1. **Student Learning Outcomes**
   Which of the program’s student learning outcomes were assessed in this annual assessment cycle?

   The post-baccalaureate certificate in Evidence-Based Decision Making (PBC EBDM) has the following learning outcomes (LOs):
   - LO1: Graduates will be able to apply program-specific knowledge to address practical problems using an ethical, evidence-based framework.
   - LO2: Graduates will be able to utilize argumentation skills appropriate for a given problem or context.

   The PBC EBDM certificate is embedded within all the School for Professional Studies MA/MS programs. Our assessment of these LOs, therefore, is part of a collective effort to improve competencies around effective decision making, as well as writing and argumentation. Given their importance we tend to direct our attention to these LOs every year.

2. **Assessment Methods: Student Artifacts**
   Which student artifacts were used to determine if students achieved this outcome? Please identify the course(s) in which these artifacts were collected. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

   Our overall assessment protocol integrates data from three sources to evaluate student learning:
   1. Instructors complete a formative assessment through a survey at the end of each course. Through the survey, instructors are asked to describe specific artifacts that are related to each LO that is mapped to that course. Instructors then assess competency in this area, as well as potential opportunities for improvement. It is important to note that this process is meant to gather data that is independent of grades given.
   2. Faculty mentors complete a summative assessment on each student at the conclusion of their respective MA/MS capstone. Mentor’s assess the student’s performance for each of the learning outcomes.
   3. A student assessment of learning outcomes is also completed by students at the end of their degree. This indirect measure asks students to rate the extent they learned and developed on each LO. They also indicate what specific competencies they developed and which they feel they need additional development.

   Specific to the PBC we also look closely at the final projects submitted in ORLD 5700: Advanced, Evidence-Based Decision Making.
   **If we have a Madrid student in the program, then they would be fully admitted into the program.**

3. **Assessment Methods: Evaluation Process**
   What process was used to evaluate the student artifacts, and by whom? Please identify the tools(s) (e.g., a rubric) used in the process and include them in/with this report.
We pulled raw survey data from each of the three surveys administered in Qualtrics. We then tabulated the quantitative data to provide a high-level overview, as well as content analyzed the qualitative data to identify key themes for each LO.

4. **Data/Results**

What were the results of the assessment of the learning outcomes? 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)?

Overall we learned that these two LOs continue to be an issue for MA/MS students. Both instructors and students indicated issues with LO1 (methods, stats) and LO2 (effective argumentation skills).

- The formative instructor survey indicated issues related to writing and research (40/48% full student achievement). Several faculty also commented that focusing on writing and argumentation issues impacts how much time they spend on content.

**Among those who completed the PBC in EBDM (i.e., completed ORLD 5700); however, the outcomes were much better (56% full student achievement; 33% partial achievement).**

5. **Findings: Interpretations & Conclusions**

What have you learned from these results? What does the data tell you?

Overall, the results tell us that students self-report that they are learning a great extent. Faculty generally agree that most students are demonstrating full achievement of LOs, but there are a percentage of students only partially demonstrating learning. While a significant weakness of our MA/MS students is related to student writing abilities and APA knowledge, utilizing sources and instructor feedback, and forming logical arguments – it does not seem to be an issue for those who complete the PBC EBDM. Therefore, the weaknesses we see when looking at outcomes is primarily our MA/MS students in the aggregate (i.e., the aggregate performance of the students who complete the PBC in EBDM/ORLD 5700 is better than that of the aggregate MA/MS students).

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

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

Each year a complete report is distributed among key faculty and administrators associated with the program for feedback. Recommendations and action items are discussed, shared, and implemented.

B. How specifically have you decided to use 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
- Teaching techniques
- Improvements in technology
- Prerequisites

**Changes to the Assessment Plan**
- Student learning outcomes
- Student artifacts collected
- Evaluation process

- Course sequence
- New courses
- Deletion of courses
- Changes in frequency or scheduling of course offerings

- Evaluation tools (e.g., rubrics)
- Data collection methods
- Frequency of data collection

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

We continually work to improve the curriculum:

- Implemented a series of orientation and graduate preparation courses (i.e., general orientation, writing, stats) to be taken prior to enrolling in the first course. As we cannot require these courses, we are working on different approaches to better direct students into these modules/courses.
SPS faculty continue to refer students to our online tutorial platform, SmartThinking.
Built rubrics and provided tutorials and coaching to assist with APA and general writing. Several classes updated resources and changed assignments (e.g., scaffolding, argument maps) to help students build stronger arguments.

If no changes are being made, please explain why.

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

We continue to “close the loop” on past assessment work. Past analyses of assessment data were used to inform recent curricular changes, some of which were made to directly influence student learning. Furthermore, based on this data we intend to make additional changes to improve student learning in each LO. For example, the data suggests that LOs 1 & 2 seem to be a consistent area of concern even though curricular changes seem to be helping (i.e., more work is needed).

B. How has this change/have these changes been assessed?

It should be noted that the PBC EBDM is new and faculty who teach the courses vary from year to year. Taken collectively, however, the data tell a story of improvement and is supplemented with qualitative data that provide additional clarification. For example, summative data across programs indicates an improvement in these LOs, citing students who complete the embedded PBC EBDM cert as being especially prepared in both.

C. What were the findings of the assessment?

Formative data suggests that LO1 and LO2, especially among the students who complete the PBC EBDM cert, are being achieved. There is still opportunity to improve upon student writing and argumentation skills. We intend to add a writing rubric element to all EBDM assignments that includes "mastery of course material" as a way of differentiating it from fully addressing the questions on the assignment and from argument. In 5700 there will also be more clarity on the final project as some students appear to need more direction on how to conceptualize a problem in a way that evidence can be effectively leveraged to address it.

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

We take a holistic approach to assessment. The plan will be reviewed annually to ensure it continues to meet the program’s needs. If a given learning outcome indicated areas in need of focused assessment, especially as it relates to one or more courses within the program or a foundational competency, then the schedule may be altered as needed, but this alteration will be temporary rather than permanent. As SPS programs continually evolve to meet changing market needs, this assessment plan is to be considered dynamic and subject to change as the program evolves and new programs are offered.

IMPORTANT: Please submit any assessment tools and/or revised/updated assessment plans along with this report.