



2021 FEMA HIGHER
EDUCATION STATE OF THE
COMMUNITY: ANNUAL SURVEY
AND REPORT

Executive Summary

The FEMA Higher Education Program Survey is conducted annually to collect and provide consistent data related to the faculty, curriculum, and students of emergency management programs. As a follow-up to last year, an additional question was added regarding COVID-19. The following key questions guided the survey: (1) What is the focus of the curriculum in emergency management (EM) programs? (2) Who are the students and faculty in EM programs? (3) What type of support is accessible to EM programs? (4) What changes (if any) impacted the program due to the pandemic? (5) Which FEMA Higher Ed services do the EM programs use?

EM Programs

This report presents the responses from 93 institutions of higher learning (IHEs) representing 114 programs. Most of the programs were domestic, however, some international programs responded as well. Majority of the programs have an overall focus on preparing students for work in the public sector. The programs are housed in various departments, schools, and colleges on campus, and the Classification of Instructional Programs (CIP) codes highlight a range of disciplinary interests. Emergency Management and Homeland Security are the most often used CIP codes and academic homes. While responding programs have various degrees, certificates, and concentration offerings, most of the programs offer bachelor's degrees, master's degrees, or a graduate certificate. Over 50% of the programs have offered EM curriculum for more than 10 years. Furthermore, EM programs increasingly provide majority of their curriculum in an online format.

EM Students

The data in this report indicates that over 67,000 students have graduated with an emergency management degree, to date. More than 60% of the programs have seen an increase in enrollment over the past three years and expect an increase in enrollment in the next three years. Over 50% of programs have seen an increase in graduates over the next three years and expect an increase in graduates in the next three years. Of those tracked, nearly 60% of graduating students secure public sector EM positions. Over 50% of programs have observed an increase in diversity among the student body. However, while some student populations have had increased enrollment over the past few years (such as non-traditional students and female students), other populations have had a dip since last year (such as first-generation students, military students, international students, Black/African American, and Asian students).

Program Support

Responding programs overwhelmingly rely on part-time faculty. At least a quarter of faculty (of each type) have a practitioner background, however, nearly 50% of adjuncts have a practitioner background. For the first time a question was asked about faculty diversity, certain racial and ethnic minorities make up 15% or less of the faculty body, while women comprise nearly 31%. Regarding resources, external funding has generally been inaccessible for most programs. However, library resources, administrative support, local EM, state EM, and national EM support have been broadly accessible. Most of the programs use increased enrollment and number of graduates as metrics of success.

Impacts of COVID-19

Many programs have had changes in the previous year due to COVID-19, which had an impact on EM curriculum and coursework due to the pandemic. This year some of the impact due to COVID-19 was positive. Some programs had an increased interest in their program from students and an increase in enrollment. However, others experienced a decrease in student enrollment, as well as hiring freezes of faculty and staff.

FEMA Resources

Several FEMA resources are used by EM programs. Most respondents use the independent study courses (23%), the principles of emergency management document (19.8%) and journal articles (19.5%) found on the FEMA Higher Education website. Nearly 60% have participated the FEMA Higher Ed Symposium. However, over 50% of program respondents were not aware of the FEMA Higher Education webinars.

Acknowledgements

This report would not be possible without the efforts of the FEMA Emergency Management Higher Education Program. Specifically, FEMA EM Higher Ed program was instrumental in reaching active emergency management programs. Additionally, this report would not occur if each of the program representatives did not fill out the survey. This year, the additional request may have been burdensome with all of the changes occurring in our educational programs, employment, and lifestyles due to the pandemic. Thank you all for taking the time. Additionally, a special thanks to Dr. Carol Cwiak for the use of her initial survey instrument.

Citation

Bennett Gayle, DeeDee. (June 2021). "2021 FEMA Higher Education State of The Community: Annual Survey and Report." Report for the FEMA Higher Education Program. Emmitsburg, MD.

Table of Contents

EXECUTIVE SUMMARY	I
ACKNOWLEDGEMENTS	II
OVERVIEW	2
NOTE ABOUT COVID-19 RESPONSE	2
METHODOLOGY	3
PROGRAM	4
DEGREE OFFERINGS.....	5
SECTOR FOCUS.....	6
CURRICULUM	6
STUDENTS	7
ENROLLMENT	8
POST-GRADUATION	8
DIVERSITY OF THE STUDENT BODY	8
PROGRAM SUPPORT	9
TYPE OF FACULTY.....	9
DIVERSITY OF THE FACULTY	11
ACCESS TO PROGRAM SUPPORT	11
METRICS OF SUCCESS	12
ANTICIPATED CHANGES	13
IMPACTS OF COVID-19 RESPONSE.....	14
ACCESS TO FEMA HIGHER EDUCATION RESOURCES	15
ONLINE RESOURCES.....	15
PARTICIPATION WITH FEMA HIGHER ED.....	16
IDEAS FOR DIFFERENT OFFERINGS	17
RESPONSE BY PROGRAM TYPE	18
UNDERGRADUATE.....	18
GRADUATE.....	20
INTERNATIONAL PROGRAMS	23
DISCUSSION	26
CONCLUSION	27
REFERENCES	28
APPENDIX I: LIST OF PARTICIPATING INSTITUTIONS	30

TABLE OF FIGURES AND TABLES

FIGURE 1: SURVEY RESPONSES OVER TIME. 3

FIGURE 2: PERCENTAGE OF EMERGENCY-MANAGEMENT RELATED PROGRAM RESPONDENTS BY ACADEMIC DEPARTMENTS. 4

FIGURE 3: PERCENTAGE OF PROGRAMS BY LENGTH OF TIME OFFERING EM CURRICULUM 5

FIGURE 4:TYPE OF CURRICULUM OFFERED BY RESPONDING PROGRAMS AS A PERCENTAGE OF RESPONSES 6

FIGURE 5:PRIMARY SECTOR FOCUS OF EM PROGRAMS, (RESPONDENTS WERE ABLE TO SELECT MORE THAN ONE). 6

FIGURE 6:CHART OF ONLINE AND IN-PERSON COURSE OFFERINGS BY PERCENTAGE..... 7

FIGURE 7:STACKED CHART OF ESTIMATE STUDENT PATTERNS (ENROLLMENT AND GRADUATION) ± THREE YEARS..... 8

FIGURE 8:AVERAGE PERCENTAGE OF DIVERSE STUDENT POPULATIONS ENROLLED IN EM PROGRAMS..... 9

FIGURE 9:AVERAGE PERCENTAGE OF FACULTY WITH AN EM-RELATED PRACTITIONER BACKGROUND 11

FIGURE 10: AVERAGE PERCENTAGE OF DIVERSE FACULTY IN EM PROGRAMS 11

FIGURE 11: PROGRAM-IDENTIFIED METRICS OF SUCCESS 13

FIGURE 12: ANTICIPATED CHANGES IN THE PROGRAM OVER THE NEXT YEAR..... 13

FIGURE 13:COVID-19 IMPACT ON EM PROGRAMS..... 14

FIGURE 14: USE OF FEMA HIGHER ED ONLINE RESOURCES 15

FIGURE 15: REASONS PROGRAMS DO NOT PARTICIPATE IN THE FEMA HIGHER ED WEBINARS 16

FIGURE 16:PARTICIPATION IN FEMA HIGHER ED PROGRAMS..... 17

FIGURE 17:PERCENTAGE OF RESPONDENTS WHO ATTEND THE FEMA HIGHER ED SYMPOSIUM BY FREQUENCY. 17

FIGURE 18:SECTOR FOCUS OF UNDERGRADUATE PROGRAMS. 18

FIGURE 19: YEARS IN EXISTENCE FOR UNDERGRADUATE PROGRAMS 19

FIGURE 20:MODALITIES USED TO OFFER UNDERGRADUATE CURRICULUMS. 19

FIGURE 21: SECTOR FOCUS OF GRADUATE PROGRAMS..... 21

FIGURE 22: YEARS OFFERING EM CURRICULUM FOR GRADUATE PROGRAMS..... 21

FIGURE 23: MODALITIES USED TO OFFER GRADUATE COURSEWORK. 22

FIGURE 24: INTERNATIONAL PROGRAM DEGREE OFFERINGS 23

FIGURE 25: ANTICIPATED CHANGES IN THE INTERNATIONAL PROGRAMS 24

FIGURE 26: CURRENT CHANGES TO INTERNATIONAL PROGRAMS DUE TO THE CORONAVIRUS PANDEMIC..... 25

FIGURE 27: METRICS OF SUCCESS FOR INTERNATIONAL EM PROGRAMS..... 25

FIGURE 28: USE OF FEMA HIGHER EDUCATION RESOURCES BY INTERNATIONAL PROGRAMS. 26

TABLE 1: SAMPLE OF SURVEY RESPONDENTS 2

TABLE 2: CORRESPONDING PERCENTAGE OF SURVEY RESPONDENTS BY CIP CODE AND TYPOLOGY..... 5

TABLE 3: ESTIMATED TOTAL NUMBER OF GRADUATES FROM EMERGENCY MANAGEMENT PROGRAMS..... 7

TABLE 4: TYPE OF FACULTY IN EMERGENCY MANAGEMENT PROGRAMS 10

TABLE 5: TOTAL NUMBER OF FACULTY AS REPORTED, BY TYPE..... 10

TABLE 6: ACCESSIBILITY OF VARIOUS TYPES OF PROGRAM SUPPORT..... 12

TABLE 7: COMPARISON OF THE ACCESS AND SUPPORT INDICATORS OVER THE FIVE YEARS..... 12

Overview

The FEMA Higher Education state-of-the-community annual survey and report provides consistent data related to the faculty, curriculum, and students of emergency management academic programs. Annually, the FEMA Higher Education Program requests a status of emergency management-related educational programs at institutes of higher learning (IHE). This year, 2021, the effort was conducted by Dr. DeeDee Bennett Gayle at the University at Albany, State University of New York. Dr. Bennett Gayle has been administering this survey since 2017. The survey was initiated in 2004 by former FEMA Higher Education Program Director, Dr. Wayne Blanchard, and initially led by Dr. Henry Fischer (Cwaik, 2006). The survey has been conducted nearly every year since except for 2005, 2006, and 2013. The purpose of this project was to assess the usefulness of the products and services provided by the FEMA Higher Education program (FEMA Higher Ed) and to collect data on the current status of emergency management (EM) programs. The sample of programs contacted was identified from the FEMA Higher Ed database, which is updated annually. This year, FEMA Higher Ed database contained 191 institutions with emergency management-related programs, 182 were domestic institutions, and 9 were international institutions. Using these 191 IHEs as the sample size, a survey was sent for the point of contact at each IHE to answer five basic assessment questions: (1) What is the focus of the EM program? (2) What impact has the pandemic had on your program? (3) Who are the students that benefit from this program? (4) What type of support is accessible to the program? (5) Which FEMA Higher Ed services do the EM programs use? This report is based on the responses from 93 institutions.

TABLE 1: SAMPLE OF SURVEY RESPONDENTS

Location	FEMA Database	Institutions Responding	Programs Represented	Response Rate of institutions
Domestic	182	88	109	48%
International	9	5	5	55.5%
Totals	191	93	114	48.7%

Note about COVID-19 Response

Included are survey questions are related to program-related changes during this academic year (2020-2021) due to the coronavirus pandemic. In late 2019, a novel coronavirus was initially reported in Wuhan, China, with a patient presenting with pneumonia-like symptoms. By January 30, 2020, the World Health Organization (WHO, 2020b) declared this novel coronavirus an outbreak. In early February of 2020, the WHO announced a name for a novel coronavirus disease, COVID-19 (WHO, 2020b). In early March of 2020, the virus was named a pandemic by WHO (Chappell, 2020). Throughout the year of 2020, the number of confirmed cases waxed and waned, aligned with holidays and state (or local) social distancing policies. A vaccine was developed in December of 2020 with distribution ongoing. As of April 2021, there have been over 130,000,000 cases and 2,840,548 deaths globally, with over 550,000 deaths occurring in the United States (Johns Hopkins, 2021).

In many countries, including the United States, the response to this pandemic was to implement social distancing, which caused many businesses to close (unless essential) and many IHEs to move to temporary remote learning (CDC, 2020; Jiang, 2020; Brown 2020). Colleges and universities have seen a change in curriculum, housing students, performing research, and academic support, as most services were moved to an online (or remote) format. Currently, many of the restrictions and mandates have been lifted. This survey was deployed amid mass vaccination efforts to mitigate coronavirus pandemic, at a time when many IHEs were making plans for course instruction post pandemic. Respondents were asked to answer their questions based on what changes have occurred in their programs due to the pandemic.

Methodology

This project used a web-based survey, administered online. Invitations to participate were sent via email. The study used a single-stage sampling technique in which the researcher used the FEMA Higher Ed database to invite all known points of contact for emergency management higher education programs that had at one time used a product or service offered by FEMA (Cresswell, 2008; Dillman, Smyth, and Christian, 2014). All representatives listed as the point of contact for the emergency management programs were invited to participate in the online survey via email. The survey instrument used was modified from the previous survey administered in 2019 (Bennett, 2020). The applied instrument was modified to include specific questions related to program identification, student diversity, COVID-19, international programs, and detailed information about the products and services provided by the FEMA Higher Ed program. The instrument was since modified to include questions regarding faculty diversity.

The invitation email was sent out February 8, 2021. Three reminder emails were sent a week apart; the poll closed on March 15, 2021. The total response rate was 48.7%, with 93 of the 191 institutions represented. Figure 2 shows the number of respondents who participated in the survey over the 35-day window.

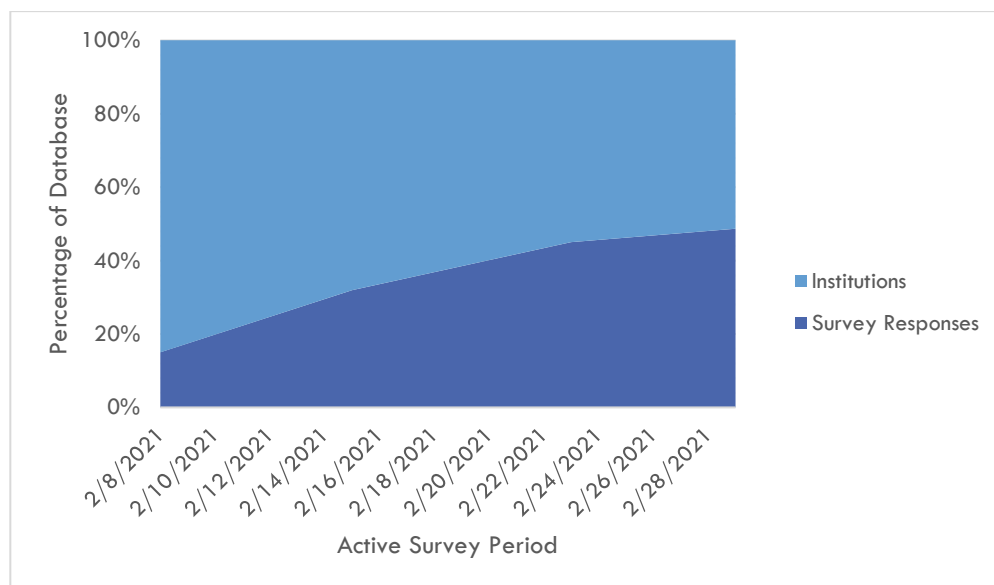


FIGURE 1: SURVEY RESPONSES OVER TIME.

Nearly two-thirds of respondents (66.6%) took 20 minutes or less complete the survey. Furthermore, none of the questions (except the first one consenting to the survey) required a response from every program. For example, only programs that indicated they offered associates degrees were asked the following questions relating to the associate's degree curriculum. Therefore, for each section of this report, take note of the total number of program respondents, reported as "n," which may vary.

The survey instrument was administered at the University of Albany Qualtrics Research Platform. Answers to open-ended short-answer questions were rudimentarily coded by semantic content analysis, grouping the frequency of similar responses (such as services, curriculum) and any final qualifiers (positive or negative) to give an overview of respondent sentiment (Krippendorff, 2004).

The results appear in the following sections related to the five-fold focus for all U.S. based programs; information about the program, impact due to the pandemic, the students, the faculty and institutional support, and the use of the FEMA Higher Ed products and services. Subsequent sections report the results from

undergraduate, graduate, and international programs. Throughout the report, comparisons are made with the results from previous surveys.

Program

A total of 88 US-based institutional representatives responded to the survey, submitting information for nearly 109 programs. While each institute of higher education (IHE) contacted for this survey is known to offer emergency management curriculum and coursework, the program focus, age, and department location vary. This section of the report focuses on identifying information about all US-based IHEs responding to this survey. It also provides an overview of the types of emergency management programs offered nationwide. Figure 2 displays the corresponding schools and departments in which the emergency management program resides.

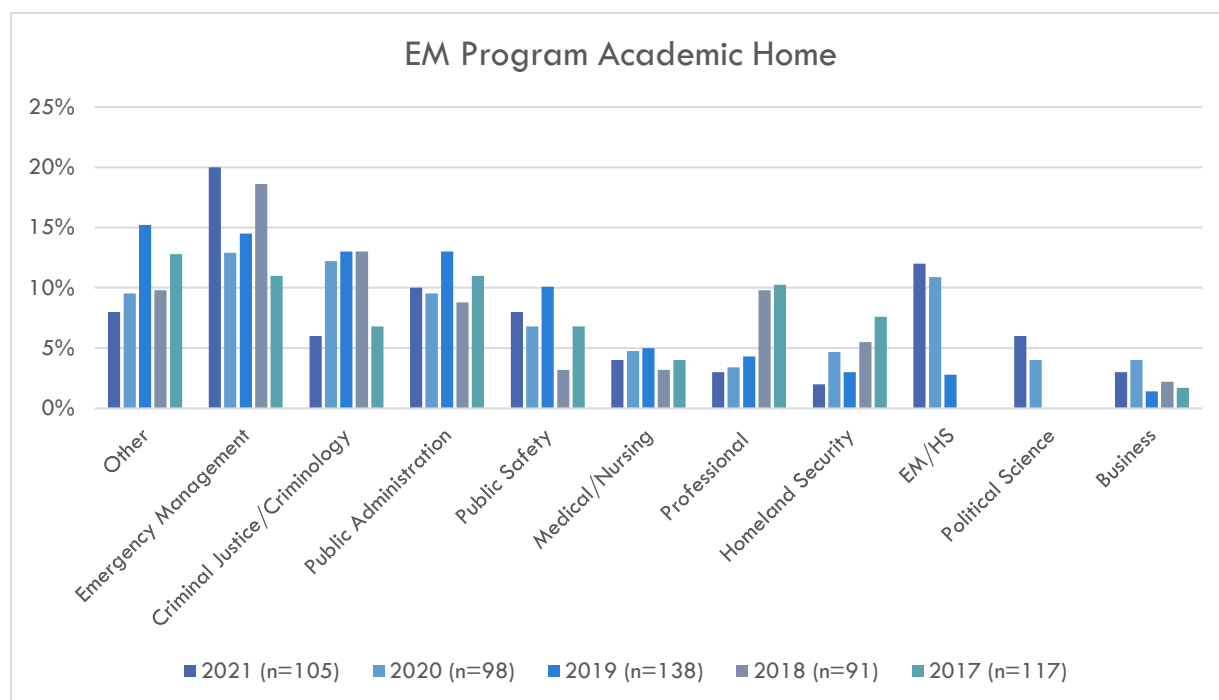


FIGURE 2: PERCENTAGE OF EMERGENCY-MANAGEMENT RELATED PROGRAM RESPONDENTS BY ACADEMIC DEPARTMENTS.

Only the top ten departments are recorded in Figure 2, as well as the ‘other’ category. Though the annual respondents vary, each year majority of programs reside within Emergency Management departments, this year 20% of programs. Not shown in Figure 3, in 2021, approximately 2% in Sociology/Social studies, 2% in IST, 2% in Engineering, and 2% in Public Health. The ‘other’ category included various departments, which didn’t easily fit into one of those mentioned above, such as Intercultural studies, Construction management, Disaster medicine and management, and Leadership studies.

Emergency management program representatives were also asked about their Classification of Instructional Programs (CIP) code(s) as developed by the U.S. Department of Education’s National Center for Education Statistics (NCES). Table 2 identifies the responses, including the typology title. Several respondents replied with more than one CIP code, (the count is 168 responses for this single question). This indicates that most programs may be interdisciplinary, but it also reflects that many representatives may not be aware of the CIP code used to identify their program initially. In Table 2, the ‘other’ category reflects several respondents who indicated they were not aware of the CIP code and specific codes not mentioned in the multiple-choice answers, such as 04.0301 – City/Urban, Community and Regional Planning.

TABLE 2: CORRESPONDING PERCENTAGE OF SURVEY RESPONDENTS BY CIP CODE AND TYPOLOGY

CIP Code and Typology Title	Percentage	n
43.0302 Crisis/Emergency/Disaster Management	39.88%	67
43.0301 Homeland Security	17.86%	30
43 Homeland Security, Law Enforcement, Firefighting, and related protective services	14.88%	25
Other	4.17%	7
44.X Public Administration and Social Service	9.52%	16
51.X Health Services/Allied Health/ Health Sciences, general	4.76%	8
30.999 Multi-Interdisciplinary studies, other	2.38%	4
34 Health-Related Knowledge and Skills	1.79%	3
24.0199 Liberal Arts and Sciences, General Studies and humanities, other	1.19%	2
45.X Social Sciences	2.99%	5
52.X Business/Commerce, general	0.60%	1
14.0804 Transportation and Highway Engineering	0%	0

Respondents were also asked how long they have offered emergency management curriculum in their programs. Many of the programs are new. As evident in Figure 3, 21% of the programs have been around for 5 years or less. Many have been around between 5 and 10 years, approximately 26% of the programs. However, most of programs are well established, with nearly 28% offering EM curriculum between 10 and 15 years. Nearly one quarter of the programs have been in existence for longer than 15 years.

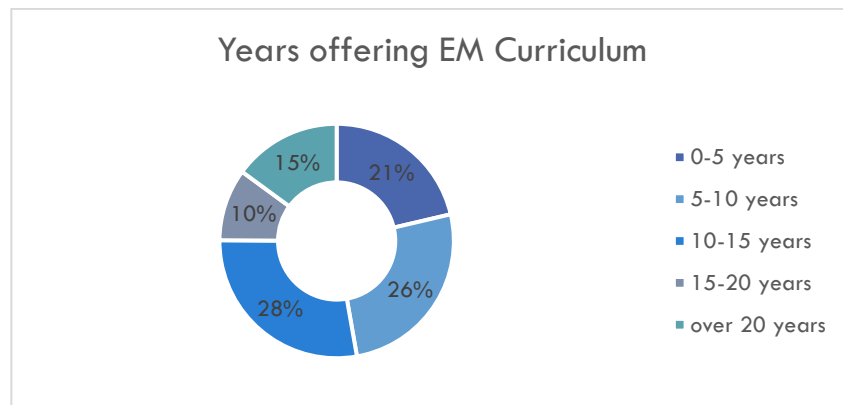


FIGURE 3: PERCENTAGE OF PROGRAMS BY LENGTH OF TIME OFFERING EM CURRICULUM

Degree Offerings

This report was disseminated to IHEs with programs that had broad offerings of emergency management curricula. The majority of IHE offerings (degrees, certificates, or concentrations) in the emergency management space are focused at the undergraduate level (48%). However, several programs offer graduate degrees, certificates, and concentrations (42%). Figure 4 identifies the type of curriculum offered in each program by the percentage of program responses. From this question, a total number of 219 offerings for degrees are represented.

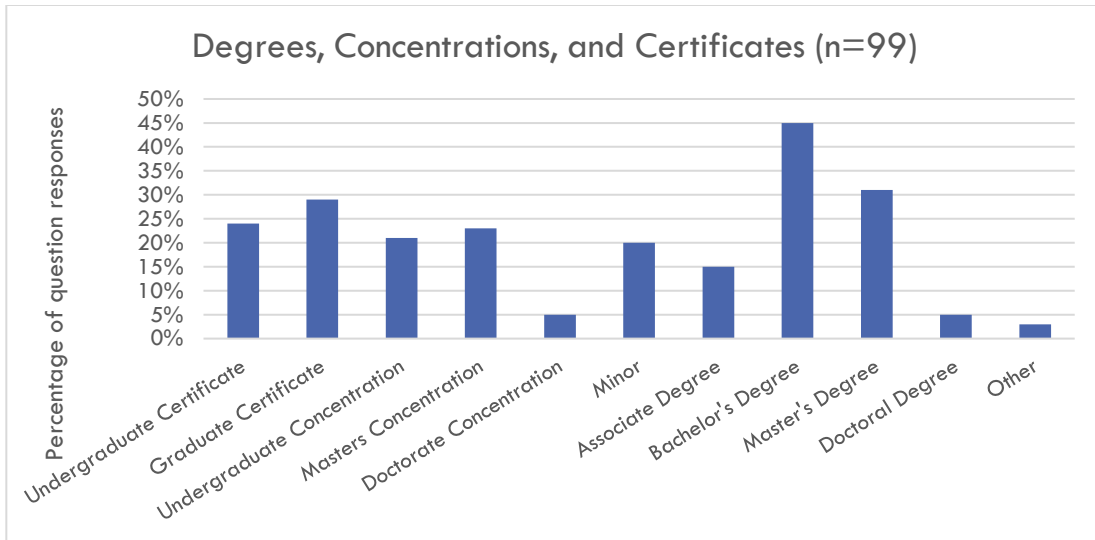


FIGURE 4:TYPE OF CURRICULUM OFFERED BY RESPONDING PROGRAMS AS A PERCENTAGE OF RESPONSES

The 'other' category included programs which incorporated coursework, which did not offer students a certificate, concentration, minor, or degree opportunity.

Sector Focus

Out of 109 programs, 46% considered the public sector as the primary orientation of their program. Nearly 23% indicated that the private sector was a central focus of their program, while nearly 16% of programs also consider non-profit (VOAD). Finally, 15% of the programs have humanitarian (global EM) as the focal sector. Results, shown in Figure 5, reflect programs with more than one primary orientation; thus, the total count of selections for this question is 207.

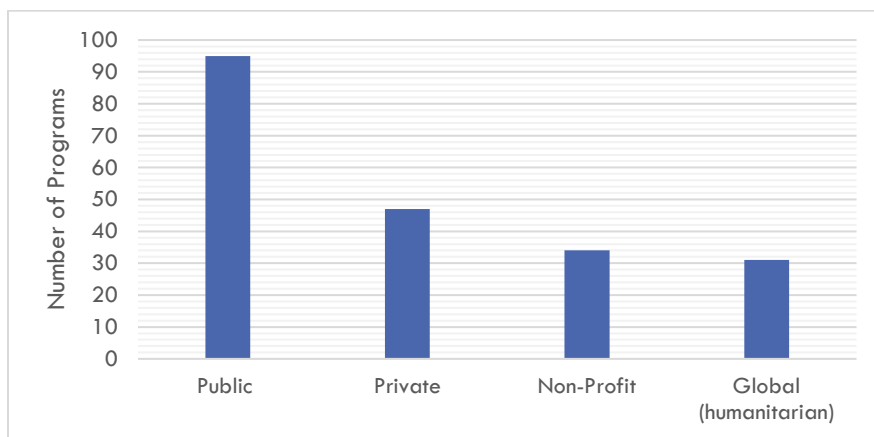


FIGURE 5:PRIMARY SECTOR FOCUS OF EM PROGRAMS, (RESPONDENTS WERE ABLE TO SELECT MORE THAN ONE).

Curriculum

The majority of the programs represented in this survey were not in the process of developing programs (70%). Of the programs indicating they are developing new programs (n=29): most are developing certificate programs, graduate programs (either masters or doctorate), an undergraduate program or topical curriculum including business, climate change and resilience, or cyber and emerging technologies.

The majority of the programs (92%) offered coursework through some form of distance education (online). Approximately 32% of respondents offer over three-fourths of the curriculum [76% - 100%] both in-person and online and over 64% offer majority of their curriculum online [76% - 100%]. Figure 6 shows the percentage of the curriculum offered in both modalities (n=79), as well as the portion of the curriculum provided solely online (n=75).

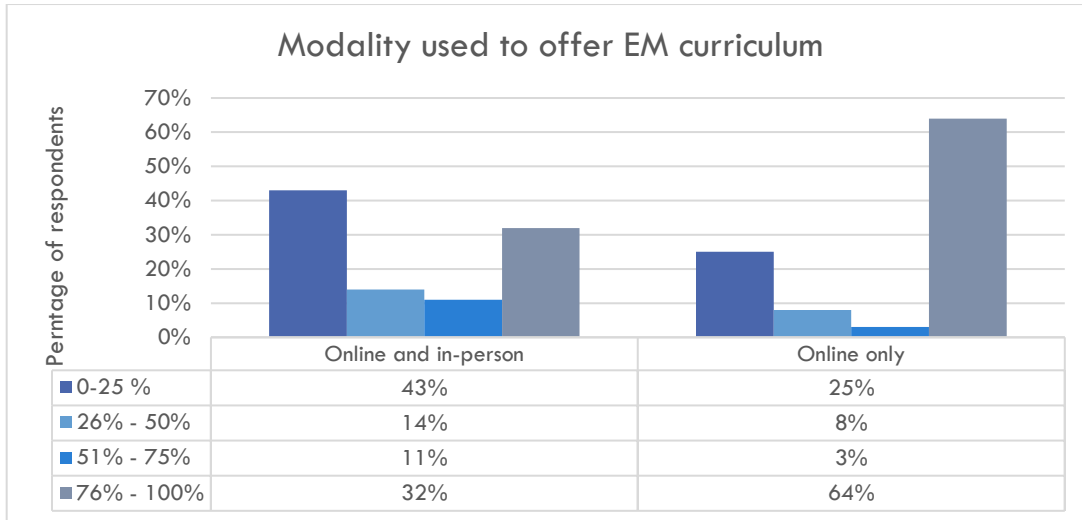


FIGURE 6: CHART OF ONLINE AND IN-PERSON COURSE OFFERINGS BY PERCENTAGE

Students

During the 2020-2021 academic year, respondents (n=54) estimated 2658 students have graduated from programs offering undergraduate or graduate degrees in emergency management. Assuming the FEMA Higher Education Program database represents 100% of the EM programs, extrapolation for the total number of students is based on 48% of U.S. based programs represented in the survey. From extrapolation, approximately 5538 students graduated from an emergency management program during the academic year. Table 3 shows the number of graduates from emergency management programs over the last three years.

TABLE 3: ESTIMATED TOTAL NUMBER OF GRADUATES FROM EMERGENCY MANAGEMENT PROGRAMS.

	2019 Raw materials	2019 *estimat e	2020 Raw numbers	2020 *estimat e	2021 Raw numbers	2021 *estimat e
Number of EM graduates	2,934	7,930	3209	8228	2658	5538
Number of graduates since the inception of FEMA Higher Ed.	---	53,734	---	61,962	---	67,500

The previous report in 2020, estimated nearly 62,000 students graduated from emergency management programs since the inception of the FEMA Higher Education programs survey began (Bennett, 2020). With the addition of extrapolated estimated from this year, there have been nearly 67,500 graduates from EM programs.

Enrollment

Enrollment in emergency management programs continues to rise. During the past three years, 63% of respondents (n=59) indicate that enrollment increased, while 22% (n=21) saw no change. Approximately 15% of responding programs had a decrease in enrollment (n=14). The projections for the next three years indicated a slightly more optimistic pattern, with 71% of respondents (n=68) expecting an increase in enrollment and only 5% (n=5) projecting a decrease. Figure 7 is a stacked chart, which shows the student patterns for enrollment and graduation over the past three years and estimates for the next three years.

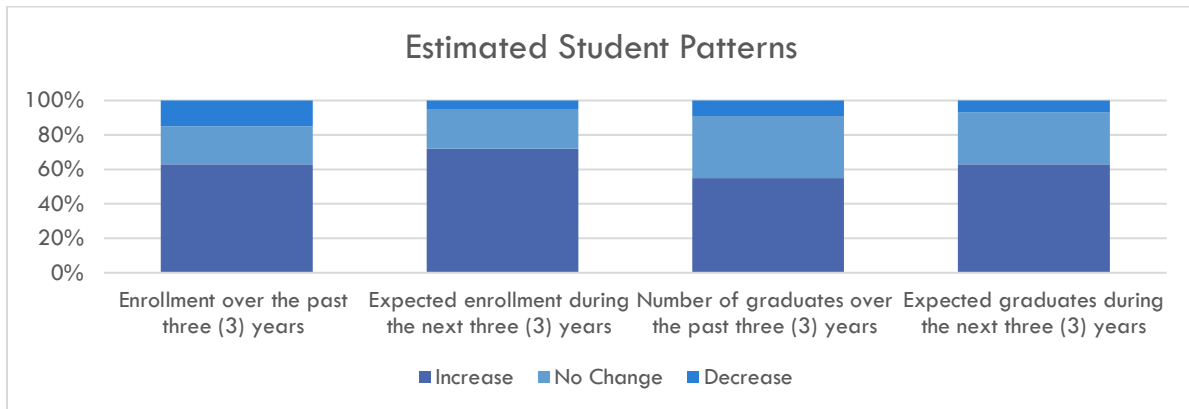


FIGURE 7: STACKED CHART OF ESTIMATE STUDENT PATTERNS (ENROLLMENT AND GRADUATION) ± THREE YEARS.

As shown, student graduation rates are similar to enrollment. Respondents 55% (n=52) indicate there was an increase in graduating students over the past three years, while nearly 36% (n=34) saw no change in the number of graduating students. Very few programs had a decrease in student graduation rates (9%, n=9). Programs are slightly optimistic to expect an increase in student graduation in the next three years (63%, n=59). Nearly 30% of respondents anticipate no change in the number of students graduating in the next three years (n=28).

Post-Graduation

After graduation, students may go on to graduate school or secure employment. Keeping track of students' post-graduation can be quite challenging. However, approximately 53% of degree-granting emergency management programs (n=51) have tracked their students' employment after leaving their IHE. Of those programs able to keep in contact with their graduates, approximately 59% move into public sector EM-related positions. Nearly 26% of graduates move into private sector positions, while fewer graduates move into non-profit (NVOAD) or humanitarian (global) areas, 14%, and 10%, respectively.

Diversity of the Student Body

Over the past couple of years, this survey has been used to track diversity in the student body of emergency management programs. Data from 2017 to 2020 indicate that the student body is becoming more diverse. This year approximately 57% of programs (n=32) reported an observed increase in diversity among their students. Of note, nearly 39% of programs (n=22) indicated that their diversity has remained steady. Almost 4% of respondents were unable to monitor diversity.

While often overused, the term diversity can have several different meanings, including gender, racial/ethnic minority populations, and nationality. In this survey, programs were asked to consider diverse groups of students, including non-traditional, first-generation, and military groups.

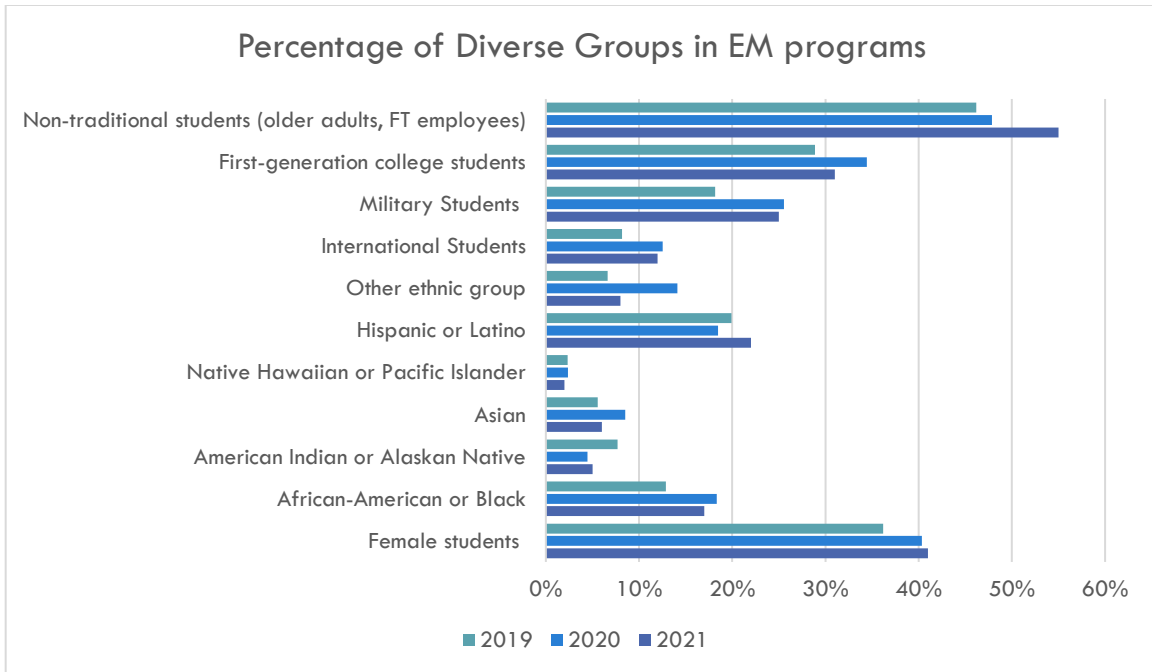


FIGURE 8: AVERAGE PERCENTAGE OF DIVERSE STUDENT POPULATIONS ENROLLED IN EM PROGRAMS

Figure 8 shows the average percentage of diverse student populations enrolled in EM programs from 2019 to 2021. By far, program respondents noted the most diverse group of students as non-traditional (55%), older adults returning to school, and individuals going to school while maintaining full-time jobs. Women students averaged 41% of students in EM programs, while first generation college students averaged 31%. Hispanic/Latino students were the most represented racial/ethnic minority (21%), followed by Black/African American (17%). International students comprise nearly 12% of the student body and approximately 25% are military students (counting veterans and active duty).

Program Support

Type of Faculty

At the university level, faculty can generally be categorized into four categories; tenure-track, tenured, full time non-tenured, and part-time (or adjunct). Most often, tenure-track faculty are the assistant professors (and occasionally associate professors) working towards specific research, teaching, and service metrics as prescribed by the university and department. Tenured faculty members are most often full professors, associate professors, or equivalent. Lecturers, instructors, and other full-time faculty usually do not have the same requirements for research as the tenured or tenure-track professors. Instead, they focus majority of their time on teaching. Similarly, part-time faculty members (such as adjuncts) do not have research duties and are focused on education, usually one class and one semester at a time.

Among degree-granting programs in emergency management, the majority rely on part-time faculty (adjunct or equivalent). In fact, given the number of respondents, several programs depended entirely upon part-time faculty (upwards of 100). Table 4 shows the average type of faculty in emergency management programs along with standard deviation.

TABLE 4: TYPE OF FACULTY IN EMERGENCY MANAGEMENT PROGRAMS

	Min	Max	Mean	Std. Dev	n
Full-time tenure-track	0	29	2.88	5.37	82
Full-time tenured	0	40	3.41	5.60	66
Full-time non-tenured	0	85	4.11	11.46	57
Part-time faculty	0	107*	10.74	16.87	80
Affiliated or associated faculty	0	15	2.58	3.55	26

*200 was the max response for each question

The raw numbers of faculty in emergency management programs, as shown in Table 5, highlight a decreasing trend across each faculty type. The most dramatic is with full-time tenured and part-time faculty. Table 5 shows the raw number of faculty in emergency management programs over the past four years.

TABLE 5: TOTAL NUMBER OF FACULTY AS REPORTED, BY TYPE

	2021	2020	2019	2018	2017
Full-time tenure-track	236	146	280	295	395
Full-time tenured	225	170	156	575	351
Full-time non-tenured	234	200	131	190	233
Part-time faculty	859	1325	1290	1442	2269
Affiliated or associated faculty	67	179	113	232	--

Many programs employ faculty with practitioner backgrounds to teach in their programs. Figure 9 shows that part-time faculty most often have a practitioner background. However, 26% of full-time non-tenure track and 33% of the full-time tenure track faculty have a practitioner background. Approximately, 34% of respondents (n=33) indicated they hired a new individual in their program. However, nearly 8% of the respondents tried but were unable to hire a new person. Of those who searched for new employees, nearly 55% (n=58) of the hires (faculty/staff) were part-time individuals.

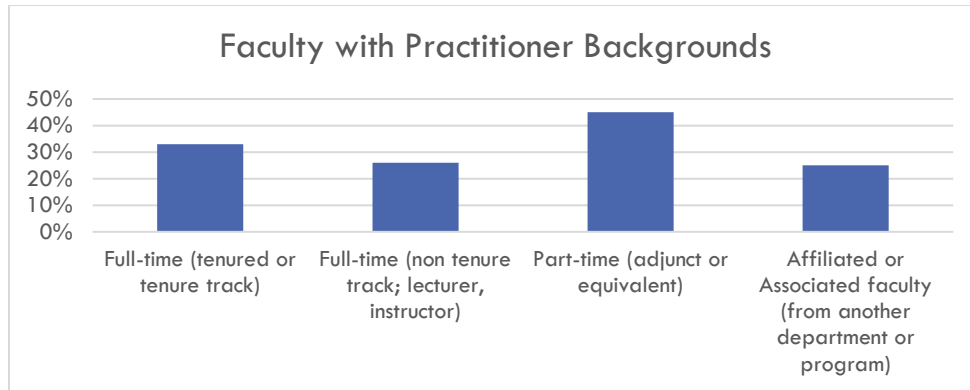


FIGURE 9: AVERAGE PERCENTAGE OF FACULTY WITH AN EM-RELATED PRACTITIONER BACKGROUND

Diversity of the Faculty

When discussing diversity of academic programs, data often follows the diversity of the student body alone. However, researchers have noted the importance of noting the diversity in IHE faculty (Stout et al., 2018; Whittaker & Montgomery, 2014; Weinberg, 2008). At least one research finding notes that the graduation rates for underrepresented minorities are improved with an increase in diverse faculty (Stout et al., 2018) and that full-time faculty with racial/ethnic minority backgrounds are often underrepresented in IHEs (Weinberg 2008). In some fields, diversity of faculty and students is a near dire situation (Whittaker & Montgomery, 2014). While many of the studies focus on racial and ethnic minority disparities, there are concerns related to other elements of diversity, such as gender (Kwekwe, 2021). A new question was introduced in this year’s survey to explore the faculty diversity in EM programs. Figure 10, highlights the average racial/ethnic and gender diversity of EM faculty as reported by the programs.

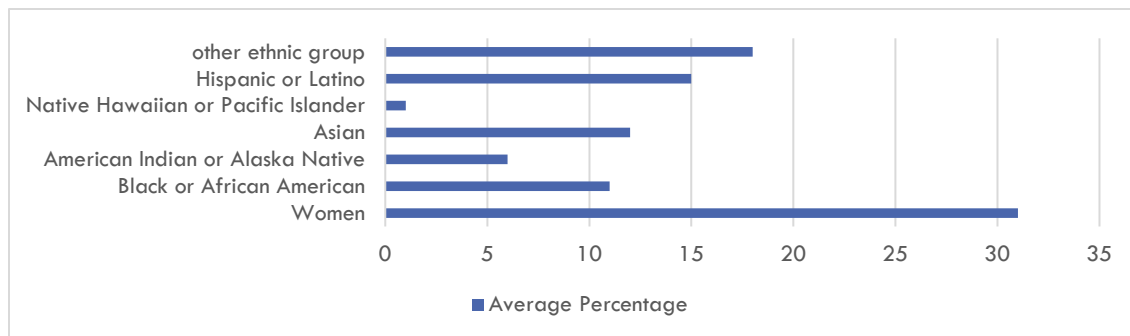


FIGURE 10: AVERAGE PERCENTAGE OF DIVERSE FACULTY IN EM PROGRAMS

As shown, on average, women comprise 31% of the faculty in EM programs. Regarding diversity, the most represented diverse faculty were Hispanic/Latino, Asian, Black/African American, with averages of 15%, 12% and 11%, respectively. It is important to note that faculty of ethnic groups other than those typically recorded represents an average of 18% of the faculty, significantly higher than the student body.

Access to program support

A little over a third of programs (39%) indicated that external funding opportunities are generally inaccessible (n=90), though nearly 46% of the programs reported that internal funding opportunities are usually accessible. Library resources and administrative support have been available to most EM programs, 82% and 71%, respectively. With regards to support from the EM community, most of the programs indicated that support is generally accessible at all levels, or they were neutral in their response, highlighted in Table 6.

TABLE 6: ACCESSIBILITY OF VARIOUS TYPES OF PROGRAM SUPPORT.

Program Support Type	Extremely inaccessible		Moderately inaccessible		Slightly inaccessible		Neutral		Slightly accessible		Moderately accessible		Extremely accessible		Total
	%	n	%	n	%	n	%	n	%	n	%	n	%	n	
External funding opportunities	11.11%	10	15.56%	14	12.22%	11	28.89%	26	22.22%	20	7.78%	7	2.22%	2	90
Institutional funding	9.20%	8	14.94%	13	5.75%	5	24.14%	21	20.69%	18	19.54%	17	5.75%	5	87
Library resources	4.44%	4	0.00%	0	4.44%	4	8.89%	8	15.73%	14	44.94%	40	10.11%	9	89
Administrative support	4.49%	4	4.49%	4	11.24%	10	8.98%	8	15.73%	14	44.94%	40	10.11%	9	89
Local EM community	2.22%	2	7.78%	7	4.44%	4	16.67%	15	23.33%	21	33.33%	30	12.22%	11	90
State EM community	2.25%	2	6.74%	6	5.62%	5	23.60%	21	24.74%	22	26.97%	24	10.11%	9	89
National EM community	1.11%	1	3.33%	3	6.67%	6	38.89%	35	27.78%	25	20.00%	18	2.72%	2	90
FEMA-specific	1.11%	1	6.67%	6	4.44%	4	35.56%	32	23.33%	21	25.56%	23	3.33%	3	90
DHS-specific	4.49%	4	7.87%	7	8.99%	8	42.70%	38	16.85%	15	15.73%	14	3.37%	3	89

Table 7 shows the comparison of access indicators for the last three years. As shown, the averages are similar for the previous years.

TABLE 7: COMPARISON OF THE ACCESS AND SUPPORT INDICATORS OVER THE PAST THREE YEARS

	2019 Mea n	2019 Std. Dev	n	2020 Mea n	2020 Std. Dev	n	2021 Mea n	2021 Std. Dev	n
External funding opportunities	3.32	1.65	87	3.52	1.75	93	3.68	1.54	90
Institutional funding	4.00	1.64	87	4.02	1.63	93	4.14	1.72	87
Library resources	5.63	1.25	87	5.63	1.23	93	5.50	1.42	90
Administrative support	4.83	1.65	87	5.04	1.44	93	5.02	1.59	89
Local EM community	5.26	1.47	87	5.27	1.30	93	5.00	1.49	90
State EM community	4.70	1.52	87	4.68	1.57	94	4.83	1.44	89
National EM community	4.53	1.40	87	4.65	1.31	94	4.58	1.12	90
FEMA-specific	4.60	1.51	86	4.53	1.50	93	4.63	1.25	90
DHS-specific	4.05	1.29	87	4.25	1.39	93	4.20	1.37	89

Metrics of Success

Nearly 19% of the programs use increases in enrollment as a metric of success and 17% indicated that the number of graduates were a metric of success. While nearly all respondents were provided the multiple-choice

parameters listed in Figure 11, nearly 2% of responding programs used another metric not listed. Other metrics included research productivity, learning assessments, classroom fill rate and the percentage of grades D, F, or W.

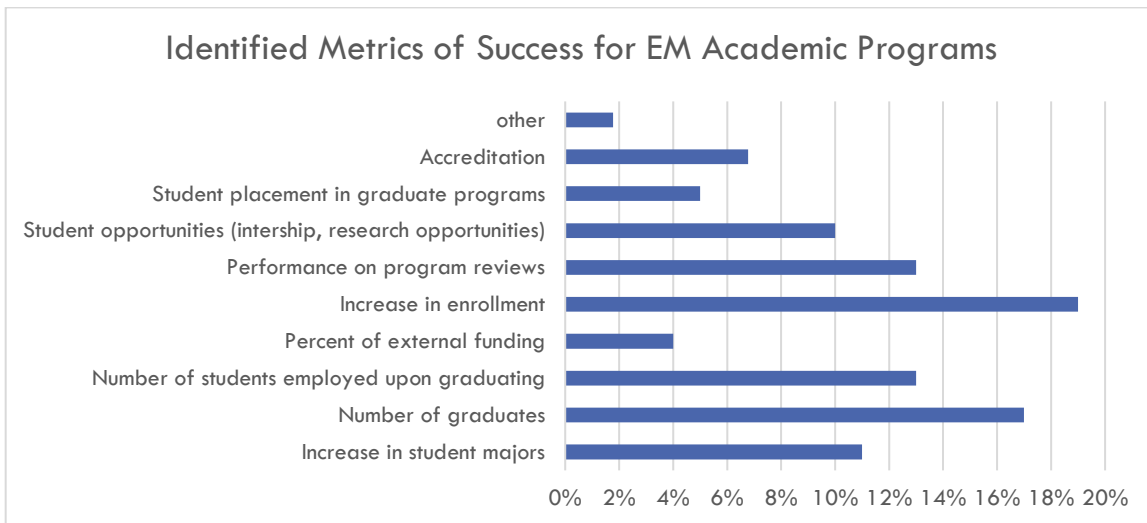


FIGURE 11: PROGRAM-IDENTIFIED METRICS OF SUCCESS

Anticipated Changes

The majority of respondents anticipate an increase in student enrollment (32%), approximately 16% plan for new faculty positions, and 13% expect new undergraduate curriculum. The least likely change is for new doctoral programs (1%), a decrease in student enrollment (5%), membership with an accrediting body (5%), reduction in funds (5%) or an increase in financial support (5%). Additionally, only 1% of programs did not anticipate a change in the coming year. Figure 12 shows their responses.

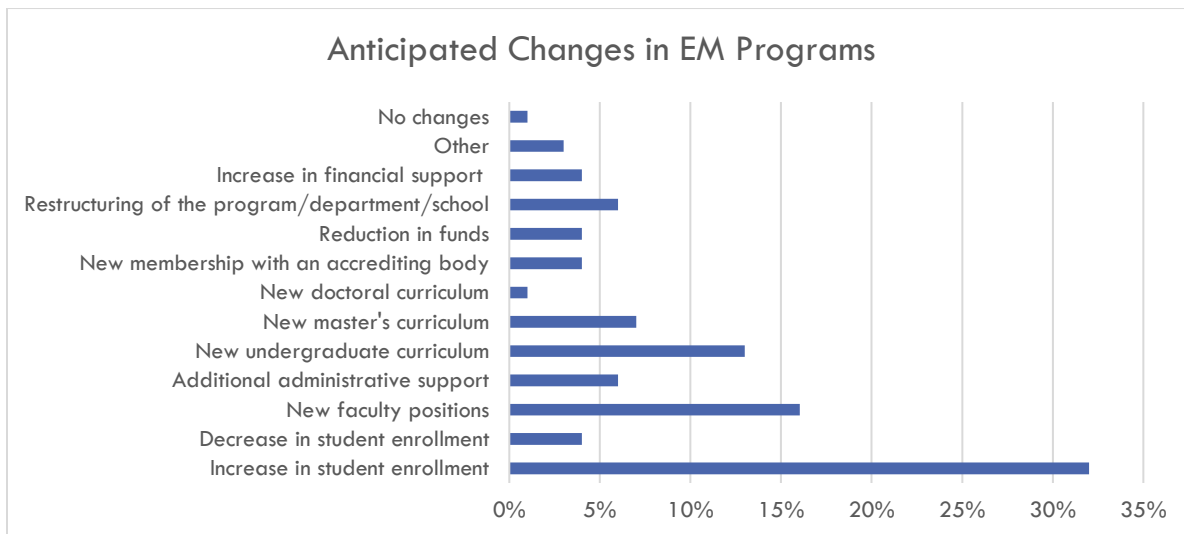


FIGURE 12: ANTICIPATED CHANGES IN THE PROGRAM OVER THE NEXT YEAR.

Those that selected 'other' indicated that their program may be eliminated or their status is unknown due to the university being restructured.

Impacts of COVID-19 response

Around early March in 2020, many colleges and universities that offered face-to-face classes moved to temporary remote learning in response to the growing number of COVID-19 cases in the United States. What was initially considered temporary and potentially short-lived, became continuous during the spring semester and into fiscal year 2020-21. The majority of colleges and universities did not allow students to continue their studies in face-to-face formats on campus and continued into Spring 2021. Furthermore, administrative support, research support, and student activities were all moved to a temporary, remote setting. Due to success with the vaccine and relaxed state mandates, many IHEs will have a face-to-face instruction in the Fall of 2021. In 2020, Emergency management programs had three primary impacts due to COVID-19; 28% saw an increase in student enrollment, 24% moved to online (remote) learning, and 16% saw a reduction in funds to their programs. The United States economy suffered as most businesses have had to close down, adjust the delivery of services, and pivot to cater to consumers who were mainly staying at home. These changes have led to significant deficits at the state level across the country (McNichol et al., 2020). These deficits may have impacted the budgets for several public IHEs. In 2020, 16% braced for a reduction in funds, however, in 2021 only 5% reported a reduction in funds.

In this survey, representatives from programs offering EM curriculum were asked about changes that have occurred due to COVID-19 (Figure 13) as a follow-up to questions asked from the last year. The primary impacts reported due to COVID-19 in 2021 are: 1) increased interest in program from students (13%), 2) increase in student enrollment (12%), and 2) decrease in student enrollment (10%). Approximately 2% of programs reported a change other than those included in the multiple-choice question. Their responses included: *reduced adjuncts, increase in class sizes & reduction of offerings, decrease in diversity of teaching methods due to lack of in-person simulations.*

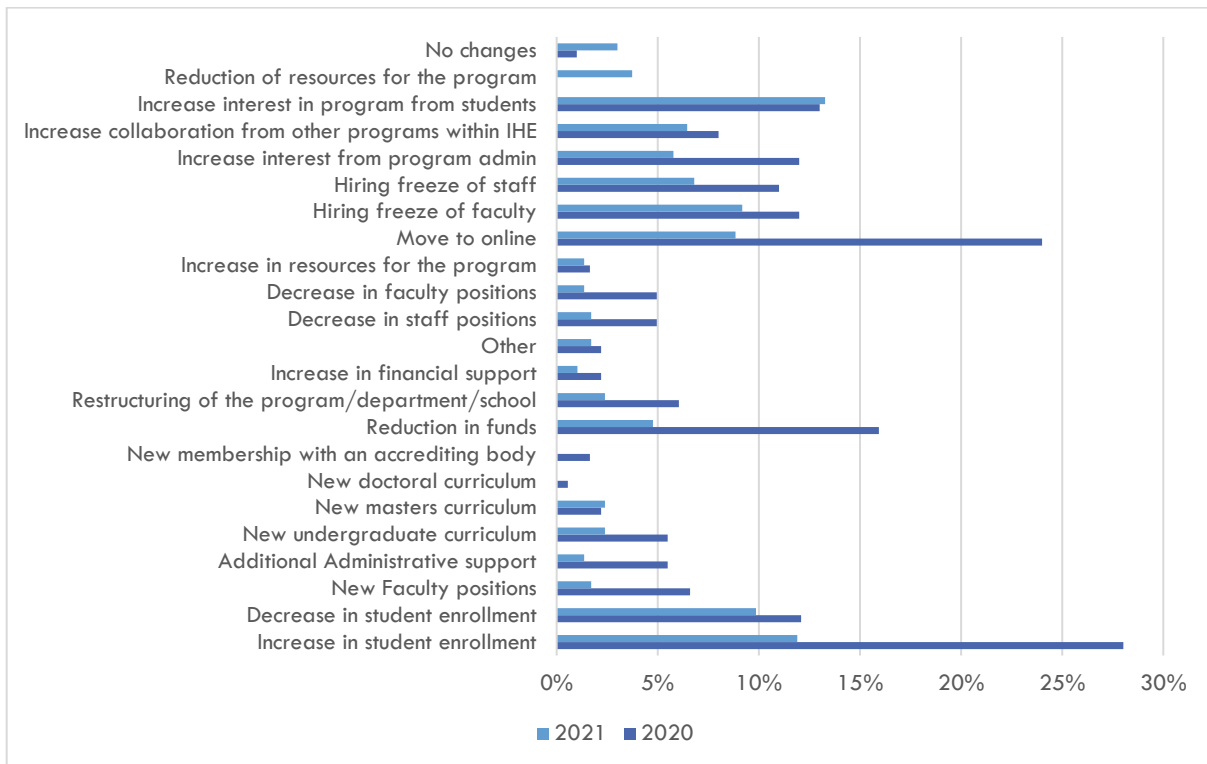


FIGURE 13: COVID-19 IMPACT ON EM PROGRAMS

Access to FEMA Higher Education Resources

In addition to providing insight on program matriculation and faculty support, this survey also asked questions regarding the use of FEMA Higher Ed resources. The FEMA Higher Ed program offers several opportunities online or in-person for curriculum development, research meetings, and training.

Online Resources

Out of 89 programs responding, the majority use the Independent study courses offered online (23%). Nearly all use the independent study courses as supplemental course material (98%). The principles of emergency management and the journal articles offered on the FEMA Higher Ed website are a close second and third popularly used online resources, 19.8% and 19.5%, respectively. Approximately 1% selected other, in that category respondents mentioned PrepTalks.

For respondents who did not select the principles of emergency management document (n=34), 29% were also not aware of the document. For respondents who indicated that they used the principles of emergency management document (n=74), 58% use it in undergraduate courses, and 41% use it in graduate courses.

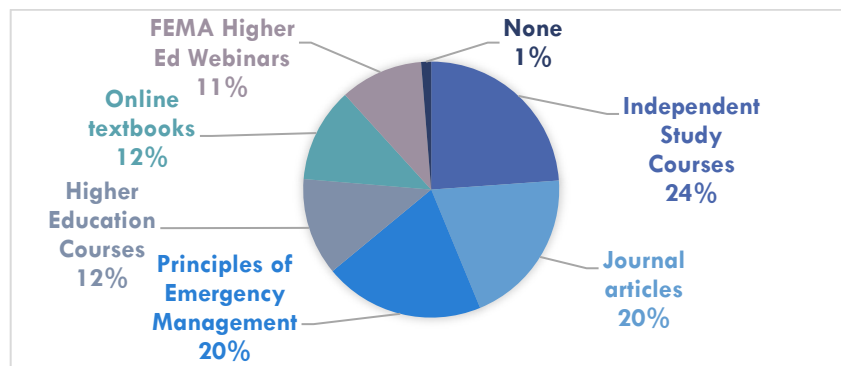


FIGURE 14: USE OF FEMA HIGHER ED ONLINE RESOURCES

Of the respondents who indicated that they use the FEMA Higher Education courses (n=27), they were requested to identify which courses they used. Below is the ranking for each course from most to least used.

National Incident Management Systems Course (NIMS)	7.73%
Disaster Response Operations and Management	5.80%
Business Crisis and Continuity Management	4.83%
Social Dimensions of Disaster	4.83%
Building Disaster Resilient Communities	4.35%
Catastrophe Readiness and Response Course	4.35%
Hazards Risk Management	4.35%
Homeland Security and Emergency Management	3.86%
Principles and Practice of Hazard Mitigation	3.86%
Public Administration and Emergency Management	3.86%
Sociology of Disaster	3.86%
Comparative Emergency Management	3.38%
Hazards, Disasters and U.S. Emergency Management - An Introduction (working draft)	3.38%
Individual and Community Disaster Education	3.38%
Terrorism and Emergency Management	3.38%
Coastal Hazards Management	2.90%
Earthquake Hazard and Emergency Management	2.90%
Emergency Management Principles and Application for Tourism, Hospitality & Travel Mgmt.	2.90%
Flood Plain Management (Graduate Level)	2.90%
Floodplain Management: Principles and Current Practices	2.90%
Hazard Mapping and Modeling	2.90%

Principle, Practice, Philosophy and Doctrine of Emergency Management	2.90%
Research and Analysis Methods in Emergency Management	2.90%
Social Vulnerability Approach to Disasters	2.90%
Breaking the Disaster Cycle: Future Directions in Natural Hazard Mitigation	2.42%
Technology and Emergency Management	2.42%
Holistic Disaster Recovery: Creating a More Sustainable Future	1.93%
Political and Policy Basis of Emergency Management	1.93%

The least used resources were online textbooks (11%) and FEMA Higher Ed webinars (10%). For respondents who indicated that they did not use the FEMA Higher Ed webinars, 52% were not aware of the webinars, and 15% noted the webinars are often at an inconvenient time. Others who responded to this question indicated that while individual instructors may use this resource the respondent to this survey may be unaware. Approximately 11% thought the topics were not related to their immediate interest.

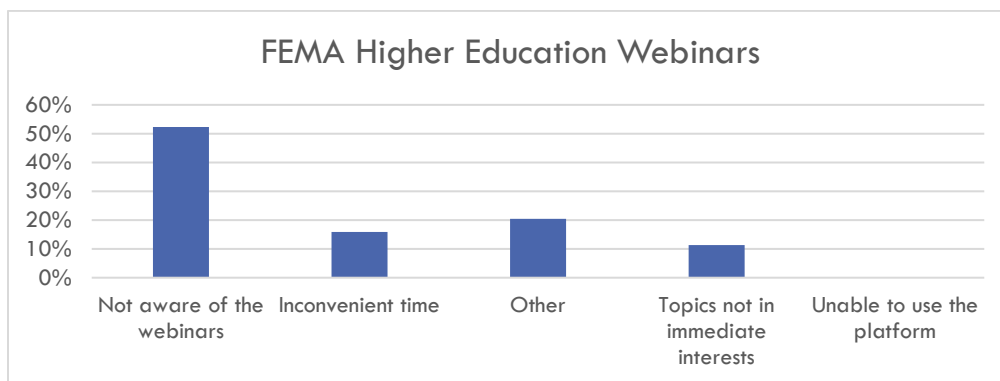


FIGURE 15: REASONS PROGRAMS DO NOT PARTICIPATE IN THE FEMA HIGHER ED WEBINARS

For the programs that selected 'other,' there were a variety of reasons, including:

Some instructors may be aware of webinars

We do view the FEMA PrepTalks, but more communication about upcoming webinars would be helpful

Many times, we receive the emails after the events have been conducted

Participation with FEMA Higher Ed

Approximately 87 programs responded to questions regarding their participation in the FEMA Higher Ed program's in-person activities. The majority of respondents 58% (n=90) have participated in the FEMA Higher Ed Symposium, while only 13% were unaware of the opportunity. Majority of respondents (n=84) were also aware of the FEMA Higher Ed focus groups (30%) and the FEMA Higher Ed Special Interest Groups (40%, n=85).

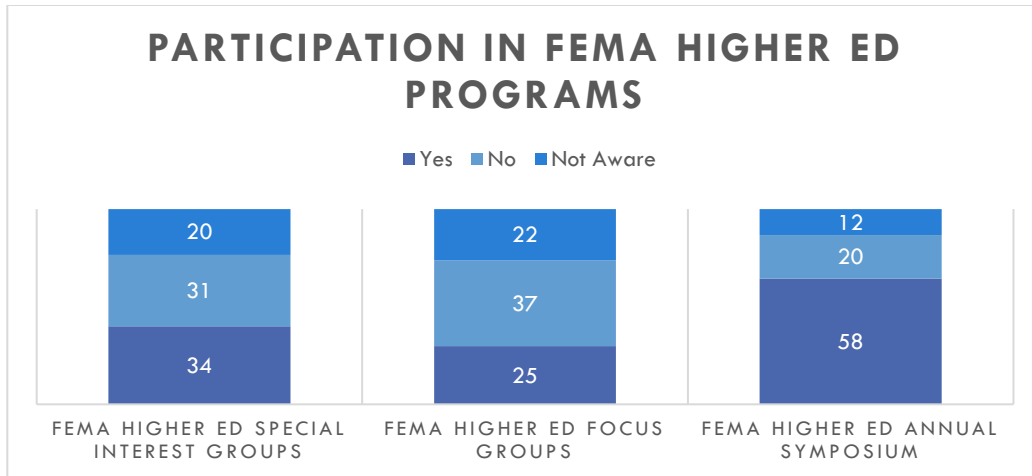


FIGURE 16: PARTICIPATION IN FEMA HIGHER ED PROGRAMS

For respondents that have previously attended the FEMA Higher Ed Annual Symposium, they were subsequently asked how often they have attended. Approximately a third of representatives attend the symposium most years (31%), over 25% have only attended every year.

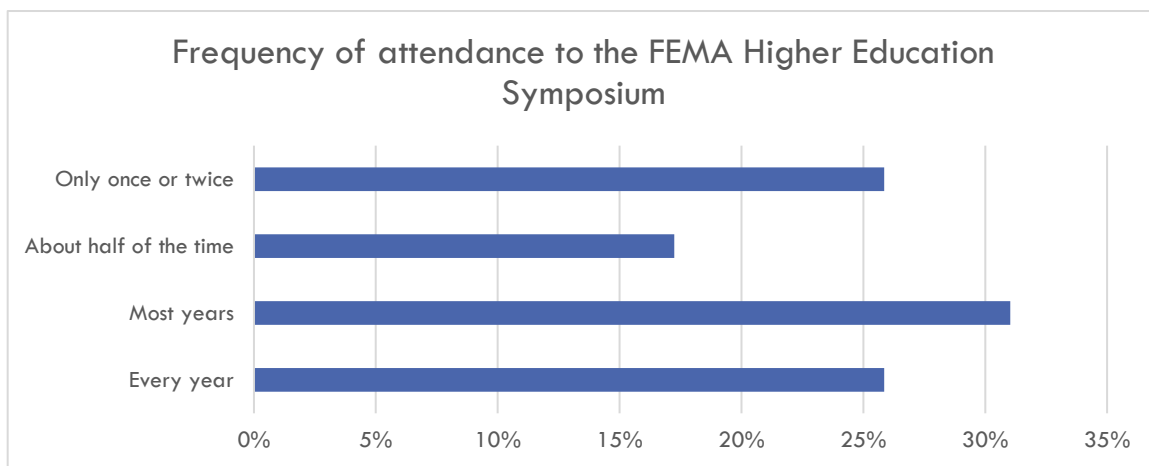


FIGURE 17: PERCENTAGE OF RESPONDENTS WHO ATTEND THE FEMA HIGHER ED SYMPOSIUM BY FREQUENCY.

Regarding the FEMA Higher Ed Special Interest Groups, 55% (n=51) are interested in receiving more information, and approximately 31% are interested in joining. Similarly, a majority of respondents (51%, n = 53) are interested in more information about FEMA Higher Ed Focus Groups, and 26% are interested in joining.

Ideas for different offerings

Program representatives were asked open-ended questions about ideas for products, activities, and services they would like to see from the FEMA Emergency Management Higher Education Program. Many would like to see changes to update the website materials and resources (n=22). Other were interested in program support, students support, increase in efforts around diversity, increase emphasis on research, updates in presenters at the symposium. Some of their responses are below:

“More involvement with I-DIEM and its goals”

“More efficient updating of web site. Give the EM community an opportunity to recommend materials for the website.”

“Opportunities for interaction between institutions...more opportunities for faculty to be a part of a focus group”

“More organized website...”

“workshops for students seeking careers in FEMA or looking a FEMA Corps for experience after college.”

“...supporting efforts within the community to coordinate and work on issues of mutual concern.”

“...limit presenters to the amount of presentations they can have [at the symposium] so others can present”

“As issues arise or complexities are identified, pushing out information would be helpful. For example, with the CARES act funding it would have been helpful to have information sent out to supplement curriculum with real-time public policy issues...”

Response by Program Type

There were differences in the responses based on the type of degree offered. In this section, the differences are reviewed separately based on U.S.-based programs that provide undergraduate degrees (certificates and concentrations at the associates and bachelor’s level included) and those that offer graduate degrees (certificates, concentrations at the master’s and doctorate degrees included). Note that in the separate analysis performed below, there is some overlap. Several programs offer both undergraduate and graduate degrees; therefore, their response was reported in both sections.

Undergraduate

The fifty-five programs offer undergraduate degrees in emergency management. According to the CIP taxonomy, the undergraduate programs were overwhelmingly coded 43.0302 Crisis/Emergency/Disaster Management (n=42). The second highest coding was 43.0301 Homeland Security (n=16). The primary orientation of the undergraduate programs was the public sector, 41% (n=54).

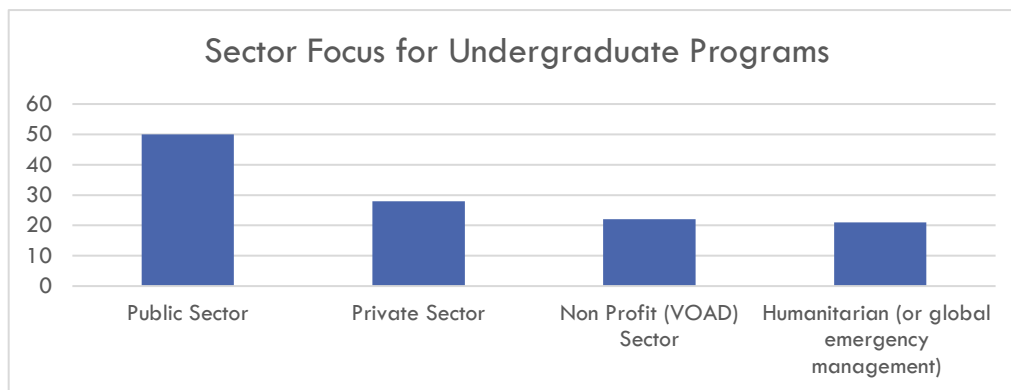


FIGURE 18:SECTOR FOCUS OF UNDERGRADUATE PROGRAMS.

The majority of the programs, 70% do not plan to develop a new curriculum (n=53). Of those planning to create new courses, they indicated the following: associates in EM, ne BA in combination with criminal justice, programs on cyber, emerging technologies, continuity of operations, updates to the program.

With 55 program reporting, most have been in existence between 5 and 10 years (35%). Figure 19 shows that only 13% of the programs have existed for longer than 15 years. There are still over 15% of new programs existing for five years or less.

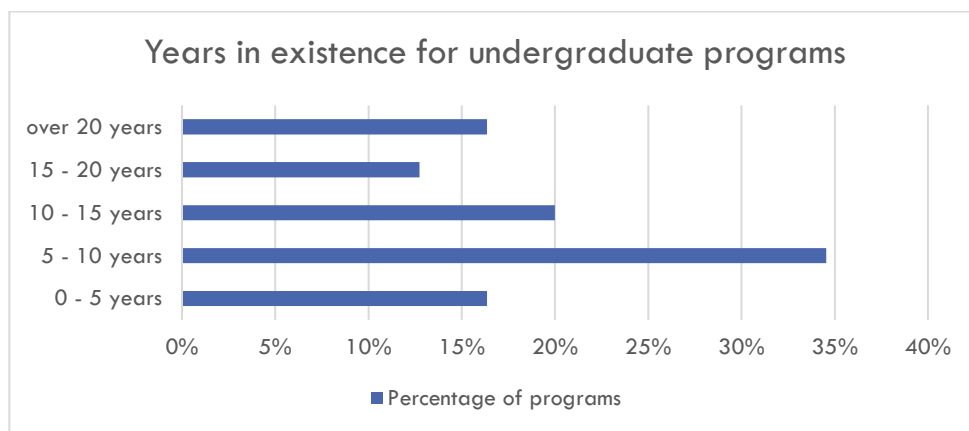


FIGURE 19: YEARS IN EXISTENCE FOR UNDERGRADUATE PROGRAMS

Over 93% of programs indicated they offer coursework in some form of distance online education (n= 55). Figure 20 shows over 59% of undergraduate programs offer nearly 100% of their coursework online. Almost 38% of programs offer the majority of their course work both online and in person.

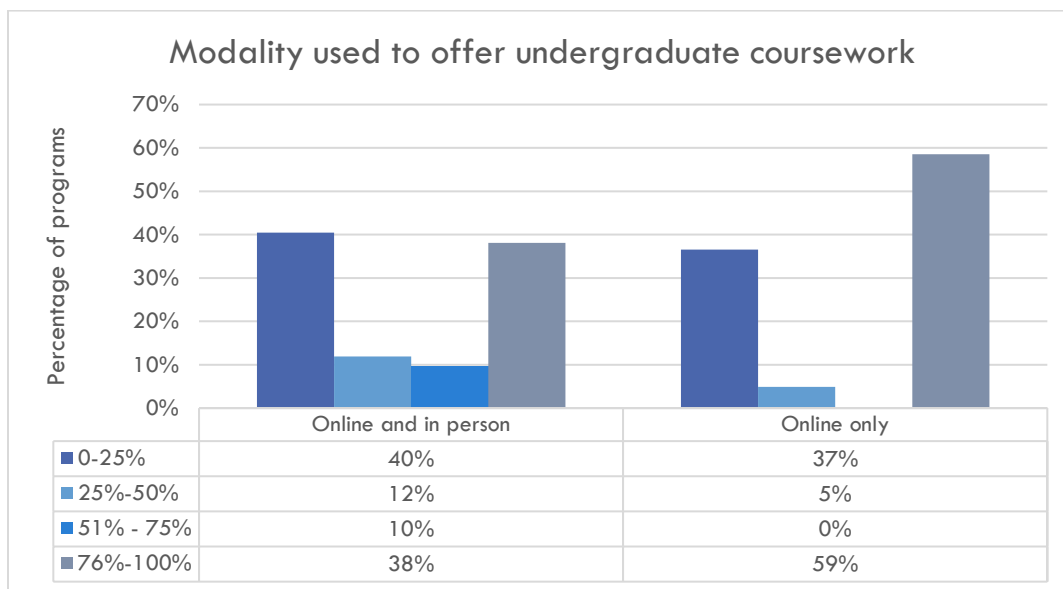


FIGURE 20: MODALITIES USED TO OFFER UNDERGRADUATE CURRICULUMS.

Nearly 57% of programs track their graduates' employment. Graduates tend to accept positions in the public sector (49%, n=30). Approximately 26% secure jobs in the private sector, 21% in the non-profit sector, and 9% in the humanitarian sector. Majority of undergraduate programs experienced an increase in enrollment in the last three years (61%, n=51) and expect an increase in enrollment over the next three years (73%, n=52). Similarly, the number of graduating students has increased over the last three years for most programs (62%, n=52) and most programs expect that increase to continue over the next three years (59%, n=51).

Most undergraduate programs have observed an increased in diversity of students, 52%, n=52. The average percentages across a wide range of diverse populations show the following: 37% women, 54% non-traditional college students, 30% first-generation college students, 20% Hispanic/Latino, 24% military students, 17% Black/African American, 10% international students, 6% American Indian or Alaska Native, 6% Asian, 2% Native Hawaiian or Pacific Islander.

Most undergraduate programs rely on part-time faculty. The average number faculty in undergraduate programs is 10 part-time, 2 full-time non-tenure track, 4 full-time tenure or tenure track, and 2 affiliated or associate faculty. Nearly 34% of programs hired new faculty and staff, approximately 54% were full-time, and 46% were part-time.

Responding programs (n=50) indicated external funding (48%), were inaccessible to their program. Most noted that internal funding was at least slightly accessible to their program (32%). Institutional administrative support (64%) and library resources (74%) was at least somewhat available for most programs. Local (62%), state (60%), national (52%), FEMA-specific (56%), and DHS-specific (36%) emergency management community support resources were all mostly accessible. Note that over 35% of respondents were neutral regarding access to national emergency management support, FEMA-specific, and DHS specific emergency management community support, 40%, 38%, and 50%, respectively.

Specific to programs offering Associates degrees, 85% do not utilize the prototype for Associates degrees in Emergency Management as part of their curriculum (n=13). The most popular FEMA Higher Education resource among all undergraduate programs were the independent study courses (24%), followed by the journal articles (20%), and the principles of emergency management document (18%). The Higher Education Courses were used approximately 14% of the time, their top eight rankings follow:

National Incident Management System (NIMS)	7.41%
Social Dimensions of Disaster	6.48%
Business Crisis and Continuity Management	6.48%
Building Disaster Resilient Communities	4.63%
Disaster Response Operations and Management	4.63%
Hazards Risk Management	4.63%
Principles, Practices, Philosophy and Doctrine of EM	4.63%
Sociology of Disaster	4.63%

Most of the programs that do not use the principles of emergency management document have prior knowledge of the material (71%). Most of the program representatives that do not attend the webinars were unaware of them (52%). Most representatives have not participated in the FEMA Higher Ed Focus group (51%). The majority (67%) have attended the symposium, and 43% have participated in the Special Interest Groups. The majority of those who were not aware of (or who have not participated in) the FEMA Higher Ed Special Interest Groups (52%) or the FEMA Higher Ed Focus Groups (57%) are interested in receiving more information.

Graduate

Thirty-one U.S. based programs responded to this survey and offer masters or doctoral degrees in emergency management or related fields. Most of the programs (40%) were coded 43.0302 Crisis/Emergency/Disaster Management, according to the CIP taxonomy. The second highest coding was 43.0301 Homeland Security (20%), and the third was 43 Homeland Security, Law Enforcement, Firefighting, and related protective services

(16.6%). The primary orientation of graduate programs was the public sector (34%); the secondary industry was private (27%).

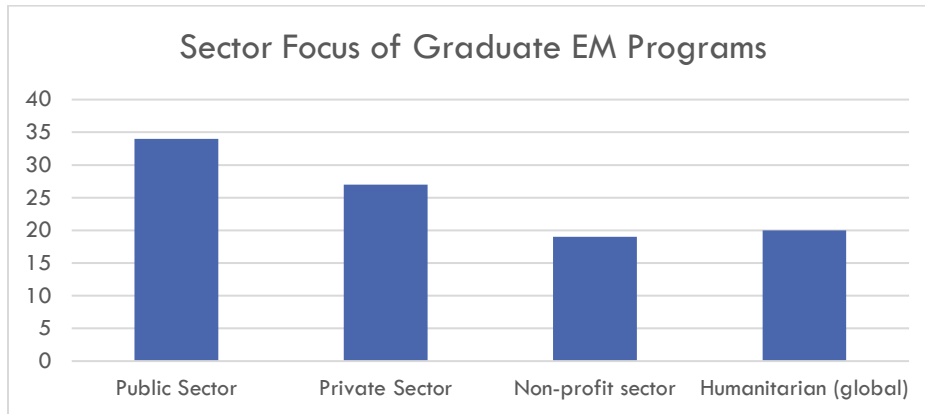


FIGURE 21: SECTOR FOCUS OF GRADUATE PROGRAMS

All of the graduate programs offered a master's degree, 1% provided a doctorate. Majority (60%) are not planning on developing a new curriculum. Those planning on developing new courses indicated the following: adding associates degree, graduate certificates, adding a minor, doctoral or undergraduate program, offering curriculum in climate security and resilience.

Majority of graduate programs (35%) have offered EM curriculum between 10 -15 years. Nearly 23% of the programs have offered EM curriculum over 20 years, see Figure 22.

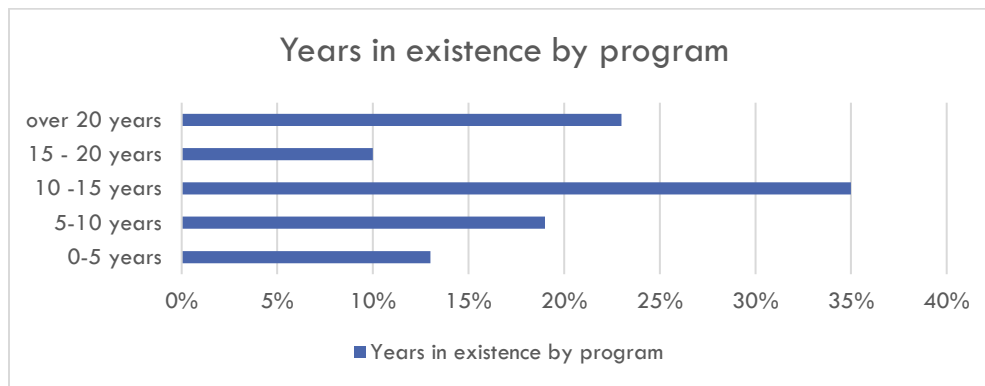


FIGURE 22: YEARS OFFERING EM CURRICULUM FOR GRADUATE PROGRAMS

Majority of the programs (100%) offered curriculum online (n=31). Nearly 63% of the programs offered most of their coursework online only, and approximately 34% of the programs offered most of their coursework both online and in-person, see Figure 23.

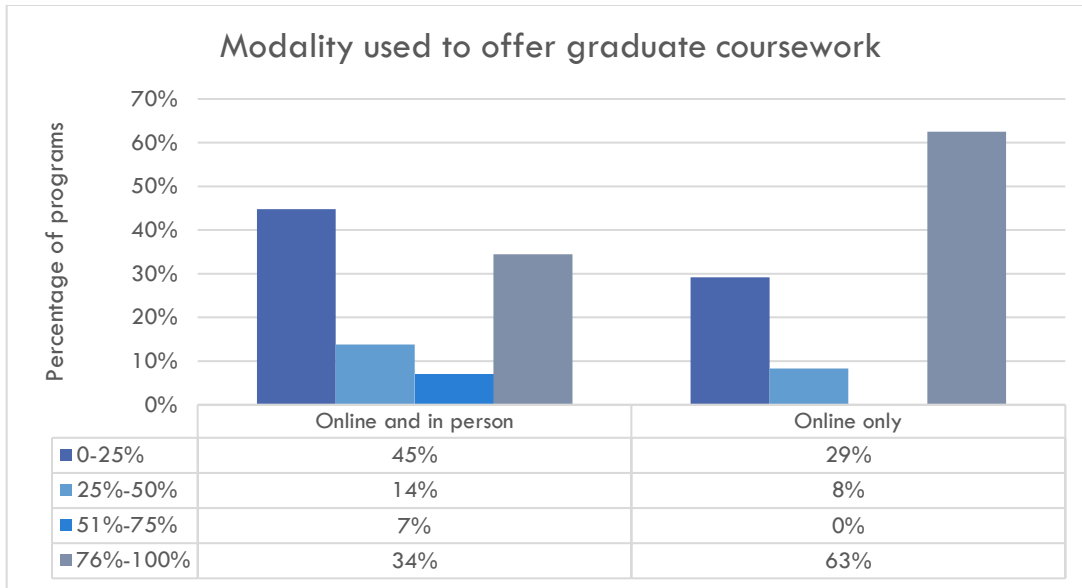


FIGURE 23: MODALITIES USED TO OFFER GRADUATE COURSEWORK.

Nearly 72% of graduate programs have observed an increase in diversity among the student body, where 24% reported steady numbers in diversity. Only one program reported an inability to monitor in diversity among graduate students. The average percentages across a wide range of diverse populations show the following: 40% women, 50% non-traditional college students, 22% first-generation college students, 19% Hispanic/Latino, 22% military students, 14% Black/African American, 13% international students, 4% American Indian or Alaska Native, 6% Asian, 2% Native Hawaiian or Pacific Islander.

Most of the graduate programs (53%) track their students' employment post-graduation (n=30). Of the programs that track employment, 55% of their graduates find positions in the public sector, 34% in the private sector, 8% in the humanitarian area, and 4% in the non-profit sector. Nearly 67% of the graduate programs have seen an increase in enrollment over the past three years, and 77% expect to see an increase in enrollment over the next three years. Most of the programs have either seen a rise in graduates over the past three years (53%) or no change in students graduating (33%). Majority of those responding expect an increase in the number of graduates over the next three years (70%).

Similar to the undergraduate programs, at the graduate level, most programs rely on part-time faculty. The average faculty in graduate programs vary by type: approximately three full-time tenure-track, four full-time tenured, three full-time faculty non-tenure track, 14 part-time faculty, and three associated faculty. About 50% of graduate programs hired new faculty and staff. Of those reporting who they hired (n=26), approximately 62% were part-time, and 38% were full-time.

Responding programs (n=27) indicated that external funding (37%) and institutional funding (44%) were extremely inaccessible. However, most indicated that library resources (93%) and administrative support (70%) were at least slightly accessible. Likewise, most programs indicated that local emergency management community support (81%), state emergency management community support (70%), national emergency management community support (67%), and FEMA specific support (52%) have been accessible. Many of the responding programs were neutral about DHS specific support (37%).

The most popular FEMA Higher Education resource were the journal articles available online (21.8%) and the principles of emergency management document (20%). Ten programs used the Higher Education Courses; the top eight rankings were as follows:

National Incident Management System (NIMS)	5.83%
Building Disaster Resilient Communities	5.00%
Business Crisis and Continuity Management	4.17%
Disaster Response Operations and Management	4.17%
Hazards, Disasters and U.S. Emergency Management	4.17%
Hazards Risk Management	4.17%
Research and Analysis Methods in Emergency Management	4.17%
Social Dimensions of Disaster	4.17%

Most of the program representatives that do not attend the webinars were not aware of them (46%). Most representatives have participated in the FEMA Higher Ed Symposium (81%), and the special interest groups (52%). However, most of the graduate program representatives have not participated in the FEMA focus groups (46%). Of those who were not aware of the focus groups, most would like more information (71%). Similarly, nearly 67% are interested in more information about the focus groups.

International Programs

Five institutes of higher education from countries outside of the US responding to the survey, representing five programs. The majority of the programs have offered EM curriculum between 10-15 years. Most programs represent more than one focus area; public sector (n=4) private sector (n=4), the non-profit sector (n=3), and humanitarian (global EM) (n=2). The five international programs have several offerings, as shown in Figure 24.



FIGURE 24: INTERNATIONAL PROGRAM DEGREE OFFERINGS

As shown in Figure 24, most international programs offer an undergraduate certificate or a bachelor's degree. One program indicated 'other' and listed offering a post-baccalaureate diploma. Over half of the international programs plan to develop new programs over the next year (75%). Their new offerings include a PH.D., micro credential, and a social vulnerability elective related to Indigenous and other marginalized populations. All of the responding programs indicated that they offer curriculum online.

Approximately 215 students have graduated from these international emergency management programs this past year. Half (50%) of the international programs track their graduates' employment post-graduation. Of those that track students, approximately 61.5% of the graduates' secure positions in the public sector, 20% of graduates in the private sector, 12.5% in the non-profit area, and 6% in the humanitarian sector.

Most of the programs have seen an increase in enrollment and graduates over the past three years (n= 3) and anticipate an increase in enrollment over the next three years (n=4). One program saw no change in the number of graduates or enrollment in their program. However, most programs anticipate an increase in graduates over the next three years (n=4).

The international programs rely primarily on associated and part-time faculty. With an average of 18 associated and 11 part-time faculty per program. Conversely the programs report an average of 2 full-time tenure track, 2.5 full time tenured, and 2 full time lecturers (or equivalent). The programs primarily select part-time faculty with emergency management practitioner backgrounds (68%). Four of the programs hired new faculty or staff in the past year, half hiring full time positions, half hiring part-time positions.

International programs anticipate an increase in student enrollment and new faculty positions over the next three years, Figure 25. One expects additional administrative support. Half anticipate new undergraduate curriculum and a restructuring of the program. One will join an accrediting body, another will develop doctoral curriculum. All except changes in the next three years.

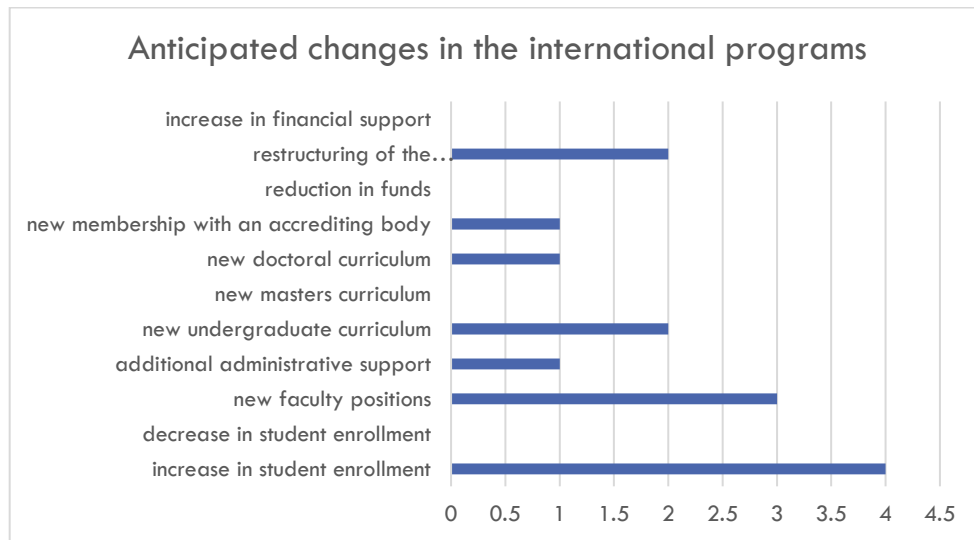


FIGURE 25: ANTICIPATED CHANGES IN THE INTERNATIONAL PROGRAMS

Similar to US programs, International programs were also impacted by the Coronavirus pandemic. Most have seen an increased interest in their program from students and an increase in enrollment. Several have had a shift to remote instruction. Figure 26 outlines the current changes.

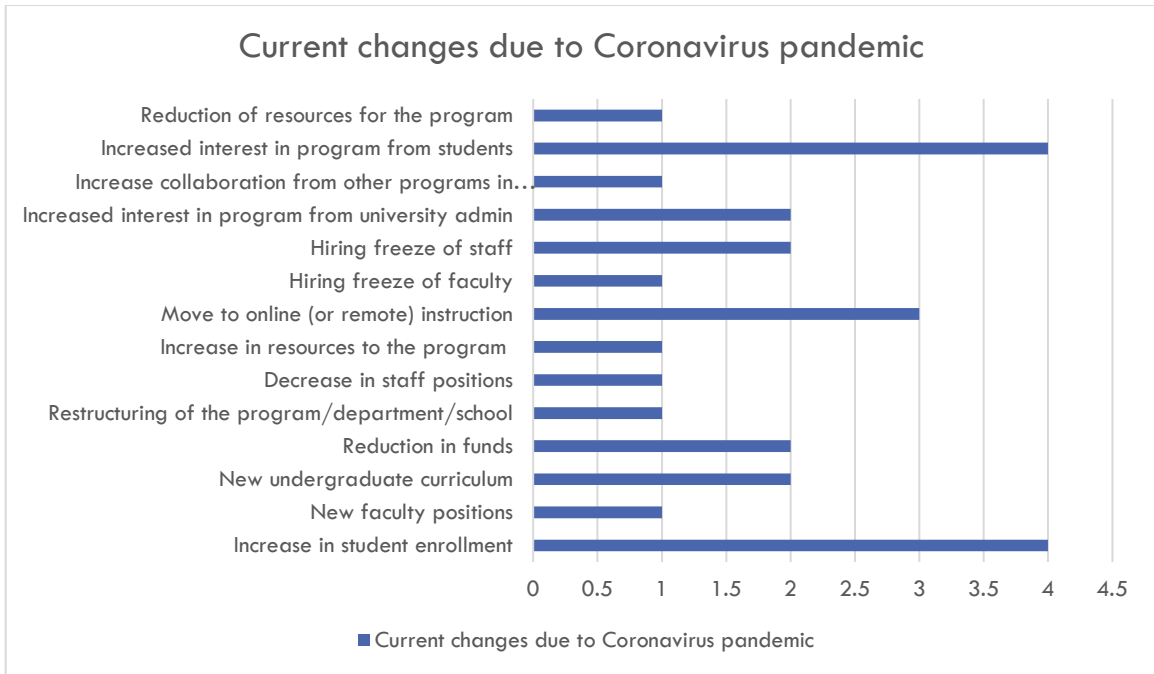


FIGURE 26: CURRENT CHANGES TO INTERNATIONAL PROGRAMS DUE TO THE CORONAVIRUS PANDEMIC

The international programs also anticipate changes in their program, at least in the short term, because of the pandemic. Two programs had a hiring freeze of staff, two programs had increased interest from university administration, two are working on new undergraduate curriculum and two had a reduction of funds. The programs were also asked about their metrics for success (Figure 27); most use the number of graduates and an increase in enrollment.

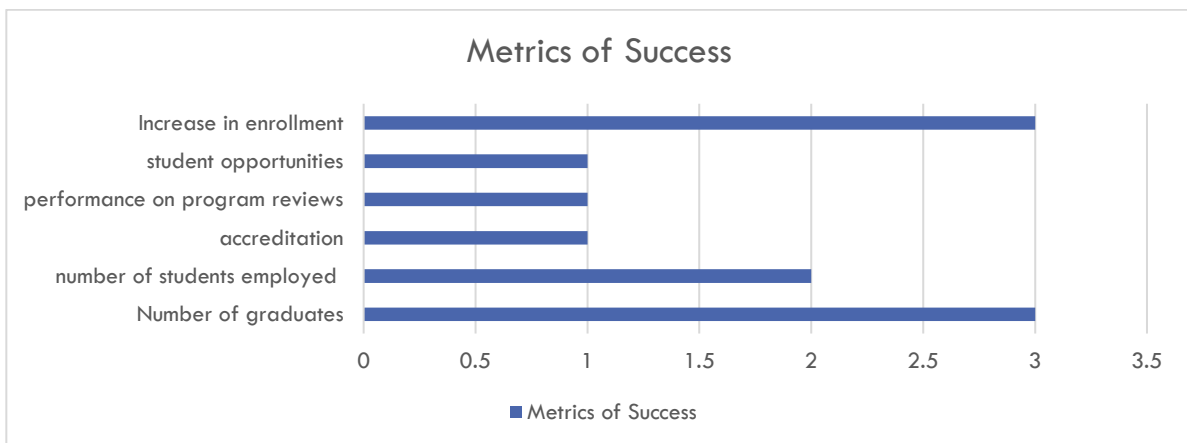


FIGURE 27: METRICS OF SUCCESS FOR INTERNATIONAL EM PROGRAMS

The international programs contacted were identified from the FEMA Higher education database as having a connection with the FEMA Higher Education Program. As such, international respondents were asked questions regarding their use of the FEMA-related resources online. As shown in Figure 28, most of the programs use the Journal Articles, the Principles of Emergency Management Document and independent study (IS) courses. Two of the programs haven't used any of the resources discussed in this survey.

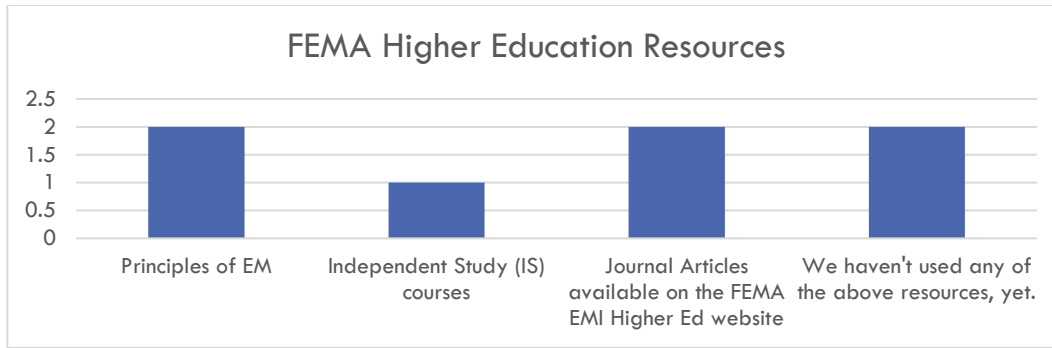


FIGURE 28: USE OF FEMA HIGHER EDUCATION RESOURCES BY INTERNATIONAL PROGRAMS.

International programs indicated that they were either unaware of the webinars or have had issues securing a SID number to gain access to the webinar. Independent study courses were used as supplemental course material and the principles of EM document was used in bachelors or associate's programs. Half of the programs had participated in the FEMA Higher Ed Symposium. None of the international programs have participated in the FEMA focus groups or special interest groups. However, half are interested in joining and receiving more information.

Discussion

This report represents nearly 50% of the institutions connected to the FEMA Higher Education Program, that self-identify as offering EM curriculum. Therefore, this report provides a good estimate about the curriculum provided, students and faculty in EM programs, access to resources, and use of FEMA materials through the FEMA Higher Education Program.

The majority of the programs represented in this survey have over decade of experience providing EM curriculum (49% undergraduate programs, 68% graduate programs; 80% of international programs). A quarter of the programs have been in existence for more than fifteen years (29% undergraduate programs, 33% graduate programs). The programs are still varied in terms of their academic homes, highlighting the interdisciplinary nature of this curriculum. Majority of the programs offer bachelor's and master's degrees and prepare students for employment in the public sector. international programs offered more certificates and bachelor's degrees and reported that they prepared students equally for public and private sector employment. The CIP codes show that 43.0302 Crisis/Emergency/Disaster management was the leading typology for the programs. Nearly all of the programs offer coursework in part online, and due to COVID-19, several programs have had to move to online instruction. It is unclear if those making the move to online instruction plan to maintain an online component to their programs.

Students are attracted to these programs, over 60% of the program experiences an increase in enrollment and over 50% had an increase in enrollment over the past three years. The number of students enrolled and who have graduated are often used as a metric of success for the programs and these percentages show overall growth for majority of the programs. Additionally, many programs have seen an increase in student interest in their programs during the pandemic. Most programs also anticipate an increase in student enrollment, new faculty positions, and new undergraduate curriculum. International programs anticipate increased student enrollment, restructuring of their programs, and addition of new undergraduate curriculum.

While these programs continue to grow, in terms of students graduated, the student body's diversity has not grown in step with regard to racial and ethnic minorities. However, non-traditional students and women have steadily increased in their enrollment in EM programs over the past couple of years. For the first time the diversity of the faculty has been estimated. As reported, the faculty represent a more varied set of individuals

than the student body in terms of racial and ethnic diversity. Interestingly the reported percentage of female faculty (31%) lags that of the student body (41%).

To maintain academic programs, access to support and resources is essential. According to the responses, most of the programs rely on part-time faculty, generally with practitioner experience. One trend over time has been a reduction in the number of full-time tenure track faculty, however, this year in all categories (except part-time faculty) there was an increase in faculty reported. Library resources and administrative support have been generally accessible, as have been support from the local EM community. Several programs were neutral on many of the questions related to support. A small number of programs are undergoing new challenges in trying to maintain student enrollments and in financial support due to COVID. Many programs reported anticipating an increase in student enrollment, new undergraduate curriculum, and new faculty positions. However, several programs indicated concerns with the reduction of funds and resources for the program, as well as hiring freezes of faculty and staff.

Most of the programs use at least one of the FEMA Higher Ed online resources, however, many of the comments strongly urge for an update to the website and the curriculum related materials posted. The most popular being the Independent study courses, Principles of Emergency Management Document, and the journal articles. The least used resources were online textbooks and webinars. Many were not aware of the webinars. The majority of the representatives attend the FEMA Higher Ed Symposium, and a third have participated in the special interest groups. Approximately a quarter of programs have been involved in the focus groups. The symposiums are extremely popular, with the majority attending annually or most years.

COVID-19 has produced new challenges for some programs and unexpected exposure for others. Nearly a third of programs expect an increase in students over the next year and a small percentage saw an increase in student enrollment during the pandemic. The number reported this year and last regarding student enrollment over the last three years also indicate many programs have experienced an increase in enrollment over the last year (this metric jumped nearly 10 percentage points). These programs are equally optimistic about enrollment over the next three years (the metric jumped nearly 10 percentage points, as well). In addition to student enrollment, many programs had an increase in interest from students, university administration and other programs in their IHE. A lot of programs reported growing concerns over student enrollment and student interest since COVID-19. Though 4% anticipated a decrease in student enrollment, 10% experienced such a decrease during the pandemic. International programs reported overwhelming that they have seen an increase in student interest and student enrollment due to the pandemic.

Conclusion

The programs have increasingly more experience, with graduate programs having the most experience offering EM curriculum domestically. As many programs use the number of graduates as a metric of success, the programs report as being successful and have had growth. Although every year there is a small percentage of programs that struggle to retain and graduate students. Annually there has been an increasing number of graduates from EM programs over sixty-seven thousand students, to date. While there is evidence that some programs have had success during the pandemic, there are concerns with access to resources. As institutions of higher education bear financial challenges, some of the programs can feel the burden; even with an increase interest in the curriculum from students, administrators, and peer programs. It is clear that many programs are struggling to 'do more with less'. As program directors, faculty, and staff attempt this great feat during this pandemic, let's remember to take care of ourselves because,

"You cannot pour from an empty cup."

– Unknown

References

- Bennett, DeeDee. (June 2020). "2021 FEMA Higher Education State of The Community: Annual Survey and Report." Report for FEMA Higher Education Program. Emmitsburg, MD.
- Brown. S. (2020, March, 25). [When Covid-19 Closed Colleges, Many Students Lost Jobs They Needed. Now Campuses Scramble to Support Them.](https://www.chronicle.com/article/When-Covid-19-Closed-Colleges/248345) The Chronicle of Higher Education. (https://www.chronicle.com/article/When-Covid-19-Closed-Colleges/248345) Accessed on May 11, 2020
- Calphas, J. and Kostov. N. (2020, May, 11). [U.S. Coronavirus Deaths Near 80,000 as States Expand Moves to Reopen Wall Street Journal](https://www.wsj.com/articles/coronavirus-latest-news-05-11-2020-11589189980) (https://www.wsj.com/articles/coronavirus-latest-news-05-11-2020-11589189980) Accessed May 11, 2020
- Centers for Disease Control and Prevention [CDC]. (2020, May, 6). [Social Distancing.](https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html) (https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html) Accessed on May 11, 2020
- Chappell, Bill. (2020, March, 11). [Coronavirus: COVID-19 Is Now Officially A Pandemic, WHO Says.](https://www.npr.org/sections/goatsandsoda/2020/03/11/814474930/coronavirus-covid-19-is-now-officially-a-pandemic-who-says) NPR. (https://www.npr.org/sections/goatsandsoda/2020/03/11/814474930/coronavirus-covid-19-is-now-officially-a-pandemic-who-says) Accessed on May 11, 2020
- Cresswell, John. 2008. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, third edition. Sage Publications: Thousand Oaks, California
- Cwaik, Carol. 2014. Emergency Management Higher Education Today: 2014 FEMA Higher Education Program Report. <https://training.fema.gov/hiedu/surveys/cwaik%20-%202014%20hi%20ed%20report.doc>
- Cwaik, Carol. 2016. Emergency Management Higher Education: Where Do We Stand? 2016 FEMA Higher Education Program Report.
- Dillman, Don A., Smyth, Jolene D., and Leah Melani Christian. 2014. Internet, Phone, Mail, and Mixed-Mode Surveys: A Tailored Design Model. John Wiley & Sons: Hoboken, New Jersey.
- Flaherty, C. (2020, April 1) [Frozen Searches.](https://www.insidehighered.com/news/2020/04/01/scores-colleges-announce-faculty-hiring-freezes-response-coronavirus) Chronicle of Higher Education. (https://www.insidehighered.com/news/2020/04/01/scores-colleges-announce-faculty-hiring-freezes-response-coronavirus) Accessed May, 19, 2020
- Jiang, I. (2020, March, 30). [Here's the difference between an 'essential' business and a 'nonessential' business as more than 30 states have imposed restrictions.](https://www.businessinsider.com/what-is-a-nonessential-business-essential-business-coronavirus-2020-3) Business Insider. (https://www.businessinsider.com/what-is-a-nonessential-business-essential-business-coronavirus-2020-3) Accessed on May 11, 2020
- Johns Hopkins. 2021. [COVID-19 Dashboard by the Center for Systems Science and Engineering \(CSSE\) at Johns Hopkins.](https://coronavirus.jhu.edu/map.html) (https://coronavirus.jhu.edu/map.html) Accessed on April 3, 2021.
- Krippendorff, Klaus. 2004. Content Analysis: an introduction to its methodology, second edition. Sage Publications: Thousand Oaks, California.

- Kwekwe, F. N. (2021). Challenges With Gender Diversity Issues in Higher Education. In *Handbook of Research on Innate Leadership Characteristics and Examinations of Successful First-Time Leaders* (pp. 204-219). IGI Global.
- McNichol, E., Leachman, M., and Marshall, J. (2020, April 14). [States Need Significantly More Fiscal Relief to Slow the Emerging Deep Recession](https://www.cbpp.org/research/state-budget-and-tax/states-need-significantly-more-fiscal-relief-to-slow-the-emerging-deep-recession). Center on Budget and Policy Priorities. (https://www.cbpp.org/research/state-budget-and-tax/states-need-significantly-more-fiscal-relief-to-slow-the-emerging-deep) Accessed on May 19, 2020
- Redden, Elizabeth. (2019, April 23). [International Student Numbers in the U.S. Decline](https://www.insidehighered.com/quicktakes/2019/04/23/international-student-numbers-us-decline). Inside Higher Ed.: Quick Takes. Retrieved from (https://www.insidehighered.com/quicktakes/2019/04/23/international-student-numbers-us-decline) on May 10, 2019.
- Stout, R., Archie, C., Cross, D., & Carman, C. A. (2018). The relationship between faculty diversity and graduation rates in higher education. *Intercultural Education*, 29(3), 399-417.
- Weinberg, S. L. (2008). Monitoring faculty diversity: The need for a more granular approach. *The Journal of Higher Education*, 79(4), 365-387.
- Whittaker, J. A., & Montgomery, B. L. (2014). Cultivating institutional transformation and sustainable STEM diversity in higher education through integrative faculty development. *Innovative Higher Education*, 39(4), 263-275.
- World Health Organization [WHO]. (2020a). [Coronavirus disease \(COVID-19\) outbreak situation](https://www.who.int/emergencies/diseases/novel-coronavirus-2019) (https://www.who.int/emergencies/diseases/novel-coronavirus-2019) Accessed on May 11, 2020
- World Health Organization [WHO]. (2020b). [Rolling updates on coronavirus disease \(COVID-19\)](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen). (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen) Accessed on May 11, 2020

Appendix I: List of Participating Institutions

Adelphi University	Mount Vernon Nazarene University
American Public University	National University
Arapahoe Community College	North Dakota State University
Arkansas Tech University	Northeastern State University
Ball State University	Northern Alberta Institute of Technology
Barry University	Northern Kentucky University
Bergen Community College	Northwest Missouri State University
Bethel University	Notre Dame College
Boston University, School of Medicine	Nova Southeastern University
Caldwell Community College	Pacific Union College
California State University, Long Beach	Palomar Community College
Clemson University	Pennsylvania College of Technology
Coastal Carolina Community College	Post University
Colorado Technical University	Prince William Sound Community College
Columbia International University	Purdue University Global
Columbia Southern University	Red Rocks Community College
Drury University	Rowan-Cabarrus Community College
Eastern Kentucky University	Rutgers University
Eastern Michigan University	Ryerson University
Eastern New Mexico University	Saginaw Valley State University
Elizabeth City State University	Saint Michael's College
Empire State College	Saint Petersburg College
Fairleigh Dickinson University	Sam Houston State University
Fayetteville Technical Community College	Texas A&M University
Florida International University	Texas Southern University
Florida State University	Truckee Meadows Community College
Fredrick Community College	Tulane University
Gaston College	Universidad del Turabo
George Mason University	University of Alaska, Fairbanks
Idaho State Meridian	University of Central Florida
Indian River State College	University of Central Missouri
Indiana University, Kokomo	University of Colorado, Colorado Springs
Jackson State University	University of Colorado, Denver
Jefferson University	University of Delaware
John Jay College, City University of New York	University of Findlay
Justice Institute of British Columbia	University of Florida
Lamar Institute of Technology	University of Idaho
Lee University	University of Illinois at Chicago

Mercer University's Penfield College	University of Maryland Global Campus
University of Maryland, Baltimore County	
University of Nebraska at Omaha	
University of New Haven	
University of North Carolina at Pembroke	
University of North Carolina, Chapel Hill	
University of North Texas	
University of South Carolina	
University of South Florida	
University of Texas Rio Grande Valley	
Utah Valley University	
Virginia Tech	
Wayne Community College	
West Texas A&M University	
Western Kentucky University	
York University	