

Assessment Report Summaries 2020-2021

Music

In this assessment cycle, the School of Music assessed goals #2, 4, and 5 of the StrAP (2. demonstrate an understanding of and the ability to read and realize musical notation; 4. demonstrate an acquaintance with a wide selection of musical literature from the principal eras, genres, and cultural sources; 5. develop and defend musical judgments). Direct assessment of spring 2021 juries and recitals was undertaken, with a rubric for technical and musical categories pertaining to the students' instrumental/vocal areas. On a scale of 1-4, with 4 being the highest, average scores for technique, musicality, intonation, and other performance factors almost entirely fell between 3 and 4, which indicates that student learning goals are being met (averages for music majors were all between 3 and 4; the only averages lower than 3 were for minor lessons (non-music majors, music minors, or secondary instruments)). The School of Music plans to convene in fall 2021 to discuss the data and modify the instruction or future assessment strategies as needed. In addition, the SoM will be revising their student learning goals, assessment measures, and tools to reflect the significant changes in curriculum in recent years.

Computer Science

Scores have been noticeably lower in the past few years. Possible explanations are 1) random noise given the small sample sizes, 2) less-prepared students entering the major, and 3) poor quality instruction. Anecdotally, when CS enrollment increases as it has in the past ten years, more students entering the major are underprepared compared to low-enrollment periods. We have no data to support or reject that hypothesis however. Low quality of instruction could certainly lead to reduced outcomes like this, and there have been clearly identified problems with some of the temporary (visiting and adjunct) instructors the department has had over the years in which graduates from the last few years were in the major.

Scores in the "Discrete Structures and Algorithms" subject area have been consistently high (only falling below the highest quartile in three years of 9 thus far). We believe this area to be a good predictor of overall performance in the major, and it is a strong focus of our program. Furthermore, this is the area in our program that has most consistently been taught by long-term tenure-track faculty. For the courses relevant to this area, we plan to continue offering the same courses in the same ways.

The large drop in the “Programming and Software Engineering” category over the past four years is concerning. We might even want to consider it an “unambiguous downward trend.” If we search for a potential explanation, we can note that the courses most central to this subject area were nearly all taught by visitors and adjuncts for the cohorts graduating in these years. Classroom observations, student evaluations, and other feedback from students generally indicated that these instructors, who are no longer teaching here, were not all adequately prepared or skilled in teaching. We can draw two potential conclusions based on this hypothesis:

1. The teaching ability of the instructors we hire is critically important.
2. Additional oversight from the department chair may be helpful.

We anticipate that teaching quality will improve with two recent tenure-track hires, and one focus for the 2021-22 AY is on improving teaching through frequent meetings and teaching collaboration.

We have addressed the second point by meeting as a department to determine guidelines for the content and instruction of CS128, our second course for majors, which is one of the most relevant courses to the “Programming and Software Engineering” category. Furthermore, at the suggestion of a recent instructor for CS128, we piloted adding a lab to the course for two additional contact hours per week with the instructor. We intend to offer a lab with that course whenever possible, though instructors’ schedules do not always allow them to run the session. We are also considering adding lab sections to other courses with heavy programming components. We will monitor our department’s performance in this category to see if there is a longer-term trend that suggests additional action.

A continued focus is to increase the density and quality of programming assignments in upper-level CS courses, hopefully improving the “Programming and Software Engineering” category in the future. Anecdotally we have reports from students that retention of theoretical concepts is greater when paired with programming assignments. This work is especially important with new tenure-track faculty added to the department over the last two academic years.

Physics

Our assessment activities were severely curtailed during the past 1.5 years due to the pandemic and departmental issues. In spite of that, we have two useful assessment data sets from AYs 19-20 and 20-21. The data based on the Force Concept Inventory (FCI) test shows that our pedagogy in Physics I continues to be quite effective. The robustness of pre test scores over the years confirms that the struggles faced by many students in recent major cohorts are likely due to deficits in their mathematical preparation. We have developed tests to identify students who need help with math and have conducted help sessions. In AY 21-22, we hope to continue with those activities and formalize the role of those tests and help sessions in our assessment program. We have also assembled a student-by-student record of their first-year and third-/fourth-year performance on the Conceptual Survey in Electricity and Magnetism (CSEM). We hope to continue this practice so that persistent trends can inform future comprehensive changes to our curriculum/pedagogy.

Sociology

During the past two years, the sociology program partnered with a national effort, called the Curriculum Mapping Toolkit for Sociology. As their website states, “Goals of the Curriculum Mapping Toolkit for Sociology (CMTS) project are to provide sociology departments with resources to help them understand their undergraduate program’s strengths and areas for growth, as well as document prevailing approaches to teaching sociological concepts and skills to students. Users of the CMTS are guided to understand the elements of a robust curriculum, as well as ways to collaboratively work with colleagues to design programs best suited to their students and institution.” This year, we made it through the final two steps, completing the process.

Theatre Arts

In normal times, 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 Jury is also our most important and critical programmatic assessment event, and provides the faculty with a broad snapshot of student performance. Data is gathered by an individual program assessment designee, and analyzed by the SoTA faculty. It can then be implemented as lessons during the next calendar year to address any identified deficiencies in student learning outcomes and close the loop.