Program Outcomes Assessment Follow-Up 2022-2023 Program Outcome (PO) Year End Reporting Form

In response to SACSCOC 8.2, "The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of seeking improvement based on analysis of the results ..."

Name of Program: Cybersecurity

Outcome #1: Enrollment (unduplicated)

Action Items from Program Review:

Item #	Action Items: (Action item identified in the 2021-22 program review.)	Results / Use of Results: (Provide results of the action item identified. Was the action item successful? If not, did you want to continue this action item going forward? If so, please include this action item in the 2023-2025 action items table below.)
1	Work with the Marketing department on campus to target females to the field (Assessed by: If the campaign is successful, there will be an increase in female enrollment in the next cycle. The faculty can also focus on reaching out directly to females who have applied for enrollment in the Cybersecurity program to ensure they continue the admissions process and are registered.)	This action item is still in progress. We will continue this action item going forward.

Baseline: 25 # (Average of total enrollment for the last three years – 2018-19; 2019-20; 2020-21)

Standard: n/a # Target: n/a #

Program Enrollment

Program Enrollment (unduplicated)					
Academic Year (Fall, Spring, Summer)	Enrollment				
2019-2020	25				
2020-2021	37				
2021-2022	46				

All Levels

Enrollment by Ethnicity, Gender, and Age

	2019-2020		2020-2021		2021-2022	
Ethnicity & Gender	N	%	N	%	N	%
African American, Female American Indian/Alaskan Native,	3	12.0%	4	10.8%	4	8.7%
Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female Hawaiian/Other Pacific Islander,	2	8.0%	3	8.1%	5	10.9%
Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	1	4.0%	1	2.7%	1	2.2%
Two or More Races, Female	1	4.0%	1	2.7%	0	0.0%
Unknown, Female	0	0.0%	1	2.7%	0	0.0%
Female Total	7	28.0%	10	27.0%	10	21.7%
African American, Male American Indian/Alaskan Native,	7	28.0%	11	29.7%	7	15.2%
Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	0	0.0%	0	0.0%	1	2.2%
Caucasian, Male Hawaiian/Other Pacific Islander,	10	40.0%	12	32.4%	21	45.7%
Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	0	0.0%	2	5.4%	4	8.7%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	1	4.0%	2	5.4%	3	6.5%
Male Total	18	72.0%	27	73.0%	36	78.3%
Total	25	100.0%	37	100.0%	46	100.0%

	2019-20		2020-2021		2021-2022	
Ethnicity & Age Range	N	%	N	%	N	%
African American, Under the age of 18		0.00/	0	0.00/	_	0.00/
American Indian/Alaskan Native.	0	0.0%	0	0.0%	0	0.0%
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,		0.070		0.070		0.070
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of						
18	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Under the age						
of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	0	0.0%	0	0.0%	0	0.0%
African American, 18-24	7	28.0%	9	24.3%	3	6.5%
American Indian/Alaskan Native,		0.00/		2.20/		2 22/
18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	1	2.2%
Caucasian, 18-24	6	24.0%	7	18.9%	9	19.6%
Hawaiian/Other Pacific Islander, 18-	0	0.0%	_	0.0%	0	0.0%
	_		0		_	
Hispanic/Latino, 18-24	0	0.0%	2	5.4%	3	6.5%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	1	2.7%	1	2.2%
18-24 Total	13	52.0%	19	51.4%	17	37.0%
African American, 25-44	2	8.0%	6	16.2%	5	10.9%
American Indian/Alaskan Native, 25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	5			16.2%		
Hawaiian/Other Pacific Islander, 25	-	20.0%	6	10.2%	14	30.4%
144	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	1	4.0%	1	2.7%	2	4.3%
Two or More Races, 25-44	1 1	4.0%	1	2.7%	0	0.0%
Unknown, 25-44		4.0%	1	2.7%	2	4.3%
25-44 Total	•	40.0%	15	40.5%	23	50.0%
African American, 45-64	1	4.0%	0	0.0%	3	6.5%
American Indian/Alaskan Native,	'	4.070		0.070		0.570
45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	1	4.0%	2	5.4%	3	6.5%
Hawaiian/Other Pacific Islander, 45-						
64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	1	2.7%	0	0.0%
45-64 Total	2	8.0%	3	8.1%	6	13.0%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native,						
65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,	_		_		_	
65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total		0.0%	0	0.0%	0	0.0%
Total	25	100.0%	37	100.0%	46	100.0%

Provide narrative for analysis of program enrollment. (Is enrollment increasing or decreasing? What are possible reasons for increase/decrease? Describe any action plans to improve or increase program enrollment.)

Recruiting efforts and personalized service to current students led to steady enrollment. The Cybersecurity program's enrollment remained thrived in spite of the Covid-19 pandemic outbreak. Although opportunities for in-person recruiting events were ceased due to gathering restrictions enforced by the state of NC, efforts to increase/maintain enrollment included an intentional focus on current and new students with phone calls, virtual office meetings, emails, and registration assistance. Also, WCC became a member of the Carolina Cyber Network and began work to get CAE accredited which gained attention. The program was also moved 100% online.

2023-2025 Action Items:

Item	Action Items (What actions can be taken to increase enrollment in your program?)	Assessment of Action Items (How will you assess the results of action items?)
1	For the Cybersecurity program to become CAE-CD designated (Center of Academic Excellence in Cyber Defense)	Earning the designation by NSA (National Security Agency)
2	Work with the Marketing department on campus to target females to the field	If the campaign is successful, there will be an increase in female enrollment in the next cycle. The faculty can also focus on reaching out directly to females who have applied for enrollment in the Cybersecurity program to ensure they continue the admissions process and are registered

Outcome #2: Retention

Action Items from Program Review:

Item #	Action Items: (Action item identified in the	Results / Use of Results: (Provide results of the action
	2021-22 program review.)	item identified. Was the action item successful? If not,
		did you want to continue this action item going
		forward? If so, please include this action item in the
		2023-2025 action items table below.)
1	Inform students of the next credential eligibility to reinforce retention. (Assessed by: Faculty will create an advising sheet which will notify students of their earned credentials (certificates, diploma, or degree) each semester to motivate and encourage students to stay enrolled.)	This action item is still in progress. We will continue this action item going forward.
2		

Baseline: 66.7 % (*Average of last three years – 2018-19; 2019-20; 2020-21; program retention*)

Standard: n/a % Target: n/a %

Fall to Fall	Retention Rate
Fall 2019 to Fall 2020	64.7%
Fall 2020 to Fall 2021	65.5%
Fall 2021 to Fall 2022	59.0%

All Levels

Retention by Ethnicity, Gender, and Age

			Fall 202	0 to Fall	Fall 202	1 to Fall
	Fall 2019 to Fall 2020		2021		2022	
Ethnicity & Gender	N	%	N	%	N	%
African American, Female	1	9.1%	2	10.5%	1	5.3%
American Indian/Alaskan Native,						
Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	0	0.0%	2	10.5%	2	10.5%
Hawaiian/Other Pacific Islander,						
Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	1	9.1%	1	5.3%	1	5.3%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	1	5.3%	0	0.0%
Female Total	2	18.2%	6	31.6%	4	21.1%
African American, Male	1	9.1%	2	10.5%	0	0.0%
American Indian/Alaskan Native,						
Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	0	0.0%	0	0.0%	0	0.0%
Caucasian, Male	7	63.6%	8	42.1%	10	52.6%
Hawaiian/Other Pacific Islander,						
Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	0	0.0%	1	5.3%	2	10.5%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	1	9.1%	2	10.5%	3	15.8%
Male Total	9	81.8%	13	68.4%	15	78.9%
Total	11	100.0%	19	100.0%	19	100.0%

				0 to Fall		1 to Fall
Educinia O A and Bosson	Fall 2019 to F			21		22
Ethnicity & Age Range	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,	0	0.070	O	0.070	· ·	0.070
Under the age of 18 Hispanic/Latino, Under the age of	0	0.0%	0	0.0%	0	0.0%
18 Two or More Races, Under the	0	0.0%	0	0.0%	0	0.0%
age of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	-	0.0%	0	0.0%	0	0.0%
African American, 18-24	2	18.2%	3	15.8%	0	0.0%
American Indian/Alaskan Native,						
	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24 Hawaiian/Other Pacific Islander,	3	27.3%	2	10.5%	0	0.0%
18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	0	0.0%	1	5.3%	2	10.5%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	1	5.3%	1	5.3%
18-24 Total	5	45.5%	7	36.8%	3	15.8%
African American, 25-44	0	0.0%	1	5.3%	0	0.0%
American Indian/Alaskan Native,						
25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	3	27.3%	6	31.6%	10	52.6%
Hawaiian/Other Pacific Islander,	0	0.00/	•	0.00/	0	0.00/
25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	1	9.1%	1	5.3%	1	5.3%
Two or More Races, 25-44	0	0.0%	0	0.0%	2	10.5%
Unknown, 25-44	1	9.1%	1	5.3%	0	0.0%
25-44 Total		45.5%	9	47.4%	13	68.4%
African American, 45-64 American Indian/Alaskan Native,	0	0.0%	0	0.0%	1	5.3%
45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	1	9.1%	2	10.5%	2	10.5%
Hawaiian/Other Pacific Islander,						
45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	1	5.3%	0	0.0%
45-64 Total	1	9.1%	3	15.8%	3	15.8%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native,	_				_	
65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	0	0.0%	0	0.0%	0	0.0%
Total	11	100.0%	19	100.0%	19	100.0%
Total	11	100.070	10	100.070	10	100.070

Provide narrative for analysis of program retention data. (Based on the data, provide a narrative of your analysis of retention. Indicate factors that may have affected your retention. State any changes you plan to make to improve retention.)

The Cybersecurity program saw an increase in retention post-pandemic. The program offers multiple delivery modalities (hybrid, evening, online) to meet student needs. Faculty continue to strive for increased retention through multiple means such as early alerts, referral to the academic skills center and increased advising efforts.

2023-2025 Action Items:

Item	Action Items (What actions can be taken	Assessment of Action Items (How will you assess the
	to increase program retention?)	results of action items?)
1	Inform students of the next credential eligibility to reinforce retention.	Assessed by: Faculty will create an advising sheet which will notify students of their earned credentials (certificates, diploma, or degree) each semester to
		motivate and encourage students to stay enrolled.

Outcome #3: Completers (unduplicated by highest level of attainment)

Action Items from Program Review:

Item #	Action Items: (Action item identified in the	Results / Use of Results: (Provide results of the action
	2021-22 program review.)	item identified. Was the action item successful? If not,
		did you want to continue this action item going
		forward? If so, please include this action item in the
		2023-2025 action items table below.)
1	Implement Instructor checkpoints to verify	Still in progress. We will continue this action item
	student performance in classes (Assessed	going forward.
	by: Faculty will continue to track and follow	
	up on student alerts and reach out to	
	students who are in danger of failing	
	courses to advise on resources available)	

Baseline: 27 # (Average of total completers for the last three years – 2019-20; 2020-21; 2021-22)

Standard: n/a # Target: n/a #

Number of Completers (unduplicated) – Graduation Year – Summer, Fall, Spring					
Graduation Year	Total Completers				
2020-2021	28				
2021-2022	30				
2022-2023	25				

All Levels

Completers by Ethnicity, Gender, and Age

	2020-2021		2021-2022		2022-2023	
Ethnicity & Gender	N	%	N	%	N	%
African American, Female	3	10.7%	2	6.7%	2	8.0%
American Indian/Alaskan Native,						
Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	4	14.3%	4	13.3%	7	28.0%
Hawaiian/Other Pacific Islander,						
Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	2	6.7%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	1	3.6%	0	0.0%	0	0.0%
Female Total	8	28.6%	8	26.7%	9	36.0%
African American, Male	6	21.4%	5	16.7%	3	12.0%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	1	3.6%	1	3.3%	0	0.0%
Caucasian, Male	9	32.1%	11	36.7%	9	36.0%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	2	7.1%	3	10.0%	2	8.0%
Two or More Races, Male	2	7.1%	2	6.7%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	2	8.0%
Male Total	20	71.4%	22	73.3%	16	64.0%
Total	28	100.0%	30	100.0%	25	100.0%

	2020	-2021	2021-	-2022	2022-	-2023
Ethnicity & Age Range Table	N	%	Ν	%	Ν	%
African American, Under the age of		0.00/	0	0.00/	0	0.00/
American Indian/Alaskan Native.	0	0.0%	0	0.0%	0	0.0%
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,						
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total		0.0%	0	0.0%	0	0.0%
African American, 18-24	4	14.3%	1	3.3%	3	12.0%
American Indian/Alaskan Native, 18-		14.570	'	3.370	3	12.070
24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	1	3.6%	1	3.3%	0	0.0%
Caucasian, 18-24	6	21.4%	3	10.0%	10	40.0%
Hawaiian/Other Pacific Islander, 18-						
24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	2	7.1%	4	13.3%	2	8.0%
Two or More Races, 18-24	1	3.6%	1	3.3%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	1	4.0%
18-24 Total	14	50.0%	10	33.3%	16	64.0%
African American, 25-44	5	17.9%	6	20.0%	1	4.0%
American Indian/Alaskan Native, 25-		0.00/	0	0.00/	0	0.00/
	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44 Hawaiian/Other Pacific Islander, 25-	7	25.0%	10	33.3%	4	16.0%
44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	1	3.6%	1	3.3%	0	0.0%
Two or More Races, 25-44	0	0.0%	1	3.3%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	1	4.0%
25-44 Total		46.4%	18	60.0%	6	24.0%
African American, 45-64	0	0.0%	0	0.0%	1	4.0%
American Indian/Alaskan Native, 45-						
64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	0	0.0%	2	6.7%	2	8.0%
Hawaiian/Other Pacific Islander, 45-		0.00/		0.00/		0.00/
64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	1	3.6%	0	0.0%	0	0.0%
45-64 Total		3.6%	2	6.7%	3	12.0%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	0	0.0%	0	0.0%	0	0.0%
Total	28	100.0%	30	100.0%	25	100.0%

Provide narrative for analysis of completers. (Based on the data, provide a narrative of your analysis of completions. Indicate factors that may have affected your completions. How might you increase the number of completers in your program?)

The IT Business Support program did not take an immediate hit from COVID-19. In fact, just the opposite. However, there was a delayed effect which caused our completion rate to slightly decrease in 2022-2023. Other factors for non-completer students include employment-related changes, relocation, and loss of financial aid.

2023-2025 Action Items:

Item	Action Items (What actions can be taken to increase student completion in your program?)	Assessment of Action Items (How will you assess the results of action items?)
1	Implement Instructor checkpoints to verify student performance in classes	Assessed by: Faculty will continue to track and follow up on student alerts and reach out to students who are in danger of failing courses to advise on resources available.

Approvals

- 1. Using DocuSign (electronic signature), the Office of Institutional Effectiveness (IE) will review and approve the Program/Service Outcome Assessment when completed by the responsible program/service personnel.
- 2. Using DocuSign (electronic signature), appropriate Department Chair, Division Dean, Director, and/or AVP is asked to read and approve the Program/Service Outcome Assessment.

IE Acceptance / Date: _	Dorothy Moore	11/9/2023	
Department Chair, Dear	n, Director, and/or AVP / Date:	Jennifer Tyndall	11/9/2023