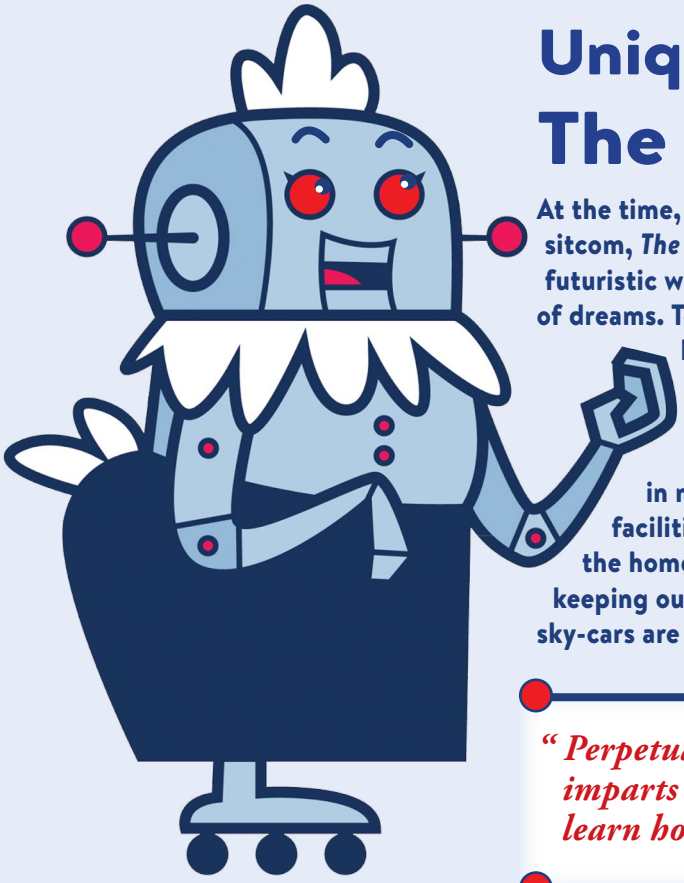

Uniquely Human Skills: The Agile Mindset at Becker

At the time, the 1960s animated sitcom, *The Jetsons*, presented a futuristic way of life that was the stuff of dreams. Today those dreams have become a reality. Rosie, their robot-maid, has given way to legions of robots and robotics used in manufacturing, health-care facilities, and more. Roomba is the home robot "maid" of today, keeping our floors tidy. While flying sky-cars are still somewhere in the future, cars that parallel park and stop on their own are steps away from driverless cars, and drones are used in a number of services, from the military to FedEx deliveries. So what's in store for the future? Will public libraries become obsolete as Siri and Alexa can now answer questions, and the Internet is populated with more information than we can consume in a lifetime? Will banks and shops be shuttered as electronic deposits and purchasing has become a way of life?

> *" Perpetuating an educational model that simply creates and imparts knowledge is insufficient. Every college student must learn how to use the power of learning to navigate the future."*

The dire predictions are everywhere. In today's world, change is constant and rapid. The jobs that exist today will no longer exist tomorrow. Employers want people who not only have the knowledge, but also the skills to be adaptive, innovative, and entrepreneurial. So this is the challenge faced by institutions of higher education: how best to prepare students for this future of uncertainty.

Several years ago, Becker College established the Agile Mindset within its curriculum to give students the foundation they need for tomorrow's world. According to President Nancy Crimmin, "Perpetuating an educational model that simply creates and imparts knowledge is insufficient. Every college student must learn how to use the power of learning to navigate the future."

Futurist Heather McGowan, daughter of Becker alumna Sandy (Field) McGowan '63, worked with Becker academics to link the future of work with the future of learning. In May 2017, the concept of Becker's Agile Mindset reached national audiences when renowned *New York Times* columnist and author Thomas Friedman—who also spoke at Becker's Presidential Speaker Series in 2014—referred to McGowan and the Agile Mindset in his column, "An agile learning mindset is the only way you'll own your own future" and on national news shows.

The Agile Mindset is now effectively woven into Becker's academic programs and the culture, to ensure Becker's vision to be recognized as an innovative, creative institution that provides students with the ability and agility to successfully navigate the complexities of an ever-changing world.

Faculty infuse the Agile Mindset into the learning experience

NUNO CARREIRO, DVM – *Assistant Professor, Veterinary Science*

The Agile Mindset curriculum at Becker seeks to encourage adaptive learning so students are able to work through and resolve unstructured problems. In one applicable assignment, each team of students receives a scenario in which they must investigate a disease outbreak at the Becker Equestrian Center. Students learn how to collect and analyze data, and give recommendations based on the results. They also learn about specific diseases in horses, how they spread, and, more importantly, how we can prevent the spread of disease in the future.

It is the task of each team to suggest a comprehensive biosecurity plan to prevent a similar disease outbreak from happening in the future. As students are introduced to various resources, they learn that each outbreak scenario can be different and the response needs to be tailored to the specific situation at hand.

This project gets students engaged and involved directly in problem-solving. Many will go on to become barn managers, responsible for designing a comprehensive biosecurity plan. My hope is that the class project introduces students to resources they can use in building an effective biosecurity plan for any specific situation. Students understand the importance of this "adaptability" or "agile mindset," as is evident in the questions they often ask, some difficult, with correct answers that will vary depending on the specific situation. Then I know that they are really thinking beyond the class project.

KAT ANDLER – *Assistant Professor, Graphic Design*

As part of the Agile Mindset development team, my goal has been to give the students a seamless experience so that they see its value and are able to truly embody the principles, values, and skills associated with it.

One example can be seen in my assignment, "Water Taste Test" in a Package Design class. Students are shown various brands of bottled water and asked to rank them in order of visual appearance. Then they are asked to evaluate the taste of the water and guess which one they are drinking. After receiving information about the price of each water bottle, it is revealed which water was which. A discussion about

visual appearance and actual taste generally leads not only to observations but also insights into their own water-buying habits.

The assignment teaches and supports the important concept of "needfinding," which is the art of discovering peoples' needs (both those they might explicitly state, and those hidden beneath the surface), since it shows the difference between observation and insights. It also helps students learn how to organize information and make a report that interests the reader.

GILLIAN FRASER, DVM – *Assistant Professor, Veterinary Science*

There are so many ways that the Agile Mindset is necessary for success in the veterinary profession. One example is the unstructured problem of educating clients about their pets and how to best care for them, in sickness and in health. There is a lot of "teaching" that goes on in the exam room that requires empathy (determining the wants and needs of a particular client, and the level of understanding of a problem) and social/emotional intelligence (determining a client's emotional state, whether they understand what is being communicated to them, and how information delivery can be revised to better achieve the goals).

In order to incorporate the Agile Mindset into my curriculum, for Anatomy and Physiology 2 review labs I assigned each lab table a presentation. They chose a topic that would be on the upcoming exam and explained it to the rest of the class, as if they had missed the class that covered it, or as if they were a client that had no background on the system behind their pet's problem.

The expected learning outcomes are: 1) students realize that studying early and often yields better exam results; 2) discovery that teaching is the best way to learn something (or at least figure out what you know and what you don't know); and 3) explaining anatomy and physiology basics to clients is not as easy as it seems, and takes lots of practice.

MARIA CALKINS – *Professor of Psychology*

In our CORE curriculum, we try to develop learning agility, change agility, and people agility in our students. Concurrent with this development is a focus on students' gaining deeper self-awareness. The product is a student who can adapt to just about anything that comes along.

In my Personality course (PSYC 2002), I try to teach students to take a macro view of each theory we study. We start with the history of the person who developed the theory, and analyze how their particular life experiences have found a way into their theory of personality. After studying each theory, we then use a common case study to apply that theory.

During case conferences, I look for and explicitly reinforce multiple interpretations of the same behavior, emphasizing that there is often no one "right" answer to a question, whether it be in personality psychology or in their future careers.

My students have shown an overwhelmingly positive response. I've seen them go from insisting on learning the "correct" answer to questions, to recognizing that there often is no one correct answer—and further, if they were to find that correct answer, a year from now it could change.

Students explain how it is working for them

Recently Professor Daryl Statkus asked her students to write a final essay on what the "The Agile Mindset" means to them. Here are a few excerpts from first-year students' essays:

ISABELLE LATHROP '19 – VET TECH

"Hearing the words 'Agile Mindset' at the beginning of the semester didn't impact me. I had no idea what it meant, and how it would impact my future at that time… . My knowledge of the Agile Mindset has grown tremendously, and I have been using it more frequently than I could have imagined... [It] stresses the importance of group work, and I think it has taught us the benefits, as well... My eye contact during presentations, writing and research skills, and ability to work with others have all improved."

MAGGIE FULLUM '21, PRE-VET

"Working together in groups has helped us become better at collaboration. Listening to others is another thing that came from these group projects; we are taking things in from our other teammates and learning to adapt to others' working methods. Knowing my strengths and weaknesses can even help me do better in my field."

ASHLEY ARNOLD '21 – VET TECH AND ANIMAL CARE

"A key point in the Agile Mindset focuses on how you think through and solve problems. An assignment that I benefitted from was "What Type of Thinker Are You?" Learning about different types of thinkers helped me pinpoint the type of thinker I am.

"Empathy is a vital role in the development of the Agile Mindset. Being able to talk to people is probably one of the most important abilities needed when working with people, especially if you don't particularly like someone. The Agile Mindset has settled into my brain over the past 12 weeks or so. I want to work in the animal field after graduation, and having empathy will definitely help when it comes to dealing with the people side of the animal world."

Leah Brault, Ph.D., Chair of the Department of Natural Sciences, presented her "Agile Minute" in an email to the Becker campus community:

How can we, as science educators, train students to think creatively to solve unstructured problems when science is just so structured?

At Becker, we already give our students many opportunities to experience the joys of science in the real world. Our students are doing externships in a variety of locations that allow them to use their newfound knowledge to answer questions they never thought to ask. Our faculty have also embraced the Agile Mindset, leaving behind exams that demand rote memorization for case studies that ask students to apply their learning to real-life situations, creating mock scenarios that present scientific problems for students to solve, or even coming up with their own unanswered questions that require them to research multiple solutions and present those choices to their classmates.

Our students' success after Becker will depend on how well we expose them to these opportunities. Do we want our graduates to remember every fact they were shown on a PowerPoint slide about Mendelian genetics, or do we want our graduates to be able to identify a question about genome editing that hasn't yet been answered, and then answer it? Do we want to graduate students who will go on to be veterinarians diagnosing an animal based on a list of symptoms or be veterinarians that look at the whole animal, considering all the potential diagnoses?

The more our students are challenged to ask questions and find answers to those questions on our campus, the better off they will be after they leave it. To quote the Agile Mindset, that is what makes us scientists "uniquely human."

View more Agile Minute entries at ***www.becker.edu/BeckerAgileMinutes***