.

5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you? Address both a) learning gaps and possible curricular or pedagogical remedies, and b) strengths of curriculum and pedagogy.

The data indicate that all students have met or exceeded the expectations of the program, specifically in applying behavioral theories, practices, policies, and research methodologies. They also met expectations in applying their knowledge of ABA to address problems in greater contexts and solving problems ethically. All students demonstrated their ability to assess and apply literature to their own research and their skills in using ABA to create an experiment of their own. Finally, they demonstrated their ability to analyze results using ABA principles and concepts.

6. Closing the Loop: Dissemination and Use of Current Assessment Findings

A. When and how did your program faculty share and discuss the results and findings from this cycle of assessment?

The results of the assessment were shared with departmental faculty during the ABA program committee meeting on September 13, 2023. They were reviewed orally by announcement and a question opportunity and written via a copy of the results listed above.

B. How specifically have you decided to use these findings to improve teaching and learning in your program? For example, perhaps you've initiated one or more of the following:

Changes to the Curriculum or Pedagogies	• Course content	• Course sequence
	• Teaching techniques	• New courses
	• Improvements in technology	• Deletion of courses
	• Prerequisites	• Changes in frequency or scheduling of course offerings
Changes to the Assessment Plan	• Student learning outcomes	• Evaluation tools (e.g., rubrics)
	• Artifacts of student learning	• Data collection methods
	• Evaluation process	• Frequency of data collection

Please describe the actions you are taking as a result of these findings.

Due to changes in accreditation standards, Seminar IV and Thesis were reviewed again this year. Seminar IV will no longer be offered as a course. Instead student will complete two semesters of Thesis. As such, the syllabus of thesis was reviewed to ensure the assessment standards (SLO 1 and SLO 4) were incorporated across the two semesters. It was decided, based on the current review of the rubrics used to assess the two SLOs that the rubrics will continue to be a part of the assessment. Additionally, the decision last year to provide updates to the student's advisor should they not be making sufficient progress towards their thesis will remain a procedure to ensure student success. Finally, it was decided that if there are students who have not completed their thesis within two years of taking the first thesis course would receive additional support from

the thesis chair and their advisor to help ensure success and completion. This will include monthly meetings to check in on progress and clear deadlines for completion.

The Ethics course syllabus was also reviewed, as Seminar V will also sunset in our new curriculum. As such, it was decided the social justice project, which focuses on applying ABA to social justice, will be incorporated into the Ethics curriculum. The syllabus was updated. It was decided that while this project is important to keep as part of the curriculum, it will not be used for assessment purposes, as the topics are varied and scoring would be too subjective.

If no changes are being made, please explain why.

7. **Closing the Loop: Review of <u>Previous</u> Assessment Findings and Changes**
   A. What is at least one change your program has implemented in recent years **as a result of previous assessment data**?

Last year, we updated the assessment procedures to focus on all SLOs as opposed to just one per year, as was done previously. We found that this assessment procedure continues to be sufficient for providing the program information about how to continuously improve.

In addition to changing the assessment procedures, we changed the communication between thesis chair and advisor to ensure that any student struggling to meet deadlines for completion are provided additional support.

   B. How has the change/have these changes identified in 7A been assessed?

Assessing all SLOs each year allows us to update courses and program expectations quickly, rather than waiting 5 years to determine if there are problems in certain courses or outcomes. We have found this to be helpful in ensuring our program remains up to our standards.

We assessed the new process of communication between thesis chair and advisor by identifying the number of students who struggled during their Seminar IV and whether or not communication occurred, and the ultimate outcome of that student (score on thesis defense). We found this to be effective in that two students demonstrated some difficulty during Seminar IV, communication and additional support were provided, and both students successfully defended their thesis projects.

   C. What were the findings of the assessment?

We found this to be effective in that two students demonstrated some difficulty during Seminar IV, communication and additional support were provided, and both students successfully defended their thesis projects.

   D. How do you plan to (continue to) use this information moving forward?

We will continue to use this intervention moving forward, as it was deemed effective.

IMPORTANT: Please submit any assessment tools (e.g., artifact prompts, rubrics) with this report as separate attachments or copied and pasted/appended into this Word document. Please do not just refer to the assessment plan; the report should serve as a stand-alone document. Thank you.

ABA 5990: Thesis
Guidelines and Grading Rubric for Thesis Proposal
2020

Description: Students will submit a written manuscript including a literature review, purpose, methods (subjects and setting; response definitions, measurement, and reliability measures/calculations; procedure; research design), hypothetical results (justified given past research), potential limitations and ideas to control for foreseeable confounds, references, and tables/figures. The manuscript should be submitted to the thesis committee 1-2 weeks prior to the defense. The manuscript should follow APA and graduate school formatting guidelines. Students should be prepared to answer questions about their proposed project and the literature base supporting the project during the oral proposal.

Committee members will grade student written and oral components using the rubric below, by determining if the student exceeds, meets, or is below expectations across each item. Members will include feedback in each box across items.

To pass, the chair and at least one committee member must score a total of 10 across the following targeted areas:

Grading Rubric	EXCEEDS (+2)	MET (+1)	BELOW EXPECTATIONS (+0)	Comments
Literature review and use of conceptually systematic language.	Comprehensive and theoretically cohesive review of the behavior analytic literature. Easy to read and follow along.	Clear presentation of the chosen field of study. Purpose clearly stated. Adhered to APA formatting.	Missing key literature/research studies, no clear conceptual articulation of literature. Not theoretically consistent.	
Methods and Procedures	Novel application or approach, or use of novel population/setting. Section is easy to replicate.	Technological and derived from previous research. Includes all of the necessary components. Use of specific experimental design(s) was justified, matched the goals of the project, and was correctly described.	Design flaws, or procedural confounds that would preclude meaningful conclusions drawn from the study. Unclear due to lack of written cohesiveness or flow.	
Results	Robust and comprehensive analysis provided of collected data.	Data findings and outcomes reported, as identified by methods. Accurately interpreted data in terms of level, trend, variability, and experimental control	Unclear outcomes or results, missing data or analyses.	
Figures and Tables	No APA errors in figures and tables, depicted multiple dimensions and measures of behavior(s),	Presented figures and tables with minimal APA errors, which depicted some measure of behavior appropriate to the target response, had little or no "chart junk" and incorporated some type of single-subject experimental design.	Missing key elements in figures and/or tables, 10+ APA errors found, no clear relationship provided in graphs between the independent variable and dependent variable.	

Chair/Committee (circle one)

Member Name: _____ Student Name: _____ Date: _____

Grading Rubric	EXCEEDS (+2)	MET (+1)	BELOW EXPECTATIONS (+0)	Comments
Potential Limitations and Confounds	In-depth analysis provided between hypothetical results, potential limitations/confounds, and ways to control for confounds. All potential pitfalls/limitations identified, and throughgoing solutions considered and identified.	Discussed general take-home points (in connection to research discussed in the literature review), and inclusion of potential limitations and confounds. Some potential pitfalls/limitations identified, and solutions considered.	Underdeveloped analyses and conclusions drawn from hypothetical results. Few potential limitations and solutions for controlling for confounds provided.	
Oral presentation	Presentation style, eye contact/engagement with audience, well prepared presentation and use of conceptually systematic language. Answers all questions correctly. Manuscript submitted within 2 weeks of presentation	Presentation prepared (uncluttered slides with important information, professional and conversational oral presentation, and answers questions correctly 80% of the time. Manuscript submitted within 1 weeks of presentation	Unprepared presentation, cluttered slides, awkward flow of presentation. Answers questions correctly <70% of the time. Manuscript submitted >1 week of presentation	

Total points: _____/ 6

Pass

(6+)

Fail

(<5)

ABA 5990: Thesis
Guidelines and Grading Rubric for Thesis Defense
2020

Description: Students will submit a written manuscript including a literature review, purpose, methods (subjects and setting; response definitions, measurement, and reliability measures/calculations; procedure; research design), results (across range of analyses depending upon study), discussion (connection back to literature review, how results fit in with current literature body, limitations/confounds, and future directions), references, and tables/figures. The manuscript should be submitted to the thesis committee 1-2 weeks prior to the defense. The manuscript should follow APA and graduate school formatting guidelines. Students should be prepared to answer questions about their project and the literature base supporting the completion of the project, during the oral defense.

Committee members will grade student written and oral components using the rubric below, by determining if the student exceeds, meets, or is below expectations across each item. Members will include feedback in each box across items.

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Methods and Procedures	Novel application or approach, or use of novel population/setting. Section is easy to replicate.	Technological and derived from previous research. Includes all of the necessary components. Use of specific experimental design(s) was justified, matched the goals of the project, and was correctly described.	Design flaws, or procedural confounds that would preclude meaningful conclusions drawn from the study. Unclear due to lack of written cohesiveness or flow.	
Results	Robust and comprehensive analysis provided of collected data.	Data findings and outcomes reported, as identified by methods. Accurately interpreted data in terms of level, trend, variability, and experimental control	Unclear outcomes or results, missing data or analyses.	
Figures and Tables	No APA errors in figures and tables, depicted multiple dimensions and measures of behavior(s),	Presented figures and tables with minimal APA errors, which depicted some measure of behavior appropriate to the target response, had little or no "chart junk" and incorporated some type of single-subject experimental design.	Missing key elements in figures and/or tables, 10+ APA errors found, no clear relationship provided in graphs between the independent variable and dependent variable.	

Chair/Committee (circle one)

Member Name: _____ Student Name: _____ Date: _____

Grading Rubric	EXCEEDS (+2)	MET (+1)	BELOW EXPECTATIONS (+0)	Comments
Discussion	In-depth analysis provided between the results of the current project and the literature. Critical analysis and interpretation of findings and outcomes using conceptually systematic language and theory.	Discussed take-home points (in connection to research discussed in the literature review), strengths, weaknesses, and future directions of the study. Discussion was conceptually systematic in conclusions drawn.	Underdeveloped analyses and conclusions drawn from results. Minimal connection to previous literature. Unclear grammar/syntax/flow.	
Oral presentation	Presentation style, eye contact/engagement with audience, well prepared presentation and use of conceptually systematic language. Answers all questions correctly. Manuscript submitted within 2 weeks of presentation	Presentation prepared (uncluttered slides with important information, professional and conversational oral presentation, and answers questions correctly 80% of the time. Manuscript submitted within 1 weeks of presentation	Unprepared presentation, cluttered slides, awkward flow of presentation. Answers questions correctly <70% of the time. Manuscript submitted >1 week of presentation	

Total points: _____/ 6

Pass
(6+)

Fail
(<5)