# Assessment Report

**PART 1: CONTACT & PROGRAM IDENTIFICATION**

| **Report Year and Contact Information:** | | |
|---|---|---|
| 2019-2020 | Andrew Tibble | atibble@cnm.edu |
| **Academic Year** | **Contact Person** | **Email** |

| **Name of Program:** | **Courses:** |
|---|---|
| Developmental/Intro Course: MATH | MATH 0980 |

**PART 2: PROGRAM SUMMARY**

**Provide a high-level review of the program to include highlights, successes, challenges, significant changes, and significant resources needed to support the program.**

The SAGE Developmental MATH program is charged with providing preparatory math courses for incoming CNM students. In AY2019-20 SAGE MATH faculty worked closely with the MSE MATH program to improve pathways for students between developmental and credit bearing math courses. A major result of that collaboration has been a simplifying of student learning outcomes in both MATH0970 and MATH0980. In both courses the number of SLO's is significantly reduced which will allow faculty to reinforce essential concepts.

MATH0980 is meeting targets for retention and success. MATH0970 is very close to the overall targets set by CNM but still slightly underperforming for success rate. MATH0970 is the entry point for CNM's most underprepared students. The shift to a distance learning environment makes it challenging to provide individual attention to students and programs like FACEA (a collaboration between math faculty and ACE tutoring) have been shut down due to the COVID-19 campus closures. The SAGE Math faculty continue to work on improving outcomes for this group.

Success rates in SAGE MATH online courses have equaled or exceeded traditional face-to-face courses in the past few years and SAGE Faculty were well prepared for the shift to online learning in Spring 2020. Faculty continue to collaborate and work from consensus shells for all SAGE MATH courses. Faculty are currently engaged in a textbook review/adoption process and hope to continue to improve the materials and resources offered to SAGE students.

**Part 3: DATA REVIEW**

| Program Data<br><br>(Each Review Year is defined as Summer, Fall, and Spring terms) | Review Year<br><br>19-20 | Review Year<br><br>18-19 | Review Year<br><br>17-18 |
|---|---|---|---|
| Annual number of graduate awards is greater than 10 | . | . | . |
| Number of declared majors | . | . | . |
| Average class size | 21 | 21 | 21 |
| Annual Average class retention rate is 70% or above (SAGE 65%) | 82% | 87% | 86% |
| Annual C-Pass rate for coursework is 60% or above | 63% | 67% | 64% |
| Average class fill rate at 60% or above capacity within a term or over a year | 81% | 80% | 83% |
| Transfer numbers/percent | NA | NA | NA |
| Full-time to part-time faculty ratio | 59: 32 | 69: 30 | 66: 16 |

| Summarize how your program met or did not meet the target measures based on the data above. |
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| MATH0980 is meeting all the targets set for the course. Retention and C-Pass rate from AY18-19 to AY19-20 are stable. For AY19-20 SAGE Math faculty employed the same curricular materials and approach.<br>MATH0970 is meeting two of the three targets set for the course. Retention rates continue to be strong at 83%. Class fills rates have declined slightly to 80% but are still well above the 60% target. C-Pass rates rose slightly to 58% in AY19-20 from 56% in AY18-19 but are still short of the 60% target. For AY19-20 SAGE Math faculty employed the same curricular materials and approach.<br>The COVID-19 shut down disrupted efforts to provide additional support through the FACEA (Faculty Academic Centers for Education Assistance) program for Spring and Summer 2020. This program had been engaging faculty to provide additional one-to-one student assistance. |

**Part 4: PROGRAM LEARNING OUTCOME ANALYSIS.**

| Learning Outcome | Population or Course(s) Assessed | Assessment Methods | Summary of Assessment Results |
|---|---|---|---|
| Add, Subtract, Multiply, and Divide Polynomial Functions | Math 0980 | Final Exam. | Data collected from course Final Measures using responses to Question 6 on Final Exam. Success rate for this question was 72% (meets/exceeds target) |

| Learning Outcome | Population or Course(s) Assessed | Assessment Methods | Summary of Assessment Results |
|---|---|---|---|
| Factor Polynomials | Math 0980 | Final Exam. | Data collected from course Final Measures using responses to Question 19 on Final Exam. Success rate for this question was 48% (below target). Note: this item was changed to the SLO for Quadratic Equations |
| Simplify and Evaluate Exponential Expressions | Math 0980 | Final Exam. | Data collected from course Final Measures using responses to Question 2 on Final Exam. Success rate for this question was 59% (slightly below target). |
| Simplify and Evaluate Radical Expressions | Math 0980 | Final Exam. | Not assessed. |
| Simplify Expressions in Scientific Notation | Math 0980 | Final Exam. | Data collected from course Final Measures using responses to Question 3 on Final Exam. Success rate for this question was 76% (meets/exceeds target) |

| Interpretation of Assessment findings |
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MATH0980 is meeting all the targets set for the course. Retention and C-Pass rate from AY18-19 to AY19-20 are stable. For AY19-20 SAGE Math faculty employed the same curricular materials and approach.

MATH0970 is meeting two of the three targets set for the course. Retention rates continue to be strong at 83%. Class fills rates have declined slightly to 80% but are still well above the 60% target. C-Pass rates rose slightly to 58% in AY19-20 from 56% in AY18-19 but are still short of the 60% target. For AY19-20 SAGE Math faculty employed the same curricular materials and approach.

The COVID-19 shut down disrupted efforts to provide additional support through the FACEA (Faculty Academic Centers for Education Assistance) program for Spring and Summer 2020. This program had been engaging faculty to provide additional one-to-one student assistance.

**Part 6: ADDITIONAL ACTION PLAN IN SUPPORT OF STUDENT LEARNING (IF APPROPRIATE)**

| Upcoming year | Changes planned for the upcoming year | Data motivating this change |
|---|---|---|
| 2020-2021 | Faculty are currently reviewing textbooks and considering a new adoption. Possible changes to curricular materials in Fall 2021 may influence how data is collected from that point forward. | SAGE textbook adoption cycle requires review of curricular materials every three years. Changes in MSE Math courses have been reflected in MATH0980 course content. |
| 2020-2021 | Changes to MATH0980 SLO's that took place in AY2019 will drive changes to the Final Measures data collection. Data will be collected on each of the 5 revised SLO's. More instructional time will be assigned to the Simplifying and Evaluating Exponential Expressions and Solving Quadratic Equations. | Final Measures data from AY2019-20 shows students are still not meeting targets for these SLO's on the Final Exam. |

| Upcoming year | Changes planned for the upcoming year | Data motivating this change |
|---|---|---|
| 2020-2021 | Changes to MATH0970 SLO's that took place in AY2019 will drive changes to the Final Measures data collection. Data will be collected on each of the 5 revised SLO's. In Math0970 faculty will spend more instructional time on Systems of Linear Equations. | Final Measures data from AY2019-20 shows students are still not meeting targets for these SLO's on the Final Exam. |

**Please Select all the following that characterize the types of changes described in the above action plan:**

| | | |
|---|---|---|
| ☐ Assessment criteria revision | ☑ Assessment methodology revision | ☐ Assignment revision |
| ☐ Budgetary reallocation | ☑ Change in teaching approach | ☐ Course content revision |
| ☐ Curricular Revision | ☐ Faculty training/development | ☐ Process revision |

**Part 6: COMMENTS**

| Use this section to record any comments, notes, or questions from individuals who reviewed this report. |
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| **School Dean:** |
| **SAAC Representative:** |