

Student Outcomes Assessment and Success Report AY2021-22

Consult with your college dean's office regarding due date and how to submit. Deans will submit reports to the Office of Assessment & Accreditation annually by October 15.

Unit/Program Name: Mathematics Teaching

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Part 1a: Summary of Student Learning Outcomes Assessment

<p>a. What learning outcomes did you assess this past year?</p> <p>If this is a graduate program, identify the Graduate Student Learning Outcome each outcome aligns with.</p>	<p>b. (1) What assignments or activities did you use to determine how well your students attained the outcome? (2) In what course or other required experience did the assessment occur?</p>	<p>c. What were your expectations for student performance?</p>	<p>d. What were the actual data/results?</p>	<p>e. What changes or improvements were made or will be made in response to these assessment results or feedback from previous year's report? Can expand on this in Part 2.</p>
<p>1. Identify and use students' individual and group differences when planning rigorous and engaging mathematics instruction that supports students' meaningful participation and learning.</p>	<p>1) Unit Plan assignment 2) Math 388 (Spring 2022)</p>	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
<p>2. Identify and use students' mathematical strengths to plan rigorous and engaging mathematics instruction that supports students' meaningful participation and learning.</p>	<p>1) Unit Plan assignment 2) Math 388 (Spring 2022)</p>	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
<p>3. Understand that teachers' interactions impact individual students by influencing and reinforcing students' mathematical identities, positive or negative, and plan experiences and instruction to develop and foster positive mathematical identities.</p>	<p>1) Unit Plan assignment 2) Math 388 (Spring 2022)</p>	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
<p>4. Establish rigorous mathematics learning goals for students based on mathematics standards and practices.</p>	<p>1) Unit Plan assignment 2) Math 388 (Spring 2022)</p>	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
<p>5. Select or develop and implement high cognitive</p>	<p>1) Unit Plan assignment 2) Math 388 (Spring 2022)</p>	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet

demand tasks to engage students in mathematical learning experiences that promote reasoning and sense making.		(developing candidate) or higher.		the new NCTM CAPE standards.
6. Select mathematics-specific tools, including technology, to support students' learning, understanding, and application of mathematics and to integrate tools into instruction.	1) Unit Plan assignment 2) Math 388 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
7. Select and use mathematical representations to engage students in examining understandings of mathematics concepts and the connections to other representations.	1) Unit Plan assignment 2) Math 388 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
8. Use multiple student responses, potential challenges, and misconceptions, and they highlight students' thinking as a central aspect of mathematics teaching and learning.	1) Unit Plan assignment 2) Math 388 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
9. Use conceptual understanding to build procedural fluency for students through instruction that includes explicit connections between concepts and procedures.	1) Unit Plan assignment 2) Math 388 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
10. pose purposeful questions to facilitate discourse among students that ensures that each student learns rigorous mathematics and builds a shared understanding of mathematical ideas.	1) Unit Plan assignment 2) Math 388 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.

11. Accurately identifies and applies content and process standards for high school mathematics.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
12. Clearly relates high school mathematics curriculum standards to student learning.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
13. Uses high-level cognitive demand tasks for rich mathematical learning experiences.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
14. Incorporates a variety of strategies and differentiated instruction.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
15. Provides students with opportunities to communicate about mathematics.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
16. Guides meaningful mathematical discussions.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
17. Accurately identifies key mathematical ideas related to high school mathematics.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
18. Demonstrates the ability to identify and address students' misconceptions.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
19. Uses a range of questioning strategies.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
20. Uses appropriate formative assessment to inform instruction.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet

		(developing candidate) or higher.		the new NCTM CAPE standards.
21. Uses appropriate summative assessments to inform instruction.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
22. Includes a reflection on appropriate mathematical proficiencies essential for all students	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
23. Exhibits knowledge of adolescent learning, development, and behavior.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 12 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
24. Demonstrates a positive disposition toward mathematical processes and learning.	1) Lesson Plan assignment 2) Math 391 (Fall 2021)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We are revising our developed rubrics to meet the new NCTM CAPE standards.
25. Accurately uses algebraic language to describe the meaning of functions and equations in mathematics.	1) Content Knowledge for Teaching Secondary School Mathematics assessment 2) Math 402 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We have created and implemented one new course, "Math 408: High School Mathematics from an Advanced Perspective" aimed at deepening and strengthening our students' content knowledge in the domains of Algebra, Calculus, Geometry, and Trigonometry.
26. Accurately uses algebraic notation and symbols to solve equations and inequalities.	1) Content Knowledge for Teaching Secondary School Mathematics assessment 2) Math 402 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We have created and implemented one new course, "Math 408: High School Mathematics from an Advanced Perspective" aimed at deepening and strengthening our students' content knowledge in the domains of Algebra, Calculus, Geometry, and Trigonometry.
27. Accurately simplifies and manipulates rational expressions.	1) Content Knowledge for Teaching Secondary School Mathematics assessment	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 	<ul style="list-style-type: none"> 100% of 5 students met this expectation. 	<ul style="list-style-type: none"> We have created and implemented one new course, "Math 408: High

	2) Math 402 (Spring 2022)	(developing candidate) or higher.		School Mathematics from an Advanced Perspective” aimed at deepening and strengthening our students’ content knowledge in the domains of Algebra, Calculus, Geometry, and Trigonometry.
28. Accurately uses properties of linear functions, inequalities, systems of linear equations.	1) Content Knowledge for Teaching Secondary School Mathematics assessment 2) Math 402 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 100% of 12 students met this expectation. 	<ul style="list-style-type: none"> We have created and implemented one new course, “Math 408: High School Mathematics from an Advanced Perspective” aimed at deepening and strengthening our students’ content knowledge in the domains of Algebra, Calculus, Geometry, and Trigonometry.
29. Accurately identifies behaviors of nonlinear functions and relationships between their various representations.	1) Content Knowledge for Teaching Secondary School Mathematics assessment 2) Math 402 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We have created and implemented one new course, “Math 408: High School Mathematics from an Advanced Perspective” aimed at deepening and strengthening our students’ content knowledge in the domains of Algebra, Calculus, Geometry, and Trigonometry.
30. Accurately uses properties of right triangles.	1) Content Knowledge for Teaching Secondary School Mathematics assessment 2) Math 402 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We have created and implemented one new course, “Math 408: High School Mathematics from an Advanced Perspective” aimed at deepening and strengthening our students’ content knowledge in the domains of Algebra, Calculus, Geometry, and Trigonometry.

31. Accurately uses properties of limits and continuity and identifies their relationships with graphs of functions.	1) Content Knowledge for Teaching Secondary School Mathematics assessment 2) Math 402 (Spring 2022)	<ul style="list-style-type: none"> We hoped that 80% or more would meet the level of 2 (developing candidate) or higher. 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We have created and implemented one new course, “Math 408: High School Mathematics from an Advanced Perspective” aimed at deepening and strengthening our students’ content knowledge in the domains of Algebra, Calculus, Geometry, and Trigonometry.
32. Successfully passes the licensure exam.	1) Indiana Math Licensure Exam 2) Spring 2022	<ul style="list-style-type: none"> We expect that at least 80% of our students should successfully pass the licensure exam. 	<ul style="list-style-type: none"> 80% of 5 students met this expectation. 	<ul style="list-style-type: none"> We have created and implemented one new course, “Math 408: High School Mathematics from an Advanced Perspective,” and have added a required statistics course, “Math 241: Principles of Statistics,” aimed at deepening and strengthening our students’ content knowledge in the domains of Algebra, Calculus, Geometry, Statistics, Trigonometry, and Numbers and Operations.

Note: If you would like to report on more than three outcomes, place the cursor in the last cell on the right and hit “tab” to add a new row.

Helpful Hints for Completing this Table

- Use your outcomes library as a reference. Note any alignment with professional standards, as applicable.
- Each outcome should be assessed by at least one direct measure (project, practica, exam, performance, etc.). If students are required to pass an examination to practice in the field, this exam should be included as one of the measures. At least one of the program’s outcomes must use an indirect measure (exit interview, focus group, survey, etc.). Use your curriculum map to correlate outcomes to courses. Describe or attach any evaluation tools such as rubrics, scales, etc.
- Identify the score or rating required to demonstrate proficiency (e.g., Students must attain a score of “3” to be deemed proficient; at least 80% of students in the program will attain this benchmark.)
- Note what the aggregate level of proficiency actually was and the number of students included in the cohort or sample (e.g., 85% of the 25 students whose portfolios were reviewed met the established benchmark).

[Part 1b: Review of Student Success Data & Activities](#)

Use [Blue Reports](#) to generate the following information (as well as any other information helpful to you):

- Cohort Sizes
- Year-to-Year Retention
- 5-Year Graduation Rate

1) Year-to-Year Cohort Size

	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022
Cohort Total (n)	13	10	13	9	7	4	6	6

2) Year-to-Year Retention Rate

	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022
Cohort Total (n)	13	10	13	9	7	4	6	6
Cohort Retention (%)	100	90	84.62	88.89	57.14	75	100	N/A

3) 5-Year Graduation Rate

	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Cohort Total (n)	12	6	15	13	10	13
Cohort Graduation (%)	41.67	66.67	46.67	84.62	80.00	69.23

What worked well in supporting student success this year?

According to the results shown in Part 1a, it is clear that all mathematics teaching majors enrolled in Math 388 during the spring 2021 semester, in Math 391 during the fall 2020 semester, and in Math 402 during the spring 2021 semester met our expectations in all of the learning outcomes. The learning outcomes from Math 388 depicted in Part 1a are aligned with the National Council of Teachers of Mathematics (NCTM) secondary grade program new standards for the Council of the Accreditation of Educator Preparation (CAEP), which can be found at

https://www.nctm.org/uploadedFiles/Standards_and_Positions/CAEP_Standards/NCTM%20CAEP%20Standards%202012%20-%20Secondary.pdf. Also, the learning outcomes from Math 391 and Math 402 shown in Part 1a are aligned with the 2012 CAEP standards (https://www.nctm.org/uploadedFiles/Standards_and_Positions/CAEP_Standards/NCTM%20CAEP%20Standards%202012%20-%20Secondary.pdf).

As the NCTM recently posted the new CAEP standards, mathematics education faculty members are currently revising the learning outcomes depicted in Part 1a, along with new rubrics to evaluate a unit plan collected from Math 388, lesson plans collected from Math 391, and mathematics assessments collected from Math 402.

Also, four of mathematics teaching majors presented origami activities with Dr. Winnie Ko at the 2021 *National* Council of Teachers of Mathematics and had a paper published by *Mathematics Teacher: Learning and Teaching Pre-K–12*. Also, they have submitted two manuscripts for peer-reviewed mathematics education journals under Dr. Ko's supervision. These were great experiences for mathematics teaching majors to go through the process of writing a conference proposal and a journal article, as well as preparing and giving a presentation for pre-service and in-service mathematics teachers and mathematics educators who attended the

2020 ICTM conference. Giving a talk at a math education conference was also a great opportunity for mathematics teaching majors to receive feedback from people attending to their session to develop their presentation skills.

What are the most significant opportunities for improvement upon which to focus in the coming year?

To keep mathematics teaching majors in the program and to help them make sense of analysis, we have developed and implemented a new course titled “Math 310: Elementary Analysis” in Fall 2019. We hope that this transition course can better support mathematics teaching majors’ learning and understanding of the concepts related to analysis. In addition, some of mathematics teaching majors have reported that they have difficulty understanding the concepts covered by “Math 412: Abstract Algebra” when first time seeing and learning related mathematical ideas. To help mathematics teaching majors develop a better understanding of abstract algebra and make connections between abstract algebra and middle school mathematics, we have included some abstract algebra concepts in the course titled “Math 308: Middle School Mathematics from an Advanced Perspective.” We hope this new change can help mathematics teaching majors see abstract algebra has been used in secondary school mathematics and have background knowledge prior to taking Math 412.

Currently, the majority of mathematics teaching majors are mathematics coaches for the math lab where is the place for undergraduate students who are taking Math 035, Math 102, Math 105, Math 115, Math 131, Math 132, and Math 241 to come for help. Being a mathematics coach is very beneficial to mathematics teaching majors because they have experience using multiple ways to solve a problem, seeing misconceptions undergraduate students have, asking different types of questions to promote undergraduate students’ thinking, and answering questions appropriately. In the coming year, we will continue to recruit mathematics teaching majors to be a mathematics coach for the math lab and provide timely support for them to develop better skills in using multiple ways to explain their mathematical reasoning, asking different types of questions to promote students’ understanding of mathematics, and supporting students to engage in productive struggle.

Part 1c: Summary of Career Readiness Activities

Please submit your Career Readiness Competencies curriculum map along with this report as a separate attachment. You can find the template here: <https://www.indstate.edu/assessment/plan-components>

Part 2: Continuous Quality Improvement

Reflect on the information shared above regarding student learning, success, and career readiness. In no more than one page, summarize:

- 1) the discoveries assessment and data review have enabled you to make about student learning, success, and career readiness (ex: What specifically do students know and do well—and less well? What evidence can you provide that learning is improving? How might learning, success, and career readiness overlap? What questions do your findings raise?)**
- 2) findings-based plans and actions intended to improve student learning and/or success (expansion of Part 1a, box e as needed)**
- 3) what your assessment plan will focus on in the coming year**
- 4) how this information will be shared with other stakeholders**

Each of the mathematics education academic advisors meets with her advisees regularly and sees if her advisees are doing ok as a semester progresses. This way really helps mathematics teaching majors to get appropriate support from their advisors, as well as to keep their academic performance and their retention and completion of the program. All mathematics teaching majors who successfully completed Math 131 and Math 132 are strongly encouraged to become a mathematics coach for the math lab to help undergraduate students enrolled in Math 035, Math 102, Math 105, Math 115, Math 131, Math 132, and Math 241. Being a mathematics coach provides a great opportunity for a mathematics teaching major not only to interact with undergraduate students and demonstrate and apply his/her content knowledge of mathematics, but also to learn how to become an effective mathematics teacher in the future. Also, most of our mathematics education courses are taught under student-centered instruction, which creates a learning environment for our mathematics teaching majors to develop their critical thinking skills by solving problems on their own, promote their communication skills by explaining mathematical ideas to small groups and the whole class, and

collaboratively work with peers in small groups, and help them recognize the value of different thought processes when sharing mathematical reasoning. In addition, mathematics teaching majors enrolled in Math 391 have opportunities to write a detailed lesson plan, to solve a mathematics problem using multiple ways, and to provide written feedback on secondary school students' mathematical work. These practices would be helpful for mathematics teaching majors to prepare their assigned lessons, anticipate secondary school students' questions/answers/thinking, and provide constructive comments to support secondary school students' learning of mathematics for their future teaching.

Regarding our assessment plan for the 2022-2023 academic year, we will continue to collect and analyze mathematics teaching majors' unit plans from Math 388, their lesson plans from Math 391, as well as their mathematics assessments, self-videotaped lessons, and self-teaching reflections from Math 402.. In order to evaluate our mathematics teaching majors' performance during their student teaching, we have created online survey questions for host teachers to provide their classroom observations and have developed teaching reflections for our students to reflect on their own teaching. These survey responses and individuals' teaching reflections would help us see if our mathematics teaching majors are prepared with sufficient content knowledge and pedagogical knowledge for teaching mathematics at the secondary school level. Currently we are revising our developed learning outcomes and rubrics that will be aligned with the new NCTM CAPE and the Indiana standards. At mathematics education curriculum meetings, we will share and refine our online survey and teaching reflection questions, new learning outcomes, and new rubrics. We will also discuss what other types of assessment data we would like to collect from our mathematics education courses. In addition, results of all the assessments that we collect and analyze for our program annual assessment report will be shared with the mathematics education program faculty members at meetings.

Please prepare this report as a Word document. Do not include any attachments. Instead, provide links to important supporting materials (e.g., detailed—but not student-specific—assessment results; rubrics; minutes; etc.), or upload them to the college’s assessment site in Blackboard.

Student Outcomes Assessment & Success Report Evaluation AY 21-22

Program: BS Mathematics Teaching Evaluation: Mature

The purpose of SOAS Report evaluation is to promote high quality academic program assessment that results in relevant, useful, and accurate data about student learning outcome achievement that faculty can use in planning for and monitoring efforts toward continuous improvement. Faculty are encouraged to incorporate feedback they find useful into assessment practices, and resources are available to support assessment development.

Evaluation Key: Exemplary=Meets all standards, exceeds some; Mature=Meets all/most standards, no serious concerns; Developing=Meets some standards, multiple recommendations for improvement; Undeveloped=Meets few/no standards, serious concerns noted; Cannot Evaluate=Missing information prevents evaluation

Component of Practice	Areas of Exemplary Practice	Standards of Practice Highlighted practices were clear in the SOASR	Recommendations for Improvement (serious concerns highlighted)	Evaluation Relative to Standards
Learning Outcomes Strong learning outcomes use language that focuses on what students will achieve and can be measured to demonstrate achievement.		At least one outcome is assessed this cycle Outcome(s) is specific as to what students will be able to know/do as a result of their learning Outcome(s) is measurable Outcome(s) is consistent across modes of delivery (if applicable)		Mature
Assessment Strategies Strong assessment strategies are designed to produce data of high enough quality to be useful to faculty trying to understand student learning outcome achievement, uncover potential issues, and determine next steps to support continuous improvement. They do not rise to the rigor of research methods, though they may draw on some related tenants and strategies.	Multiple comprehensive, rich, relevant assignments were used as assessment measures, with rubrics deployed to evaluate LOs independently.	Assessment measure(s) is designed for precise alignment to designated outcome(s) Overall assessment strategy relies primarily on direct assessment measure(s) Indirect assessment measure(s) is included to provide supplemental perspectives Assessment data comes from multiple sources, either within a significant course or across the curriculum Assessment measures include rich and/or relevant displays of student learning (i.e. experiential learning, intensive writing, problem-based learning, licensure exams, etc.) Tools for evaluating student achievement are clearly described when necessary (i.e. rubrics, exam alignment key, preceptor evaluation, etc.)		Exemplary

<p>Results & Analysis Clear depiction of results and strong analysis pairs with strong assessment strategies to allow faculty to determine appropriate interpretation of data and use of findings. Use of student achievement data rather than anecdotes, comparison to thresholds of proficiency, and thoughtful use of disaggregation to uncover potential group differences that might exist are all good practices.</p>		<p>The threshold for proficiency for each outcome is clearly stated relative to the measure/evaluation tool used</p> <p>The threshold for proficiency reflects reasonably high expectations for the program</p> <p>Actual student performance data on assessment measures is shared relative to the stated threshold for proficiency and (when applicable) the evaluation tool used</p> <p>Thoughtful discussion of faculty insights gained from findings is included</p> <p>When appropriate, student performance data is disaggregated by group, without identifying any specific student (ex: on-campus & distance cohorts in a program offering both forms of delivery)</p> <p>When applicable, missing data or significant limitations to how data may be interpreted or applied are described</p>	<p>Does the licensure exam provide any feedback that can be accessed by the faculty to understand areas for improvement? I know some do not, or the student would have to provide this to the faculty.</p>	<p>Mature</p>
<p>Continuous Improvement Assessment is about sharing and use of results to celebrate strong performance and improve in intentional ways. Assessment for continuous improvement includes engaging multiple faculty in assessment, comparing prior results to current results to examine our interventions, using findings to plan for the future, and sharing what we have learned.</p>	<p>Excellent discussion of additional assessment strategies to strengthen feedback loop to student teachers from host teachers.</p>	<p>Multiple program faculty are involved in the assessment process</p> <p>Plans for maintaining strong performance and/or improving student learning are clearly driven by assessment findings</p> <p>Plans for maintaining strong performance and/or improving student learning are within reasonable purview of program faculty</p> <p>If data from prior assessments is provided, reflection on changes over time and the possible impact any prior interventions is discussed</p> <p>A commitment to ongoing assessment is demonstrated in clear plans for upcoming assessment</p> <p>Assessment findings are shared with program faculty and any applicable stakeholders</p>		<p>Mature</p>

Contact Kelley Woods-Johnson at kelley.woods-johnson@indstate.edu or x7975 with questions or for support.