Graduate Degree Program Annual Assessment Report

2022-2023

Office of Institutional Research and Assessment

August 2023

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Executive Summary

This report represents the 2022-2023 assessment review of the Hood College Graduate Degree Programs, containing results relating to the Graduate School Outcomes (GSOs) and the individual programs. Graduate program assessment has been reviewed during annual summer workshops since at least 2019-2020. This report is the first formal graduate assessment report published by the Office of Institutional Research and Assessment (OIRA) in the past 5 years, although programs always have access to historic outcome results in the Chalk & Wire assessment platform. Graduate program assessment reports will be annually published by OIRA in future years.

This 2022-2023 report contains outcome achievement results from each of the past 3 years and also includes disaggregated data based on gender and race/ethnicity. Demographic data from the past 3 years is grouped together to increase the sample size. The disaggregated data has enabled the College to determine if a group has disproportionally higher or lower scores on a particular outcome.

The data management system of the College organizes students in gender and race/ethnicity groups that mirror the Integrated Postsecondary Education Data System (IPEDS) demographic categories. For gender, students are organized into a “male” or “female” category. Students are also organized into one of the following race/ethnicity categories: “American Indian or Alaska Native,” “Asian,” “Black or African American,” “Hispanic/Latino,” “Native Hawaiian or other Pacific Islander,” “White,” “Two or more races,” “Race/ethnicity unknown,” or “U.S. Nonresident.”

The Demographic Results tables use the College’s gender and race/ethnicity groups, which mirror the IPEDS categories, to analyze student outcome performance within each demographic group. Students are classified into “white” or “diversity” to measure student performance based on race/ethnicity. This “diversity” group structure follows the College’s definition of the group to include all race/ethnicity categories except “white” and “unknown.” Combining students of multiple race/ethnicity groups into the “diversity” category enhances the reliability of the data by increasing the sample size. Students in the “diversity” category included 35% of all graduate students in Fall 2021.

SLOs

All graduate programs areas have clearly defined student learning outcomes (SLOs), which are published on the College’s website. Some programs use SLOs from their accreditation or other professional organizations, including many Education programs. Other programs have developed SLOs that are unique to their program.

Participation

The College requires all programs to annually collect and review assessment data in order to improve student learning. There were 4/19 (21%) graduate programs that did not collect assessment data in 2022-2023. Of those 4 programs, 2 will be sunsetted/discontinued after 2022-2023, and the other 2 programs finalized plans to collect data in 2023-2024.

The Office of the Provost required all programs to finalize curriculum maps by July 1, 2023, and all programs complied with the requirement. Now that programs have developed curriculum maps, all programs will be required to collect assessment results during each semester moving forward.

Strengths

All graduate programs finalized curriculum maps in 2022-2023 while reviewing alignments of program SLOs to the various GSOs. The actions of graduate programs to improve their assessment processes will increase their ability to collect and review outcome achievement results in 2023-2024, ultimately allowing for programs to implement detailed initiatives to improve student learning. Overall, at least 93% of students achieved proficient or advanced on each GSO in 2022-2023.

General Recommendations

If programs agree with the validity and reliability of the results described in this report, then programs should first identify the successful strategies that allowed students to achieve their target performance. Likewise, new or revised strategies should be developed to address outcomes where students fell short. Programs should also discuss and strategize methods to reduce performance differences between demographic groups.

The GSO results revealed that the critical reasoning, diversity, and professionalism outcomes received fewer measurements than the other outcomes. The Graduate School asked programs to review their SLO to GSO alignments after the summer 2023 assessment workshop, aiming to balance the number of measurements between the outcomes. Programs should also ensure that all program SLOs are being assessed at relatively equal rates.

As mentioned in the Participation section above, 2 programs made plans to assess student learning in 2023-2024 after not collecting results in 2022-2023. A few other programs must also ensure that they collect more data in the upcoming year to address data reliability concerns attributed to small sample sizes and limited data collection in 2022-2023.

Programs received their 2022-2023 outcome results near the beginning of June 2023 in an Excel format. Results for sub-outcomes (i.e. 1.1, 1.2, 2.1, 2.2, etc.) were aggregated into their larger outcome (i.e. SLO 1, SLO 2) for some programs in this report, but the disaggregated sub-outcome results were also disseminated to programs in the Excel reports.

Overview

Data was collected from July 1, 2022 to May 31, 2023 and was compiled in June, July, and August of 2023. The report was disseminated in Fall 2023. This annual report provides a summary of key findings and contains the following:

- **Program SLOs** and their GSO alignment;
- **Assessment plans** based on degree program curriculum maps, which list the courses and assignments that measure student learning of the program SLOs;
- **Data summary** including the number of times an SLO was assessed (sum), mean score (average), and the percentage of student assessments identified as Novice (1), Emergent (2), Proficient (3), or Advanced (4). The summary also includes disaggregated data based on race/ethnicity and gender;
- **Strengths** faculty and/or OIRA identify after analyzing the data and reviewing the assessment process;
- **Actionable items** to address possible areas for improvement in student abilities and/or the assessment process, based on the data summary.

Course descriptions and program requirements can be found in the 2022-2023 Hood College Catalog.

Participation

Assessment data was collected in Chalk & Wire for 14/19 (74%) graduate degree programs in 2022-2023.

Program	2022-2023 Data Collection?	Notes
Bioinformatics (M.S.)	No	Assessment planned for Fall 2023
Biomedical Science (M.S.)	Yes	
Business Administration (MBA)	Yes	
Ceramic Arts (M.A.)	No	Sunset after 2022-2023
Ceramic Arts (MFA)	No	Sunset after 2022-2023
Computer Science (M.S.)	Yes	
Counseling (M.S.)	Yes	
Curriculum and Instruction (M.S.)	Yes	
Cybersecurity (M.S.)	Yes	
Education, Multidisciplinary Studies (M.S.)	Yes	
Educational Leadership (M.S.)	Yes	
Environmental Biology (M.S.)	No	Assessment planned for Fall 2023
Humanities (M.A.)	No	Assessment planned for Fall 2023
Information Technology (M.S.)	Yes	
Management Information Systems (M.S.)	Yes	
Math Education (M.S.)	Yes	
Mathematics Instructional Leadership (M.S.)	Yes	
Organizational Leadership (DOL/DBA)	Yes	
Reading Specialization (M.S.)	Yes	

Graduate School Outcomes (GSO) Assessment

GSO Descriptions

Many program SLOs are aligned to the various GSOs. The alignments can be found on program curriculum maps.

Upon graduation, students will be able to:		
Number	**Title**	**Description**
GSO 1	Communications	Graduate students will communicate clearly and effectively in oral, written, and/or visual formats, consistent with the standards of their discipline.
GSO 2	Research	Graduate students will identify and explore relevant questions and/or problems by accessing, evaluating, applying, and/or conducting research using discipline-specific strategies.
GSO 3	Critical Reasoning	Graduate students will approach content and tasks with a critical awareness, framed by knowledge and skills appropriate to their discipline.
GSO 4	Problem Solving	Graduate students will apply advanced disciplinary content knowledge and strategies to understand and address problems and questions relevant to their discipline and to which they have not previously been introduced.
GSO 5	Diversity	Graduate students will recognize and engage diverse ideas, perspectives, and/or traditions that inform their discipline, profession, and graduate experience.
GSO 6	Professionalism	Graduate students will engage in legal, ethical, and professional behaviors consistent with their discipline, including leadership, teamwork, and/or other responsibilities to key stakeholders.

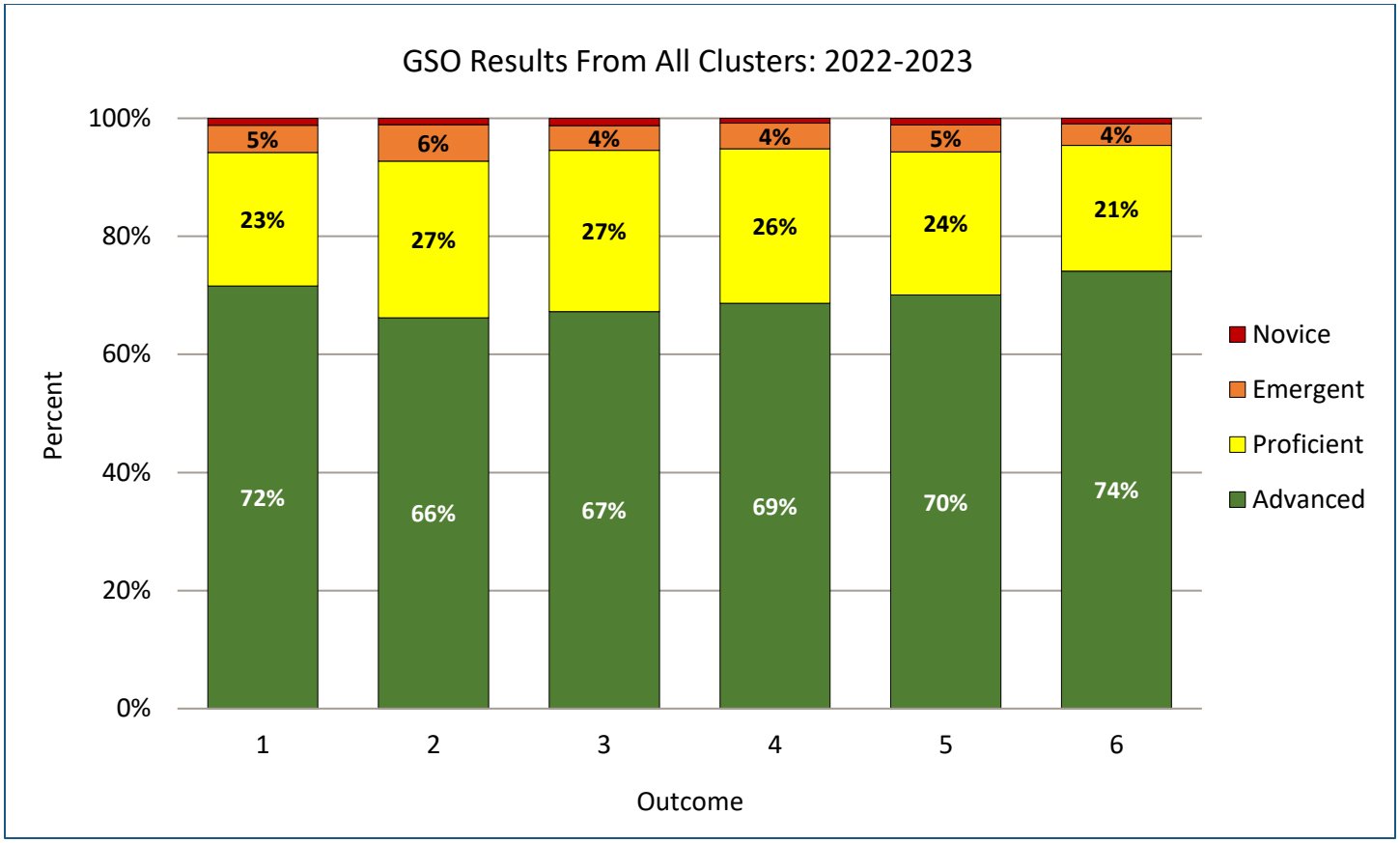
GSO Results

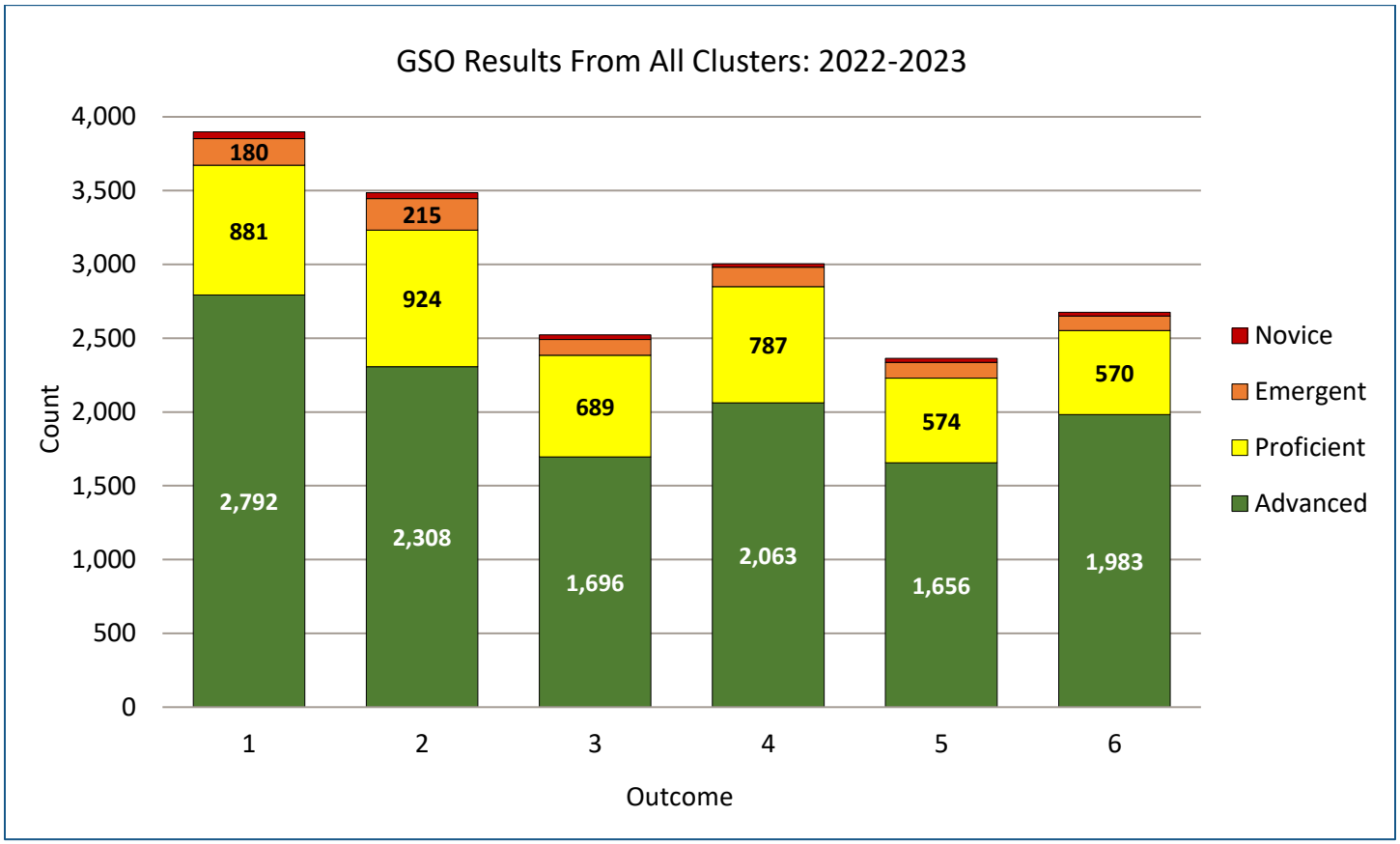
GSO Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
GSO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	3,899	3.65	46	180	881	2,792	1%	5%	23%	72%	94%
2	3,485	3.58	38	215	924	2,308	1%	6%	27%	66%	93%
3	2,522	3.61	31	106	689	1,696	1%	4%	27%	67%	95%
4	3,005	3.63	24	131	787	2,063	1%	4%	26%	69%	95%
5	2,364	3.63	27	107	574	1,656	1%	5%	24%	70%	94%
6	2,676	3.69	25	98	570	1,983	1%	4%	21%	74%	95%
Total	**17,951**	**3.63**	**191**	**837**	**4,425**	**12,498**	**1%**	**5%**	**25%**	**70%**	**94%**

GSO Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
GSO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	4,945	3.69	36	186	1,063	3,660	1%	4%	21%	74%	96%
2	3,735	3.57	51	239	971	2,474	1%	6%	26%	66%	92%
3	3,151	3.61	31	124	880	2,116	1%	4%	28%	67%	95%
4	3,566	3.64	33	140	888	2,505	1%	4%	25%	70%	95%
5	2,916	3.67	20	106	678	2,112	1%	4%	23%	72%	96%
6	2,914	3.69	15	133	596	2,170	1%	5%	20%	74%	95%
Total	**21,227**	**3.65**	**186**	**928**	**5,076**	**15,037**	**1%**	**4%**	**24%**	**71%**	**95%**

GSO Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
GSO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	4,448	3.66	34	138	1,153	3,123	1%	3%	26%	70%	96%
2	3,442	3.62	23	147	948	2,324	1%	4%	28%	68%	95%
3	2,777	3.64	14	116	726	1,921	1%	4%	26%	69%	95%
4	3,271	3.66	12	94	885	2,280	0%	3%	27%	70%	97%
5	2,529	3.66	9	97	638	1,785	0%	4%	25%	71%	96%
6	2,672	3.63	11	108	738	1,815	0%	4%	28%	68%	96%
Total	**19,139**	**3.64**	**103**	**700**	**5,088**	**13,248**	**1%**	**4%**	**27%**	**69%**	**96%**

GSO Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
GSO	All	Female	Male	Diversity	White	All	Female	Male	Diversity	White
1	13,292	2,803	1,064	1,700	2,079	95%	94%	94%	93%	95%
2	10,662	2,444	1,025	1,579	1,798	93%	92%	95%	89%	96%
3	8,450	1,706	803	1,084	1,360	95%	94%	96%	91%	98%
4	9,842	2,018	967	1,358	1,549	96%	94%	96%	91%	98%
5	7,809	1,593	759	1,112	1,186	95%	94%	95%	91%	97%
6	8,262	1,873	788	1,220	1,382	95%	95%	96%	93%	97%
Total	**58,317**	**12,437**	**5,406**	**8,053**	**9,354**	**95%**	**94%**	**95%**	**91%**	**97%**


GSO Results From All Clusters: 2022-2023
100%
80%
60%
40%
20%
0%
Percent
5%
6%
4%
4%
5%
4%
23%
27%
27%
26%
24%
21%
72%
66%
67%
69%
70%
74%
1
2
3
4
5
6
Outcome
Novice
Emergent
Proficient
Advanced


GSO Results From All Clusters: 2022-2023
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Count
180
881
215
924
689
787
574
570
2,792
2,308
1,696
2,063
1,656
1,983
1
2
3
4
5
6
Outcome
Novice
Emergent
Proficient
Advanced

Strengths

GSO 1 (Communications) and GSO 2 (Research) received the highest number of measurements. GSO 3 (Critical Reasoning), GSO 4 (Problem Solving), and GSO 6 (Professionalism) received the highest percentage of students that scored proficient or advanced (all 95%) in 2022-2023. GSO 6 also received the highest percentage of students that scored advanced (74%) in 2022-2023.

Validity & Reliability

Performance scores remained similar in 2022-2023 versus previous years, suggesting a strong data reliability. Departments reviewed the alignments of program SLOs to the various GSOs after the 2023 summer workshop. Prior to the workshop, many programs only aligned rubric lines from individual assignments to the GSOs. The realignments will increase the data reliability in 2023-2024 by creating a clear and consistent connection from program SLOs to the GSOs.

Actionable Items

Realigning SLO to GSO connections also aimed to balance the number of measurements between all GSOs. GSO 3 (Critical Reasoning), GSO 5 (Diversity), and GSO 6 (Professionalism) have historically received the lowest number of annual measurements. Following the summer 2023 realignment, programs will reassess whether they effectively balanced the number of GSO measurements.

The summer 2022 workshop aimed to improve performance on GSO 2 (Research), in particular. A higher percentage of students scored proficient or advanced on GSO 2 in 2022-2023 (93%) versus 2021-2022 (92%), but GSO 2 remained the lowest performing outcome. Discussions and actions to improve GSO 2 should continue in 2023-2024.

Men and women achieved proficient or advanced on all GSOs at similar rates in 2022-2023. However, a larger performance difference appeared between the race/ethnicity groups. White students performed 5 or 6 percentage points (proficient and advanced) better than students in the diversity group on most GSOs. Graduate programs should hold discussions and implement new strategies to improve performance of students in the diversity group in 2023-2024.

Graduate Degree Programs Assessment

Bioinformatics (M.S.)

SLOs

1. Biological Interpretation of Data
    - 1.1: Fundamentals of Molecular Biology and Genetics
    - 1.2: Advanced Molecular Biology, Genetics and Epigenetics
    - 1.3: Genomics and Metagenomics – Methods of Inquiry
    - 1.4: Proteomics
    - 1.5: Analysis of Biological Sequences and Comparative Genomics
    - 1.6: Molecular Structure Analysis and Modeling
    - 1.7: Biological Pathway Enrichment Analysis
    - 1.8: Gene Expression Analysis (Microarray and RNAseq)
    - 1.9: Scientific Method and Experimental Design
    - 1.10: Scientific Integrity/Responsible Conduct in Research and Scholarship
    - 1.11: Oral Communication of Experimental Procedures, Results, Discussion
    - 1.12: Written Communication of Experimental Procedures, Results, Discussion
    - 1.13: Leadership and Project Management Skills
    - 1.14: Interpret and Critique Published Scientific Literature

2. Data Analysis Methods
    2.1: Basic Biostatistics in R
    2.2: Applied Statistical Modeling (Advanced Biostatistics in R)
    2.3: Machine Learning
    2.4: Data Visualization
    2.5: Work remotely on a computational server – navigate and run jobs
    2.6: Use of publicly available databases and analysis tools
    2.7: Ability to plan and execute a project in a matrix environment
    2.8: Best practices for robust and reproducible research (FAIR principles)
3. Software Development Skills
    3.1: Programming in R
    3.2: Programming in Python
    3.3: Scripting in Unix/Linux
    3.4: Collaborative Software Development
    3.5: Algorithm Development and Testing
    3.6: Program installation/version control
4. Data Management
    4.1: Unix/Linux
    4.2: Data Management for Robust and Reproducible Research (FAIR principles)
    4.3: Ability to obtain and store data to/from data repositories

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Bioinformatics (M.S.) Curriculum Map.

Data Summary

Bioinformatics (M.S.) has not collected assessment data in the past 3 years.

Actionable Items

Bioinformatics (M.S.) will revise its SLOs into complete statements with action verbs, rather than the current SLOs that only reflect topical areas of within the discipline. Then, the program will ensure that student learning data is collected and reviewed in 2023-2024 by collaborating with instructors of courses listed in the curriculum map.

Biomedical Science (M.S.)

SLOs

1. Develop a comprehensive core knowledge of fundamental elements of biomedical science, and develop skills to access and use scientific information in the pursuit of answering a scientific question through:
    1.1: Recalling key concepts of protein biochemistry;
    1.2: Recalling key concepts of cell structure and function;
    1.3: Recalling key concepts of eukaryotic molecular biology;
    1.4: Recalling key concepts of bioinformatics;
    1.5: Identifying appropriate sources of scientific information;
    1.6: Compiling information obtained from scientific sources; and
    1.7: Developing an experimental design needed to answer a scientific question.
2. Prepare written documents that demonstrate scientific methodology and convention used to communicate complex scientific topics through:
    2.1: Synthesizing scientific ideas in written format;
    2.2: Utilizing proper convention for scientific writing;
    2.3: Describing experimental design in written format;
    2.4: Describing experimental results of a project in written format; and
    2.5: Explaining conclusions of a scientific project in written format.

3. Prepare oral presentations that demonstrate scientific understanding and methodology for communicating complex scientific topics through:
    3.1: Describing scientific ideas in oral format;
    3.2: Describing experimental design in oral format;
    3.3: Articulating results of a project in oral format;
    3.4: Articulating conclusions of a project in oral format; and
    3.5: Defending scientific ideas to a professional audience.
4. Analyze scientific data through:
    4.1: Analyzing data acquired in the lab or from a database; and
    4.2: Preparing visual diagrams depicting analyzed data.
5. Interpret scientific data through:
    5.1: Formulating conclusions from scientific results; and
    5.2: Proposing new ideas/hypotheses based on conclusions.
6. Perform and know the appropriate use of common experimental techniques in the lab through:
    6.1: Performing biomedical laboratory techniques; and
    6.2: Incorporating the use of specific laboratory techniques/equipment in an experimental design.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Biomedical Science (M.S.) Curriculum Map.

Data Summary

Biomedical Science (M.S.) Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
1	28	2.86	0	6	20	2	0%	21%	71%	7%	79%
2	3	2.67	0	1	2	0	0%	33%	67%	0%	67%
3	17	2.71	0	6	10	1	0%	35%	59%	6%	65%
4	27	2.81	0	7	18	2	0%	26%	67%	7%	74%
5	13	3.08	0	2	8	3	0%	15%	62%	23%	85%
6	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**88**	**2.84**	**0**	**22**	**58**	**8**	**0%**	**25%**	**66%**	**9%**	**75%**

Biomedical Science (M.S.) Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
1	78	2.95	1	18	43	16	1%	23%	55%	21%	76%
2	22	3.14	0	7	5	10	0%	32%	23%	45%	68%
3	28	3.21	0	5	12	11	0%	18%	43%	39%	82%
4	46	2.89	2	10	25	9	4%	22%	54%	20%	74%
5	36	2.75	2	9	21	4	6%	25%	58%	11%	69%
6	6	3.67	0	0	2	4	0%	0%	33%	67%	100%
Total	**216**	**2.98**	**5**	**49**	**108**	**54**	**2%**	**23%**	**50%**	**25%**	**75%**

Biomedical Science (M.S.) Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	117	3.13	1	13	73	30	1%	11%	62%	26%	88%
2	21	3.14	0	4	10	7	0%	19%	48%	33%	81%
3	21	3.10	0	5	9	7	0%	24%	43%	33%	76%
4	40	2.98	0	11	19	10	0%	28%	48%	25%	73%
5	47	2.91	0	11	29	7	0%	23%	62%	15%	77%
6	14	3.29	0	1	8	5	0%	7%	57%	36%	93%
Total	**260**	**3.07**	**1**	**45**	**148**	**66**	**0%**	**17%**	**57%**	**25%**	**82%**

Biomedical Science (M.S.) Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	All	Female	Male	Diversity	White	All	Female	Male	Diversity	White
1	223	158	65	134	86	83%	80%	88%	73%	97%
2	46	40	6	35	11	74%	73%	83%	74%	73%
3	66	54	12	43	22	76%	74%	83%	67%	91%
4	113	82	31	62	48	73%	72%	77%	56%	94%
5	96	67	29	57	37	75%	73%	79%	60%	97%
6	20	14	6	15	5	95%	93%	100%	93%	100%
Total	**905**	**672**	**233**	**558**	**332**	**77%**	**75%**	**83%**	**67%**	**94%**

Strengths

The highest percentage of students scored proficient or advanced on SLO 6 (95%) and SLO 1 (83%) in the past 3 years. SLO 1 received the highest number of measurements in the past 3 years.

Validity & Reliability

Biomedical Science (M.S.) only received 88 total measurements in 2022-2023, raising concerns about the sample size and data reliability. The program should ensure all courses listed in their curriculum map are assessed if running in 2023-2024 to increase the data reliability.

Actionable Items

The program should ensure more assessment results are collected in 2023-2024 before making significant data-informed changes. Despite the data reliability concerns, the program should discuss and develop strategies to improve performance the weaker performing demographic groups. Only 67% of students in the diversity group achieved proficient or advanced, compared to 94% of white students. Biomedical Science (M.S.) should develop and implement new strategies to increase performance of students in the diversity race/ethnicity group, in particular.

Business Administration (MBA)

SLOs

1. Will demonstrate knowledge of the functional areas of business through:
    1.1: Demonstrating knowledge of Marketing by performing a marketing strategy analysis;
    1.2: Showing knowledge of Financial Management by performing a financial analysis;
    1.3: Illustrating knowledge of Operations Management by performing an operational strategy analysis;
    1.4: Showing knowledge of Financial and Managerial Accounting by performing an analysis of accounting statements; and
    1.5: Showing knowledge of the Management of Information Systems & Technology by performing an information strategy analysis.
2. Will be able to use quantitative tools and techniques in the preparation, analysis, and presentation of data and information for problem-solving and decision-making through:
    2.1: Demonstrating the ability to perform financial analysis using appropriate spreadsheet software; and
    2.2: Demonstrating the ability to gather, analyze and present economic data for decision-making.
3. Will be able to identify how the global environment presets opportunities and challenges for organizations and draft appropriate strategies to respond to them through:
    3.1: Identifying and analyzing opportunities and challenges in the global environment; and
    3.2: Drafting appropriate organizational response strategies to the global opportunities and challenges.
4. Will demonstrate effective leadership and team membership skills through:
    4.1: Critically evaluating their leadership skills;
    4.2: Illustrating the ability to effectively communicate relevant business information to organizational stakeholders in writing;
    4.3: Showing competence in effective oral and visual presentation of data and information; and
    4.4: Demonstrating effective teamwork skills.
5. Will be able to make decisions based on ethical considerations and the triple bottom-line paradigm of business sustainability through:
    5.1: Applying an ethical framework to a decision-situation and recommend the best course of action; and
    5.2: Critically evaluating the strategy of an organization with respect to its subscription to economic, social and environmental sustainability and recommend suggestions for improvement.
6. Will have a comprehensive capstone experience where they will create a strategic plan for an organization based on external and internal situation audits through:
    6.1: Conducting external and internal situation audits for an organization; and
    6.2: Creating a strategic plan for an organization.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Business Administration (MBA) Curriculum Map.

Data Summary

Business Administration (MBA) Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
1	1,304	3.45	8	77	537	682	1%	6%	41%	52%	93%
2	217	3.54	4	3	81	129	2%	1%	37%	59%	97%
3	616	3.44	2	38	264	312	0%	6%	43%	51%	94%
4	581	3.54	3	24	210	344	1%	4%	36%	59%	95%
5	119	3.60	0	4	40	75	0%	3%	34%	63%	97%
6	826	3.48	2	44	336	444	0%	5%	41%	54%	94%
Total	**3,663**	**3.48**	**19**	**190**	**1,468**	**1,986**	**1%**	**5%**	**40%**	**54%**	**94%**

Business Administration (MBA) Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	1,232	3.60	14	25	402	791	1%	2%	33%	64%	97%
2	232	3.56	6	19	46	161	3%	8%	20%	69%	89%
3	604	3.58	6	14	210	374	1%	2%	35%	62%	97%
4	685	3.66	3	17	192	473	0%	2%	28%	69%	97%
5	130	3.66	1	3	35	91	1%	2%	27%	70%	97%
6	770	3.61	6	14	256	494	1%	2%	33%	64%	97%
Total	**3,653**	**3.61**	**36**	**92**	**1,141**	**2,384**	**1%**	**3%**	**31%**	**65%**	**96%**

Business Administration (MBA) Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	1,901	3.58	12	88	594	1,207	1%	5%	31%	63%	95%
2	227	3.78	0	3	45	179	0%	1%	20%	79%	99%
3	792	3.55	6	40	262	484	1%	5%	33%	61%	94%
4	493	3.55	5	22	161	305	1%	4%	33%	62%	95%
5	115	3.55	2	4	38	71	2%	3%	33%	62%	95%
6	986	3.55	10	44	322	610	1%	4%	33%	62%	95%
Total	**4,514**	**3.57**	**35**	**201**	**1,422**	**2,856**	**1%**	**4%**	**32%**	**63%**	**95%**

Business Administration (MBA) Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	All	Female	Male	Diversity	White	All	Female	Male	Diversity	White
1	4,437	2,039	2,329	1,643	2,665	95%	96%	94%	93%	97%
2	676	309	358	328	330	95%	95%	95%	90%	99%
3	2,012	908	1,072	700	1,248	95%	96%	93%	93%	96%
4	1,759	802	938	715	1,006	96%	96%	95%	94%	97%
5	364	168	191	137	217	96%	96%	96%	96%	96%
6	2,582	1,172	1,372	902	1,604	95%	96%	94%	94%	96%
Total	**11,830**	**5,398**	**6,260**	**4,425**	**7,070**	**95%**	**96%**	**94%**	**93%**	**97%**

Strengths

The MBA program continued their strong data collection rates in 2022-2023, receiving the most measurements for SLO 1. The highest percentage of students scored proficient or advanced on SLO 2 and SLO 5 (both 97%) in 2022-2023. The program also had relatively small performance differences between demographic groups.

Validity & Reliability

The MBA program has carefully planned each course, assignment, and rubric that assesses student performance on the various SLOs. A few rubrics do include numerous criteria, unintentionally weighting those assignments more than assignments with few criteria.

Actionable Items

SLO 1 received the fewest percentage of students that scored proficient or advanced (93%) in 2022-2023. This relatively low performance marked a decline from pervious years. The program should use the future 2023-2024 results to determine if the 2022-2023 SLO 1 performance was part of a trend.

Among all outcomes, students in the diversity category performed 4 percentage points (proficient or advanced) lower than white students. On SLO 2, however, students in the diversity category performed 9 percentage points (proficient or advanced) lower than white students. The MBA program should discuss and apply strategies for supporting the achievement of SLO 2 among students in the diversity category, in particular.

Ceramic Arts (M.A.)

SLOs

1. Gain a broad working knowledge of science and design concepts merged with technical skills, the history of ceramic art, and the universal concepts of the ceramic arts media to facilitate the creation of proficient ceramic works.
    1.1: SCIENCE - Build scientific knowledge to formulate ceramic elements merging the relationship of design, form, materials and personal aesthetics;
    1.2: TECHNICAL SKILLS - Devise processes to create work that illustrates technical competence in the ceramic arts medium; and
    1.3: HISTORY - Demonstrate awareness of the ceramic arts' historical, cultural, and contemporary movements from pre-history through modernity, the decorative arts and fine arts cannon.
2. Develop a skillful and personal aesthetic direction in the ceramic arts through:
    2.1: AESTHETIC EXPRESSION - Through the production of a capstone exhibition demonstrate the accomplishment of a personal ceramic arts statement;
    FIELD KNOWLEDGE - Build manual and technical skills to express ideas in ceramic materials;
    2.2: FIELD KNOWLEDGE - Create a series that explores different aesthetic directions to be considered; and
    2.3: FIELD KNOWLEDGE - Create a body of artwork presented in a capstone exhibition.
3. Foster creative thinking skills by honing the ability to observe, interpret, and evaluate expression in the ceramic arts through:
    3.1: OBSERVE - Evaluate the subtle nuances of influential elements on the artwork's communicated concepts;
    3.2: INTERPRET - Conduct a series explorations of the ceramic media; and
    3.3: SELF-EVALUATE - Perform a collection of self-evaluation assignments on personal bodies of art. Based on the core elements of the Ceramic Arts Graduate Program (history, science, design, artistry and innovation).
4. Become adept at communicating personal intentions visually, verbally, and in written format through:
    4.1: VISUAL ART WORK - Create a body of personal artwork;
    4.2: VERBAL - Lead a gallery talk, lecture, and oral presentation; and
    4.3: WRITTEN - Structure a research paper, publishable article, or essay.
5. Acquire the confidence to seek the challenge of higher learning environments, become skilled knowledgeable artists, intellectually sound risk takers, career oriented professionals, and empowered citizens meeting the challenges of today's society through:
    5.1: RISK TAKER - Devise processes to create art work that demonstrates originality; and
    5.2: CAREER ORIENTED - Master the business of producing, exhibiting, and marketing personal artwork. If applicable become a proficient educator on the subject matter.

Assessment Plan

Ceramic Arts (M.A.) does not have a curriculum map available (sunset after 2022-2023).

Data Summary

Ceramic Arts (M.A.) has not collected assessment data in the past 3 years.

Actionable Items

If the program returns to the College in the future, a curriculum map should be developed to collect assessment data.

Ceramic Arts (MFA)

SLOs

1. Gain an advanced working knowledge of science and design concepts merged with technical skills, the history of ceramic art, and the universal concepts of the ceramic arts media to facilitate the creation of distinctive ceramic works through:
    1.1: SCIENCE - Apply scientific knowledge to formulate ceramic elements merging the relationship of design, form, materials and personal aesthetics;
    1.2: TECHNICAL SKILLS - Devise and innovate processes to create work that illustrates technical competence in the ceramic arts medium; and
    1.3: HISTORY - Demonstrate awareness of the ceramic arts' historical, cultural, and contemporary movements from pre-history through modernity, the decorative arts and fine arts canon.
2. To create a significant body of work through the development of advanced skills and exploration of the creative processes to refine a personal aesthetic expression in the ceramic arts and contribute new MFA knowledge to the field through:
    2.1: AESTHETIC EXPRESSION - Through the production of two major exhibitions develop and produce an integrated and articulate personal ceramic arts statement;
    2.2: FIELD KNOWLEDGE - Learn the skills needed and the standards of academic writing to structure a thesis proposal;
    2.3: FIELD KNOWLEDGE - Conduct a thesis literature review to support thesis research; and
    2.4: FIELD KNOWLEDGE - Create a body of artwork demonstrative of thesis research through the production of a solo exhibition and written thesis documenting the research and development of the personal aesthetic statement within the context of the field.
3. Foster creative thinking skills by honing the ability to observe, interpret, articulate, challenge and evaluate expression in the ceramic arts through:
    3.1: OBSERVE - Develop the ability to evaluate the subtle nuances of influential design principles used to emphasize elements of the artwork's communicated concepts;
    3.2: INTERPRET - Explore a series of personal aesthetic directions for the thesis work. Conduct a series of peer-review evaluations; and
    3.3: SELF-EVALUATE - Perform a collection of self-evaluation assignments on personal bodies of art. Based on the core elements of the MFA program (history, science, design, artistry and innovation).
4. Become adept at communicating personal intentions visually, verbally, and in written format grounded in academic standards through:
    4.1: VISUAL ART WORK - Create a dynamic, refined body of personal artwork that demonstrates proficiency, scholarly research and clear artistic direction for a solo exhibition;
    4.2: VERBAL - Learn how to organize concepts to create engaging, fluent and meaningful oral presentations for different applications such as; classroom lecture, gallery presentation and public speaking venues to support the art; and
    4.3: WRITTEN - Develop proficiencies for academic writing formats from essay, research paper, thesis proposal, thesis, to article for publication.
5. Acquire the confidence to seek the challenge of higher learning environments, become skilled knowledgeable artists, intellectually sound risk takers, career oriented professionals, and empowered citizens meeting the challenges of today's society through:
    5.1: RISK TAKER - Originality and contributing new knowledge are core requirements of the Masters of Fine Arts degree. The criteria of the MFA degree challenge the candidate to embrace curiosity and imagination as necessary elements that fuel exploration. Risk taking is fostered in the advanced curriculum and in every course. Specific studio course objectives are intended to build technical and creative skills through experiential learning. The graduate becomes a confident professional risk taker and innovator; and
    5.2: CAREER ORIENTED - The Masters of Fine Arts in Ceramics Arts at Hood College prepares the graduate in a fully integrated way. The completion of thesis work and defense produces an articulate, educated, skilled risk taker who will continue to contribute to the field and the ceramics continuum.

Assessment Plan

Ceramic Arts (MFA) does not have a curriculum map available (sunset after 2022-2023).

Data Summary

Ceramic Arts (MFA) has not collected assessment data in the past 3 years.

Actionable Items

If the program returns to the College in the future, a curriculum map should be developed to collect assessment data.

Computer Science (M.S.)

SLOs

1. Select and apply appropriate programming and knowledge paradigms.
    - 1.a Applying algorithmic design paradigms and methods of analysis to solve computational problems
    - 1.b Differentiating between programming language paradigms and selecting a specific programming language to implement a solution
2. Possess in-depth knowledge of hardware/software/networks and systems integration.
    - 2.a Analyzing the trends and impact of modern computer architectures
    - 2.b Integrating concepts and techniques involving hardware, software and networking.
3. Demonstrate understanding of the fundamental nature of data.
    - 3.a Constructing and validating artificial intelligence systems.
4. Practice modular software design.
    - 4.a Applying design and development principles in the construction of software systems of varying complexity.
5. Demonstrate effective professional skills including teamwork, utilization of information resources, and communication with technical and nontechnical audiences.
    - 5.a Working effectively as part of a team.
    - 5.b Classifying and solving generally stated problems.
    - 5.c Identifying and using professional information resources.
    - 5.d Monitoring current trends and directions in the field.
    - 5.e Communicating effectively with technical and non-technical audiences.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Computer Science (M.S.) Curriculum Map.

Data Summary

Computer Science (M.S.) began collecting assessment data in Spring 2023. Demographic results are not included due to a low sample size.

Computer Science (M.S.) Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
1.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
1.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
3.a	24	3.00	6	1	4	13	25%	4%	17%	54%	71%
4.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
5.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
5.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
5.c	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
5.d	24	3.29	4	0	5	15	17%	0%	21%	63%	83%
5.e	24	3.42	3	0	5	16	13%	0%	21%	67%	88%
Total	**72**	**3.24**	**13**	**1**	**14**	**44**	**18%**	**1%**	**19%**	**61%**	**81%**

Strengths

In a limited sample size, the highest percentage of students achieved proficient or advanced on SLO 5.e (88%) in 2022-2023.

Validity & Reliability

Computer Science (M.S.) only received 72 total measurements in 2022-2023, raising concerns about the sample size and data reliability. The program should ensure all courses listed in their curriculum map are assessed if running in 2023-2024 to increase the data reliability.

Actionable Items

Computer Science (M.S.) developed a strong curriculum map and began implementing assessment processes in 2022-2023. The program should ensure more assessment results are collected in 2023-2024 before making significant data-informed changes.

Counseling (M.S.)

Key Performance Indicators (KPIs)

1. Demonstrate knowledge of professional counselor roles and responsibilities.
2. Apply knowledge of ethics in licensed and professional counseling practice.
3. Integrate multicultural competencies and intervention strategies for diverse individuals into the counseling process.
4. Articulate factors of human growth and development, functioning, and behavior.
5. Demonstrate use of career interventions and assessments.
6. Articulate knowledge of theories and models for counseling.
7. Apply evidence-based counseling interviewing and techniques.
8. Apply group leadership, planning, and facilitation strategies.
9. Demonstrate knowledge of counseling assessment and related statistical and psychometric concepts.
10. Assess risk, trauma, and abuse.
11. Articulate knowledge in Research Design, Program Evaluation, & and Statistical Methods.
12. Facilitate academic achievement and college and career readiness.
13. Articulate knowledge and skills in school-based collaboration and consultation.
14. Knowledge of school based program development.
15. Demonstrate expertise in school-based mental health & behavioral concerns.
16. Demonstrate efficacy in diagnosis, case conceptualization and treatment planning.
17. Clinical Mental Health Contexts, Management, & Documentation
18. Substance Use and Co-Occurring Disorders

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Counseling (M.S.) Curriculum Map.

Data Summary

Counseling (M.S.) KPI Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
KPI	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	305	3.80	0	1	59	245	0%	0%	19%	80%	100%
2	253	3.80	0	8	35	210	0%	3%	14%	83%	97%
3	314	3.48	3	42	71	198	1%	13%	23%	63%	86%
4	277	3.43	1	26	103	147	0%	9%	37%	53%	90%
5	169	3.67	3	9	28	129	2%	5%	17%	76%	93%
6	457	3.40	14	61	112	270	3%	13%	25%	59%	84%
7	684	3.49	1	51	242	390	0%	7%	35%	57%	92%
8	210	3.80	0	1	41	168	0%	0%	20%	80%	100%
9	401	3.58	1	11	144	245	0%	3%	36%	61%	97%
10	113	3.27	9	8	40	56	8%	7%	35%	50%	85%
11	379	3.64	0	11	113	255	0%	3%	30%	67%	97%
12	72	3.17	0	10	40	22	0%	14%	56%	31%	86%
13	99	3.85	0	0	15	84	0%	0%	15%	85%	100%
14	85	3.72	0	0	24	61	0%	0%	28%	72%	100%
15	64	3.34	0	11	20	33	0%	17%	31%	52%	83%
16	138	3.56	2	9	37	90	1%	7%	27%	65%	92%
17	28	4.00	0	0	0	28	0%	0%	0%	100%	100%
18	58	3.93	0	0	4	54	0%	0%	7%	93%	100%
Total	**4,106**	**3.57**	**34**	**259**	**1,128**	**2,685**	**1%**	**6%**	**27%**	**65%**	**93%**

Counseling (M.S.) KPI Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
KPI	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	291	3.85	0	4	37	250	0%	1%	13%	86%	99%
2	247	3.58	0	29	45	173	0%	12%	18%	70%	88%
3	392	3.38	5	68	93	226	1%	17%	24%	58%	81%
4	296	3.47	2	22	106	166	1%	7%	36%	56%	92%
5	50	3.70	0	1	13	36	0%	2%	26%	72%	98%
6	472	3.43	14	45	136	277	3%	10%	29%	59%	88%
7	690	3.57	6	52	172	460	1%	8%	25%	67%	92%
8	236	3.61	0	12	67	157	0%	5%	28%	67%	95%
9	350	3.60	2	10	113	225	1%	3%	32%	64%	97%
10	294	3.40	6	24	110	154	2%	8%	37%	52%	90%
11	397	3.53	0	19	150	228	0%	5%	38%	57%	95%
12	45	3.78	0	0	10	35	0%	0%	22%	78%	100%
13	105	3.68	0	0	34	71	0%	0%	32%	68%	100%
14	76	3.41	0	5	35	36	0%	7%	46%	47%	93%
15	94	3.48	1	0	46	47	1%	0%	49%	50%	99%
16	326	3.47	5	35	87	199	2%	11%	27%	61%	88%
17	60	3.90	0	3	0	57	0%	5%	0%	95%	95%
18	57	3.74	1	1	10	45	2%	2%	18%	79%	96%
Total	**4,478**	**3.54**	**42**	**330**	**1,264**	**2,842**	**1%**	**7%**	**28%**	**63%**	**92%**

Counseling (M.S.) KPI Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
KPI	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	230	3.76	0	1	53	176	0%	0%	23%	77%	100%
2	232	3.89	0	2	22	208	0%	1%	9%	90%	99%
3	356	3.47	7	34	100	215	2%	10%	28%	60%	88%
4	292	3.55	0	16	98	178	0%	5%	34%	61%	95%
5	160	3.43	9	9	47	95	6%	6%	29%	59%	89%
6	534	3.44	14	42	173	305	3%	8%	32%	57%	90%
7	650	3.47	6	29	271	344	1%	4%	42%	53%	95%
8	126	3.51	0	4	54	68	0%	3%	43%	54%	97%
9	326	3.43	7	34	97	188	2%	10%	30%	58%	87%
10	284	3.13	17	40	115	112	6%	14%	40%	39%	80%
11	335	3.69	2	25	48	260	1%	7%	14%	78%	92%
12	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
13	33	3.55	0	0	15	18	0%	0%	45%	55%	100%
14	21	3.24	0	2	12	7	0%	10%	57%	33%	90%
15	52	3.33	0	3	29	20	0%	6%	56%	38%	94%
16	337	3.53	2	18	116	201	1%	5%	34%	60%	94%
17	62	3.74	0	4	8	50	0%	6%	13%	81%	94%
18	47	3.32	0	5	22	20	0%	11%	47%	43%	89%
Total	**4,077**	**3.51**	**64**	**268**	**1,280**	**2,465**	**2%**	**7%**	**31%**	**60%**	**92%**

Counseling (M.S.) KPI Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
KPI	**All**	**Female**	**Male**	**Diversity**	**White**	**All**	**Female**	**Male**	**Diversity**	**White**
1	826	662	161	228	583	99%	99%	100%	100%	99%
2	732	589	138	223	494	95%	95%	91%	95%	95%
3	1,062	881	181	310	732	85%	85%	84%	84%	85%
4	865	696	165	202	647	92%	93%	91%	89%	93%
5	379	318	61	94	280	92%	93%	84%	85%	94%
6	1,463	1,193	267	406	1,032	87%	88%	82%	81%	89%
7	2,024	1,679	345	621	1,370	93%	93%	92%	91%	94%
8	572	469	103	171	391	97%	97%	97%	96%	97%
9	1,077	911	166	239	813	94%	94%	94%	89%	95%
10	691	576	115	146	529	85%	86%	82%	84%	85%
11	1,111	934	177	288	805	95%	95%	93%	92%	96%
12	117	99	18	27	90	91%	94%	78%	78%	96%
13	237	180	57	65	172	100%	100%	100%	100%	100%
14	182	144	38	49	133	96%	96%	97%	94%	97%
15	210	164	46	66	142	93%	95%	87%	88%	95%
16	801	673	128	151	632	91%	93%	83%	91%	91%
17	150	126	24	30	116	95%	95%	96%	93%	96%
18	162	138	24	27	131	96%	96%	92%	100%	95%
Total	**12,661**	**10,432**	**2,214**	**3,343**	**9,092**	**92%**	**93%**	**90%**	**90%**	**93%**

Strengths

Counseling (M.S.) addressed the need for improvement in the research outcomes by ensuring there is a research-related assignment in every appropriate class. In most cases, though the assignments draw on the students' research and writing skills, they are also applied to practice.

The program continued its strong number of measurements in 2022-2023, receiving the most measurements for KPI 7. All students scored proficient or advanced on the following outcomes in 2022-2023: KPIs 1, 8, 13, 14, 17, and 18. The program also had relatively small performance differences between demographic groups.

Validity & Reliability

The program uses a detailed curriculum map that specifies the course, assignment, and rubrics that align with the various outcomes. Counseling (M.S.) recently implemented a standard tool, the Counselor Competencies Scale, to measure professionalism outcomes. The program also adjusted GSO alignments after 2022-2023.

Actionable Items

Several outcomes received few measurements, including KPI 15, KPI 17, and KPI 18. The program should ensure all courses that align with those outcomes collect assessment data in 2023-2024, or the program should consider revising their curriculum map to increase the number of planned measurements.

Under 85% of students scored proficient or advanced on KPI 6 and KPI 15. The program should hold discussions and implement new strategies to improve performance on these outcomes. Likewise, Counseling (M.S.) should discuss new strategies to reduce the large performance differences between demographic groups on KPI 5, KPI 12, and KPI 15.

Curriculum and Instruction (M.S.)

SLOs

SLOs unique to the Curriculum and Instruction (M.S.) program at Hood College can be found here.

The following SLOs are the National Board for Professional Teaching Standards (NBPTS). The Curriculum and Instruction (M.S.) program uses the NBPTS to measure learning among students in the program.

1. Teachers are Committed to Students and Their Learning
2. Teachers Know the Subjects They Teach and How to Teach Those Subjects to Students
3. Teachers are Responsible for Managing and Monitoring Student Learning
4. Teachers Think Systematically About Their Practice and Learn from Experience
5. Teachers are Members of Learning Communities

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Curriculum and Instruction (M.S.) Curriculum Map.

Data Summary

The following results show achievement of the NBPTS among Curriculum and Instruction (M.S.) students.

Curriculum & Instruction (M.S.) NBPTS Results: 2022-2023

June 1, 2022-May 31, 2023			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
1	63	3.68	0	4	12	47	0%	6%	19%	75%	94%
2	22	3.95	0	0	1	21	0%	0%	5%	95%	100%
3	30	3.73	0	1	6	23	0%	3%	20%	77%	97%
4	40	4.00	0	0	0	40	0%	0%	0%	100%	100%
5	95	3.86	2	1	5	87	2%	1%	5%	92%	97%
Total	**250**	**3.83**	**2**	**6**	**24**	**218**	**1%**	**2%**	**10%**	**87%**	**97%**

Curriculum & Instruction (M.S.) NBPTS Results: 2021-2022

June 1, 2021-May 31, 2022			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
1	231	3.75	1	9	37	184	0%	4%	16%	80%	96%
2	82	3.90	2	0	2	78	2%	0%	2%	95%	98%
3	177	3.84	0	5	19	153	0%	3%	11%	86%	97%
4	108	3.88	1	2	6	99	1%	2%	6%	92%	97%
5	120	3.77	1	6	13	100	1%	5%	11%	83%	94%
Total	**718**	**3.81**	**5**	**22**	**77**	**614**	**1%**	**3%**	**11%**	**86%**	**96%**

Curriculum & Instruction (M.S.) NBPTS Results: 2020-2021

June 1, 2020-May 31, 2021			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
1	123	3.67	0	0	41	82	0%	0%	33%	67%	100%
2	32	3.81	0	0	6	26	0%	0%	19%	81%	100%
3	49	3.78	0	1	9	39	0%	2%	18%	80%	98%
4	63	3.62	1	1	19	42	2%	2%	30%	67%	97%
5	78	3.69	2	0	18	58	3%	0%	23%	74%	97%
Total	**345**	**3.69**	**3**	**2**	**93**	**247**	**1%**	**1%**	**27%**	**72%**	**99%**

Curriculum & Instruction (M.S.) NBPTS Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	**All**	**Female**	**Male**	**Diversity**	**White**	**All**	**Female**	**Male**	**Diversity**	**White**
1	417	341	76	61	356	97%	96%	99%	87%	98%
2	136	112	24	24	112	99%	98%	100%	92%	100%
3	256	213	43	47	209	97%	97%	98%	89%	99%
4	211	179	32	43	168	98%	98%	94%	93%	99%
5	293	242	51	46	247	96%	96%	94%	93%	96%
Total	**1,313**	**1,087**	**226**	**221**	**1,092**	**97%**	**97%**	**97%**	**90%**	**98%**

Strengths

All students scored proficient or advanced on SLO 2 and 4 in 2022-2023. SLO 5 received the highest number of measurements. An equal percentage (97%) of men and women achieved proficient or advanced on all outcomes in the past 3 years. The program reviewed their assessed courses, assignments, and SLO alignments to develop their curriculum map in 2022-2023.

Validity & Reliability

Some outcomes received few measurements in 2022-2023, raising concerns about the sample size and data reliability. The program should ensure all courses listed in their curriculum map are assessed if running in 2023-2024 to increase the data reliability.

Actionable Items

As previously mentioned, program should ensure all courses listed in their curriculum map are assessed if running in 2023-2024. Students in the diversity group achieved proficient or advanced at a lower rate (8 percentage points) than white students among all outcomes. The performance difference between race/ethnicity groups was greatest on SLO 1 and SLO 3. Curriculum and Instruction (M.S.) should develop and implement strategies to reduce the differences between the groups, especially on SLO 1 and SLO 3.

Cybersecurity (M.S.)

SLOs

1. Apply sound theoretical and applied cybersecurity skills, methods, and techniques for cyber defense.
2. Evaluate, develop, deploy and configure appropriate controls, countermeasures, tools, and techniques to address threats, attacks, vulnerabilities, and protect organizational assets and resources.
3. Identify, evaluate, and address ethical, legal, and social implications in cybersecurity while complying with applicable laws, regulations, and following best practices.
4. Communicate effectively technical, legal, and theoretical cybersecurity topics to technical and non-technical audiences.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Cybersecurity (M.S.) Curriculum Map.

Data Summary

(M.S.) Cybersecurity Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1.1	32	3.00	0	0	32	0	0%	0%	100%	0%	100%
1.2	18	2.94	0	6	7	5	0%	33%	39%	28%	67%
2.1	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
3.1	34	3.00	0	0	34	0	0%	0%	100%	0%	100%
3.2	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.1	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**84**	**2.99**	**0**	**6**	**73**	**5**	**0%**	**7%**	**87%**	**6%**	**93%**

(M.S.) Cybersecurity Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1.1	55	2.96	0	2	53	0	0%	4%	96%	0%	96%
1.2	15	2.87	0	5	7	3	0%	33%	47%	20%	67%
2.1	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
3.1	28	2.93	1	1	25	1	4%	4%	89%	4%	93%
3.2	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.1	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**98**	**2.94**	**1**	**8**	**85**	**4**	**1%**	**8%**	**87%**	**4%**	**91%**

(M.S.) Cybersecurity Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1.1	14	2.93	0	1	13	0	0%	7%	93%	0%	93%
1.2	15	3.13	0	3	7	5	0%	20%	47%	33%	80%
2.1	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
3.1	13	3.15	0	0	11	2	0%	0%	85%	15%	100%
3.2	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.1	12	3.25	1	1	4	6	8%	8%	33%	50%	83%
Total	**54**	**3.11**	**1**	**5**	**35**	**13**	**2%**	**9%**	**65%**	**24%**	**89%**

Cybersecurity (M.S.) Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	All	Female	Male	Diversity	White	All	Female	Male	Diversity	White
1.1	101	44	57	86	15	97%	98%	96%	97%	100%
1.2	48	18	30	36	11	71%	78%	67%	67%	82%
2.1	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
3.1	75	33	42	63	12	97%	94%	100%	97%	100%
3.2	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.1	12	7	5	11	1	83%	71%	100%	82%	100%
Total	**236**	**102**	**134**	**196**	**39**	**91%**	**91%**	**91%**	**90%**	**95%**

Strengths

In a limited sample size, all students achieved proficient or advanced on SLO 1.1 and SLO 3.1 in 2022-2023.

Validity & Reliability

Cybersecurity (M.S.) only received 84 total measurements in 2022-2023, raising concerns about the sample size and data reliability. The program should ensure all courses listed in their curriculum map are assessed if running in 2023-2024 to increase the data reliability.

Actionable Items

The program developed a strong curriculum map and began implementing assessment processes in 2022-2023. Cybersecurity (M.S.) should ensure more assessment results are collected in 2023-2024 before making significant data-informed changes.

Education, Multidisciplinary Studies (M.S.)

SLOs

The following SLOs are the Education Department Institutional Outcomes (IO), which were created in 2015. All Education Department programs align with the following outcomes. The Multidisciplinary Studies (M.S.) program uses the Education Department Institutional Outcomes to measure learning among students in the program.

1. Hood College prepares educators who demonstrate standards based content knowledge, pedagogical knowledge, and pedagogical content knowledge to ensure that all students can learn.
2. Hood College prepares educators who use their knowledge of diversity to create learning environments in which all students learn.
3. Hood College prepares educators who use a variety of assessment data to guide planning and instruction to improve learning for all students.
4. Hood College prepares educators who use technology to enhance learning.
5. Hood College prepares educators who communicate effectively with students, families, and colleagues in order to facilitate learning.
6. Hood College prepares educators who reflect on their practice and are committed to continued professional growth.
7. Hood College prepares educators who demonstrate ethics and integrity to promote respect for the profession.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Education, Multidisciplinary Studies (M.S.) Curriculum Map.

Data Summary

The following results show achievement of the Education Department Institutional Outcomes (IO) among Multidisciplinary Studies (M.S.) students.

Multidisciplinary Studies (M.S.) IO Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
1	9	4.00	0	0	0	9	0%	0%	0%	100%	100%
2	12	3.83	0	0	2	10	0%	0%	17%	83%	100%
3	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4	12	3.67	0	0	4	8	0%	0%	33%	67%	100%
5	21	3.90	0	0	2	19	0%	0%	10%	90%	100%
6	9	3.89	0	0	1	8	0%	0%	11%	89%	100%
7	3	4.00	0	0	0	3	0%	0%	0%	100%	100%
Total	**66**	**3.86**	**0**	**0**	**9**	**57**	**0%**	**0%**	**14%**	**86%**	**100%**

Multidisciplinary Studies (M.S.) IO Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	14	3.50	0	2	3	9	0%	14%	21%	64%	86%
2	34	3.35	0	1	20	13	0%	3%	59%	38%	97%
3	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
4	10	3.50	0	0	5	5	0%	0%	50%	50%	100%
5	26	3.50	0	1	11	14	0%	4%	42%	54%	96%
6	15	3.07	1	2	7	5	7%	13%	47%	33%	80%
7	31	3.35	0	2	16	13	0%	6%	52%	42%	94%
Total	**132**	**3.39**	**1**	**8**	**62**	**61**	**1%**	**6%**	**47%**	**46%**	**93%**

Multidisciplinary Studies (M.S.) IO Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	55	3.71	0	2	12	41	0%	4%	22%	75%	96%
2	35	3.57	0	4	7	24	0%	11%	20%	69%	89%
3	13	3.46	0	3	1	9	0%	23%	8%	69%	77%
4	9	3.78	0	0	2	7	0%	0%	22%	78%	100%
5	41	3.71	0	0	12	29	0%	0%	29%	71%	100%
6	20	3.55	1	1	4	14	5%	5%	20%	70%	90%
7	18	3.89	0	0	2	16	0%	0%	11%	89%	100%
Total	**191**	**3.67**	**1**	**10**	**40**	**140**	**1%**	**5%**	**21%**	**73%**	**94%**

Multidisciplinary Studies (M.S.) IO Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	All	Female	Male	Diversity	White	All	Female	Male	Diversity	White
1	78	76	2	16	62	95%	96%	50%	94%	95%
2	81	73	8	32	49	94%	93%	100%	97%	92%
3	15	15	0	2	13	80%	80%	n/a	100%	77%
4	31	28	3	10	21	100%	100%	100%	100%	100%
5	88	84	4	33	55	99%	99%	100%	97%	100%
6	44	41	3	17	27	89%	90%	67%	82%	93%
7	52	43	9	24	28	96%	98%	89%	96%	96%
Total	**389**	**360**	**29**	**134**	**255**	**95%**	**95%**	**90%**	**95%**	**95%**

Strengths

In a limited sample size, all students scored proficient or advanced on each SLO in 2022-2023. The program reviewed their assessed courses, assignments, and SLO alignments to develop their curriculum map in 2022-2023.

Validity & Reliability

Only 11 students were enrolled in the program in Fall 2021, reflecting the low number of assessment measurements in the past few years. Given the low enrollment of the program, Multidisciplinary Studies (M.S.) should ensure all courses listed in their curriculum map are assessed if running in 2023-2024 to increase the data reliability.

Actionable Items

The program should continue their current teaching and curricular strategies to retain the strong performances on all outcomes. The overall demographic results from the past 3 years indicated that men performed 5 percentage points (proficient or advanced) lower than women. The low male performance could be attributed to one underperforming student, rather than a widespread tread, because of the minimal number of men in the program. Still, Multidisciplinary Studies (M.S.) should monitor male performance in future years to identify if the lower performance represents a tread.

Educational Leadership (M.S.)

SLOs

SLOs unique to the Educational Leadership (M.S.) program at Hood College can be found here.

The Educational Leadership (M.S.) program uses the following Professional Standards for Educational Leaders (PSEL) to measure learning among students in the program.

1. Mission, Vision, and Core Values: Effective educational leaders develop, advocate, and enact a shared mission, vision, and core values of high-quality education and academic success and well-being of each student.
2. Ethics and Professional Norms: Effective educational leaders act ethically and according to professional norms to promote each student's academic success and well-being.
3. Equity and Cultural Responsiveness: Effective educational leaders strive for equity of educational opportunity and culturally responsive practices to promote each student's academic success and well-being.
4. Curriculum, Instruction, and Assessment: Effective educational leaders develop and support intellectually rigorous and coherent systems of curriculum, instruction, and assessment to promote each student's academic success and well-being.
5. Community of Care and Support for Students: Effective educational leaders cultivate an inclusive, caring, and supportive school community that promotes the academic success and well-being of each student.
6. Professional Capacity of School Personnel: Effective educational leaders develop the professional capacity and practice of school personnel to promote each student's academic success and well-being.
7. Professional Community for Teachers and Staff: Effective educational leaders foster a professional community of teachers and other professional staff to promote each student's academic success and well-being.
8. Meaningful Engagement of Families and Communities: Effective educational leaders engage families and the community in meaningful, reciprocal, and mutually beneficial ways to promote each student's academic success and well-being.
9. Operations and Management: Effective educational leaders manage school operations and resources to promote each student's academic success and well-being.
10. School Improvement: Effective educational leaders act as agents of continuous improvement to promote each student's academic success and well-being.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Educational Leadership (M.S.) Curriculum Map.

Data Summary

Educational Leadership (M.S.) PSEL Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	1,694	3.91	2	7	138	1,547	0%	0%	8%	91%	99%
2	1,242	3.95	3	7	36	1,196	0%	1%	3%	96%	99%
3	1,385	3.94	0	9	64	1,312	0%	1%	5%	95%	99%
4	879	3.87	5	11	78	785	1%	1%	9%	89%	98%
5	788	3.84	6	11	85	686	1%	1%	11%	87%	98%
6	63	3.98	0	0	1	62	0%	0%	2%	98%	100%
7	366	3.88	3	6	23	334	1%	2%	6%	91%	98%
8	2,644	3.84	6	33	343	2,262	0%	1%	13%	86%	99%
9	2,320	3.84	11	19	307	1,983	0%	1%	13%	85%	99%
10	992	3.88	0	10	102	880	0%	1%	10%	89%	99%
Total	**12,373**	**3.88**	**36**	**113**	**1,177**	**11,047**	**0%**	**1%**	**10%**	**89%**	**99%**

Educational Leadership (M.S.) PSEL Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	2,478	3.85	16	36	244	2,182	1%	1%	10%	88%	98%
2	2,023	3.91	7	29	100	1,887	0%	1%	5%	93%	98%
3	1,463	3.91	2	30	68	1,363	0%	2%	5%	93%	98%
4	1,079	3.83	13	14	116	936	1%	1%	11%	87%	97%
5	1,031	3.85	7	17	103	904	1%	2%	10%	88%	98%
6	61	3.95	0	0	3	58	0%	0%	5%	95%	100%
7	508	3.86	3	6	52	447	1%	1%	10%	88%	98%
8	3,679	3.85	14	33	445	3,187	0%	1%	12%	87%	99%
9	3,103	3.88	7	22	299	2,775	0%	1%	10%	89%	99%
10	1,385	3.87	12	6	136	1,231	1%	0%	10%	89%	99%
Total	**16,810**	**3.87**	**81**	**193**	**1,566**	**14,970**	**0%**	**1%**	**9%**	**89%**	**98%**

Educational Leadership (M.S.) PSEL Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	2,079	3.94	1	17	81	1,980	0%	1%	4%	95%	99%
2	1,552	3.93	2	25	48	1,477	0%	2%	3%	95%	98%
3	1,863	3.95	0	14	69	1,780	0%	1%	4%	96%	99%
4	1,156	3.89	0	7	115	1,034	0%	1%	10%	89%	99%
5	1,007	3.89	0	12	85	910	0%	1%	8%	90%	99%
6	75	3.99	0	0	1	74	0%	0%	1%	99%	100%
7	546	3.92	0	2	38	506	0%	0%	7%	93%	100%
8	3,517	3.87	0	30	392	3,095	0%	1%	11%	88%	99%
9	2,934	3.89	2	26	258	2,648	0%	1%	9%	90%	99%
10	1,215	3.88	9	13	97	1,096	1%	1%	8%	90%	98%
Total	**15,944**	**3.90**	**14**	**146**	**1,184**	**14,600**	**0%**	**1%**	**7%**	**92%**	**99%**

Educational Leadership (M.S.) PSEL Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	**All**	**Female**	**Male**	**Diversity**	**White**	**All**	**Female**	**Male**	**Diversity**	**White**
1	6,251	4,769	1,478	2,167	3,978	99%	99%	97%	99%	98%
2	4,447	3,403	1,036	1,593	2,770	99%	99%	97%	99%	98%
3	5,081	3,929	1,141	1,819	3,158	99%	99%	98%	99%	99%
4	3,114	2,387	725	1,074	1,970	98%	99%	97%	99%	98%
5	2,826	2,180	645	985	1,780	98%	98%	97%	98%	98%
6	199	160	39	81	111	100%	100%	100%	100%	100%
7	1,349	1,043	306	472	853	99%	99%	97%	99%	98%
8	9,911	7,557	2,342	3,348	6,415	99%	99%	99%	99%	99%
9	8,357	6,387	1,955	2,905	5,304	99%	99%	99%	99%	99%
10	3,592	2,752	838	1,247	2,286	99%	99%	98%	99%	98%
Total	**45,127**	**34,567**	**10,505**	**15,691**	**28,625**	**99%**	**99%**	**98%**	**99%**	**99%**

Strengths

At least 98% of students achieved proficient or advanced on all outcomes in 2022-2023, continuing a strong performance trend from previous years. Educational Leadership (M.S.) collected over 12,000 measurements in 2022-2023. The program also received minimal performance differences between demographic groups. The program reviewed their assessed courses, assignments, and SLO alignments to develop their curriculum map in 2022-2023.

Validity & Reliability

The program uses a detailed curriculum map that specifies the course, assignment, and rubrics that align with the various outcomes. The program also reviewed GSO alignments after 2022-2023. Performance scores remained similar in 2022-2023 versus previous years, suggesting a strong data reliability.

Actionable Items

The program should continue their current teaching and curricular strategies to retain the strong performances on all outcomes. Educational Leadership (M.S.) should also continue to review and revise their SLO alignments to the GSOs to ensure they measure the various outcomes at similar frequencies. Likewise, the program should increase the number of measurements for PSEL 6, which received far less measurements than other outcomes in 2022-2023.

Environmental Biology (M.S.)

SLOs

1. Problem solve and apply the scientific method to the field and literature of environmental biology through:
    1.1: Identifying gaps in available information surrounding an environmental issue;
    1.2: Designing an experiment or study to test a hypothesis or a solution to solve a problem;
    1.3: Evaluating rigor of experimental/ study design and identify potential biases in published work;
    1.4: Evaluating if data presented, or collected and analyzed, support a hypothesis and draw appropriate conclusions;
    1.5: Expressing relevant information in various mathematical forms (e.g. equations, graphs, diagrams) with appropriate units to perform calculations/ solve problems; and
    1.6: Identifying appropriate and critique others' approach(es) for solving a problem based on relevant context and background.

2. Collect, analyze, interpret, and display scientific data using appropriate, current methods and software through:
    2.1: Identifying and using appropriate statistical tests;
    2.2: Analyzing data collected in the lab, field, or from publicly available sources; and
    2.3: Preparing graphs, tables, and/or figures to display data/information.
3. Effectively communicate scientific information to diverse audiences through writing through:
    3.1: Describing background information to frame a hypothesis/scenario in writing;
    3.2: Describing methods by which a scientific experiment/study was or will be conducted in writing;
    3.3: Articulating results from own or others' project/experiment in writing;
    3.4: Articulating conclusions from own or others' project/experiment in writing;
    3.5: Synthesizing and organizing information from multiple sources in writing; and
    3.6: Using appropriate convention and citation style in scientific writing.
4. Effectively communicate scientific information to diverse audiences through oral presentation through:
    4.1: Describing background information to frame a hypothesis/ scenario in an oral presentation;
    4.2: Describing methods by which a scientific experiment/study was or will be conducted in an oral presentation;
    4.3: Articulating results from own or others' project/experiment in an oral presentation;
    4.4: Articulating conclusions from own or others' project/experiment in an oral presentation;
    4.5: Synthesizing and organizing information in an oral presentation;
    4.6: Articulating scientific information clearly and effectively to an audience; and
    4.7: Facilitating discussion of environmental issues.
5. Demonstrate a broad knowledge of environmental biology and ecology through:
    5.1: Explaining key concepts of ecology;
    5.2: Explaining key concepts of environmental science;
    5.3: Explaining how global climate change is impacting/is predicted to have impacts on populations, environments, and ecosystems;
    5.4: Explaining basic principles of natural resource management;
    5.5: Identifying appropriate primary and secondary sources of information; and
    5.6: Describing the contributions of key classic and contemporary scientists to the fields of ecology and environmental science.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Environmental Biology (M.S.) Curriculum Map.

Data Summary

Environmental Biology (M.S.) has not collected assessment data in the past 3 years.

Actionable Items

The program will ensure that student learning data is collected and reviewed in 2023-2024 by collaborating with instructors of courses listed in the curriculum map.

Humanities (M.A.)

SLOs

1. Synthesize in-depth information from relevant sources representing various points of view on a particular subject/field through:
    1.1: Identifying and critically engaging relevant scholarship on a topic, and
    1.2: Developing a clear research-based questions and thesis.
2. Develop research skills needed to construct and answer analytical questions through:
    2.1: Structuring an organized research design;
    2.2: Constructing an argument; and
    2.3: Supporting the conclusion with evidence.

3. Demonstrate writing skills through:
    3.1: Arranging an organized, final document specific to the audience and purpose of the research project;
    3.2: Applying grammatical and stylistic rigor; and
    3.3: Citing evidence appropriately using the acceptable style.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Humanities (M.A.) Curriculum Map.

Data Summary

Humanities (M.A.) has not collected assessment data in the past 3 years.

Actionable Items

The program will ensure that student learning data is collected and reviewed in 2023-2024 by collaborating with instructors of courses listed in the curriculum map.

Information Technology (M.S.)

SLOs

1. Demonstrate general knowledge of software/networking/information systems security through:
    1.1: Applying fundamental concepts and principles of networking; and
    1.2: Appraising network architecture and technology.
2. Apply software design and data management techniques through:
    2.1: Comparing and contrasting software and information systems;
    2.2: Breaking down a system's development, engineering methodology, design process, evaluation and operation feasibility; and
    2.3: Distinguish general information among databases.
3. Apply basic analytic tools and database for decision-making through:
    3.1: Applying select database tools for implementing database design; and
    3.2: Converting data into information for managerial decision-making.
4. Demonstrate effective professional skills including teamwork, utilization of information resources and communication with technical and nontechnical audience through:
    4.1: Working effectively as part of a team;
    4.2: Identifying and using professional information resources;
    4.3: Monitoring current trends and directions in data; and
    4.4: Communicating effectively with technical and non-technical audiences.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Information Technology (M.S.) Curriculum Map.

Data Summary

Information Technology (M.S.) Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1.a	18	3.22	2	1	6	9	11%	6%	33%	50%	83%
1.b	18	2.50	6	2	5	5	33%	11%	28%	28%	56%
2.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.c	54	2.83	0	15	33	6	0%	28%	61%	11%	72%
3.a	44	3.41	0	7	12	25	0%	16%	27%	57%	84%
3.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.a	278	3.86	0	4	32	242	0%	1%	12%	87%	99%
4.b	18	3.67	0	1	4	13	0%	6%	22%	72%	94%
4.c	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.d	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**430**	**3.59**	**8**	**30**	**92**	**300**	**2%**	**7%**	**21%**	**70%**	**91%**

Information Technology (M.S.) Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
1.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.c	36	3.17	1	6	15	14	3%	17%	42%	39%	81%
3.a	32	3.50	0	2	12	18	0%	6%	38%	56%	94%
3.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.a	180	3.96	0	2	4	174	0%	1%	2%	97%	99%
4.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.c	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.d	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**248**	**3.78**	**1**	**10**	**31**	**206**	**0%**	**4%**	**13%**	**83%**	**96%**

Information Technology (M.S.) Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
1.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.c	14	2.86	1	2	9	2	7%	14%	64%	14%	79%
3.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
3.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.c	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.d	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**14**	**2.86**	**1**	**2**	**9**	**2**	**7%**	**14%**	**64%**	**14%**	**79%**

Information Technology (M.S.) Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	All	Female	Male	Diversity	White	All	Female	Male	Diversity	White
1.a	18	6	12	16	2	83%	83%	83%	81%	100%
1.b	18	6	12	16	2	56%	33%	67%	56%	50%
2.a	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.b	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.c	104	47	56	81	21	76%	72%	79%	72%	90%
3.a	76	40	35	58	15	88%	85%	91%	84%	100%
3.b	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.a	458	222	230	362	86	99%	99%	98%	98%	100%
4.b	18	6	12	16	2	94%	100%	92%	94%	100%
4.c	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.d	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**692**	**327**	**357**	**549**	**128**	**92%**	**92%**	**93%**	**91%**	**98%**

Strengths

In a limited sample size, 99% of students scored proficient or advanced on SLO 4.a in 2022-2023. The program has measured SLO 4.a far more than other the outcomes.

Validity & Reliability

Information Technology (M.S.) received less than 20 measurements for most outcomes in 2022-2023, raising concerns about the sample size and data reliability. The program should ensure all courses listed in their curriculum map are assessed if running in 2023-2024 to increase the data reliability.

Actionable Items

Student were only measured 18 times for SLO 1.b in 2022-2023, but half of those measurements did not achieve proficient or advanced. The program should review performance on SLO 1.b, in particular, after more data is collected to determine whether the weak performance in 2022-2023 was part of a trend.

Management Information Systems (M.S.)

SLOs

1. Effectively apply technical skills in information systems to facilitate organizational decision making and general operations.
    1.1: Convert data into information for managerial decision-making using data mining software, and
    1.2: Apply select database tools for implementing database design.
2. Possess in-depth knowledge of the processes of organizations and management functions and the key role that information systems play.
    2.1: Apply leadership and organizational theory to design and solve practical level problems in modern organizations;
    2.2: Illustrate knowledge of operations management; and
    2.3: Assess the impact of emerging technologies on business.
3. Demonstrate proficiency in managing projects, technical teams, and information systems.
    3.1: Apply project management techniques to initiate, plan, execute, and monitor projects.
4. Demonstrate effective professional skills including teamwork, utilization of information resources, and communication with technical and nontechnical audiences.
    4.1: Work effectively as part of a team;
    4.2: Identify and use professional information resources; and
    4.3: Communicate effectively with technical and non-technical audiences.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Management Information Systems (M.S.) Curriculum Map.

Data Summary

Management Information Systems (M.S.) Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
1.a	12	3.33	0	0	8	4	0%	0%	67%	33%	100%
1.b	44	3.41	0	7	12	25	0%	16%	27%	57%	84%
2.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.c	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
3.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.a	278	3.86	0	4	32	242	0%	1%	12%	87%	99%
4.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.c	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**334**	**3.78**	**0**	**11**	**52**	**271**	**0%**	**3%**	**16%**	**81%**	**97%**

Management Information Systems (M.S.) Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1.a	10	2.90	2	2	1	5	20%	20%	10%	50%	60%
1.b	32	3.50	0	2	12	18	0%	6%	38%	56%	94%
2.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.c	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
3.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.a	180	3.96	0	2	4	174	0%	1%	2%	97%	99%
4.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.c	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**222**	**3.84**	**2**	**6**	**17**	**197**	**1%**	**3%**	**8%**	**89%**	**96%**

Management Information Systems (M.S.) Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
1.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.c	297	3.60	0	13	94	190	0%	4%	32%	64%	96%
3.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.a	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.b	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.c	0	n/a	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**297**	**3.60**	**0**	**13**	**94**	**190**	**0%**	**4%**	**32%**	**64%**	**96%**

Management Information Systems (M.S.) Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	All	Female	Male	Diversity	White	All	Female	Male	Diversity	White
1.a	22	8	14	20	2	82%	75%	86%	80%	100%
1.b	76	40	35	58	15	88%	85%	91%	84%	100%
2.a	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.b	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
2.c	297	171	117	171	117	96%	96%	94%	94%	97%
3.a	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.a	458	222	230	362	86	99%	99%	98%	98%	100%
4.b	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
4.c	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a
Total	**853**	**441**	**396**	**611**	**220**	**96%**	**96%**	**96%**	**95%**	**99%**

Strengths

In a limited sample size, all students scored proficient or advanced on SLO 1.a in 2022-2023. The program measured SLO 4.a far more than other the outcomes.

Validity & Reliability

Management Information Systems (M.S.) received less than 15 measurements for most outcomes in 2022-2023, raising concerns about the sample size and data reliability.

Actionable Items

The program should ensure all courses listed in their curriculum map are assessed if running in 2023-2024 to increase the data reliability and the number measured SLOs.

Mathematics Education (M.S.)

SLOs

SLOs unique to the Mathematics Education (M.S.) program at Hood College can be found here.

The Mathematics Education (M.S.) program uses the following Mathematics National Board for Professional Teaching Standards (Math NBPTS) to measure learning among students in the program.

1. Commitment to Mathematics Learning of All Students: Accomplished mathematics teachers acknowledge and value the individuality and worth of each student, believe that every student can learn and use mathematics, and are dedicated to their success. Accomplished mathematics teachers are committed to the fair and equitable treatment of all students— especially in their learning of mathematics.
2. Knowledge of Mathematics: Accomplished mathematics teachers have a deep and broad knowledge of the concepts, principles, techniques, and reasoning methods of mathematics, and they use this knowledge to inform curricular goals and shape their instruction and assessment. They understand significant connections among mathematical ideas and the applications of these ideas to problem solving in mathematics, in other disciplines, and in the world outside of school.
3. Knowledge of Students: Accomplished teachers use their knowledge of human development and individual students to guide their planning and instructional decisions. They understand the impact of prior mathematical knowledge, home life, cultural background, individual learning differences, student attitudes and aspirations, and community expectations and values on students and their mathematics learning.
4. Knowledge of the Practice of Teaching: Accomplished mathematics teachers use their knowledge of pedagogy along with their knowledge of mathematics and student learning to inform curricular decisions; select, design, and develop instructional strategies and assessment plans; and choose materials and resources for mathematics instruction. Accomplished mathematics teachers stimulate and facilitate student learning by using a wide range of practices.
5. Learning Environment: Accomplished mathematics teachers create environments in which students are active learners, show willingness to take intellectual risks, develop self-confidence, and value mathematics. This environment fosters student learning of mathematics.
6. Ways of Thinking Mathematically: Accomplished mathematics teachers develop their own and their students' abilities to reason and think mathematically—to investigate and explore patterns, to discover structures and establish mathematical relationships, to formulate and solve problems, to justify and communicate conclusions, and to question and extend those conclusions.
7. Assessment: Accomplished mathematics teachers integrate a range of assessment methods into their instruction to promote the learning of all students by designing, selecting, and ethically employing assessments that align with educational goals. They provide opportunities for students to reflect on their strengths and weaknesses in order to revise, support, and extend their individual performance.
8. Reflection and Growth: To improve practice, accomplished mathematics teachers regularly reflect on what they teach, how they teach, and how their teaching impacts student learning. They keep abreast of changes and learn new mathematics and mathematical pedagogy, continually improving their knowledge and practice.
9. Families and Communities: Accomplished mathematics teachers collaborate with families and communities to support student engagement in learning mathematics. They help various communities, within and outside the school building, understand the role of mathematics and mathematics instruction in today's world.
10. Professional Community: Accomplished mathematics teachers continually collaborate with other teachers and education professionals to strengthen the school's mathematics program, promote program quality and continuity across grade levels and courses, and improve knowledge and practice in the field of mathematics education.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Mathematics Education (M.A.) Curriculum Map.

Data Summary

Mathematics Education (M.S.) Math NBPTS Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	24	3.83	0	0	4	20	0%	0%	17%	83%	100%
2	24	3.83	0	0	4	20	0%	0%	17%	83%	100%
3	24	3.79	0	0	5	19	0%	0%	21%	79%	100%
4	24	3.79	0	0	5	19	0%	0%	21%	79%	100%
5	24	3.83	0	0	4	20	0%	0%	17%	83%	100%
6	24	3.83	0	0	4	20	0%	0%	17%	83%	100%
7	24	3.71	0	1	5	18	0%	4%	21%	75%	96%
8	24	3.83	0	0	4	20	0%	0%	17%	83%	100%
9	24	3.75	0	0	6	18	0%	0%	25%	75%	100%
10	24	3.83	0	0	4	20	0%	0%	17%	83%	100%
Total	**240**	**3.80**	**0**	**1**	**45**	**194**	**0%**	**0%**	**19%**	**81%**	**100%**

Mathematics Education (M.S.) Math NBPTS Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	8	3.50	0	0	4	4	0%	0%	50%	50%	100%
2	8	3.50	0	0	4	4	0%	0%	50%	50%	100%
3	8	3.38	0	0	5	3	0%	0%	63%	38%	100%
4	8	3.88	0	0	1	7	0%	0%	13%	88%	100%
5	8	3.63	0	0	3	5	0%	0%	38%	63%	100%
6	8	3.63	0	0	3	5	0%	0%	38%	63%	100%
7	8	3.50	0	0	4	4	0%	0%	50%	50%	100%
8	8	3.38	0	0	5	3	0%	0%	63%	38%	100%
9	8	3.50	0	0	4	4	0%	0%	50%	50%	100%
10	8	3.38	0	0	5	3	0%	0%	63%	38%	100%
Total	**80**	**3.53**	**0**	**0**	**38**	**42**	**0%**	**0%**	**48%**	**53%**	**100%**

Mathematics Education (M.S.) Math NBPTS Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	4	3.75	0	0	1	3	0%	0%	25%	75%	100%
2	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
3	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
4	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
5	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
6	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
7	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
8	12	3.92	0	0	1	11	0%	0%	8%	92%	100%
9	12	4.00	0	0	0	12	0%	0%	0%	100%	100%
10	12	3.83	0	0	2	10	0%	0%	17%	83%	100%
Total	**64**	**3.94**	**0**	**0**	**4**	**60**	**0%**	**0%**	**6%**	**94%**	**100%**

Mathematics Education (M.S.) Math NBPTS Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	All	Female	Male	Diversity	White	All	Female	Male	Diversity	White
1	36	20	16	8	24	100%	100%	100%	100%	100%
2	36	20	16	8	24	100%	100%	100%	100%	100%
3	36	20	16	8	24	100%	100%	100%	100%	100%
4	36	20	16	8	24	100%	100%	100%	100%	100%
5	36	20	16	8	24	100%	100%	100%	100%	100%
6	36	20	16	8	24	100%	100%	100%	100%	100%
7	36	20	16	8	24	97%	95%	100%	88%	100%
8	44	28	16	8	32	100%	100%	100%	100%	100%
9	44	28	16	8	32	100%	100%	100%	100%	100%
10	44	28	16	8	32	100%	100%	100%	100%	100%
Total	**384**	**224**	**160**	**80**	**264**	**100%**	**100%**	**100%**	**99%**	**100%**

Strengths

Almost all SLOs have received only proficient or advanced performances from each measurement. The program also consistently measures the various outcomes. The program reviewed their assessed courses, assignments, and SLO alignments to develop their curriculum map in 2022-2023.

Validity & Reliability

Mathematics Education (M.S.) assesses student learning with an exit folio, a comprehensive assessment that incorporates artifacts and evidence of learning throughout a student's time in the program. The program generally has less than 10 students that graduate, and the total number of measurements mirror the low enrollment of the program.

Actionable Items

The program should continue to consistently measure student performance on the exit folio, given that the program uses the assignment to collect all of their direct assessment results.

Mathematics Instructional Leadership (M.S.)

SLOs

SLOs unique to the Mathematics Instructional Leadership (M.S.) program at Hood College can be found here.

The Mathematics Instructional Leadership (M.S.) program uses the following National Council of Teachers of Mathematics (NCTM) Council for the Accreditation of Educator Preparation (CAEP) Elementary Mathematics Specialist 2012 Standards to measure learning among students in the program.

1a. Demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, applications in varied contexts, and connections within and among mathematical domains (Number and Operations, Algebra, Geometry and Measurement, and Statistics and Probability) as outlined in the NCTM CAEP Mathematics Content for Elementary Mathematics Specialist.
2a. Use problem solving to develop conceptual understanding, make sense of a wide variety of problems and persevere in solving them, apply and adapt a variety of strategies in solving problems confronted within the field of mathematics and other contexts, and formulate and test conjectures in order to frame generalizations.
2b. Reason abstractly, reflectively, and quantitatively with attention to units, constructing viable arguments and proofs, and critiquing the reasoning of others; represent and model generalizations using mathematics; recognize structure and express regularity in patterns of mathematical reasoning; use multiple representations to model and describe mathematics; and utilize appropriate mathematical vocabulary and symbols to communicate mathematical ideas to others.
2c. Formulate, represent, analyze, and interpret mathematical models derived from real-world contexts or mathematical problems.
2d. Organize mathematical thinking and use the language of mathematics to express ideas precisely, both orally and in writing to multiple audiences.
2e. Demonstrate the interconnectedness of mathematical ideas and how they build on one another and recognize and apply mathematical connections among mathematical ideas and across various content areas and real-world contexts.
2f. Model how the development of mathematical understanding within and among mathematical domains intersects with the mathematical practices of problem solving, reasoning, communicating, connecting, and representing.
3a. Apply knowledge of curriculum standards for elementary mathematics and their relationship to student learning within and across mathematical domains in teaching elementary students and coaching/mentoring elementary classroom teachers.
3b. Analyze and consider research in planning for and leading students and the teachers they coach/mentor in rich mathematical learning experiences.
3c. Plan and assist others in planning lessons and units that incorporate a variety of strategies, differentiated instruction for diverse populations, and mathematics-specific and instructional technologies in building all students' conceptual understanding and procedural proficiency.
3d. Provide students and teachers with opportunities to communicate about mathematics and make connections among mathematics, other content areas, everyday life, and the workplace.
3e. Implement and promote techniques related to student engagement and communication including selecting high quality tasks, guiding mathematical discussions, identifying key mathematical ideas, identifying and addressing student misconceptions, and employing a range of questioning strategies.
3f. Plan, select, implement, interpret, and assist teachers in using formative and summative assessments to inform instruction by reflecting on mathematical proficiencies essential for all students.
3g. Monitor students' progress and assist others, including family members, administrators and other stakeholders, in making instructional decisions and in measuring and interpreting students' mathematical understanding and ability using formative and summative assessments.
4a. Exhibit knowledge of child, pre-adolescent, and adult learning, development, and behavior and demonstrate and promote a positive disposition toward mathematical processes and learning.
4b. Plan, create, and coach/mentor teachers in creating developmentally appropriate, sequential, and challenging learning opportunities grounded in mathematics education research in which students are actively engaged in building new knowledge from prior knowledge and experiences.

4c. Incorporate knowledge of individual differences and the cultural and language diversity that exists within classrooms and include and assist teachers in embracing culturally relevant perspectives as a means to motivate and engage students.
4d. Demonstrate and encourage equitable and ethical treatment of and high expectations for all students.
4e. Apply mathematical content and pedagogical knowledge in the selection, use, and promotion of instructional tools such as manipulatives and physical models, drawings, virtual environments, presentation tools, and mathematics-specific technologies (e.g., graphing tools and interactive geometry software); and make and nurture sound decisions about when such tools enhance teaching and learning, recognizing both the insights to be gained and possible limitations of such tools.
5a. Verify that elementary students demonstrate conceptual understanding; procedural fluency; the ability to formulate, represent, and solve problems; logical reasoning and continuous reflection on that reasoning; productive disposition toward mathematics; and the application of mathematics in a variety of contexts within major mathematical domains.
5b. Engage students and coach/mentor teachers in using developmentally appropriate mathematical activities and investigations that require active engagement and include mathematics-specific technology in building new knowledge.
5c. Collect, organize, analyze, and reflect on diagnostic, formative, and summative assessment evidence and determine the extent to which students' mathematical proficiencies have increased as a result of their instruction or their efforts in coaching/mentoring teachers.
6a. Take an active role in their professional growth by participating in professional development experiences that directly relate to the learning and teaching of mathematics and to their development as a mathematics instructional leader.
6b. Engage in and facilitate continuous and collaborative learning that draws upon research in mathematics education to inform practice; enhance learning opportunities for all students' and teachers' mathematical knowledge development; involve colleagues and other school professionals, families, and various stakeholders; and advance the development in themselves and others as reflective practitioners.
6c. Plan, develop, implement, and evaluate mathematics-focused professional development programs at the school and/or district level; use and assist teachers in using resources from professional mathematics education organizations such as teacher/leader discussion groups, teacher networks, and print, digital, and virtual resources/collections; and support teachers in systematically reflecting on and learning from their mathematical practice.
6d. Demonstrate mathematics-focused instructional leadership through actions such as coaching/mentoring; building and navigating relationships with teachers, administrators, and the community; establishing and maintaining learning communities; analyzing and evaluating educational structures and policies that affect students' equitable access to high quality mathematics instruction; leading efforts to assure that all students have opportunities to learn important mathematics; evaluating the alignment of mathematics curriculum standards, textbooks, and required assessments and making recommendations for addressing learning and achievement gaps; developing appropriate classroom or school-level learning environments; and collaborating with school-based professionals to develop evidence-based interventions for high and low-achieving students.
7a. Engage in a sequence of planned field experiences and clinical practice under the supervision of an experienced and highly qualified mathematics educator that involves the development of a broad experiential base of knowledge and skills working with a range of student and adult learners in a variety of school and professional development settings and the development of interpersonal skills critical for mentoring other teachers and working with school-based personnel, district administrators, and others.
7b. Develop and use leadership skills to improve mathematics programs at the school and/or district level, e.g., coaching/mentoring new and experienced teachers to better serve students; sharing critical issues, policy initiatives, and curriculum trends related to mathematics teaching; keeping abreast of local, state, or national policy decisions related to mathematics education; communicating to educational constituents about students, curriculum, instruction, and assessment; collaborating to create a shared vision and to develop an action plan for school improvement; and partnering with school-based professionals to improve each student's achievement.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Mathematics Instructional Leadership (M.S.) Curriculum Map.

Data Summary

Mathematics Instructional Leadership (M.S.) assessment results were not collected in 2021-2022. Demographic results are not included due to a low sample size.

Mathematics Instructional Leadership (M.S.) NCTM CAEP Elementary Math Specialist Standards Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
3a	6	4.00	0	0	0	6	0%	0%	0%	100%	100%
3b	6	3.50	0	0	3	3	0%	0%	50%	50%	100%
3c	6	3.67	0	0	2	4	0%	0%	33%	67%	100%
3d	6	4.00	0	0	0	6	0%	0%	0%	100%	100%
3e	6	4.00	0	0	0	6	0%	0%	0%	100%	100%
3f	18	4.00	0	0	0	18	0%	0%	0%	100%	100%
3g	18	3.94	0	0	1	17	0%	0%	6%	94%	100%
4a	6	4.00	0	0	0	6	0%	0%	0%	100%	100%
4b	19	3.79	0	0	4	15	0%	0%	21%	79%	100%
4c	6	3.50	0	0	3	3	0%	0%	50%	50%	100%
4d	6	3.67	0	0	2	4	0%	0%	33%	67%	100%
4e	6	4.00	0	0	0	6	0%	0%	0%	100%	100%
5a	6	4.00	0	0	0	6	0%	0%	0%	100%	100%
5b	6	3.50	0	0	3	3	0%	0%	50%	50%	100%
5c	6	3.83	0	0	1	5	0%	0%	17%	83%	100%
6a	18	3.83	0	0	3	15	0%	0%	17%	83%	100%
6b	18	3.83	0	0	3	15	0%	0%	17%	83%	100%
6c	18	3.94	0	0	1	17	0%	0%	6%	94%	100%
6d	18	4.00	0	0	0	18	0%	0%	0%	100%	100%
7a	18	3.94	0	0	1	17	0%	0%	6%	94%	100%
7b	18	3.50	0	0	9	9	0%	0%	50%	50%	100%
Total	**235**	**3.85**	**0**	**0**	**36**	**199**	**0%**	**0%**	**15%**	**85%**	**100%**

Mathematics Instructional Leadership (M.S.) NCTM CAEP Elementary Math Specialist Standards Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
3a	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
3b	2	3.50	0	0	1	1	0%	0%	50%	50%	100%
3c	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
3d	2	3.50	0	0	1	1	0%	0%	50%	50%	100%
3e	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
3f	5	4.00	0	0	0	5	0%	0%	0%	100%	100%
3g	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
4a	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
4b	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
4c	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
4d	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
4e	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
5a	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
5b	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
5c	2	4.00	0	0	0	2	0%	0%	0%	100%	100%
6a	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
6b	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
6c	5	4.00	0	0	0	5	0%	0%	0%	100%	100%
6d	5	4.00	0	0	0	5	0%	0%	0%	100%	100%
7a	4	4.00	0	0	0	4	0%	0%	0%	100%	100%
7b	4	3.75	0	0	1	3	0%	0%	25%	75%	100%
Total	**63**	**3.95**	**0**	**0**	**3**	**60**	**0%**	**0%**	**5%**	**95%**	**100%**

Strengths

All students achieved proficient or advanced on each assessed outcome in the past 3 years. The program reviewed their assessed courses, assignments, and SLO alignments to develop their curriculum map in 2022-2023.

Validity & Reliability

The program generally has less than 5 students that graduate each academic year, and the total number of measurements mirror the low enrollment of the program. The program collects the assessment results from a variety of courses and assignments.

Actionable Items

Due to the low enrollment of the program, Mathematics Instructional Leadership (M.S.) should ensure that results are collected when assignments are scheduled for assessment, as described in the curriculum map.

Organizational Leadership (DOL/DBA)

SLOs

1. Reflect in order to globally analyze personal and professional values and principles as a leader, assess their own leadership styles, evaluate their strengths-based leadership styles, and develop strategies to become more effective leaders through:
    1.1: Conducting personal and professional leadership analysis and reflection;
    1.2: Comparing and contrasting leadership strategies using theories and models to understand mindful leadership; and
    1.3: Engaging in on-going leadership development throughout the program.
2. Strengthen the responsible administration of financial, social, ecological and human resources through:
    2.1: Analyzing financial information and reporting findings to compare and contrast with industry standards to develop recommendations to uphold the highest standards of fiscal responsibility;
    2.2: Applying leadership skills to identify and develop a plan to address organizational or community needs;
    2.3: Analyzing sustainability strategies of an organization or community to identify sustainability challenges and issues; and
    2.4: Completing a needs assessment in human resources in an appropriate organization and then design a plan to address two to three of the most significant needs.
3. Equip leaders with the necessary skills and competencies to effectively initiate and manage change to transform organizations and communities in today's competitive environment through:
    3.1: Applying leadership and change management theory to organizational issues and challenges to enhance organizational effectiveness;
    3.2: Analyzing challenges and issues facing an organization or community to develop a set of recommendations to remain sustainable and competitive; and
    3.3: Developing a strategic plan using best practices in leadership theory and change management to reflect an understanding of systems-thinking and responsible stewardship.
4. Position candidates to work closely within the larger community by providing a forum for area professionals to network and collaborate with others who share their interests in leadership, service and development of communities through:
    4.1: Interacting with leaders from communities to develop a leadership network and align with leaders and organizations to support mindful leadership development;
    4.2: Participating in doctoral program sponsored activities and reflecting on experiences and their impact on serving as mindful, authentic leadership; and
    4.3: Developing a project designed to impact the community through your specialization coursework.
5. Prepare leaders to employ pedagogical, empirical and research skills to effectively initiate, conduct and evaluate independent research through:
    5.1: Presenting a concept paper outlining a proposed theoretical framework intended for research study (lit review, theoretical constructs and theoretical framework);
    5.2: Conducting independent research using appropriate pedagogical and empirical skills; and
    5.3: Defending your research findings.
6. Prepare leaders as creators and consumers of information within today's information ecosystem through:
    6.1: Evolving as a leader who can construct knowledge and information important and relative to specific industries and contexts;
    6.2: Applying the research and inquiry process to create information;
    6.3: Appreciating the research and inquiry process to value the importance of information in today's changing landscape;
    6.4: Applying the research process as a valid form of inquiry;
    6.5: Evolving as a leader who understands that scholarship is a vital part of conversation as a scholar practitioner; and
    6.6: Formulating information and research searches as part of strategic exploration.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Organizational Leadership (DOL-DBA) Curriculum Map.

Data Summary

Organizational Leadership (DOL/DBA) Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	853	3.50	32	65	198	558	4%	8%	23%	65%	89%
2	899	3.48	32	66	242	559	4%	7%	27%	62%	89%
3	600	3.43	26	47	169	358	4%	8%	28%	60%	88%
4	696	3.59	13	12	220	451	2%	2%	32%	65%	96%
5	1,954	3.44	35	158	674	1,087	2%	8%	34%	56%	90%
6	1,601	3.42	63	160	414	964	4%	10%	26%	60%	86%
Total	**6,603**	**3.46**	**201**	**508**	**1,917**	**3,977**	**3%**	**8%**	**29%**	**60%**	**89%**

Organizational Leadership (DOL/DBA) Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	886	3.56	6	34	305	541	1%	4%	34%	61%	95%
2	604	3.58	0	42	171	391	0%	7%	28%	65%	93%
3	405	3.52	0	40	113	252	0%	10%	28%	62%	90%
4	726	3.10	5	27	588	106	1%	4%	81%	15%	96%
5	2,117	3.35	16	129	1,060	912	1%	6%	50%	43%	93%
6	1,910	3.65	8	85	466	1,351	0%	4%	24%	71%	95%
Total	**6,648**	**3.47**	**35**	**357**	**2,703**	**3,553**	**1%**	**5%**	**41%**	**53%**	**94%**

Organizational Leadership (DOL/DBA) Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	1,013	3.34	17	127	368	501	2%	13%	36%	49%	86%
2	609	3.22	20	148	120	321	3%	24%	20%	53%	72%
3	407	3.16	15	112	71	209	4%	28%	17%	51%	69%
4	852	2.90	9	135	641	67	1%	16%	75%	8%	83%
5	1,939	3.23	21	233	972	713	1%	12%	50%	37%	87%
6	2,000	3.30	52	367	501	1,080	3%	18%	25%	54%	79%
Total	**6,820**	**3.22**	**134**	**1,122**	**2,673**	**2,891**	**2%**	**16%**	**39%**	**42%**	**82%**

Organizational Leadership (DOL/DBA) Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	All	Female	Male	Diversity	White	All	Female	Male	Diversity	White
1	2,752	1,826	863	1,566	1,030	90%	91%	88%	89%	91%
2	2,112	1,356	718	1,223	765	85%	87%	82%	84%	87%
3	1,412	910	478	824	507	83%	85%	79%	82%	85%
4	2,274	1,480	787	1,115	1,113	91%	93%	87%	92%	92%
5	6,010	4,016	1,919	3,347	2,434	90%	90%	90%	89%	93%
6	5,511	3,836	1,557	3,263	1,930	87%	88%	85%	86%	89%
Total	**20,071**	**13,424**	**6,322**	**11,338**	**7,779**	**88%**	**89%**	**86%**	**87%**	**90%**

Strengths

Organizational Leadership (DOL/DBA) collected over 6,000 measurements in each of the past 3 years. SLO 4 received the highest percentage of students that scored proficient or advanced (96%) in 2022-2023, continuing its strong performance from the pervious year. Performance differences between demographic groups were relatively small.

Validity & Reliability

The overall percentage of students that achieved proficient or advanced has fluctuated the past few years. The fluctuation could be explained by the implementation of several new rubrics and assessed assignments in the past 2 years.

Actionable Items

The lowest percentage of students achieved proficient or advanced on SLO 6 (86%) in 2022-2023. The program should discuss explanations for the low performance on the outcome, which decreased from the previous year. Although performance differences between demographic groups were relatively small, the program should consider strategies to decrease the performance differences even further.

Reading Specialization (M.S.)

SLOs

The Reading Specialization (M.S.) program uses the International Literacy Association (ILA) Standards 2017 as its SLOs. The program uses the following ILA 2010 Standards to measure learning among students in the program.

1. Foundational Knowledge: Candidates understand the theoretical and evidence-based foundations of reading and writing processes and instruction.

- 1.1: Candidates understand major theories and empirical research that describe the cognitive, linguistic, motivational, and sociocultural foundations of reading and writing development, processes, and components, including word recognition…
- 1.2: Candidates understand the historically shared knowledge of the profession and changes over time in the perceptions of reading and writing development, processes, and components.
- 1.3: Candidates understand the role of professional judgment and practical knowledge for improving all students' reading development and achievement.

2. Curriculum and Instruction: Candidates use instructional approaches, materials, and an integrated, comprehensive, balanced curriculum to support student learning in reading and writing.

- 2.1: Candidates use foundational knowledge to design or implement an integrated, comprehensive, and balanced curriculum.
- 2.2: Candidates use appropriate and varied instructional approaches, including those that develop word recognition, language comprehension, strategic knowledge, and reading–writing connections.
- 2.3: Candidates use a wide range of texts (e.g., narrative, expository, and poetry) from traditional print, digital, and online resources.

3. Assessment and Evaluation: Candidates use a variety of assessment tools and practices to plan and evaluate effective reading and writing instruction.

- 3.1: Candidates understand types of assessments and their purposes, strengths, and limitations.
- 3.2: Candidates select, develop, administer, and interpret assessments, both traditional print and electronic, for specific purposes.
- 3.3: Candidates use assessment information to plan and evaluate instruction.
- 3.4: Candidates communicate assessment results and implications to a variety of audiences.

4. Diversity: Candidates create and engage their students in literacy practices that develop awareness, understanding, respect, and a valuing of differences in our society.

4.1: Candidates recognize, understand, and value the forms of diversity that exist in society and their importance in learning to read and write.

4.2: Candidates use a literacy curriculum and engage in instructional practices that positively impact students' knowledge, beliefs, and engagement with the features of diversity.

4.3: Candidates develop and implement strategies to advocate for equity.

5. Literate Environment: Candidates create a literate environment that fosters reading and writing by integrating foundational knowledge, instructional practices, approaches and methods, curriculum materials, and the appropriate use of assessment…

5.1: Candidates design the physical environment to optimize students' use of traditional print, digital, and online resources in reading and writing instruction.

5.2: Candidates design a social environment that is low risk and includes choice, motivation, and scaffolded support to optimize students' opportunities for learning to read and write.

5.3: Candidates use routines to support reading and writing instruction (e.g., time allocation, transitions from one activity to another, discussions, and peer feedback).

5.4: Candidates use a variety of classroom configurations (i.e., whole class, small group, and individual) to differentiate instruction.

6. Professional Learning and Leadership: Candidates recognize the importance of, demonstrate, and facilitate professional learning and leadership as a career-long effort and responsibility.

6.1: Candidates demonstrate foundational knowledge of adult learning theories and related research about organizational change, professional development, and school culture.

6.2: Candidates display positive dispositions related to their own reading and writing and the teaching of reading and writing, and pursue the development of individual professional knowledge and behaviors.

6.3: Candidates participate in, design, facilitate, lead, and evaluate effective and differentiated professional development programs.

6.4: Candidates understand and influence local, state, or national policy decisions.

Assessment Plan

The 2022-2023 curriculum map can be accessed here: Reading Specialization (M.S.) Curriculum Map.

Data Summary

Reading Specialization (M.S.) ILA Results: 2022-2023											
June 1, 2022-May 31, 2023			Count				Percent				
SLO	**Sum**	**Mean**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Novice**	**Emergent**	**Proficient**	**Advanced**	**Prof+Adv**
1	31	3.94	0	0	2	29	0%	0%	6%	94%	100%
2	12	4.00	0	0	0	12	0%	0%	0%	100%	100%
3	40	3.90	0	0	4	36	0%	0%	10%	90%	100%
4	3	4.00	0	0	0	3	0%	0%	0%	100%	100%
5	15	3.80	0	0	3	12	0%	0%	20%	80%	100%
6	34	3.97	0	0	1	33	0%	0%	3%	97%	100%
Total	**135**	**3.93**	**0**	**0**	**10**	**125**	**0%**	**0%**	**7%**	**93%**	**100%**

Reading Specialization (M.S.) ILA Results: 2021-2022											
June 1, 2021-May 31, 2022			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	47	3.89	0	0	5	42	0%	0%	11%	89%	100%
2	213	3.49	0	1	107	105	0%	0%	50%	49%	100%
3	119	3.66	0	1	39	79	0%	1%	33%	66%	99%
4	103	3.83	0	0	18	85	0%	0%	17%	83%	100%
5	154	3.69	0	3	41	110	0%	2%	27%	71%	98%
6	207	3.85	0	0	32	175	0%	0%	15%	85%	100%
Total	**843**	**3.70**	**0**	**5**	**242**	**596**	**0%**	**1%**	**29%**	**71%**	**99%**

Reading Specialization (M.S.) ILA Results: 2020-2021											
June 1, 2020-May 31, 2021			Count				Percent				
SLO	Sum	Mean	Novice	Emergent	Proficient	Advanced	Novice	Emergent	Proficient	Advanced	Prof+Adv
1	59	3.90	0	0	6	53	0%	0%	10%	90%	100%
2	19	3.89	0	0	2	17	0%	0%	11%	89%	100%
3	32	3.81	0	0	6	26	0%	0%	19%	81%	100%
4	19	3.37	0	0	12	7	0%	0%	63%	37%	100%
5	73	3.62	0	2	24	47	0%	3%	33%	64%	97%
6	71	3.69	0	2	18	51	0%	3%	25%	72%	97%
Total	**273**	**3.72**	**0**	**4**	**68**	**201**	**0%**	**1%**	**25%**	**74%**	**99%**

Reading Specialization (M.S.) ILA Demographic Results: Fall 2020-Spring 2023										
June 1, 2020-May 31, 2023	Total Number of Measurements (Sum)					Percent Proficient or Advanced				
SLO	All	Female	Male	Diversity	White	All	Female	Male	Diversity	White
1	137	133	0	33	104	100%	100%	n/a	100%	100%
2	244	242	0	46	198	100%	100%	n/a	100%	99%
3	191	188	0	33	158	99%	99%	n/a	100%	99%
4	125	122	0	29	96	100%	100%	n/a	100%	100%
5	242	234	0	47	195	98%	98%	n/a	96%	98%
6	312	304	0	67	245	99%	99%	n/a	99%	100%
Total	**1,251**	**1,223**	**0**	**255**	**996**	**99%**	**99%**	**n/a**	**99%**	**99%**

Strengths

All students achieved proficient or advanced on each assessed outcome in 2022-2023. The program reviewed their assessed courses, assignments, and SLO alignments to develop their curriculum map in 2022-2023.

Validity & Reliability

The program assessed student performance in 6 courses and one exit portfolio for graduating students. Reading Specialization (M.S.) uses the ILA 2010 standards to ensure students are accurately and consistently assessed.

Actionable Items

Several SLOs received few measurements in 2022-2023. The program should ensure that results are collected when assignments are scheduled for assessment, as described in the curriculum map.