November 2017

Assessment in Action

Data Intervention helps Limited Access Admissions in Health Professions

Those who oversee programs with limited enrollment, like those in FSW's School of Health Professions, are continually challenged to find the best candidates for the limited spaces in their programs. When applying for the Cardiovascular Technology Program (CVT) or the Respiratory Care Program (RC), for example, acceptance to Florida SouthWestern State College does not imply acceptance into the programs.

Dr. Jeffrey Elsberry, Associate Dean of Cardiopulmonary and Emergency Care Programs, explained that acceptance to either of these two programs is determined by admission criteria, the core of which has been the CVT and RC admissions' use of carefully weighted admissions points. This customized admissions process measures and compares specific applicant predictor variables to estimate future success on measurable programmatic outcomes. Since 2009, admissions points for success prediction are awarded in the following categories.

- Overall GPA
- Completion of co-requisite coursework,
- Points on the Watson-Glaser Critical Thinking Exam

- Math/Science GPA
- Overall educational experience
- A panel interview

Each of these components is based on a review of the literature and is generally acceptable among programs from other colleges. Targeted predictor variables are given weighted value on a 100- point scale to form the basis for accumulated admission points. The programs annually evaluate their admissions and academic processes with the goal of continuous improvement in program outcomes. Noting the weights for each category, Dr. Elsberry explained that though admission decisions were made according to applicants' scores, he and his colleagues, Professor Jeff Davis and Professor Jean Newberry, wanted to be assured that the admissions scores were weighted in such a way that they were selecting students who would be the most successful in these vigorous programs.

Dr. Joseph van Gaalen, Dr. Jeffery Elsberry, and Professor Jeff Davis. Not pictured; Professor Jean Newberry.

Dr. Elsberry, along with Professors Davis and Newberry, began their research by looking at the literature and comparing FSW's admissions and success rates with those at other institutions. The incorporation of the Watson-Glaser Critical Thinking Instrument, as an admission predictor variable, was based primarily on research findings reported in the literature by other academic institutions. With more than 5 years of CVT and RC outcome data accumulated for candidates with Watson- Glaser Critical Thinking Scores collected at admission, Dr. Elsberry and his team constructed research questions:

- Is there a statistically significant correlation between these scores and Board Exam Scores for the five graduating cohorts from 2012-16?
- Are their differences when comparing predictor and outcome variables between and among cohorts?

Working with Dr. Joseph van Gaalen in the Office of Academic Assessment, Dr. Elsberry's team conducted an admissions variables assessment to carefully examine the weighted values verses the success rates of program graduates.

Using multivariate analysis, Dr. van Gaalen was able to provide a more thorough look into how each of the prediction components interact with one another and which best serve the program as predictive tools. The below figure is one such example. Here, each student's overall GPA and Watson-Glaser score are mapped on a grid while the board exam score is shown as a color representation for that location on the grid. Known as a ratio map, this technique uses two predictive data sets together with the resultant data to serve as a kind of look-up table which can help in deciding how multiple variables affect the outcome. The 'hot' and 'cold' areas of the ratio map can be used to see how there are upper bounds to a predictor. In other words, overall GPA might be a reasonable first step in prediction, but from the ratio map we see that it doesn't always hold true. A student might have a low overall GPA but if he or she scores really high on the Watson-Glaser, the overall GPA is no longer as good a predictor.

Ratio Map of Respiratory Exam Score based on Waston-Glaser Test and Overall GPA
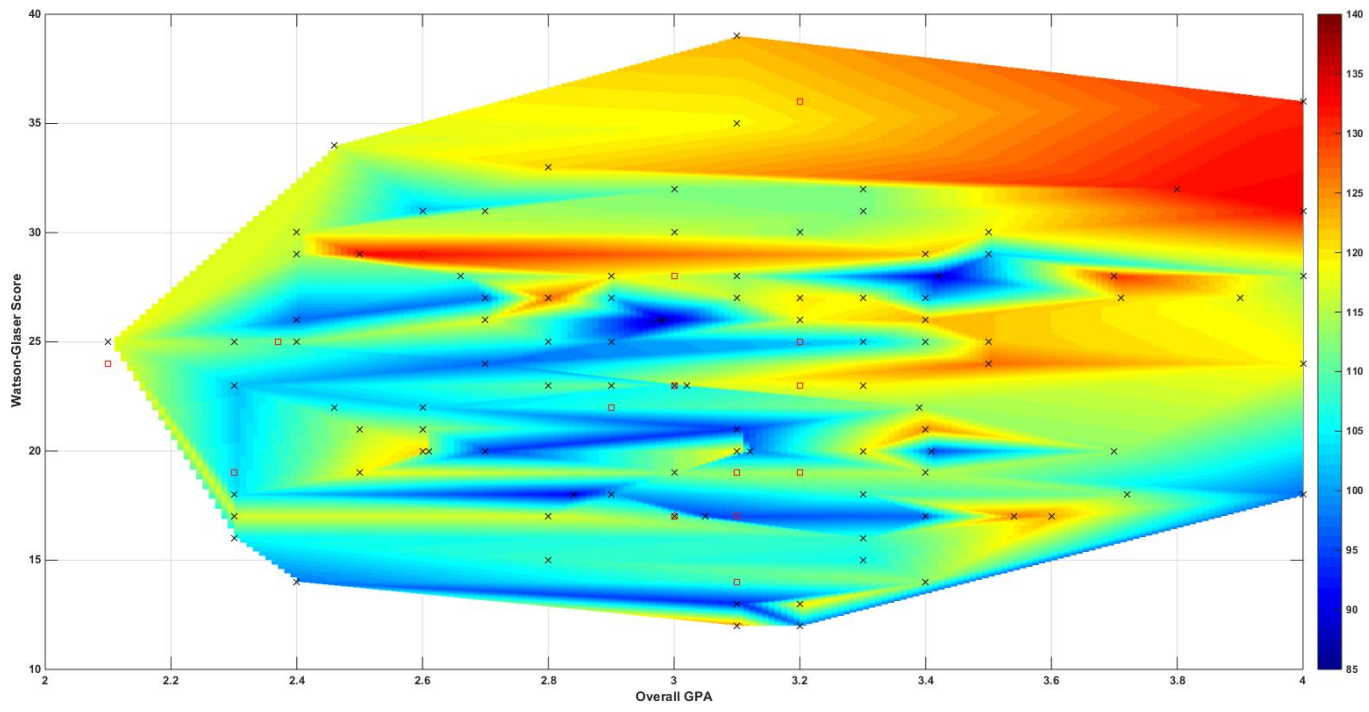
"We are all quite pleased and also somewhat surprised where the analysis of our predictor variables has led," said Dr. Elsberry. Clearly, we are well along the path for the intervention portion of the Limited Access Admissions process assessment. With the assistance of the Office of Academic Assessment, the CVT and RC programs have successfully redefined the coefficients that will alternatively weight their program admission predictor variables. Armed with the research and data obtained through their Admissions Predictor Assessment, Dr. Elsberry and his team are confident that the revised algorithm for admission point calculation should provide more clarity for admissions decisions in 2018. Dr. van Gaalen adds "by the very nature of the ratio map, continued data collection will actually result in an ever improving ratio map."

Predictor Variable	Pre-Variable Assessment Weight	Post-Variable Assessment Weight
Overall GPA	15%	30%
Math/Science GPA	30%	30%
Co-Requisites Completed	10%	0%
Educational Experience	5%	10%
Watson-Glaser Critical Thinking Exam	20%	30%
Panel Interview	20%	0%

FSW's Growing Culture of Assessment

Dr. Caroline Seefchak, Professor of Education and LAC Chair

When something is inherently interesting or particularly useful, people tend to approach it with genuine enthusiasm. Assessment projects that help identify things that can be made better or that point to the direction for improvement can be of tremendous interest. Faculty in higher education generally want to focus on assessment efforts that will meet a need, serve a purpose, or help with decision-making (Suskie, 2004). Assessment should provide "a vision worth working toward" (Angelo, 1999).

At FSW, one such vision materialized in the School of Health Professions. By collaborating with Dr. Joseph van Gaalen in the Office of Academic Assessment, Dr. Jeffrey Elsberry, Professor Jeff Davis, and Professor Jean Newberry, in Cardiopulmonary and Emergency Care Programs, conducted an admissions variables assessment to carefully examine the weighted values of their admissions criteria verses the success rates of their program graduates. Their story of assessment and data and algorithm revision is told in this issue of our newsletter.

This College does, indeed, have a growing and thriving respect for assessment and for all it can tell us. Assessment is as useful as what is done with its findings, and it's important to be ever mindful that interpretation of data, based on professional judgment and experience, is paramount to the efficacy of any assessment project. FSW's Learning Assessment Committee, along with the College's Office of Academic Assessment, is committed to nurturing the vital assessment culture of our institution. Any faculty or staff member with an idea for improving a class, a program, or a procedure within the College, is encouraged to speak with your department's LAC representative or assessment coordinator or to visit the Office of Academic Assessment in I-122 on the Thomas Edison Lee Campus.

"Research" and "Investigate" Underway

This academic year's General Education Assessment plan, courses which were identified by faculty as "Research" or "Investigate" were randomly selected for General Education Assessment during fall 2017.

Under the new plan outlined by the LAC, courses that met the criteria could have been randomly selected. Letters were sent to faculty for selected courses in mid-October. These faculty members were asked to provide an assignment which the instructor feels is appropriate to meet that competency. More detailed information was included in the selection letter. Faculty with questions concerning our AY 2017-2018 General Education Assessment plan should contact Dr. Joseph van Gaalen at jvangaalen@fsw.edu

Course Level Assessment

Learning Assessment Coordinators are overseeing the AY 2017-2018 Course Level Assessments for their departments or divisions and are taking input on any courses that would benefit from being a part of the Course Level Assessment program at the College. The Office of Academic Assessment is always available to provide support to faculty to develop assessment tools, administer assessments, collect data, and analyze results for course assessments.

| C	R	E	A	T	I	V	E
Communicate	Research	Evaluate	Analyze	Think	Investigate	Visualize	Engage

LAC Welcomes English Professor

*Dr. Shawn Moore,
Professor of English*

A new member of the Learning Assessment Committee, Shawn Moore received his PhD from Texas A&M University in English Literature, Language, and Culture. While at Texas A&M, he was the Research Associate and Graduate Fellow for the *Initiative for Digital Humanities, Media, and Culture* (*IDHMC*), where he developed digital humanities projects for faculty and staff, and served as the project manager of 18thConnect, a digital collation platform for 18th Century texts. In 2012, he founded the *Digital Cavendish Project*, an independent collaborative repository for the study of Margaret Cavendish, Duchess of Newcastle (1623-1673). Under his direction, the project grew from an archival repository to a scholarly collaborative project that provides access to digitized versions of Cavendish's texts, online resources for the study of Cavendish, and published original research from scholars. Currently, Dr. Moore is working on a digital platform for creating digital editions of early modern texts via a grant from the Academic Research Council (ARC). In spring 2017, he will be teaching LIT 2380: Introduction to Women in Literature and will be using digital humanities projects and open access texts to explore early modern women writers in areas of science and technology.

Data Humor
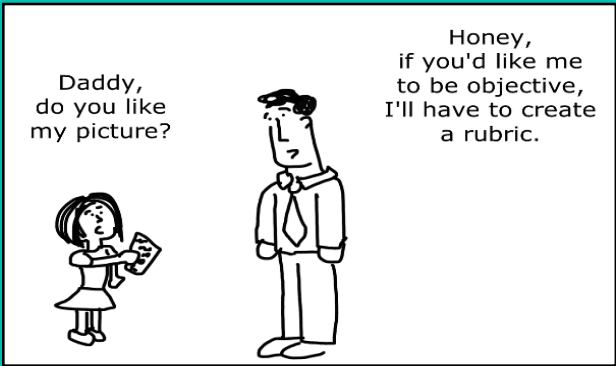
Learning Assessment Committee Members
2017-2018

Marty Ambrose	**Dr. Erik Fay**	**Dr. Shawn Moore**	**Dr. Eric Seelau**
Patricia Arcidiacono	**Dr. Julia Kroeker**	**Dr. Kristi Moran**	**William Stoudt**
Dr. Marius Coman	**Margaret Kruger**	**Dr. Katie Paschall**	**Allison Studer**
Dr. John Connell	**Fernando Mayoral**	**Jennifer Patterson**	**Dr. Amy Trogan**
Jane Charles	**Dr. Lisa McGarity**	**Dr. Elijah Pritchett**	**Dr. Joseph van Gaalen**
Dr. Eileen DeLuca	**Barb Miley**	**Dr. Caroline Seefchak**	**Dr. Richard Worch**
Thomas Donaldson	**Colleen Moore**		