



### Background

One of the key concerns of any program that leads to a credentialing exam is the pass rate for graduates. The Accreditation Council for Education in Nutrition and Dietetics (ACEND) standards require dietetic technician programs to meet the following objective:

Over a five-year period, the pass rate for program graduates taking the Commission on Dietetic Registration (CDR) credentialing exam for the first time will be at least 70%.

The SSC Dietetic Technician program pass rate prior to the assessment grant award was 100%, but only 20% of eligible students had taken the exam. It was proposed to implement the use of a credentialing exam simulation software program (Visual Veggies) to improve completion and maintain the pass rate.

\*National Dietetic Technician program first attempt pass rate = 75%; all program first attempt pass rate = 66.1%.

### Objectives

- To increase student confidence in taking the dietetic technician credentialing exam.
- To increase the percentage of eligible students that take the dietetic technician registration exam within 12 months of eligibility.
- To maintain the pass rate above the ACEND standard of 70%.
- To identify test domains with group results below 70%, and develop strategies for improvement in the curriculum.

### Methods

#### Target group:

All dietetic technician students enrolled in DTR229 Professional Dietetics (final capstone course prior to graduation).

- Completed survey to assess levels of confidence and readiness to take the DTR credentialing exam at baseline and post-final simulation (Figure 1).
- Completed pre-test simulation to assess baseline scores in all three domains (Figure 2) of the exam, as well as their overall score.
- Instructed to practice with an intentional focus on lowest scoring domains.
- Final simulation exam conducted at the end of the semester.

### Measures

Please respond to each statement by choosing the response or statement that best reflects your current mindset regarding the Dietetic Technician Credentialing Exam.

	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
I feel that I am currently prepared to take the DTR credentialing exam.					
I feel confident that I am currently prepared to achieve a score of 75% or higher in the domain: <i>Nutrition Science and Care for Individuals/Groups</i>					
I feel confident that I am currently prepared to achieve a score of 75% or higher in the domain: <i>Food Science and Food Service</i>					
I feel confident that I am currently prepared to achieve a score of 75% or higher in the domain: <i>Management of Food and Nutrition Services</i>					
I feel confident that my coursework has sufficiently encompassed the material required to prepare me for the DTR credentialing exam.					
I believe that simulated practice exams for the DTR credentialing exam will improve my confidence for taking the DTR credentialing exam.					

Figure 1: Self-Assessment for Confidence and Preparedness

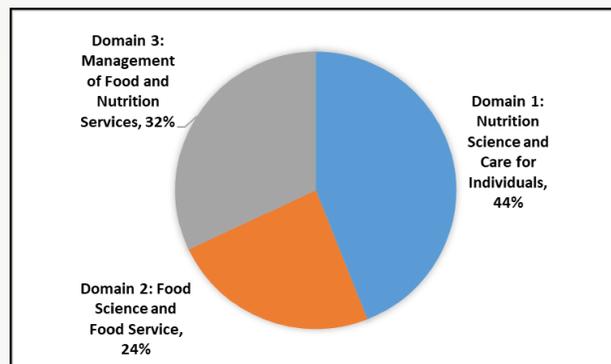


Figure 2 Dietetic Technician Exam Content by Domain

### Results

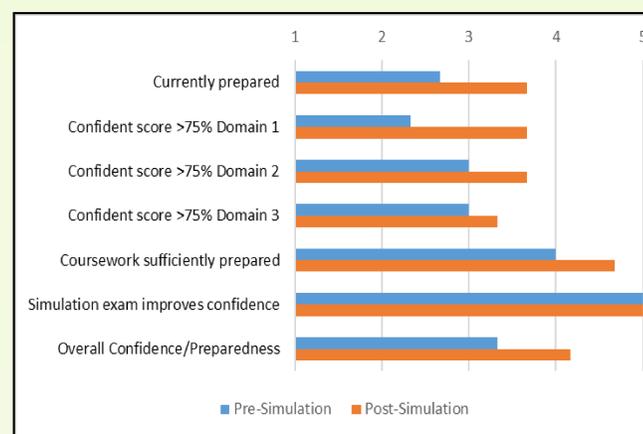


Figure 3: Results of Self-Assessment for Confidence and Preparedness, pre and post-simulation exam practice.

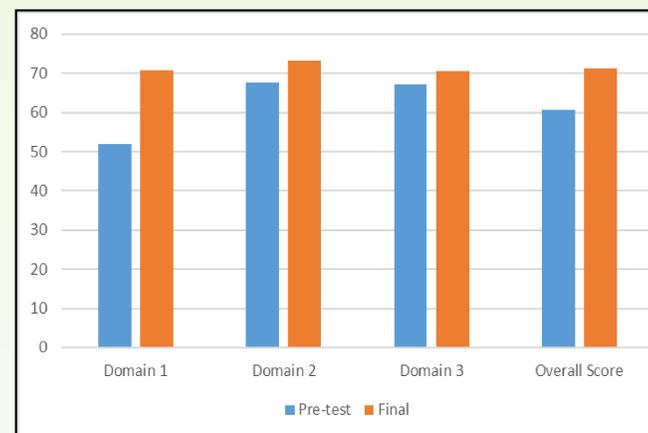


Figure 4: Results of Simulation Exam by Domain, pre-test and final simulation

- 100% of students completed the CDR credentialing exam within 12 months of eligibility (n=3)
- 100% of students passed the exam the first time
- No domains in the final simulation exam with a score below 70%

### Discussion

Results of the simulation exam practice program revealed the following:

- Students demonstrated improvements in feelings of confidence and preparedness for all domains of the exam, including overall preparedness (Figure 3).

### Discussion (continued)

- Students demonstrated improvements in all three domain scores for the simulation exam (Figure 4).
- Students improved overall total scores for the simulation exam by 17.5%.
- All students (100%) took their credentialing exam within 12 months, compared prior 20% completion rate.
- All students (100%) passed the exam on first attempt.

#### Limitations:

- Small student population for this particular graduating class
- Students were concurrently taking coursework that aligned with content domain 1, which likely resulted in the lower pre-score, however final score in domain 1 improved by 36.4%.

### Conclusion

While the class size for this exam simulation project was small, it is evident that the Visual Veggies exam simulation program is a valuable tool and strategy for enhancing student preparedness and confidence in taking the DTR credentialing exam. The program was utilized again this year, and will remain part of the DTR229 course for the foreseeable future. Ongoing use of the Visual Veggies simulation software will provide continuous feedback, as well as promote student success for achieving the DTR credential.

### References

"Dietetic Technician: Registration Examination for Dietetic Technicians" (2019, August 4). Retrieved from <https://www.cdrnet.org/dtr-exam-stats>.