Measuring Student Competency Achievement for the Future: Infusing the Continuous Improvement Process

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Introduction

Health administration educational programs must continue to morph to meet the future challenges of healthcare leadership in a rapidly changing market. To do this, programs and faculty need a mechanism by which they can readily update their competency models to meet those future market demands, infuse their curriculum with relevant content and activities, track student progress and then adjust courses as necessary based upon student outcomes. The UIW MHA Program has such a model. Using the Cardinal Assessment and Review Dashboard (the CARD), students are assessed at the individual level and across the curriculum, on 23 specific competencies. These 23 competencies, covering 6 overarching domains, were developed and continue to be updated based upon feedback from local industry leaders who make up the Program’s Executive Advisory Board. The data from each student’s Card is aggregated, by cohort, each year to identify areas for programmatic improvement, where we specifically seek answers to the question of “how do we improve student learning outcomes.” This poster illustrates how data from the CARD was used to evaluate program effectiveness and then effect change in improving student learning outcomes.

Initial Findings from Class of 2018 Cohort

We began tracking student competency achievement using the CARD in 2018 (note: we were only able to capture data for the second year of our Class of 2018 cohort). Our initial evaluation of the average student achievement of the program competencies resulted in two competencies standing out: Innovative Thinking and Financial Skills. The average score attained during the Exit Assessment (the culminating program assessment) was just 5.0 in Innovative Thinking and just below 5.0 for Financial Skills. Interestingly, these findings showed a deterioration of competencies from their second-year outcomes.

The CARD rating scale ranges from 0 (No student assignment) to 10 (Expert Application). Ratings of 1 - 4 reflect increasing levels of knowledge of the competency. Ratings of 5 - 7 reflect increasing levels of the ability to apply the competency. Ratings of 8 - 10 reflect increasing levels of the ability to expertly apply the competency. Our mission is to educate and develop early career health leaders and as such, most students enter our MHA program with little to no previous business education or experience. Given our student’s background, our goal then is to provide them with foundational knowledge they will need to be successful and increase their ability to apply the competencies, recognizing most will not graduate from our program at the expert level. Therefore, the expectation is that students will reach a minimum application score of 5.0, but preferably up to a 7.0, in each competency by the end of their second year.

UIW MHA Student Competency Model

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Process Improvement Results

While this poster presents our program’s focused efforts on just two of the program competencies, our efforts continue to focus on monitoring and improving all of our competencies. The MHA faculty meet annually to strategically refine competency coverage across the courses and to discuss improvements to course content, assessment tools and grading rubrics. The following three graphics illustrate the improvement trends across our program competency domains. The competency growth across the cohorts can be seen in the movement of the Exit Assessment average scores from being at or close to 5.0 in the Class of 2018 to close to 6.0 in the Class of 2019 and finally even closer to exceeding 6.0 in the Class of 2020. We will continue to track and monitor student competency attainment with the goal of shifting the curve out even further until it reaches our target score of 7.0.

Both competencies are assessed in the Healthcare Marketing Management course, which is offered in the students’ last semester (2nd year). Students complete a quantitative analysis (BCA), in which their financial skills are assessed, and a group Marketing Analysis and Plan, in which their innovative thinking skills are assessed. In 2019, a greater emphasis was placed on encouraging students to be “more innovative” in their product/services creative idea. No surprise, this resulted in increases of average scores. In 2020, additional exercises were incorporated into the creative idea component of the Marketing Analysis and Plan which did result in more innovative products/services being proposed, but did not significantly impact the Exit Assessment results. Additional assignments were provided in the Leadership Course, another second-year course, to enhance student innovative thinking skills. Students were required to reflectively journal on various leadership traits and then establish short-term and long-term goal plans. The act of reflection alone can promote innovative thinking as an outcome. Throughout the course numerous hands-on games and exercises were introduced to allow students to push their creativity in solving problems and discovering solutions to real-world problems. We did see a slight increase in this competency across the 2-year course, but these efforts did not result in a major effect on the Exit Assessment.

In 2019, we saw a drop in student financial skills as measured by the BCA. A possible reason for this is the professor revised the BCA case study to permit a greater emphasis on finance. While this had a negative outcome on the average financial skills score, it did result in students performing better on the Exit Assessment in this competency. A post-Marketing course debrief with the students was held to review the BCA and to discuss the areas in which the cohort had struggled, and this occurred shortly before the Exit Assessment case was released. By the summer of 2019 we had competency assessment data for a full cohort (i.e., 2 years). We were then able to note the large decrease in financial skills loss between the first year of the program when students take two finance courses and the second year, when financial skills are assessed with the Marketing BCA. Students were, for the most part, able to apply the financial tools they selected to the data correctly; however, they did not select the appropriate tools to “refresh” the students’ recall, an overview of the financial tools they had learned the previous year was presented just prior to the BCA being assigned in 2020. This resulted in an improvement in their financial skills competency average. However, the BCA did not have a major effect on their Exit Assessment results.

The solution for enhancing persistence in financial skills appears to be repeat and continual emphasis throughout the two-year program. Innovative thinking skills are harder to teach face-to-face. A 2017 PwC survey found 77% of CEOs struggle to find employees with the creativity and innovation skills they need. The ability to innovate, that is, to do things differently, which generates change and develops new paradigms, is a critical competency needed by future health administrators. It is challenging to develop and assess this competency in our students as can be seen by the results of our analyses here. Last Fall the MHA faculty added a new Organizational Behavior course to our curriculum, and it is where we now first introduce innovative thinking to our students. Students are exposed to case study successes and failures and participate in numerous hands-on activities to inspire innovation and creativity (see picture of “The Spraghetti Challenge”). These simulations are then linked to real-world problems that students might find in their own healthcare organizations. The results of these new educational opportunities will hopefully reflect favorably in our Class of 2021 cohort’s second-year courses and Exit Assessment outcomes.