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Final Report

College of Micronesia–FSM 21st Century
Curriculum Project

Bradley Rentz, Ph.D.

April 2026



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Prepared for: College of Micronesia–FSM

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Executive Summary

This report presents the findings from Phase 2 of the *College of Micronesia–FSM (COM–FSM) 21st Century Curriculum Project*, conducted by Rentz Consulting, LLC, as well as recommendations for COM–FSM’s consideration. Phase 2 examined COM–FSM’s current curriculum, related processes, and classroom practices and experiences. The analysis drew on four complementary methods: a document review of course outlines, syllabi, and curriculum committee records; a student enrollment and graduation analysis spanning 2020–2025; surveys of 462 students (weighted to represent the full student population), 78 alumni, and 78 faculty members (a 75% response rate); and interviews and focus groups with students, alumni, faculty, community members, and partner organizations conducted across all COM–FSM campuses (excluding the FMI campus).

Identified Strengths

The results were overwhelmingly positive and identified five major strengths:

1. **Strong student and alumni satisfaction.** 88% of current students and 87% of alumni reported overall satisfaction with their programs. 94% of alumni found their program helpful for professional career growth, and the vast majority of both groups rated their programs as good value for the cost of enrollment.
2. **High quality courses.** 89% of students and 87% of alumni agreed that their courses used clear and easy-to-understand materials and taught up-to-date content. Faculty members similarly reported frequently incorporating real-life examples, critical thinking activities, and current content in their courses.
3. **Strong career preparation.** 87% of both students and alumni agreed they would have the knowledge and skills needed to succeed in their careers after graduating. Faculty members overwhelmingly reported designing their courses to support career readiness, including problem solving, and technical skills.
4. **Effective practicums.** Programs offering practicums—primarily certificate, AAS, nursing, and education programs—received strong praise from students and alumni for developing practical, job-ready skills. Community business leaders also valued practicums as opportunities to identify and train qualified candidates.
5. **Growth in AAS, Certificate, and BS programs.** Over the past five years, enrollment in Bachelor of Science, Associate of Applied Science, and vocational certifi-

cate programs has grown substantially. AAS programs in particular received the highest satisfaction ratings of any program type and could serve as models for career readiness across the college.

Areas of Growth

The study also identified seven areas where COM–FSM can continue to grow:

1. **Streamlining the Curriculum Committee review process.** The Curriculum Committee (CC) took an average of 596 days to complete course outline reviews, and 47% of courses (the percentage includes inactive courses) were not updated within the required five-year cycle. The CC does not currently directly review the quality or currency of course content and materials (instead it focuses almost exclusively on course constructive alignment), resulting in over 19% of approved course outlines listing required textbooks more than 20 years old. The report recommends streamlining the review process, incorporating direct content quality review, and expanding faculty instructional agency.
2. **Improving online courses and offering more scheduling flexibility.** Online courses at COM–FSM are primarily asynchronous, and students' top request was for more interaction with faculty and peers. The report recommends piloting hybrid course formats, making existing online courses more interactive, and expanding evening and weekend course offerings for working students.
3. **Integrating FSM Indigenous languages, cultures, and knowledge.** Only 7% of course outlines included student learning outcomes (SLOs) related to Micronesian languages, cultures, or traditional knowledge, and only 8% of available syllabi explicitly incorporated related content or activities. Over 60% of faculty members reported not including Micronesian authors and sources or teaching professional use of local FSM languages. The report recommends creating institutional SLOs for Indigenous language and cultural integration, offering FSM language courses as general education electives, and developing certificate or micro-credential programs for traditional skills.
4. **Strengthening career preparation.** Only 52% of programs received moderately high or higher *Career Readiness and Preparation* scores. Key gaps include limited connections with local employers, insufficient emphasis on entrepreneurship and job creation, underdeveloped career soft skills, misalignment between some general education requirements and program career needs, and limited practicum availability. The report recommends expanding practicums to all programs, reviewing general education requirements for technical programs, and creating clearer post-graduation employment and transfer pathways.
5. **Strengthening technology use.** While overall technology use ratings were positive, about 13% of programs received low or very low *Technology Use* scores. Only 27% of faculty members frequently incorporate AI tools, and fewer than half fre-

quently train students on using spreadsheets or writing professional emails. The report recommends expanded faculty training in technology and AI integration, continued infrastructure improvements, and further transition to more mobile-friendly platforms.

6. **Adding new programs.** Students and alumni most frequently requested programs in engineering, legal studies, computer science, and health. Many students also expressed a desire to complete bachelor’s-level study within the FSM. The report recommends developing new articulation agreements and transfer pathways to support these interests and establishing ongoing mechanisms to gather community input on program needs.
7. **Strengthening campus connections and internal communication.** State campus students, faculty, and administrators frequently reported feeling disconnected from the National campus. Information silos between campus units—including advising, counseling, and recruitment—create confusion and inefficiency. The report recommends fostering a shared college identity, standardizing advising resources, and continuing digitization of paper-based processes.

Looking Ahead

The findings from Phase 2 provide a strong evidence base for Phases 3 and 4 of the project, which will focus on planning for and piloting curriculum changes at the college. Taken together, the results affirm COM–FSM’s strong commitment to its mission of being “a learner-centered institution of higher education that is committed to the success of the Federated States of Micronesia by providing academic and career & technical educational programs characterized by continuous improvement and best practices.”

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1

Introduction

This report summarizes the main findings from Phase 2 of the *College of Micronesia–FSM 21st Century Curriculum* project. It provides a summary in **Chapter 2** of the methods used and their limitations. This is followed in **Chapter 3** by COM–FSM’s strengths that emerged among the findings, as well as areas of growth in **Chapter 4**. Recommendations for the college’s consideration are also provided in **Chapter 4**.

1.1 Overview of Project

The *COM–FSM 21st Century Curriculum* project is a multi-year multi-phase project that started in August 2025. Its goal is to support the college in developing a system-wide updated curriculum that:

- Trains students for 21st-century jobs aligned with current and expected workforce demands.
- Incorporates contemporary technology.
- Promotes sustainable and climate-resilient economic development.
- Mainstreams FSM Indigenous knowledge, skills, languages, and cultural practices to promote the FSM’s economic and cultural sovereignty.
- Focuses on and promotes the FSM’s geographic strengths.
- Fosters Pacific regional interconnectedness.
- Dynamically plans for and adapts to future changes.

To meet this goal, the project has four initial phases:

- **Phase 1:** Developing a logic model and theory of change. [Completed in September 2025]
- **Phase 2:** Reviewing current curriculum and associated processes, classroom practices and experiences, and instructor professional learning. [Completed in April 2026]
- **Phase 3:** Planning for implementing curriculum changes. [Starting May 2026]
- **Phase 4:** Piloting the new curriculum changes. [TBD]

2

Methods

This chapter describes the methods used for analyses completed as part of Phase 2 of this project as well as their limitations (Section 2.5).

Four different sets of analyses were conducted in order to have a robust multifaceted understanding of COM–FSM’s current curriculum and related processes and practices; student, alumni, and faculty experiences; and community need. The analyses included:

- A document review (Section 2.1) of COM–FSM internal files related to the current curriculum.
- A review of student data for course and program enrollment trends, as well as graduation rates (Section 2.2).
- Student, faculty, and alumni surveys about their courses and programs (Section 2.3).
- Student, alumni, faculty, community member, and partner organization interviews/focus groups (Section 2.4) to gather in-depth information about their experiences at COM–FSM and areas of potential improvement.

Each analysis is described in more detail below.

2.1 Document Review

Several types of documents provided by COM–FSM related to the curriculum were reviewed. These included: course syllabi, course outlines, program reviews, program assessments, and a variety of documents from the curriculum committee (such as course outline review checklists, feedback on course outlines, review handbooks, review process tracking documents, and other related documents). Syllabi and program reviews and assessments were requested from August 2020–August 2025, but due to incomplete records, most of those received were from 2023–2025. The most recent course outlines were requested including in-progress course outline updates up to March 2026.

For the course syllabi and outlines, the documents were reviewed following these review protocol questions:

1. How old are the required course materials?
2. To what extent do the courses incorporate the use of AI? (Syllabi only)
3. To what extent do the courses incorporate Indigenous Micronesian skills, knowledge, cultures, and languages?
 - Do the courses incorporate Indigenous Micronesian skills, knowledge, cultures, and languages content and activities?
 - Do the courses incorporate CSLOs related to Indigenous Micronesian skills, knowledge, cultures, and languages?
4. To what extent do courses incorporate strategies to support English learners and multilingual students? (Syllabi only)
5. What learning technologies are being used in courses? (Syllabi only)
6. To what extent are hands-on learning activities included? (Course outlines only)
7. How often are the course outlines actually updated? (Course outlines only)
8. What other patterns emerge from the course syllabi and outlines?

The course outline review process tracking spreadsheet was examined to determine how long the review process by the Curriculum Committee takes on average.

The other documents provided by COM–FSM were analyzed by inductively identifying emergent themes related to the curriculum following the principles of thematic analysis (Braun & Clarke, 2006).

2.2 Student Enrollment Analysis

Student course and program enrollment from Summer 2020 to Fall 2025 and graduation data from Summer 2020 to Spring 2025 provided by COM–FSM were analyzed for this report.

For the student course enrollment data, the following research questions were examined:

1. What are the program enrollment patterns by campus?
2. What are the program enrollment patterns by students' home state?
3. What are the program enrollment patterns by students' gender?
4. How has program enrollment varied over time between 2020/21 and 2025/26?
5. What are the course modality enrollment patterns between 2021/22 and 2025/26?
6. What are the course enrollment patterns system-wide and by campus?

For the student graduation data, the following research question was examined:

- How have graduation rates by credential¹ and program changed from academic year 2020/21 to 2024/25?

¹ The term credential is used in this report to inclusively refer to both degrees and certificates.

2.3 Student, Faculty, and Alumni Surveys

Three survey instruments were created to gather information from students, alumni, and faculty members respectively about their experiences at COM–FSM and their perceptions about their programs. The surveys were administered online in December 2025.

2.3.1 Survey Instruments

Each of the three survey instruments had similar sets of questions, which were customized to the particular audience. Many of the included questions used Likert scales, which ask respondents to pick responses that range from strongly disagree to strongly agree or how often each statement is true ranging from never to always.

The student survey instrument included seven (7) sections in addition to a required initial informed consent question. The sections included:

- **Background and Demographics:** 8 items about the students' demographics, enrollment information at COM–FSM, and their plans after completing their studies.
- **Career Preparation:** 14 Likert response items about students' level of agreement with statements about how well their program and courses at COM–FSM are preparing them for their desired careers.
- **Technology Use:** 10 Likert response items about students' level of agreement with statements about how well their program and courses at COM–FSM are preparing them for using various technologies.
- **Course Content:** 6 Likert response items about students' level of agreement with statements about the content of their courses.
- **FSM Indigenous Cultures and Languages:** 13 Likert response items about students' level of agreement with statements about how well their program and courses at COM–FSM have incorporated FSM Indigenous cultures and languages.
- **Overall Satisfaction:** 4 Likert response items about students' level of agreement with statements about their overall satisfaction with the program and experiences at COM–FSM.
- **Open-Ended Feedback:** 5 open-ended questions that asked students to share their thoughts in more detail about what programs COM–FSM should offer, changes they would like to see at the college, how technology can be used more, how FSM Indigenous cultures, languages, and traditional knowledge can be more integrated into COM–FSM programs, and any other thoughts they would like to share.

Similarly, the alumni survey instrument also included seven (7) sections, but slightly different items. The sections included:

- **Background and Demographics:** 7 items about the alumni demographics and their programs.
- **Career Preparation:** 15 Likert response items for their level of agreement about how COM–FSM prepared them for their careers.
- **Technology Use:** 9 Likert response items for their level of agreement with statements about how their courses and programs at COM–FSM prepared them to use various technologies.
- **Course Content:** 6 Likert response items for their level of agreement with statements about the content of their courses at COM–FSM.
- **FSM Indigenous Cultures and Languages:** 13 Likert response items for their level of agreement with statements about how well their courses and programs at COM–FSM incorporated FSM Indigenous cultures and languages.
- **Overall Satisfaction:** 7 Likert response items for their level of agreement with statements about their overall satisfaction with their program at COM–FSM.
- **Open-Ended Feedback:** 7 open-ended questions that asked alumni to share their thoughts in more detail about what programs COM–FSM should offer, changes they would like to see at the college, how technology can be used more, how the college can better prepare graduates to be workforce ready, how FSM Indigenous cultures, languages, and traditional knowledge can be more integrated into COM–FSM courses, and any other thoughts they would like to share.

Based on their different role at the college, the faculty survey instrument included six (6) sections. The sections included:

- **Background and Demographics:** 6 items about the faculty demographics and their subject areas.
- **Career Preparation:** 8 Likert response items about how often statements are true about how faculty members' courses at COM–FSM are preparing students for careers.
- **Technology Use:** 12 Likert response items about how often statements are true about how faculty members' courses at COM–FSM are preparing students to use various technologies.
- **Course Content:** 11 Likert response items about how often statements are true about the content of their courses.
- **FSM Indigenous Cultures and Languages:** 17 Likert response items about faculty members' level of agreement with statements about how their courses at COM–FSM have incorporated FSM Indigenous cultures and languages.
- **Open-Ended Feedback:** 8 open-ended questions that asked faculty members to share their thoughts in more detail about what programs COM–FSM should offer, changes they would like to see at the college, how technology can be used more, how FSM Indigenous cultures, languages, and traditional knowledge can be more integrated into COM–FSM courses, and any other thoughts they would like to share.

2.3.2 Survey Samples

The response rates for each survey differed substantially. 483 students submitted the online survey; however, only 462 (27.1% of all Fall 2025 enrolled students) students consented to complete it. This response rate may seem low, but in survey research it is a normal, if not good, response rate. A much smaller number of alumni (79) submitted the online survey, but only 78 consented to complete the survey. However, the faculty survey had a much higher response rate, where 78 faculty members submitted the online survey (75.0% of all Fall 2025 employed faculty members and part-time instructors).

The goal of the survey analysis is to measure what the entire population views about a given topic. Since the students who responded to the survey do not exactly match COM-FSM's student population (some groups are overrepresented and others underrepresented), it is standard practice in survey research to create sampling weights that balance out responses to match the known population patterns. Because the student survey instrument asked students to provide demographic information like gender, campus enrolled at, major/program, full-time vs. part-time status, etc., those characteristics can be matched with known counts from COM-FSM Fall 2025 enrollment data. Using the standard *raking* method (Deville & Särndal, 1992), weights were created to ensure that the student sample nearly identically matched the actual student population. Table 2.1 displays the results of the weighting. In that table:

- "Target %" is the known population percentage for that student group based on enrollment data.
- "Unweighted N" is the original number of student survey responses for that student group.
- "Unweighted %" is the original percentage of students in that group based on survey responses.
- "Difference from Target" is the difference in percentage points between the original survey results and the enrollment data. Positive values indicate that the group was underrepresented relative to their actual population (not enough respondents), while negative values indicate that the group was overrepresented.
- "Weighted N" is the effective number of student survey responses for that student group after applying the weights.
- "Weighted %" is the effective percentage of student survey responses for that student group after applying the weights.

Table 2.1: Student survey sample overview

	Target %	Unweighted N	Unweighted %	Difference from Target	Weighted N	Weighted %
Campus						
Chuuk	15.5%	113	24.5%	-8.9%	71.7	15.5%
CTEC	19.0%	121	26.2%	-7.2%	87.7	19.0%
Kosrae	7.8%	23	5.0%	2.8%	35.8	7.8%
National	49.5%	129	27.9%	21.5%	228.6	49.5%
Yap	8.3%	76	16.5%	-8.2%	38.3	8.3%
Total	100.0%	462	100.0%	48.7%	462.0	100.0%
Gender						
Female	63.3%	320	69.3%	-6.0%	292.3	63.3%
Male	36.7%	142	30.7%	6.0%	169.7	36.7%
Total	100.0%	462	100.0%	12.0%	462.0	100.0%
Full-time vs. Part-time						
full-time	71.4%	359	77.7%	-6.3%	329.8	71.4%
part-time	28.6%	103	22.3%	6.3%	132.2	28.6%
Total	100.0%	462	100.0%	12.6%	462.0	100.0%
Credential						
AA	26.4%	129	27.9%	-1.5%	122.2	26.4%
AAS	5.6%	34	7.4%	-1.7%	26.1	5.6%
AS	37.5%	157	34.0%	3.6%	173.5	37.5%
BS	5.5%	28	6.1%	-0.5%	25.5	5.5%
CA	21.0%	102	22.1%	-1.1%	96.9	21.0%
TYC	2.5%	7	1.5%	1.0%	11.7	2.5%
UC	1.4%	5	1.1%	0.3%	6.2	1.4%
Total	100.0%	462	100.0%	9.7%	462.0	100.0%
Program						
Ag. & Nat. Res. Management	5.1%	23	5.0%	0.1%	23.4	5.1%
Agriculture and Food Technology	5.9%	51	11.0%	-5.1%	27.3	5.9%
Basic Public Health	1.3%	2	0.4%	0.9%	6.0	1.3%
Bookkeeping	2.1%	10	2.2%	-0.1%	9.5	2.1%
Building Technology	1.0%	7	1.5%	-0.5%	4.6	1.0%
Business Administration	16.0%	48	10.4%	5.6%	74.0	16.0%
Career Education: Motor Vehicle Mechanic	0.3%	2	0.4%	-0.1%	1.4	0.3%
Carpentry	0.4%	1	0.2%	0.1%	1.6	0.4%
Computer Information Systems	5.8%	17	3.7%	2.2%	26.9	5.8%
Construction Electricity	0.5%	5	1.1%	-0.6%	2.4	0.5%
Electronic Engineering Technology	2.8%	10	2.2%	0.6%	12.7	2.8%
Electronics Technology	1.6%	7	1.5%	0.1%	7.3	1.6%
Elementary Education	2.8%	8	1.7%	1.1%	13.1	2.8%
Health Careers Opportunity Program	3.8%	22	4.8%	-1.0%	17.6	3.8%
Hospitality and Tourism Management	2.3%	8	1.7%	0.6%	10.6	2.3%
Liberal Arts	9.6%	48	10.4%	-0.8%	44.1	9.6%
Marine Science	3.8%	7	1.5%	2.3%	17.4	3.8%
Micronesia Studies	6.2%	20	4.3%	1.9%	28.7	6.2%
Nursing	6.1%	57	12.3%	-6.2%	28.3	6.1%
Nursing Assistant	6.3%	7	1.5%	4.8%	29.2	6.3%
Pre-Teacher Preparation	6.9%	39	8.4%	-1.6%	31.7	6.9%
Public Health	1.2%	18	3.9%	-2.7%	5.7	1.2%
Refrigeration and Air Conditioning	0.3%	3	0.6%	-0.4%	1.4	0.3%
Secretarial Science	0.5%	10	2.2%	-1.7%	2.2	0.5%
Teacher Preparation - Elementary	2.4%	6	1.3%	1.1%	11.2	2.4%
Telecommunication Technology	3.1%	20	4.3%	-1.3%	14.1	3.1%
Trial Counselor	0.7%	1	0.2%	0.5%	3.2	0.7%
Unclassified	1.4%	5	1.1%	0.3%	6.2	1.4%
Total	100.0%	462	100.0%	44.0%	462.0	100.0%

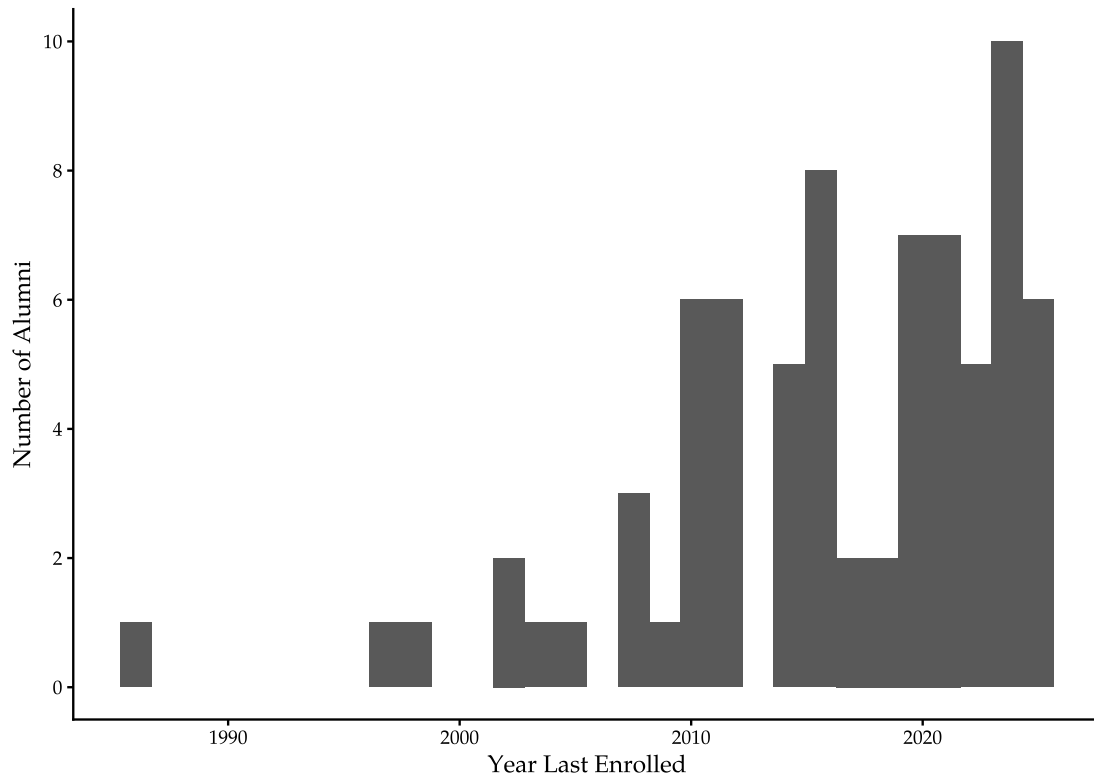


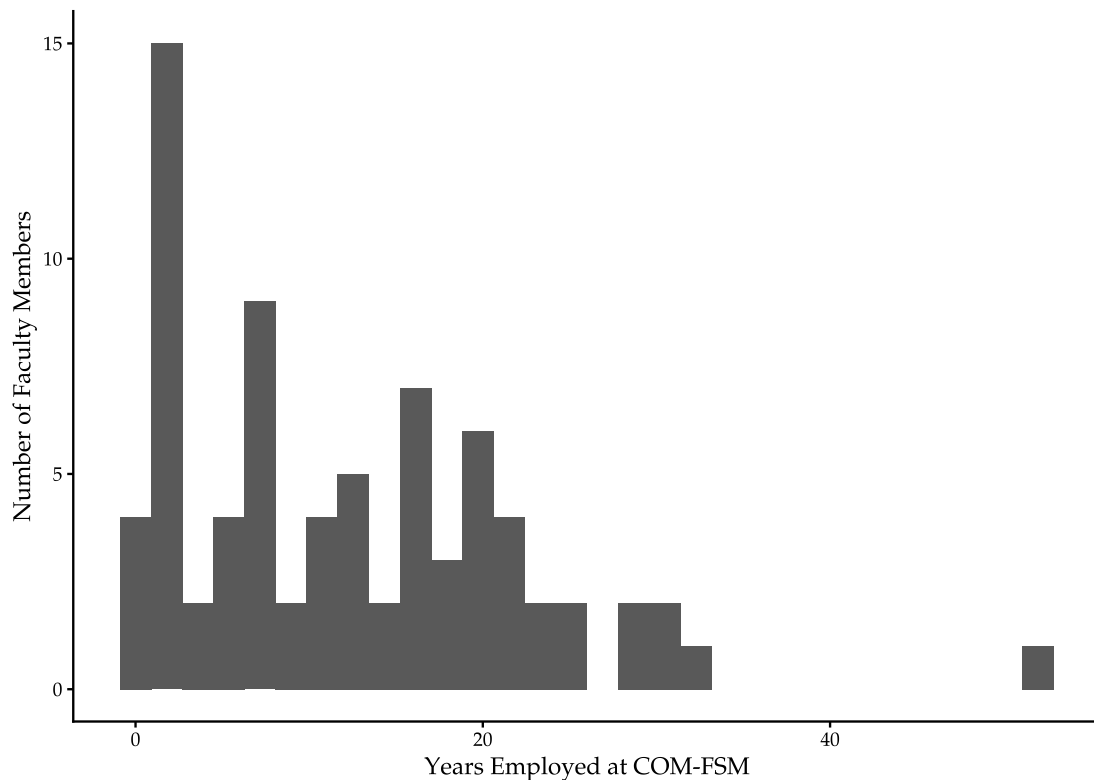
Figure 2.1: *Year last enrolled at COM-FSM*

After applying the weights, all of the student groups matched their target populations within 0.04%, which indicates an extremely high level of matching COM-FSM's student population.² Because of this high level of matching across campuses, gender, credential, program, and full-/part-time status, coupled with the total sample including over a quarter of enrolled students system-wide, the weighted sample is likely representative of the total student population. The weighted results are, therefore, used for the rest of the student results presented in this report instead of the original unweighted results.

For the alumni survey, known population numbers were difficult to determine since the population includes alumni from several decades and reliable numbers were not available. Because of this, survey weights were not used for the alumni survey results. The results do not represent all alumni but rather the experiences and views of the individual respondents. The demographic characteristics of the alumni respondents are provided in [Table 2.2](#), and the year alumni last enrolled at COM-FSM is plotted in [Figure 2.1](#).

Since the faculty survey had a very high response rate, no survey weights were needed to balance the responses. The demographic characteristics of the faculty member sample are provided in [Table 2.3](#). The subjects taught by the respondents are given in [Table 2.4](#).

² The FMI campus was excluded from this project and none of its students or faculty members were included.



account how often each response level is selected overall and use that to inform how the scale is created. Taking the overall frequency of the response levels into account is important, especially in the context of the FSM where respondents may rate items more positively out of politeness, since it allows the model to use slight variations in the responses to distinguish items from each other on the scale it generates, which creates a more nuanced measure of the latent trait being measured by the item.

The GRMs also calculate a score for each respondent that is on the same scale as the items. These scores allow us to compare the items and the respondents to each other. The original scores the models create are called z-scores, but for ease of interpretation they are converted to a 0–100% scale.³ Higher values on the scale mean a higher rating by the respondents, while lower values mean the opposite. The scores for groups of interest are then aggregated and reported. The GRMs used for the student responses incorporate the survey sampling weights.

All of the GRMs used in the report controlled for differences in respondent background (such as gender, major, degree, enrollment status [new, continuing, or returning], and full-time or part-time status for students) and campus.⁴

2.3.4 Open-ended questions

The open-ended questions are analyzed by inductively identifying emergent themes following the principles of thematic analysis (Braun & Clarke, 2006).

2.3.5 Data Suppression

In order to protect respondents' privacy, group-level results for items other than background and demographic items are suppressed for groups with fewer than 4 individuals. This protection comes with the trade-off that some groups, such as some smaller programs, may not have any disaggregated results. However, all responses are used in aggregate results and in the analysis models used for calculating group results.

2.4 Interviews

During Phase 2 of the project, faculty, students, alumni, and community members were interviewed across the COM–FSM campuses⁵ to gain more in-depth information about their experiences at and views of COM–FSM than what was provided by the surveys.⁶ Participants were asked a series of questions about their experiences with COM–FSM on a range of topics related to the curriculum based on their role and relationship with the college using pre-established interview protocols. However, not all questions from

³ Z-scores were converted to percentiles by finding the proportion of a normal distribution that falls below each z-score.

⁴ The models used weakly informative priors and allowed the item difficulty values and discrimination values to be correlated.

⁵ The FMI campus was excluded from this project.

⁶ The surveys give breadth of information, while interviews provide targeted depth of information.

the protocols were used in each interview due to the fluid nature of the conversations, the topics covered by the participants, and occasional time constraints.⁷ The interviews were conducted both individually and in small focus groups based on participant availability. Some interviews were conducted over Zoom, while most were conducted in person. The interviews and focus groups were audio recorded and then transcribed. The transcriptions were analyzed by inductively identifying emergent themes related to the curriculum following the principles of thematic analysis (Braun & Clarke, 2006).

To protect individual privacy, only de-identified results are shared in this report. Some quotes used may be slightly adjusted from the original in order to remove identifying contextual information.

2.5 Limitations

This report has several limitations that are described based on methodology.

2.5.1 Document review limitations

The document review only included documents that were available and provided by COM-FSM for review. For some documents, in particular course outlines, there was good availability, so virtually all courses are included. For others, such as the course assessments, program reviews, and course syllabi, a substantial number were unavailable. The results of those analyses may provide an incomplete picture for the missing documents.

2.5.2 Survey limitations

The survey analyses have several limitations. First, there are some overall methodological limitations. Surveys only provide a single point-in-time snapshot of the respondents' views about the survey items. Those views may change over time, so the current results may not represent respondents' future views. Some respondents may also not provide their true feelings and may feel social pressure to respond more positively than they would otherwise. While the anonymous online nature of the survey was used to help mitigate this effect, the results may still be more positive than how respondents actually feel. Additionally, surveys are subject to recency bias, where more recent events (such as recent positive or negative experiences) can wield a stronger influence over the responses than either historical events or the totality of their experiences. So, therefore, survey results often represent an in-the-moment view of the respondents' feelings rather than a neutral summative assessment of their experiences.

There are also several limitations specific to each of the three surveys. For the student survey, only about 27% of students completed it, which means that a large majority of students did not respond.⁸ While statistical techniques were used to help ensure

⁷ Some additional questions were also used in the interviews based on the natural flow of the conversation.

⁸ Many surveys typically have much lower response rates, so 27% is actually a reasonable response rate.

the respondents' demographics matched the overall COM-FSM student population, there could be unmeasured differences between those students who completed the survey and those who did not, since the students were not randomly sampled, such as differences in motivation to respond, perhaps driven by stronger grievances or more positive experiences to share, or that their instructor offered class time to complete the survey. This limitation is also true to a larger extent for the alumni survey that had a very low response rate relative to the total COM-FSM alumni population, which was compounded by the inability to use the same statistical techniques that were used for the student survey. The alumni survey results, therefore, may not be representative of the COM-FSM alumni population. However, non-representative samples still provide valid opinions of those individuals who shared them and may also be useful for decision-making purposes. The faculty survey had an excellent 75% response rate, which likely means that the responses are broadly representative of the college's faculty. That being said, there may be some unmeasured differences between the 75% who responded and the 25% who did not.

2.5.3 Interview limitations

The interview analysis in this report has two main limitations. The first is that it does not necessarily capture a representative sample of the respective interviewed populations, since doing so is logistically challenging and often rarely feasible. However, an effort was made to interview individuals across a variety of roles and programs across the college's campuses. The second limitation is that since the interviews are necessarily done with a live interviewer, individuals may not be as honest or open as they would in more anonymous settings. To help mitigate that, individuals were informed that all responses would be anonymized before being shared.

Table 2.2: *Alumni survey sample demographics*

Characteristic	N = 78 ¹
Campus	
Chuuk	1 (1.3%)
CTEC	3 (3.9%)
Kosrae	1 (1.3%)
National	60 (78%)
Yap	12 (16%)
Unknown	1
Gender	
Female	46 (60%)
Male	31 (40%)
Unknown	1
Home State	
Chuuk	11 (14%)
Kosrae	5 (6.5%)
Pohnpei	29 (38%)
Yap	32 (42%)
Unknown	1
Graduated	69 (90%)
Unknown	1
Credential	
AA	23 (30%)
AAS	3 (3.9%)
AS	23 (30%)
BS	14 (18%)
CA	1 (1.3%)
TYC	11 (14%)
UC	1 (1.3%)
Unknown	2
Program	
Ag. & Nat. Res. Management	5 (6.6%)
Business Administration	8 (11%)
Computer Information Systems	5 (6.6%)
Electronics Technology	2 (2.6%)
Elementary Education	12 (16%)
General Business	1 (1.3%)
Health Careers Opportunity Program	3 (3.9%)
Hospitality and Tourism Management	1 (1.3%)
Liberal Arts	12 (16%)
Marine Science	1 (1.3%)
Micronesia Studies	1 (1.3%)
Nursing	5 (6.6%)
Pre-Teacher Preparation	7 (9.2%)
Public Health	1 (1.3%)
Teacher Preparation - Elementary	9 (12%)
Telecommunication Technology	1 (1.3%)
Trial Counselor	1 (1.3%)
Unclassified	1 (1.3%)
Unknown	2
Year Last Enrolled	2,017 (1,986, 2,025)
Unknown	3

¹n (%); Median (Min, Max)

Table 2.3: *Faculty survey sample demographics*

Characteristic	N = 78
Campus	
Chuuk	6 (9.8%)
CTEC	14 (23%)
Kosrae	5 (8.2%)
National	27 (44%)
Yap	9 (15%)
Unknown	17
Gender	
Female	33 (43%)
Male	43 (57%)
Unknown	2
Educational Attainment	
Vocational training	1 (1.3%)
Associate's degree	3 (3.9%)
Bachelor's degree	11 (14%)
Master's degree	49 (64%)
Doctorate/Professional Degree	12 (16%)
Unknown	2

Table 2.4: *Faculty survey sample subjects taught*

Subject	n
AC	1
AG	2
AR	1
BA/BU	6
BK	2
CA	7
CE	1
ED/EDU	9
EN	12
ESL	8
ESS	2
HTM	1
IS	1
MR	1
MS	15
MU	1
NU	4
PH	3
PY	5
RAC	1
SC	9
SS	10
VAE	1
VCE	1
VCT	1
VEE	5
VSP	4
VTE	4
Unknown	3

3

Identified Strengths

The results of all the analyses conducted were overwhelmingly positive and identified numerous strengths for COM–FSM’s curriculum and related processes. The main strengths are presented below.

3.1 Strong Student and Alumni Satisfaction

An overwhelming majority of the students (Figure 3.1) and alumni (Figure 3.2) surveyed¹ expressed their overall satisfaction with their program at COM–FSM. In particular, 88% of current students and 87% of alumni surveyed agreed that they were satisfied with their program at COM–FSM. Similarly, 94% of alumni found the program to be helpful for their professional career growth and 92% agreed that their program was valuable for their success after graduation. The vast majority of students (87%) and alumni (88%) also found their program to be good value for the cost of enrollment.

Several students and alumni expanded on their positive views about the college in the open-ended questions and interviews. Some examples from alumni include:

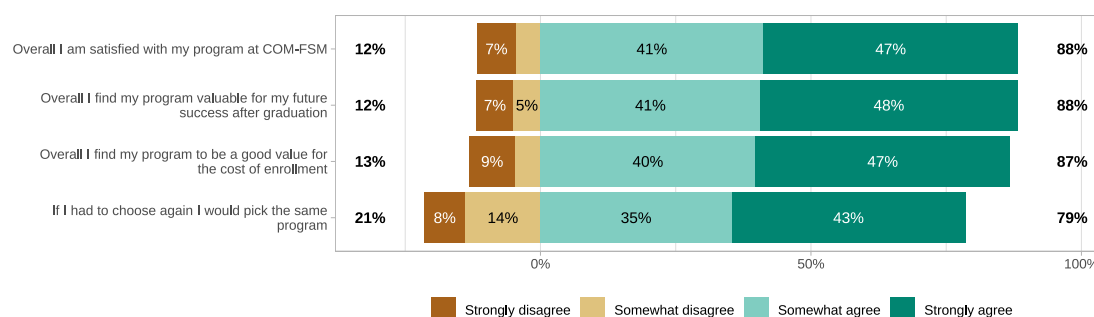


Figure 3.1: Student survey overall satisfaction item responses

¹ As noted in the limitations section that unlike the student survey results, the alumni survey results are not weighted and are unlikely to be representative of the full COM–FSM alumni population; accordingly, alumni findings should be interpreted as reflecting the views of the individual respondents rather than as generalizable conclusions about all alumni.

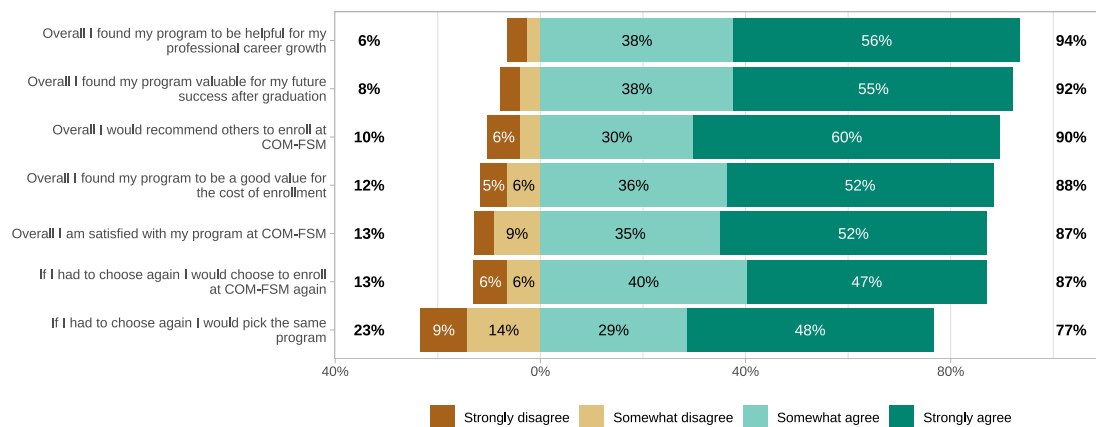


Figure 3.2: Alumni survey overall satisfaction item responses

- “I transferred to [a state college in the U.S.]² a couple of years later smoothly. I did not complete my BS due to personal and financial reasons. However, I feel the skills I learned in 1.5 years at [the state college] are on the same caliber as COM-FSM despite the class levels in the 200s and 300s. I would send my child to COM-FSM because it is an amazing school and wish our communities in the FSM could see it.”
- “My program was very fun and without it I would not have been where I am today.”
- “I think one thing I cherished and benefit a lot from during my time at COM-FSM was having the best faculty.”

Current students also shared similar sentiments:

- “I’d like to share that supportive instructors and a close-knit campus community make learning at COM-FSM meaningful.”
- “I really appreciate choosing COM to pursue my program and career field at The College of Micronesia.”
- “I am very satisfied with my program and believe I have learned a lot throughout my studies. My experience at COM-FSM has been excellent, as a new student, I always wanted to attend this college, and it has truly surpassed my expectations. The supportive environment, dedicated instructors, and engaging coursework have all contributed to making my time here both rewarding and memorable.”
- “The program I am currently in is very amazing.”

Students and alumni agreed that dedicated, high-quality faculty members, a strong sense of community, and programs catered to the needs of FSM students are core areas of strength for COM-FSM. Several faculty members also shared how they strive to best serve their students:

- “COM-FSM is uniquely Micronesian, physically present in the nation, valuing consensus, culture, communication, connectivity, and compassion.”

² The college name is suppressed for respondent privacy.

- “In my opinion, COM–FSM is unique because it blends academic learning with cultural identity and community responsibility in a way few institutions do. It serves as a national college for the Federated States of Micronesia, meaning students from different islands, languages, and traditions come together in one learning environment. This diversity enriches classroom discussions and helps students learn not only from textbooks but also from each other’s lived experiences.”
- “We know our own people. We understand them unlike other colleges.”
- “I see it as a safe place for Micronesians to learn.”
- “COM–FSM maintains a close-knit environment where instructors know their students personally and support them both academically and personally.”
- “COM–FSM already stands on strong foundations—community connection, cultural relevance, faculty dedication, and a mission of nation-building.”
- “COM–FSM has dedicated and approachable faculty who genuinely support students.”

3.2 Overall High-Quality Courses

Another driving factor of students’ and alumni’s high satisfaction with their experiences at COM–FSM is their overall high satisfaction with the quality of courses at COM–FSM. 89% of students (Figure 3.3) and 87% of alumni (Figure 3.4) surveyed agreed that their courses used materials that were clear and easy to understand. Similarly, 87% of students and 88% of alumni agreed that their courses teach content that is up-to-date.

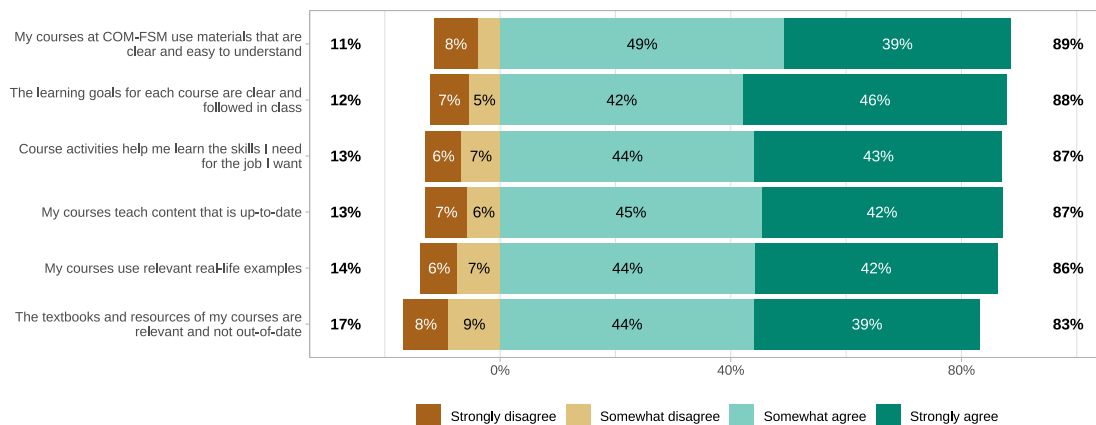


Figure 3.3: Student survey course content item responses

The surveyed faculty members (Figure 3.5) also reported frequently incorporating high-quality elements in their courses. For example, 92% of faculty members reported frequently using relevant real-life examples in their courses and frequently teaching content that is up-to-date. 87% of faculty members indicated that their courses frequently help students develop critical thinking skills, and 80% shared that their courses frequently are aligned with skills needed for current jobs.

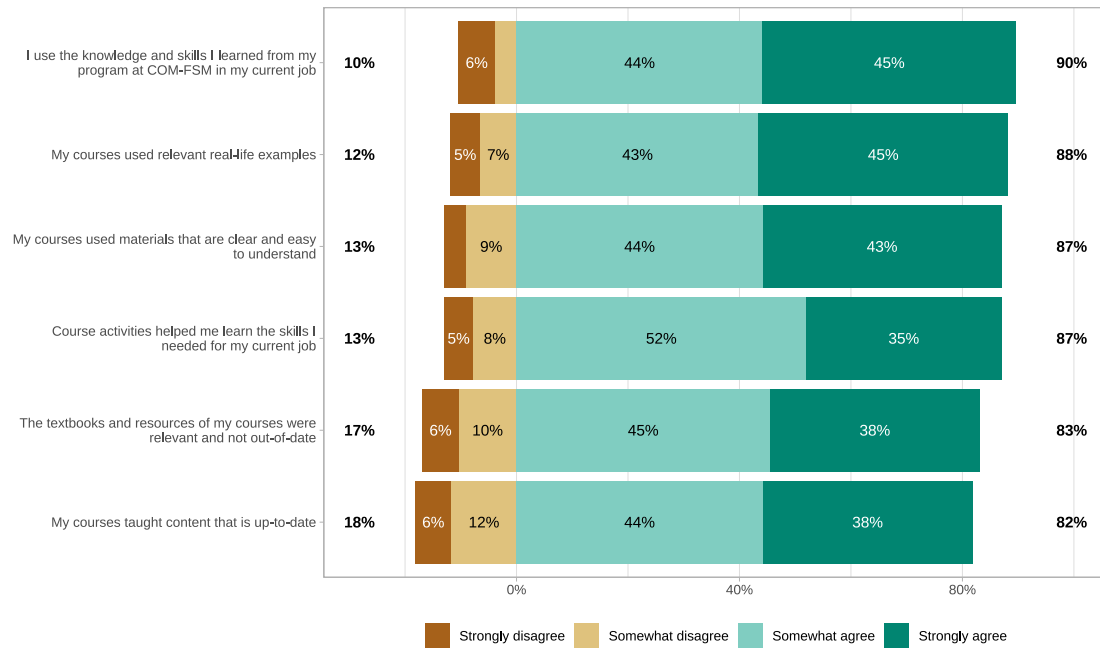


Figure 3.4: Alumni survey course content item responses

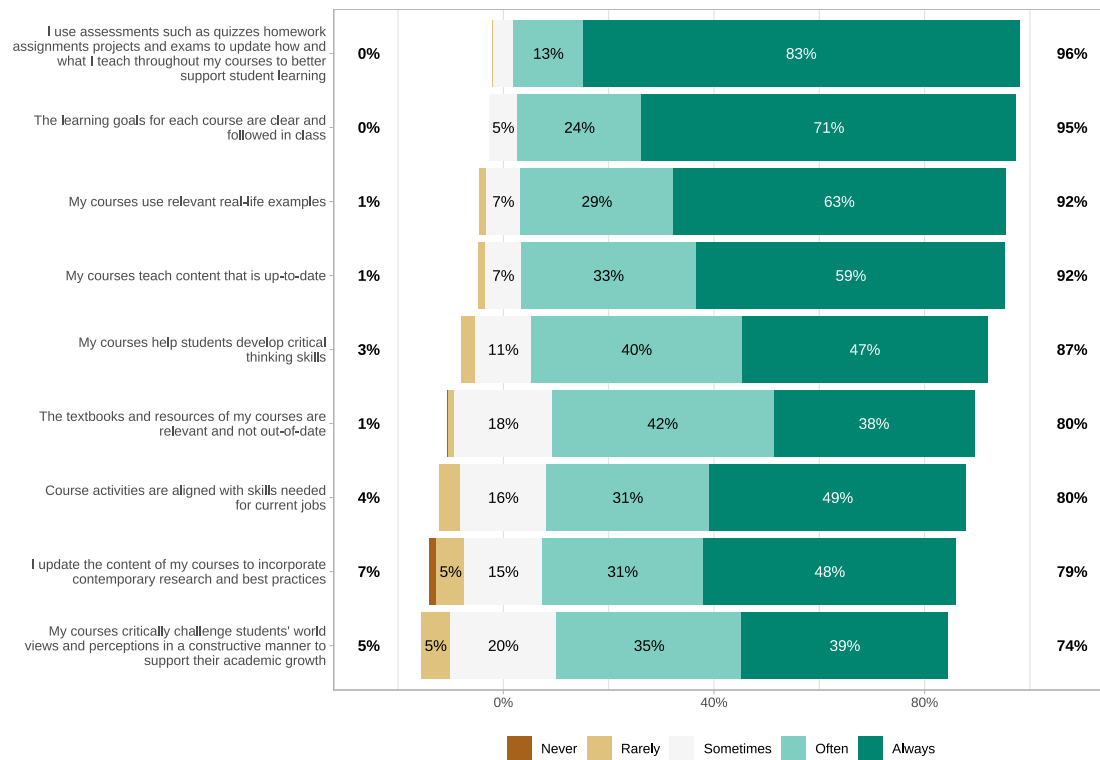


Figure 3.5: Selected faculty survey course content item responses

3.3 Overall Strong Career Preparation

A large majority of the students (Figure 3.6) and alumni (Figure 3.7) surveyed agreed that their programs are preparing them for the jobs and careers that they want. In

particular, 87% of both students and alumni surveyed agreed that they would have the knowledge and skills needed to succeed in their careers after graduating from COM-FSM. Likewise, there is strong agreement that their programs prepared them well for job-related technical skills (85% of students and 86% of alumni), speaking and writing skills (86% of students and 90% of alumni), and problem solving and time management skills (83% of students and alumni).

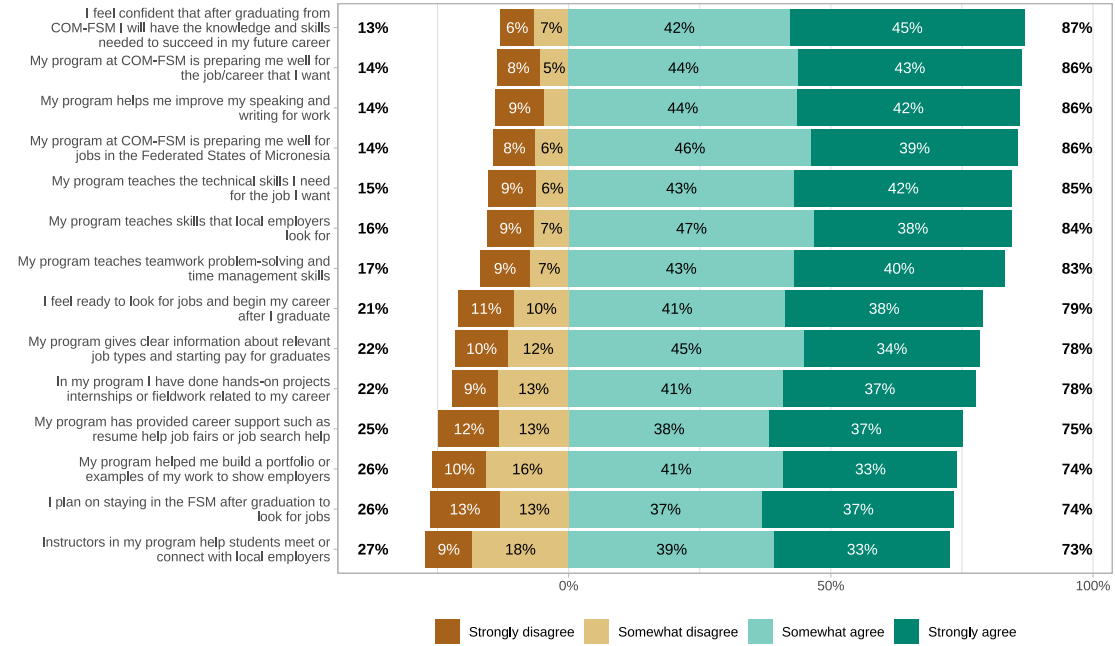


Figure 3.6: Student survey career preparation and readiness item responses

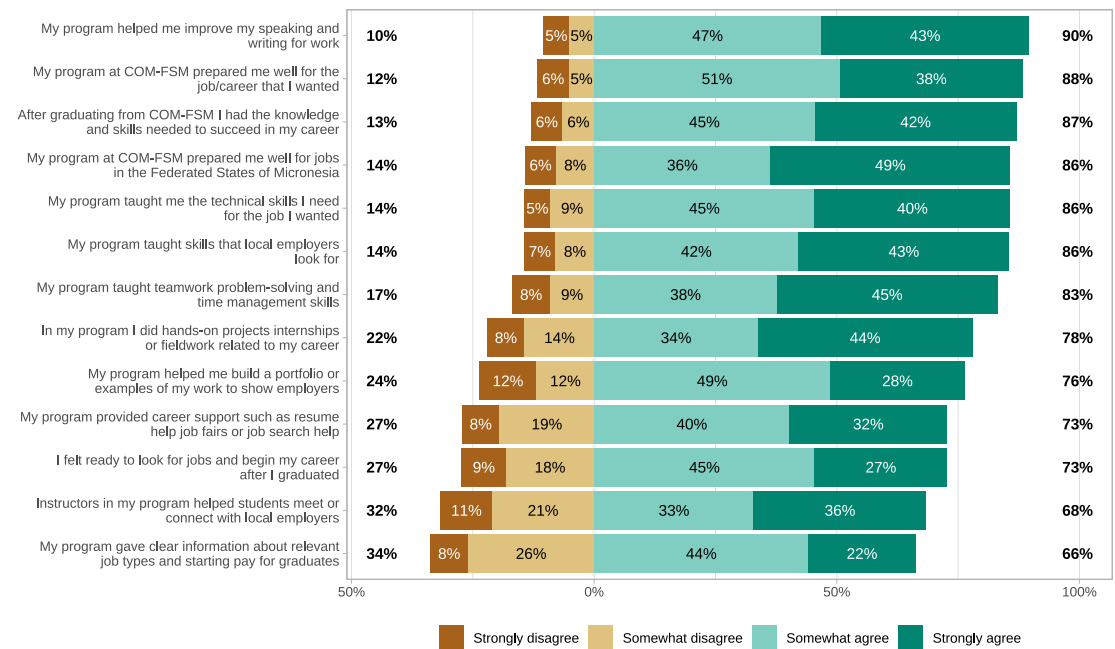


Figure 3.7: Selected alumni survey career preparation and readiness item responses

Faculty members (Figure 3.8) reported overwhelmingly that they design their courses to support their students' career readiness. For example, 96% of faculty members surveyed frequently include knowledge and skills needed for students to succeed in their careers, 89% design their courses to prepare students for jobs in the FSM, and 87% frequently teach teamwork, problem solving, and time management skills. Two-thirds of faculty members also frequently include hands-on projects, internships, or fieldwork in their courses to support students' career development.

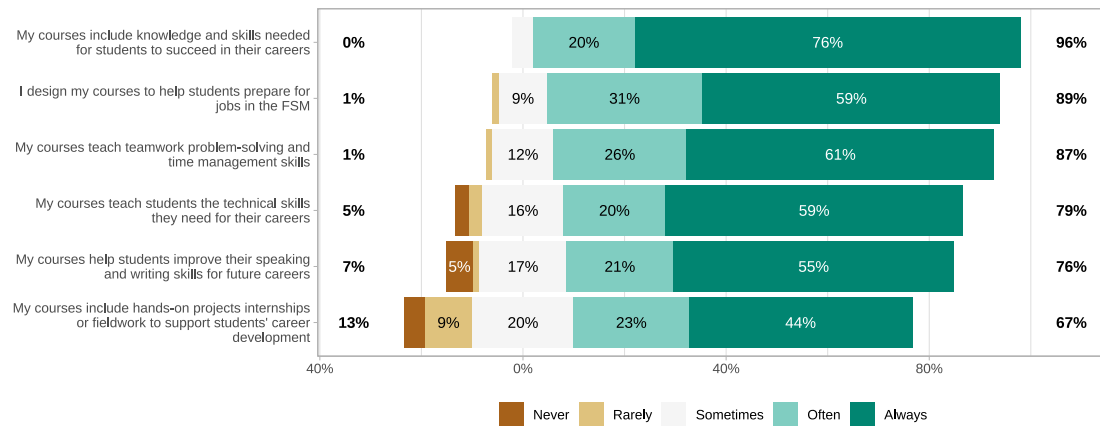


Figure 3.8: Selected faculty survey career preparation and readiness item responses

3.4 Effective Practicums

Several programs at COM–FSM require students to complete a practicum prior to graduation that provides students with hands-on practical experience. These programs are mostly limited to certificate, AAS, nursing, and education programs. For those programs that offer practicums, students and alumni expressed positive experiences about how they helped them develop hands-on knowledge that better prepared them for their careers. Community business leaders also shared how practicums provide opportunities for them to expand their pool of qualified applicants and have more time to vet and train potential applicants.

3.5 Growth in AAS, Certificate, and BS Programs

COM–FSM has seen substantial growth in enrollment (as a percentage of the total enrollment) for Bachelor of Science (BS), Associate of Applied Science (AAS), and vocational certificate programs (CA) over the past five years (Figure 3.9). AAS programs increased in enrollment by 1.4%, certificate programs by 4.7%, and BS programs by 2.3%. Notably these programs are more directly tied to specific careers and the AAS and CA programs in particular offer more hands-on experience on average than other programs, which students are drawn to. Students and alumni also reported extremely high satisfaction with AAS programs across all survey measures, the highest of any pro-

grams. These programs, especially the AAS programs, can be models for other COM-FSM programs in how to support student career readiness and support the FSM’s local job needs.

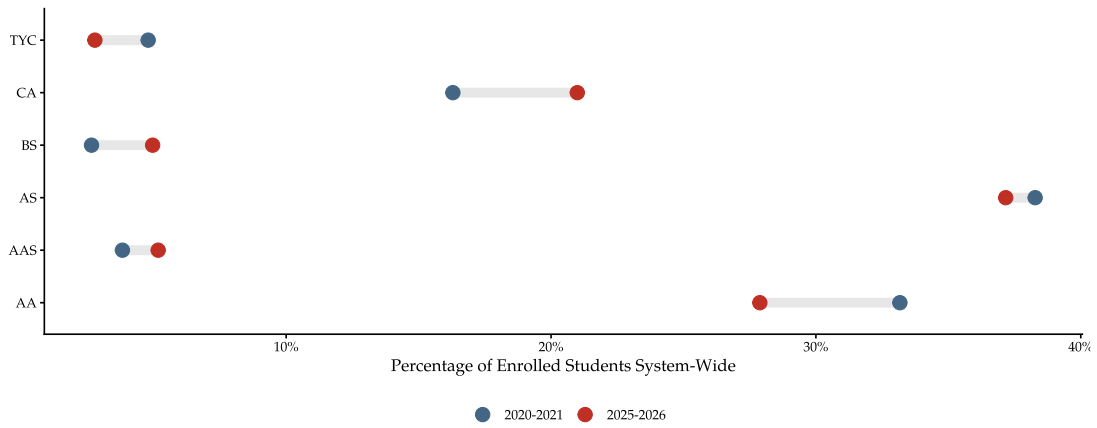


Figure 3.9: Degree and Certificate Program Enrollment Changes 2020/21–2025/26 System-Wide

4

Areas of Growth

While the results of the study were overwhelmingly positive for COM–FSM, there are some areas where the college could continue to grow to better prepare and support its students. In order to support the college’s mission of continual improvement, the main areas of growth are presented below grouped by topic area and combine findings from across the study’s different analyses. Recommendations for the college’s consideration are also provided within each section.

4.1 Streamlining the Curriculum Committee Review Process and Enhancing Faculty Member Instructional Agency

COM–FSM’s Curriculum Committee (CC), as the name suggests, is charged with reviewing any updates to course and program content, outcomes, and required course materials, like textbooks. All courses are required to be reviewed at least every five years. This study found that the CC does a robust job in ensuring effective constructive alignment (alignment between course, program, and institutional student learning outcomes (SLOs), how they are measured in each course, and the course’s activities) of each course. Likewise, the CC members work diligently to improve course quality and have made many improvements to the review processes over the past few years. However, the study also found three main areas of additional improvement that, if addressed, would enhance the quality and efficiency of the CC’s review of course outlines: (1) limited review of quality of course content and materials, (2) excessively long review times and overly burdensome processes, and (3) limited faculty member instructional agency. Each of these areas are discussed below.

4.1.1 Limited Review of Quality of Course Content and Materials

The first area of improvement, is that the curriculum committee does not directly review the course content nor the course materials to ensure that they are the most up-to-date and aligned with best practices in their field. None of the CC review docu-

Table 4.1: Age of Main Course Textbook in Course Outlines

Age	Number of Courses	Percentage
10 years old or less	113	35.3%
11-20 years old	146	45.6%
Over 20 years old	61	19.1%

Source: COM-FSM course outlines. Excludes courses that did not include course materials.

ments include fields for checking the actual content, but focus almost exclusively on SLOs (how they are measured and their alignment with program SLOs and institutional SLOs) and the course's internal consistency.

As a result of limited course content review, over 19% of approved course outlines included required textbooks over 20 years old (Table 4.1). However, on the positive side, the number of courses with outdated course materials is in the minority thanks to the due diligence of faculty members who update the materials in their course outlines themselves using their expertise in their field. This phenomenon is also visualized in Figure 4.1, where the average age of textbooks is plotted by when course outlines were last reviewed by the CC. Since the course outlines (in theory) are required to be updated every five years, the color shading shows the age the textbook will be at the time of the next review: blue indicates under 10 years old, yellow 10–20 years old, and red over 20 years old. In most years, the CC is approving materials that will on average be 15 years old or older at the time of the next review, if it happens on time. For many fields, especially fast changing ones like those related to technology, such materials may be substantially outdated well before they are next up for review. While not all older materials are inherently bad (such as works of literature or seminal works in the field used for their historical significance), almost all of those materials included severely outdated content, which may be detrimental to students. As a caveat to this finding, some of the outdated textbooks included text like "or more recent edition" to allow more recent published editions to be used if available; however, several of them did not actually have more recent editions, and the college's bookshop typically maintained the older edition in stock. Based on the available data, it was unclear the extent to which the more recent editions were actually being used, so the original listed publication date was used in the analyses.

It is worth noting that this finding of a substantial number of outdated textbooks coexists with the previously reported positive student and alumni perceptions of course quality. This suggests that students may not always be aware when their course materials are outdated, or that faculty members are supplementing required materials with more current content in ways that are not fully captured by the course outlines.

4.1.2 Excessively Long Review Times and Overly Burdensome Processes

Related to the first area of growth, the CC took on average 596 days to complete its review of changes to course outlines, with the shortest review taking 77 days and the

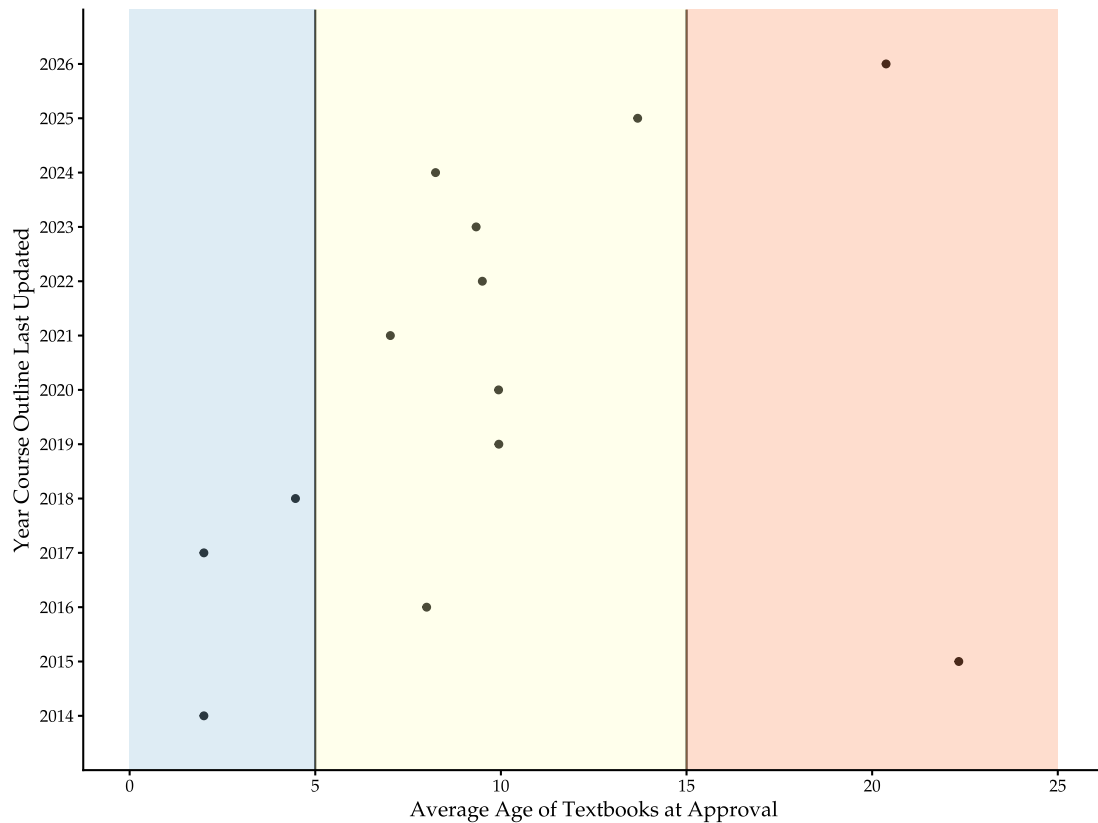


Figure 4.1: Average age of course textbooks by year last reviewed by the Curriculum Committee

longest 2,117 days. This length occurs at least in part because the CC review process requires many stages of review. First a subject area faculty member makes changes to the outline and arrives at a consensus on new changes with other faculty members who also teach that subject (if any). Next the Instructional Coordinator (IC) for that campus reviews and sends it back to the faculty member for edits. Once the IC approves, it goes to the Dean of Academic Programs (DAP) for review. After the DAP approves, it goes to the full CC for review, which typically meets 1–2 times per month. After approving, it goes to the Vice President of Instructional Affairs (VPIA) for final review and approval. At any stage if there are edits to be made, they go back to the faculty member to change, and the document then has to go through all the preceding steps again. Since there were 341 course outlines and each one needs to go through at least five levels of review (faculty, IC, DAP, CC, and VPIA), there are at a minimum 1,705 review steps for all courses to be successfully reviewed, which assumes no additional revisions that would trigger additional rounds. All of those review steps can and do easily bottleneck.

COM-FSM's curriculum policies require all course outlines to be reviewed and updated (as needed) at least every five year. This study, however, found that 47% of courses were not updated within this required time span. Because of the substantial amount of work required at all levels of the process to review and update course outlines according to the current CC processes, there is not enough faculty and admin-

istrative bandwidth for the CC to actually meet those review requirements. This also exacerbates the issue of using outdated course materials.

4.1.3 Limited Faculty Member Instructional Agency

Because even minor changes to course outlines, such as updating course textbooks, require review by the CC, it makes faculty members less facile in responding to changes in their subject areas. Several faculty members shared that the CC's review processes hinder their ability to update their course materials, due to the long and often burdensome review process. Some faculty members also shared in interviews and the surveys that the CC's policies limit their instructional agency, because all faculty members must use the required course materials in the approved course outlines. That means faculty members may be locked into instructional decisions from past instructors from five or in some instances up to 15 years ago. It can also mean they are required to use more expensive textbooks that students need to buy, when the faculty member might prefer high-quality cheaper or even free alternatives. While faculty members can initiate changes to their courses, the CC's processes make those changes overly burdensome and unnecessarily impose a one-size-fits-all approach that limits faculty member agency in making instructional decisions and sidelines their subject area expertise, which ultimately is a disservice to students.

4.1.4 Recommendations

To address these three areas of growth, this study has identified four recommendations for COM-FSM to consider. The college might first consider streamlining the CC review process to reduce its complexity and make it more efficient and timely. This would greatly reduce the time burden on staff at all levels and would potentially be a cost saver for the college. Second, it might also consider incorporating a direct review of the quality and appropriateness of the course content and associated materials in course outlines to ensure that no courses have outdated content or materials. However, any changes to the review processes should not create new structural barriers for timely updates. Third, the college might explore ways to ensure the course content and materials of fast-changing subject areas are continually up-to-date, such as by offering an accelerated course content and materials review process. Fourth, the college might consider ways to better incorporate faculty member instructional agency and allow greater course material flexibility, while still ensuring academic rigor.

4.2 Improving the Quality of Online Courses and Offering More Course Flexibility

Online courses are a great way to expand access to college courses and provide more flexibility to students. COM-FSM has effectively used online courses to increase course

offerings across its campuses and has continually worked to refine and improve the quality of those courses. This study has identified two areas where COM–FSM can continue to enhance its online courses to better support students: (1) Making online courses more interactive and (2) offering more hybrid courses and more evening and night in-person courses.

4.2.1 Making Online Courses More Interactive

Online courses at COM–FSM are mostly asynchronous, where students complete various course modules and assignments at their own pace and there are usually limited, if any live sessions. Many students shared in the surveys and interviews that they value the flexibility of online courses, but their request that out-ranked all others was for more interaction between students and faculty, and among fellow students. Below are some related quotes from students:

- “I would like to see more interactive learning tools, virtual field trips, and online collaboration platforms.”
- “Better online and real-time teacher and student interaction on assignment questions and feedback.”
- “Technology could be used more at COM–FSM to improve learning through interactive exercises and digital resources.”
- “It’s not face to face and like I can’t interact with the teacher and talk to them, then I can’t really understand the material I’m doing. Because if it’s just online. I feel like I have to search up a different way how to do it [myself].”

Students’ desire for more interactive online courses may also be associated (among other factors) with the overall decrease in online course enrollment (Figure 4.2).¹ As of the Fall 2025 semester, over half of course enrollments at all campuses are in-person. This is not to suggest that in-person courses are not desired by students (many students also preferred in-person courses to online ones), but rather that online courses can be a useful supplemental tool to support college access and provide needed flexibility to students.

Multiple faculty members shared in the interviews that they are actively trying to make their online classes more interactive and some have tried multiple different strategies to varying success. For example, one faculty member shared “I’ve made numerous attempts to set up more meaningful conversational kind of activities in my classes. And it’s really hard because they all have different schedules. Only about one fourth of the students show up and I haven’t been successful. I just set up chats last semester and I thought Oh, that’ll do it because they’re used to chatting, but only a few

¹ The association between student preferences for more interactive online courses and the decline in online enrollment should, however, be interpreted cautiously. The trend toward higher in-person enrollment observed across all campuses may also reflect a broader post-pandemic return to in-person learning and instructor availability at each campus rather than dissatisfaction with online course quality specifically, and the available data do not allow these factors to be disentangled.

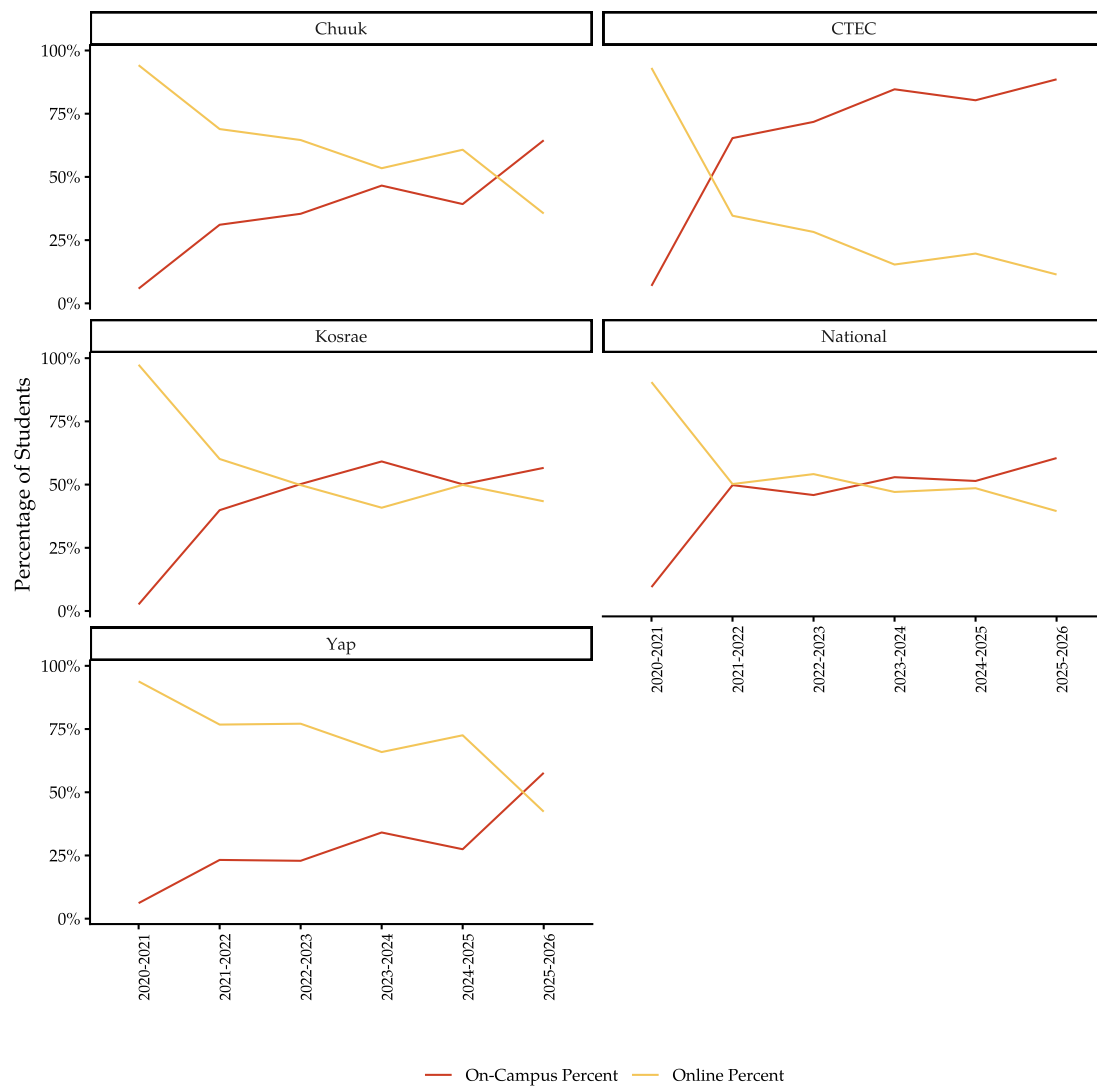


Figure 4.2: Percentage of student course enrollments by modality by campus

chatted with each other and us. I wanted them to chat with each other more than me if they wanted to, but I wasn't successful." Others shared that the limited interaction makes it hard to give timely feedback to support students' learning.

Another related challenge faced by faculty members is that the course outlines that they have to follow were originally created for in-person instruction. Those course outlines may not be well suited for online instruction. However, given the constraints described above about the CC review process, faculty members have fewer options for how to adapt the course to an online modality, especially since there is only one approved course outline that must serve both in-person and online modalities.

4.2.2 Offering more hybrid courses and more evening and night in-person courses

Several students shared that course scheduling flexibility is important to them, because it allows them to fit their courses into their existing work and family obligations. Hybrid courses (also called blended learning) offer both in-person and online learning components. Since COM–FSM currently has limited hybrid course offerings, some students and faculty members suggested that hybrid courses could be a way to address student flexibility while also providing more meaningful interaction and hands-on experience than fully online courses. Similarly other students requested more evening or night courses so that those students who are at work during the day can still attend in-person courses after work.

4.2.3 Recommendations

To address these findings, the following recommendations are provided for COM–FSM to consider:

- Pilot some new hybrid courses following best practices at other postsecondary institutions.
- Identify ways to make existing online courses more interactive using existing technology or other open-source or low-cost solutions.
- Expand evening, night, or weekend course offerings, especially for programs that serve currently working professionals.

4.3 Integrating FSM Indigenous Languages, Cultures, and Knowledge into COM–FSM’s Core Identity and Mission

As the FSM’s only public postsecondary institution, integrating FSM Indigenous languages, cultures, and knowledge into COM–FSM’s core identity and mission will be a key component of a successful 21st century curriculum for the college. This study identified two main areas of growth related to this topic across its analyses, which are discussed in their own sections below.

4.3.1 COM–FSM’s urgently needed role as safeguard of the FSM’s Indigenous cultures, languages, and knowledge

Safeguarding the FSM’s Indigenous languages, cultures, and traditional knowledge was a common concern shared by many students, alumni, faculty members, and community members, especially given the FSM’s challenges of migration, climate change, and language shift to English. Many wished COM–FSM as the country’s only public postsecondary institution would serve as a vital safeguard for the country’s linguistic

and cultural heritage. However, the results of this study show that COM–FSM, while making some progress, has much room to grow in this important role.

Overall, students (Figure 4.3) and alumni (Figure 4.4) rated COM–FSM highly on the *FSM Indigenous Culture, Language, and Knowledge Incorporation* items, especially that COM–FSM respects students’ Micronesian identities and that they learn some local knowledge and history in their programs. However, a quarter of students and almost half of alumni reported that their programs did not teach them how to use FSM local languages professionally in the workplace. Likewise, similar numbers of students and alumni reported that their courses did not include Micronesian authors and sources. When looking at the faculty side (Figure 4.5), the numbers are more stark: Over 60% of faculty members report not including Micronesian authors and sources in their courses nor teaching students how to use FSM local languages professionally in the workplace. Likewise, just under half of faculty members (47%) are not incorporating local FSM languages in classroom activities, assignments, or assessments. These survey findings highlight that incorporating local languages and locally-created sources in courses are primary areas of needed growth for COM–FSM.

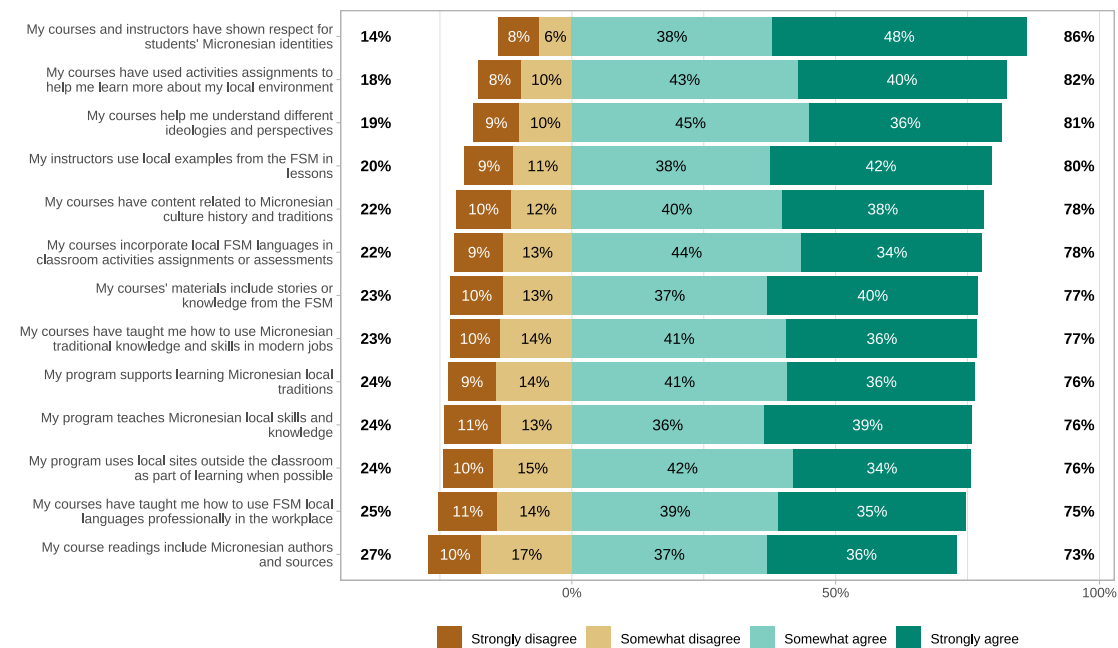


Figure 4.3: Student survey culture item responses

While the student results overall are quite positive for the *FSM Indigenous Culture, Language, and Knowledge Incorporation* items, when examining the results by COM–FSM program, we see a different story. Only 39% of the programs examined had moderately high or higher scores, while over a quarter of programs had low or very low scores (Table 4.2).²

² The discrepancy between positive overall results and lower results by program arises in part due to the unequal number of students in each program, which means the larger programs have a larger influence on the overall results than smaller programs.

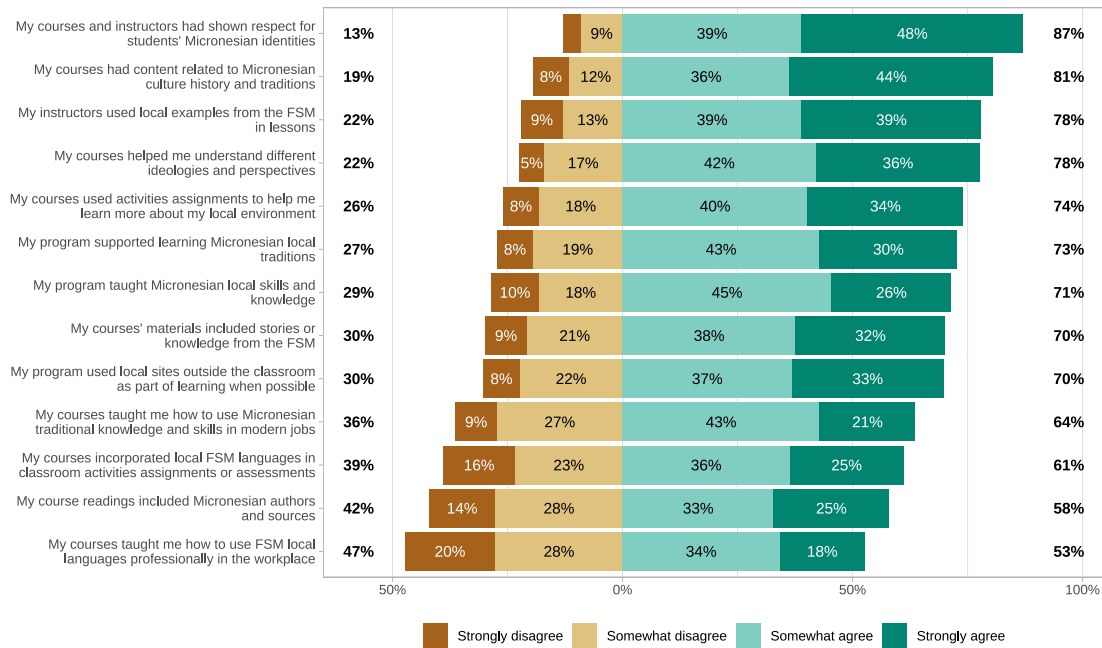


Figure 4.4: Alumni survey culture item responses

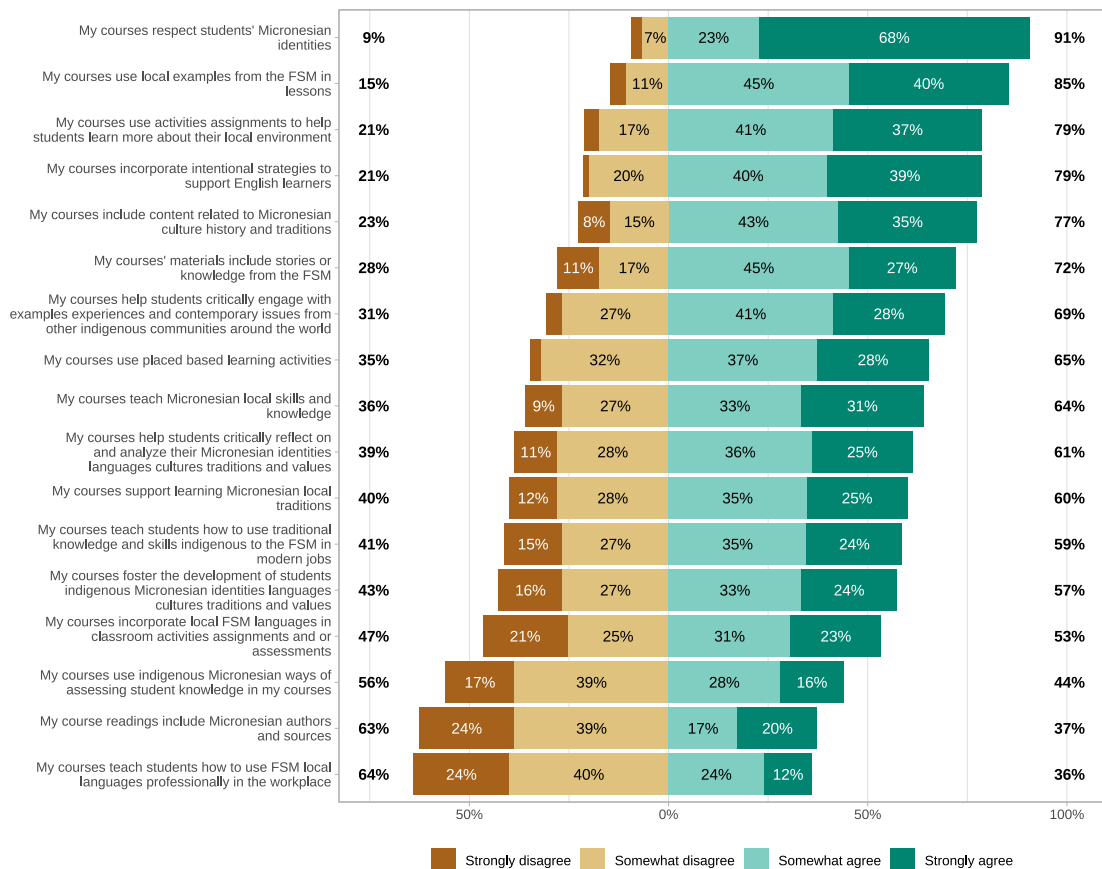


Figure 4.5: Faculty survey culture item responses

Similarly, based on the results of the course review, only 7% of courses' outlines included course SLOs related to Micronesian languages, cultures, and traditional knowl-

Table 4.2: Number of COM–FSM programs that fell within each FSM Indigenous Culture, Language, and Knowledge Incorporation Scale student rating

Program Rating	N = 23
FSM Indigenous Culture, Language, and Knowledge Incorporation Scale	
Very Low	2 (8.7%)
Low	4 (17.4%)
Moderately Low	8 (34.8%)
Moderately High	4 (17.4%)
High	4 (17.4%)
Very High	1 (4.3%)

Source: Student survey administered December 2025.

edge and only 8% of the available course syllabi³ explicitly included any course content or activities related to Micronesian languages, cultures, and traditional knowledge. While some courses may be including such content or activities in ways that are not captured by the course outlines or syllabi, these findings indicate that very few courses formally integrate Micronesian languages, cultures, and traditional knowledge.

In the interviews and open-ended survey results, alumni, students, and faculty members identified several ways the college could better strengthen its integration of FSM languages and cultures. The first way they recommended is creating new institutional SLOs related to FSM languages, cultures, and knowledge and integrating them into existing programs and courses. These new SLOs would help the college integrate FSM languages, cultures, and knowledge across programs as well as formally track the extent to which students are meeting them. Second, many requested the creation of FSM language courses at each campus and the option to take them as a general education requirement and making them a requirement for some programs like Micronesian Studies. Third, some suggested creating new certificate programs or even micro-credentials for traditional skills like canoe building, traditional navigation, handicrafts, traditional fishing skills, local house building, and other local skills relevant to each state that are at risk of not being learned in their communities. Community members also shared that these programs can help provide sources of income for individuals, especially in rural communities who may not have many other income options. These programs could also help foster new research in these areas and creation of learning resources to help document and sustain these local practices. Finally, the college can become the premier research center for Micronesian studies and similar areas unique to the FSM which is best summarized by the following quote from an alum: “COM–FSM can become a hub for Pacific island studies, sustainability, and climate resilience, attracting scholars and students from across the region.”

³ As noted in the limitations section above, a substantial proportion of course syllabi were unavailable for review, and the available sample may not be representative of all courses offered at COM–FSM. This finding should therefore be interpreted as a lower-bound estimate; the true proportion of courses incorporating such content may be somewhat higher, though the broader pattern indicated by this finding is corroborated by the course outline, survey, and interview results.

4.3.2 Localizing instruction and decentering Western-produced course content and materials

The second theme to emerge in the results is the need to better localize instructional materials and further reduce the unnecessary U.S. and European focus of many courses. Many faculty members shared that most of their courses materials are created in the U.S. and often this creates challenges because they do not fit the FSM's context and even teach content that is not relevant. For example, a faculty member shared how their course teaches FSM tax code for business, but the course's required textbook focuses on the U.S. tax code, which is not relevant to the course or the students. Another example shared by faculty members described a public health textbook that introduced recommended healthy foods, but many of the suggested healthy foods are not readily available in the FSM or if so are too expensive for many people to afford regularly. The textbook also did not include the commonly available healthy local options. Faculty members also shared examples of how they are localizing their course materials. One faculty member creates their own materials that use local examples and incorporate local ecological knowledge into their courses. Others shared how the U.S.-based Cengage products, in addition to not giving relevant examples to the FSM, are often too expensive for students. With the switch to e-books, one faculty member shared that students are being pushed by Cengage to sign up for the Cengage unlimited subscription which is "pretty pricey for those students who need only one textbook." Instead of overpriced U.S. textbooks, some faculty members are finding open access materials that are free and more relevant to students, for example: "I use a textbook that's recommended for students in Fiji. It's a free download, a free textbook."

In addition to challenges of finding appropriate localized course materials, several courses, especially general education required courses, that are meant to broaden students' perspectives and introduce them to other fields of inquiry like (but not limited to) philosophy, psychology, literature, and poetry, often have an unnecessarily limited focus on U.S. and European authors and sources. While those authors and sources are perfectly valid areas of study, the students might benefit from a more balanced approach that introduces Pacific, Asian, African, and South American sources as well to ensure students are exposed to a wider range of ideas, especially ones that might be more relevant to this region.

4.3.3 Recommendations

To address these findings, the following recommendations are provided for COM-FSM to consider:

- Create institutional SLOs related to Micronesian languages, cultures, and traditional knowledge and create new program and course SLOs to align with them. The creation of those SLOs would help ensure Micronesian languages, cultures,

Table 4.3: Number of COM–FSM programs that fell within each Career Readiness and Preparation Scale student rating

Program Rating	N = 23
Career Readiness and Preparation Scale	
Very Low	1 (4.3%)
Low	5 (21.7%)
Moderately Low	5 (21.7%)
Moderately High	7 (30.4%)
High	3 (13.0%)
Very High	2 (8.7%)

Source: Student survey administered December 2025.

and traditional knowledge are integrated across programs and would help the college track the extent to which students are meeting them.

- Create local language courses and offer them as general education electives.
- Revise current courses, especially liberal arts and general education courses, to include more global perspectives and voices instead of their current narrow regional focus.
- Create new certificate or micro-credential programs for traditional knowledge and skills in each of the four states. Relatedly, COM–FSM might also consider creating language and culture summer programs (or study abroad semester-long programs) particularly for FSM diaspora college-aged students living in the U.S. to help them reconnect with their FSM cultures and languages.
- Create a digital institutional repository housed at the COM–FSM library to store and make accessible locally created learning materials and research.⁴

4.4 Strengthening Career Preparation

While the overall results for the college’s career readiness were quite positive, there are discrepancies across programs (Table 4.3). Only 52% of programs had moderately high or higher Career Readiness and Preparation scores on the student survey, and 26% had low or very low scores. When examining these disparities, there are seven main areas where additional growth may be warranted to support students’ career readiness and preparation that are discussed in their own sections below.

4.4.1 Strengthening Relationships with Local Employers

Strengthening relationships with local employers was a common theme that emerged in the surveys and interviews. In the faculty survey, only about half of faculty members reported that their courses frequently help students meet or connect with local employers and help students build a portfolio or examples of their work to show employers (Figure 4.6). During the interviews, multiple community members shared their

⁴ This could be accomplished by using the free open source DSpace (<https://dspace.org/>) digital repository software that is used by many colleges and universities.

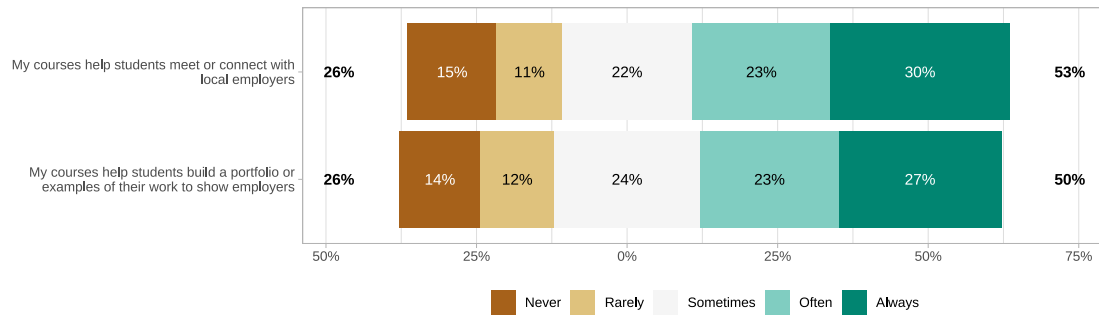


Figure 4.6: *Lowest faculty survey career readiness item responses*

desire to have more input into the college's curriculum. For example, a leader of local community organization indicated that "We need to work closer with the college to share with them what is going on with us and what we need" because there was no process for that input now. Multiple faculty members also shared that there used to be some formal process in the past to engage with local businesses but it had been dormant for years, as exemplified by this quote: "we [had] this advisory council before and they were active before, but now no more." Other faculty members shared that their courses "should be more focused on the local needs," but that they do not have a mechanism to assess those needs. An alum shared that the college could "reach out to other NGOs [and] work collaboratively to develop a plan that will interest our students to enroll and get a good job in the future."

4.4.2 Supporting entrepreneurship and job creation

Several individuals shared that they would like to see greater focus in programs on supporting student entrepreneurship and job creation. For example, a college faculty member shared that the college is training students for much-needed vocational skills, but there may not be companies to hire them when they graduate or the pay may be very low. In addition to the technical training in vocational programs, they recommended that the college also help students "create jobs rather than train [students to] graduate to look for jobs...To train people to create jobs for themselves." A student similarly shared: "I'm going to work for what two dollars an hour? It's not appealing. So in order for you to survive Pohnpei you either have to set up your own business or know people...My goal is actually to set up a business because not a lot of local people here have that type of business around here." That student and others shared that they wished their CTEC program also offered more business-related classes so that they have both the needed technical skills and business skills to create their own company upon graduation. For example, a different student shared that they would like to create their own business but they do not know "how to fund and make my own business."

4.4.3 Developing career “soft skills”

Developing career soft skills was a theme that emerged in multiple interviews. Some faculty members shared how their programs strongly emphasize business soft skills and customer service. For example, a faculty member shared that “we stress to them the importance of them providing the best service” and they coach students on how to perform in the workplace through creating real-life scenarios and activities. Another faculty member shared: “I just found out [a CTEC program], they have mock interviews just to help the students try to go into an interview like their first [job] interview. I think they should do that for all the majors really.” Similarly, an alum shared that their program’s internship “helped me to communicate with others [and] helped me to be myself and teach me that I can [do this job] one day.”

Others interviewed shared areas of improvement for the college in supporting soft skills. A faculty member shared “Some of our students when they graduate, they struggle to write their résumés. Those are basic survival skills in the workforce.” They also shared that the college offers résumé writing seminars, but most students do not attend since they are optional events and not all students are aware of them. They recommended embedding those activities directly into program courses or general education courses. A community member shared that they would like to see the college teach students more “financial management and time management,” since those are important life skills.

4.4.4 Stronger focus on job needs in programs

Multiple faculty members, alumni, and students shared that their programs require courses that may not be aligned with students’ future career needs. For example, one faculty member shared that terminal certificate programs should focus on courses that help students’ careers and that some of the general education requirement may not align with that: “For example the humanities, you don’t need that...then [for] science, they have physical science, but the one that they learn in physical science is not the applied science. They learn the general physics: mechanics, heat. They don’t need that. They need an applied science that is relevant to the program. They don’t need algebra in our [program]. When are you going to find X and Y in my [field]. No, they don’t need that. So it’s a waste of time. So instead just use applied math wherein they will be beneficial to the student and of course when they apply for work...Just modify the English, science, [and] math [requirements] according to the needs of the program, inclined to [the program]. Not inclined to literature, you know, because literature English is different from technical English.” Similarly, a student shared for their program “we had to take humanities and it’s something to [meet general education requirement] but yeah I think they could have come up with more useful courses that would be beneficial in the future.” An alum shared that they would remove the math courses from their program if they could: “the math course...I don’t usually. I’m not using any of it.”

A similar finding was that some faculty members did not think that their courses have enough time for hands-on activities, especially for vocational and technical courses. For example, one faculty member indicated their courses should be “30% lecture, 70% hands-on,” because “you’re developing a worker” who needs the hands-on experience, since it is a safety issue otherwise. When the faculty members started, the college’s administration told them their course should be “six hours of lecture, six hours of practicums,” which did not make sense to them, “because it’s supposedly in other countries what we use is 25% lecture.” They had to press the college to change, but there was resistance. They also shared how their activities require longer prep time than is available in the class time: “it might take from 30 minutes to 45 minutes [to do the initial stage] and then by the time it’s ready for us to work on it then the class is over by the time. So I just wish we had a little bit more time.”

4.4.5 Expanding practicums across programs

Requiring practicums in programs was another theme shared in the interviews. Some faculty members indicated that their programs have recently added requirements for practicums: “There was [a] practicum for certificate level, but no practicum at all for AS degree level. So we added that.” Others shared that they wish the practicums were longer: “our partners, they said that it’s too short because...what they’re seeing is if we can make it longer” because students do not have enough time to learn the job skills and join work projects. Other faculty members shared that they wish there were opportunities to go abroad for their internships to get “that interning experience that they would get from interning in other international countries” that they would not get in the FSM. Some students also shared that their program does not offer internships, but they wish they had opportunities to do so: “I would definitely like to do more...practicums, field work.”

4.4.6 Strengthening postgraduation pathways

Students and alumni in the open-ended survey items and interviews requested stronger postgraduation pathways to local employment and postsecondary programs abroad. COM-FSM currently has articulation agreements with multiple postsecondary institutions abroad and strong relationships with some local employers for particular programs, especially vocational, education, and nursing programs. However, alumni and students were not always aware of existing relationships with foreign postsecondary institutions or which courses they would need to complete for admission to their desired program abroad. Likewise, many alumni and students wanted more pathways for employment locally after graduation, like job placement opportunities and other agreements with local employers.

4.4.7 Recommendations

To address these findings, the following recommendations are provided for COM–FSM to consider:

- Require practicums in all programs at COM–FSM.
- Since practicums are relatively short in duration, COM–FSM might consider exploring alternate structures for some programs like multi-term co-ops or similar experiences that provide students with longer hands-on training.
- Review the ratio of direct classroom instruction to hands-on activities in technical and vocational courses to ensure students have enough opportunities to gain practical experience.
- Create easy to understand pathways for existing articulation agreements and create updated advising and recruitment documents to support student decision-making. Consider also identifying local employment pathways for each program.
- Review the required general education courses for all technical programs to ensure the required courses provide skills aligned with what students will need in their careers after graduation.

4.5 Strengthening Technology Use

Overall, students (Figure 4.7) and alumni (Figure 4.8) rated the college highly for technology use. However, there were four areas of technology use growth that emerged in the study’s results, which are discussed below.

4.5.1 Strengthening technology use across programs

While the overall student survey results for technology use were positive, like the other findings, there were substantial differences between programs (Table 4.4). About 57% of programs received scores of moderately high or higher for technology use and 13% of programs received scores of low or very low. Most programs (70%) received scores of moderately high or moderately low. Those lower scores are primarily driven by the survey items: “I have practiced using the exact tools, machines, and software I will use at the future job I want” (24% of students disagreed), “My program prepares me to learn new technology that I will need on the job” (21% of students disagreed), and “My program teaches how to get help when technology or software does not work” (21% of students disagreed). A sizeable minority of students feel that their programs are not preparing them for the technology they will need on the job.

Table 4.4: Number of COM-FSM programs that fell within each Technology Use Scale student rating

Program Rating	N = 23
Technology Use Scale	
Very Low	1 (4.3%)
Low	2 (8.7%)
Moderately Low	7 (30.4%)
Moderately High	9 (39.1%)
High	2 (8.7%)
Very High	2 (8.7%)

Source: Student survey administered December 2025.

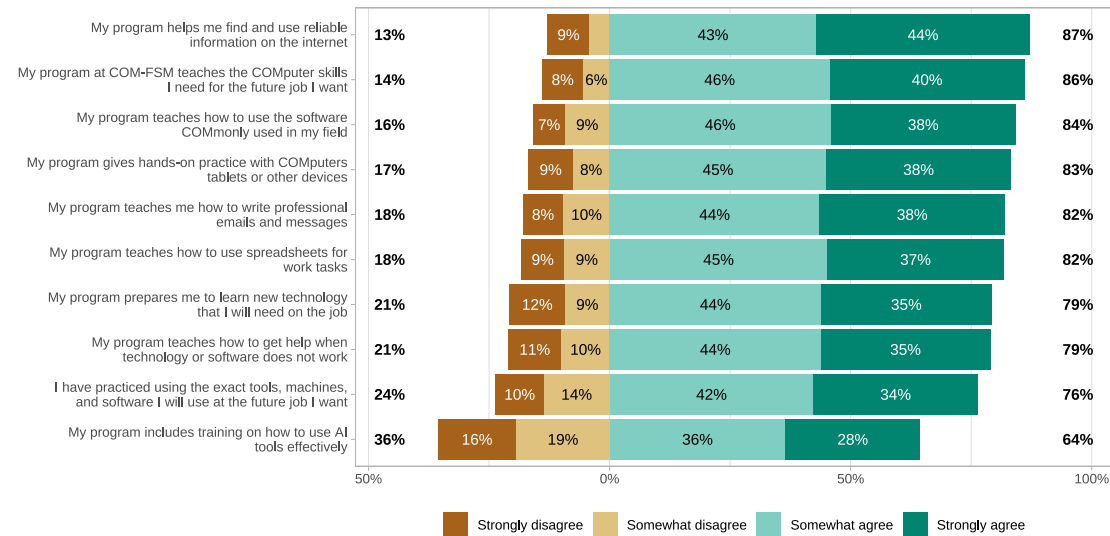


Figure 4.7: Student survey technology use item responses

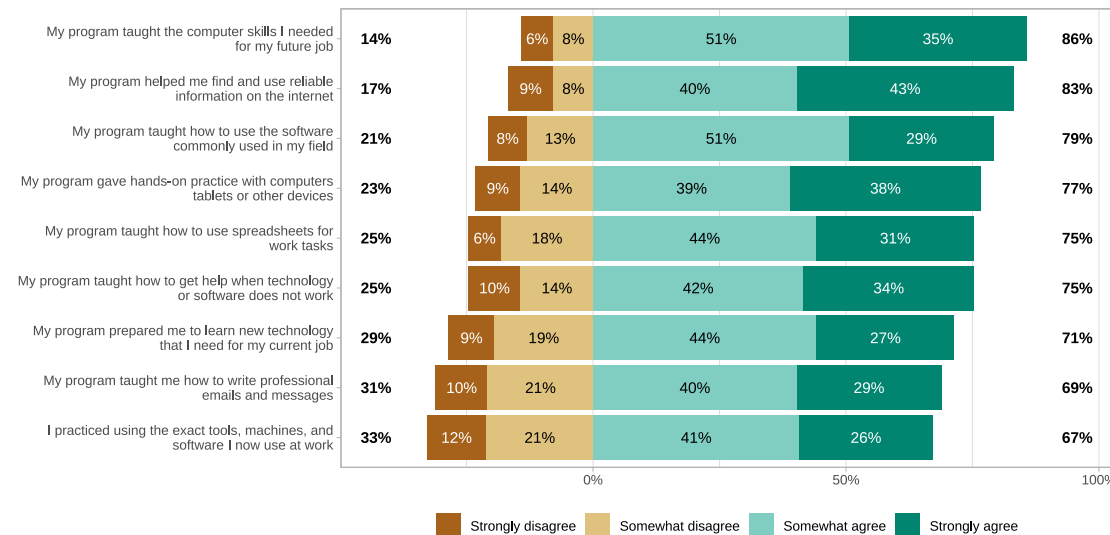


Figure 4.8: Alumni survey technology use item responses

The faculty survey results (Figure 4.9) provide helpful additional context. Just over half of faculty members (54%) reported that they frequently incorporate new technology into their courses. Likewise, only half of faculty members shared that their courses

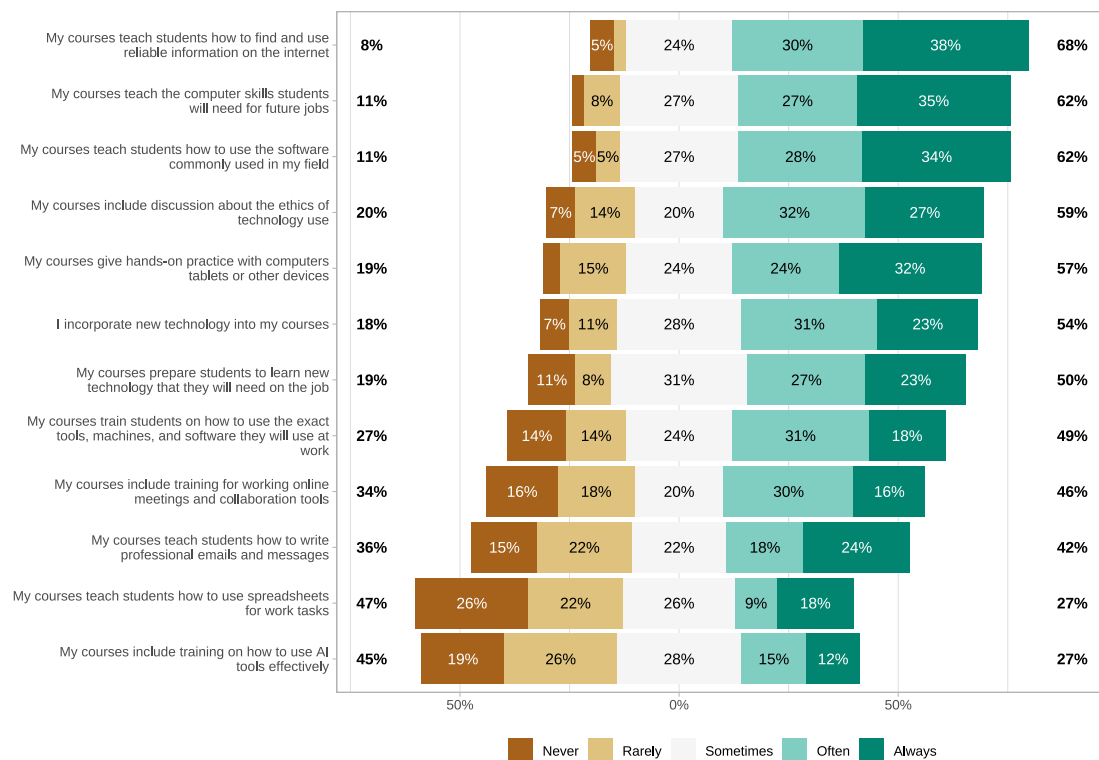


Figure 4.9: Faculty survey technology use item responses

frequently prepare students to learn new technology they will need on the job, 49% shared that their courses frequently train students on how to use the exact tools, machines, and software they will use at work, only 42% frequently teach students how to write professional emails and messages, and 27% frequently teach students how to use spreadsheets for work tasks. While not every course offered by COM–FSM needs to incorporate all of those technologies, the number of faculty members who do is overall quite low.

Strengthening technology use and training across programs and encouraging more faculty members to use technology in their courses could better help support students' career readiness.

4.5.2 Addressing infrastructure challenges

Infrastructure challenges were a common theme across interviews and open-ended survey items when discussing technology use. COM–FSM has been working diligently to improve its IT infrastructure and has made substantial improvements, but it is a constant challenge given the FSM's geographic context and the college's budget limitations. Many of those interviewed discussed internet speed and access as a common challenge, especially at the state campuses. Similarly students shared how they often do not have access to a computer and reliable internet at home and requested more opportunities to use campus computer labs at night and on weekends, especially to complete their online coursework.

4.5.3 Using more mobile-friendly technology

Some faculty members shared that they are shifting the software used in class to mobile-friendly options in order to make it more accessible to students who may not have access to laptop or desktop computers at home. For example, “All homework can be done through the phone” and “[we use] slides, all of which are designed to be mobile friendly so they can work from their phone.” One faculty member encourages students to use phones respectfully in class as a learning tool, since most students have phones and there are multiple freely available apps and mobile-friendly websites that can support student learning, especially in the sciences. That same faculty member shared “[I use] Google Slides because they [students] do [slide] composition on their phone.” For another example: “For classes that are using e-books, I allow them to use their cell phones or whatever device that the students have to go on and read their textbooks and then I lecture by using a smartphone.” However, some existing online platforms and software that are used in courses are not mobile-friendly and can be challenging for some students to access.

4.5.4 Increasing training on using AI tools

The incorporation of AI training in courses was the lowest technology item for students (64% of students agreed; [Figure 4.7](#)) and faculty members (only 27% incorporate it frequently; [Figure 4.9](#)). This finding is not necessarily surprising given how new the technology is and that COM–FSM had only created its institutional AI use policy in Fall 2025. In the student interviews, many requested training on how to use AI tools and to learn more about which tools are available. In the faculty interviews, there was a range of responses from banning AI tools outright to actively encouraging their use within specific parameters. For example as a common middle ground, some faculty members shared that they allow students to use AI and give them general guidance on appropriate in-class use. For example: “I tell them okay, you have to work on this project. And then you can use AI but don’t rely on it. Just use it as assistant, you know, to assist you with what you know.” On the more proactive side, a small number of faculty members have dedicated AI assignments and activities in their courses that teach students the limitations of AI models and guide students in critically evaluating the models’ responses. Some faculty members shared that they would like to use AI tools more in their classes, but did not feel confident enough to create lessons on the topic and requested more training.

4.5.5 Recommendations

To address these findings, the following recommendations are provided for COM–FSM to consider:

- Provide more training for faculty members on how to incorporate technology (especially mobile-friendly ones) and AI tools, in their courses.

Table 4.5: *Categories of Additional Programs Desired by COM–FSM Students*

Category	Count
Engineering	22
Legal	21
Health	15
Computer Science	12
Business	11
Vocational	11
Service Industry	10
Arts	9
Science	9
Aviation	8
Social Science	7
Technology	4
Humanities	2
Military Science	2
Farming	1

Source: Student survey administered December 2025.

- Continue efforts to improve internet speeds across campuses and explore additional opportunities to provide computer access to students.
- Continue transitioning to mobile-friendly software and online platforms to support students' access.
- Identify ways to increase technology use in low scoring programs.
- Create new institutional and/or program SLOs related to technology use to ensure students across all programs learn appropriate technologies for 21st century jobs.

4.6 New Programs Requested by Students and Alumni

Students (Table 4.5) and alumni (Table 4.6) were asked in the open-ended survey items to identify any new programs they would like to see at COM–FSM. Engineering, legal, and computer science programs were among the most frequent requests. Many students also requested an equivalent bachelor's program for their current program of study, so that they can continue their education in the FSM instead of having to move abroad.

4.6.1 Recommendations

While it may be challenging and costly for COM–FSM to create new four-year degrees, especially engineering, the college might consider identifying new pathways among existing courses and programs (and new articulation agreements as needed) to support students in enrolling in those programs abroad. The college might also consider creating mechanisms to continually gather feedback from students, alumni, and other FSM community members to determine future program and pathway needs.

Table 4.6: *Categories of Additional Programs Desired by COM–FSM Alumni*

Category	Count
IT & Computers	10
Legal	10
Social science	10
Vocational	9
General	6
Health	5
Engineering	4
Humanities	4
Social Work	4
Business	3
Education	3
Science	3
Renewable energy	2
Sustainability	2
Food production	1
Language	1
Mathematics	1

Source: Alumni survey administered December 2025.

4.7 Strengthening Connections Between COM–FSM Campuses and Streamline Intra-College Communication Channels

While not directly related to the college’s curriculum, the need to strengthen connections and cohesion between the COM–FSM campuses, as well as between various offices within the college, frequently arose in the interviews. For example, state campus (including CTEC) students, faculty members, and administrators often felt at least somewhat disconnected from the other campuses, especially from the National campus. Students across all campuses shared that they wished they had more opportunities to interact with their peers at other campuses and had more cross-campus activities. Related to the finding above about making online courses more interactive, students in state campuses who enroll in many online courses shared that they felt isolated and wished that they could interact with other students. Faculty members also shared that they wished there were more opportunities for working with their colleagues across the campuses, more shared professional development opportunities, and more opportunities for them to meet in person. Likewise, some administrators and faculty members shared that student recruitment can be a challenge, especially at CTEC, because the recruiters at the National campus may not be familiar with the CTEC programs, so they are overlooked. Similar silos were reported by other groups at the college. For example, several faculty members and students reported being unaware of the services provided by the college’s counselors and how to access them and on the other side, college counselors also had challenges getting information to faculty members and students. Some faculty members shared that it can be challenging for them to access the information they need to accurately advise students about the college’s policies, processes, and even which courses students are required to take for

their program. As another example, a student who transferred from another institution shared: “it’s very frustrating trying to register for classes here because the communication between the staff itself is very poor. I don’t know how many times I had to submit my transcripts or get misinformation about certain stuff.”

4.7.1 Recommendations

To address these findings, the following recommendations are provided for COM–FSM to consider:

- Identify ways to continue fostering a shared identity across the college’s campuses from students to administrators.
- Create updated consistent guidance, expectations, and training for academic advisors. These could include information about career pathways, required courses, future program and employment opportunities, and other available services on campus, such as college counseling services.
- Streamline communication between the college’s internal units and reduce information silos wherever possible. Likewise, the college should continue its efforts to digitize the remaining paper-based processes and forms to make those processes more efficient and accessible.

References

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Bürkner, P.-C. (2021). Bayesian item response modeling in R with brms and Stan. *Journal of Statistical Software*, 100(5), 1–54. <https://doi.org/10.18637/jss.v100.i05>
- Deville, J.-C., & Särndal, C.-E. (1992). Calibration estimators in survey sampling. *Journal of the American Statistical Association*, 87(418), 376–382. <https://doi.org/10.1080/01621459.1992.10475217>
- Samejima, F. (1997). Graded response model. In W. J. van der Linden & R. K. Hambleton (Eds.), *Handbook of modern item response theory* (pp. 85–100). Springer. https://doi.org/10.1007/978-1-4757-2691-6_5

