2016 Phi Kappa Phi Excellence in Innovation Award

eAdvisor and me3
Personalized and Focused Advising Strategies for Student Success

ARIZONA STATE UNIVERSITY
Introduction

Arizona State University (ASU) has developed a new model for the American Research University, creating an institution that is committed to excellence, access and impact. ASU measures its success not by the number of students excluded from the university, but rather by those included and how they succeed (Crow and Dabars, 2015). ASU takes fundamental responsibility for educating Arizonans for a better future and for the economic, social, cultural and overall health of the community it serves. As part of its charter, ASU has developed three key metrics designed to help our state succeed: a) 90% retention from freshman to sophomore year, b) 75% 6-year graduation rate and c) awarding 25,000 degrees annually by 2020.

This focus on inclusivity and excellence is a response to the problems we face in our state and beyond. A recent report noted that by 2020, 68% of jobs in Arizona will require postsecondary training (CFA, 2015). However, we also know that only “46.5% of Arizona’s public high school graduates are eligible for admission to the state’s public universities” (ABOR, 2015 cited in CFA, 2015, p. 16). This lack of high school preparation leaves ASU in the position to identify and provide supplemental instruction to underprepared students in an environment where per pupil funding at Arizona public universities has been cut by 51% since 2008 (CFA, 2015). An underfunded university system coupled with underprepared high school graduates has compelled us to innovate despite constraints.

We believe that comprehensive academic advising enhanced with integrated technology can change students’ life trajectories. Advising enables high school students to graduate prepared for postsecondary success and stay on track once they arrive at the university. However, quality advising requires time and resources, making it difficult for low-resourced school districts and higher education institutions to achieve at scale. In Arizona, with a ratio of 941 high school student to every one guidance counselor and state funding cuts to higher education, simply hiring more counselors and advisors is not an option (ASCA, 2014). Recognized as the nation’s largest and “most innovative” public research institution, ASU strives to help as many students as possible prepare for and complete a college education (Faller, 2015). As such, ASU has invested in an innovative
suite of advising tools that leverage technology to magnify human capacity and drive measurable results. This suite of tools is comprised of two main systems: eAdvisor and me3.

**eAdvisor**
ASU is committed to the success of each unique student. Innovations in academic advising are central to this commitment. Professional advisors in each of the 14 colleges provide accessible high-quality advising that supports students in identifying and developing plans for accomplishing their academic and career goals. Complementing the human interaction is eAdvisor, a suite of digital tools that provides real time, personalized feedback to students regarding their progress towards degree completion (Phillips, 2013).

Prior to 2007, unclear curricular requirements often led to graduation delays and a corresponding 4-year graduation rate of 33.5%. To clarify curriculum and improve graduation rates ASU created eAdvisor (See Appendix A and A-1). Through eAdvisor, college advisors proactively monitor enrollment in pre-requisites, critical requirements and courses necessary for timely graduation. Students also receive messaging timed to coincide with open registration periods to ensure they are enrolled in courses appropriate for their major and academic progress. Further, the system provides early alerts to advisors and students whose performance suggests they may be at risk. eAdvisor is designed to guide each undergraduate student into a major that fits his or her interests and skills while providing feedback regarding academic progress along the way.

As part of a comprehensive advising strategy, designed to change the advising conversation from transactional in nature to career exploration and preparation, the implementation of eAdvisor has led to increases in both the 4- and 6-year graduation rates at ASU (See Appendix B). Without intentional policies retention and graduation rates tended to progress along a relatively flat trend-line between 1996 and 2006. However, graduation rates began to rise rapidly after the implementation of eAdvisor and its associated policy changes in 2007. Since the implementation of eAdvisor, the 6-year graduation rate has improved from 56.9% (entering 2006 cohort) to 65.3% (entering 2009 cohort). Next year, the official 6-year rate is predicted to reach 67% for all students, 15 points higher than in
1996. For the first time in ASU history, the 6-year graduation rate for Arizona students is expected to reach 70% (See Appendix C). Next year the 4-year graduation rate will have also dramatically improved to roughly 11 points above the old trend line and 25 points above the 1996 level. For Arizona students, it will be 30 points above 1996 level. This rapid acceleration in the 4-year graduation rate, according to Phillips (2014), saves each student $24,500, and puts qualified workers into the economy more quickly.

With the successes of eAdvisor, there was a clear need to further expand support structures into the broader educational system in Arizona. Six years ago, ASU expanded the concepts of eAdvisor to our community college partners in the state through a guided transfer pathway program. To date, over 20,000 Arizona community college students at all 10 community colleges and two tribal colleges have enrolled in one of 250 curriculum pathways. Streamlined curriculum pathways clearly outline the community college courses that transfer directly into students’ desired ASU major. Upon successful completion of the transfer pathway, students will have met the requirements to earn an associate degree from their community college, met the lower-division university general studies requirements, and are admitted as a junior into their chosen bachelor’s degree at ASU. Similar to eAdvisor for first-year students, the transfer pathway program provides students with access to highly qualified advising professionals and digital tools to track their progress towards their bachelor’s degree while at the community college. Adapting the eAdvisor concepts for community college students not only facilitates a seamless transfer to the university, but also ensures minimal loss of credit, time and money for transfer students.

Having been in place since 2007, the rich data set we now have with eAdvisor is allowing ASU to pursue additional research into optimal timing for advising interventions. For example, we are finding that eAdvisor’s “once off track” warning gives us an earlier opportunity to provide retention related interventions to students whose behavior has historically been associated with a lower likelihood of persisting and who are not adequately captured by the “twice off track” indicator. eAdvisor’s off track warnings provides opportunity for advisor intervention before the student fall behind. This additional research is allowing us to identify the most effective points in time to provide interventions for specific populations.
of students, thus taking innovative and personalized academic feedback to another level. Personalized and focused intervention is essential to further progress as it becomes important to engage students who have not yet taken advantage of prior alerts and services and to be pre-emptive in engaging all students in a timely fashion before failure occurs.

ASU is committed to helping students find a major that fits their needs and interests and persist through coursework to graduation. eAdvisor represents ASU’s innovative spirit; a spirit aimed at serving our community in the best possible way. In this case we have redesigned our advising system to be student-centric and leverage technology to enhance our advisors’ capabilities. This departure from a transactional model of advising to a dynamic and human centered approach has helped ASU move students toward successful degree completion and future economic mobility.

me3

The successes that have been achieved at the college level do little to address problems that students face in the K-12 system. In Arizona half of the postsecondary bound high school graduates come from only 10.6% of Arizona high schools (CFA, 2015). The current system of postsecondary preparation within Arizona high schools is not working. High school students need to be better prepared for postsecondary aspirations. Recognizing that the road to postsecondary success and future employment begins well before college entrance, and given a desire to build upon the success of eAdvisor, we have created a related career and major exploration tool for high school students called me3. This online tool provides high school students with the same type of transparency of educational requirements, career and major exploration, and personalized feedback central to student interests and academic goals as the successful tools within the ASU eAdvisor suite. me3 demonstrates ASU’s commitment to further contribute to the educational attainment and economic advancement of our state.

me3 meets high school students where they are, on their smart phones. me3 is a mobile responsive website that assesses student career interests via an image based RIASEC (Realistic, Investigative, Artistic, Social, Enterprising and Conventional) instrument.
Holland’s RIASEC career theory is one of the most accepted and influential career interest diagnostic models in vocational psychology today (Foutch, McHugh, Bertoch and Reardon, 2014). At the end of the assessment, students are given three career suggestions based on correlations between RIASEC codes and careers established by The Occupational Information Network (ONET). The results section allows for hundreds of possible outcomes that are customized for every user. Students connect those potential careers to college majors and then are provided specific high school course plans that best prepare them for a) high school graduation, b) admission to any of Arizona’s three state universities and c) successful completion of the first year of university coursework in their chosen college major. Released in September 2015, ASU’s goal is to reach 100,000 Arizona high school students through the tool in its first year.

me3 harnesses technology, gamification concepts, and data-based feedback to prepare students for successful transitions from high school to a postsecondary institution while keeping them interested and engaged. me3 was specifically built as a responsive design website to address the needs of our rural communities who may only have Internet access through hand-held devices. The project was piloted with six different Arizona high school districts to ensure a broad sample of the Arizona student population, achieve a general consensus on high school course suggestions for majors, and get feedback on making the best possible tool. The website officially launched on September 8, 2015.

In the last month the website has had over 4,300 sessions, with new visitors making up 67.1% and returning visitors 32.9% of total users in the month (see Appendix D). This innovative tool has been featured in prominent national and local news media including: the New York Times, The Arizona Republic and Huffington Post (see Appendix E for example publications).

One of the many ways me3 is different from other assessment tools is through its use of images. Rather than a typical written and rated text based assessment, students are shown a series of images relating to the RIASEC interest categories. At the end of the 60-question assessment, students are given three career suggestions based on established connections between RIASEC codes and careers maintained by ONET. Students can
then begin the process of exploring careers by selecting preferred careers and pairing them with specific college majors. These career to major connections are established by the academic units at ASU and updated annually to ensure accuracy and relevance. me3 can be used by students entering ninth grade as they plan their first year of high school. The tool is suitable for high school students at any grade level and is designed for ongoing use during the high school to college transition.

Though me3 is relatively new, students and high school staff already see its benefits. For students, me3 is shaping their mindset regarding college and the future. Frankie, a junior in high school, credits me3 with changing how he approaches college and career preparation. “It made me think of different ways to get to college” (Frankie Q. personal communication). After playing the game, he got back a career in engineering. Similarly, Angela noted that me3 has helped her consider new career choices. “It definitely opened my eyes … to literally a new field of possibility … I had never considered teaching before and now it’s … on my radar” (Angela H. personal communication). me3 is also gaining traction with teachers and administrators. Jennifer Anderson, the department chair of student advising at Westwood High School in Mesa, Arizona, noted that, “me3 provides students with insight about themselves that links them to career choices they might not consider otherwise. me3 is an immense tool for postsecondary readiness” (Jennifer Anderson personal communication). me3 is not just another academic planning tool. It is a perspective shaping tool that helps student explore their own potential.

me3 has also recently been updated to meet Arizona’s Education and Career Action Plan (ECAP) requirements. In 2008, the Arizona State Board of Education (AZDE) started requiring ECAPs for all Arizona students in grades 9-12. “The ECAP reflects a student’s current plan of coursework, career aspirations, and extended learning opportunities in order to develop the student’s individual academic and career goals” (AZDE, 2015, p. 1). While there are a few for profit tools in current use that provide much of this functionality, many schools in rural districts are still completing ECAPs with a pen and paper. me3 is a free, online tool that schools can use to meet ECAP requirements, provide transparency and visibility to high school counselors and administration, and help make the process
engaging for the student while building the academic mindset necessary for success in postsecondary education. In addition, no other free tool we know of connects the ECAP requirements and planning process to college level majors or provides feedback on the appropriate high school coursework needed to prepare for college success. The functionality of me3 as an ECAP provider is not only applicable to students in Arizona, but also to youth around the country. Because me3 includes robust planning capabilities it can be a transferable tool that other states could use to meet the objectives of the Workforce Innovation and Opportunity Act (WIOA) that went into effect July 1, 2015 (DOL, 2015).

**Conclusion**

The innovative spirit of ASU is centered around developing solutions to real-life challenges. For many families in Arizona, making sense of the college-going process, its eligibility and curricular complexities represent such a real-life challenge. In addition to meeting ASU’s goals of adding another 10,000 annual graduates by 2025 with a 75% 6-year graduation rate, our mission of inclusivity requires us to find innovative ways to better serve students from underrepresented socioeconomic backgrounds. Both eAdvisor and me3 represent ASU’s commitment to helping solve the advising and related postsecondary education challenges Arizona faces. Both represent iterative innovation, designed to personalize the college preparation and education process in ways that clarify curricular requirements and provide real time feedback to help students achieve their educational goals. It is this combination of innovative technologies, constant re-examination, improvement and work with our community partners that will help ASU and Arizona meet its educational goals and better prepare Arizona students for the 21st century workplace.
REFERENCES


eADVISOR SCREEN SHOTS AND USER STATISTICS

APPENDIX A

https://asu.edu/degrees
eAdvisor Screen Shots and User Statistics

Major maps for each major are accessible on Degree Search. The screen shot of the eAdvisor Tracking Tool above shows the student’s personalized view of how courses taken meet degree requirements. The user statistics represent views of the major maps on Degree Search.
### Graduation Rates: Total

**Cohort Year**

<table>
<thead>
<tr>
<th>Year</th>
<th>6-year Grad Rate</th>
<th>4-year Grad Rate</th>
<th>VSA 8-year Grad Rate</th>
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<tbody>
<tr>
<td>1996</td>
<td>24.6%</td>
<td>26.1%</td>
<td>27.7%</td>
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<tr>
<td>1997</td>
<td>26.1%</td>
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<td>29.6%</td>
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<td>1998</td>
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<td>29.6%</td>
<td>31.9%</td>
</tr>
<tr>
<td>1999</td>
<td>29.6%</td>
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<td>33.2%</td>
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<tr>
<td>2000</td>
<td>31.9%</td>
<td>33.2%</td>
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<td>2001</td>
<td>33.2%</td>
<td>35.5%</td>
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<td>2002</td>
<td>35.5%</td>
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<td>2005</td>
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<td>42.9%</td>
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<tr>
<td>2006</td>
<td>41.6%</td>
<td>42.9%</td>
<td>44.2%</td>
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<tr>
<td>2007</td>
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<td>45.5%</td>
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<td>2010</td>
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<td>2011</td>
<td>48.0%</td>
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<tr>
<td>2012</td>
<td>49.2%</td>
<td>50.0%</td>
<td>50.0%</td>
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</table>

**Long-term Trend**

- 6-year grad rate: 24.6% to 50.0%
- 4-year grad rate: 26.1% to 50.0%
- VSA 8-year grad rate: 27.7% to 50.0%
GRADUATION RATES: AZ

APPENDIX C

Graduation Rates: AZ

Cohort Year


20.9% 23.8% 26.0% 28.4% 31.0% 34.2% 43.6% 50.8% 51.2%

52.5% 55.4% 57.9% 57.0% 60.2% 60.8% 66.3% 69.3% 70.2% 73.2%
me3 SCREEN SHOTS AND USER STATISTICS

APPELLIX D

me3 officially launched on September 8, 2015. In the last month the website has had more than 4,300 sessions, with new visitors making up 67.1% and returning visitors 32.9% of total users in the month.

https://asu.edu/me3
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<th>Date</th>
<th>Source</th>
<th>Title</th>
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<td>8.21.2015</td>
<td>PBS Newshour</td>
<td>Opening the Doors to more low-income students reshapes a University</td>
<td><a href="http://www.pbs.org/newshour/bb/opening-doors-low-income-students-reshapes-university/">http://www.pbs.org/newshour/bb/opening-doors-low-income-students-reshapes-university/</a></td>
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<tr>
<td>8.31.2015</td>
<td>ASU News Now</td>
<td>Online game from ASU pairs high schoolers with majors</td>
<td><a href="https://www.asunow.asu.edu/content/online-game-asu-pairs-high-schoolers-majors/">https://www.asunow.asu.edu/content/online-game-asu-pairs-high-schoolers-majors/</a></td>
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<td>9.08.2015</td>
<td>ASU News Now</td>
<td>Online me3 game lays out a pathway to college</td>
<td><a href="https://www.asunow.asu.edu/content/online-me3-game-lays-out-pathway-college/">https://www.asunow.asu.edu/content/online-me3-game-lays-out-pathway-college/</a></td>
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<td>11.03.2015</td>
<td>Huffington Post</td>
<td>How My Students and I Build a Classroom of Inquiry and Social Justice, and How It Changed My Life</td>
<td><a href="http://www.huffingtonpost.com/mike-meaney-/how-my-students-and-i-bui_b_8453904.html">http://www.huffingtonpost.com/mike-meaney-/how-my-students-and-i-bui_b_8453904.html</a></td>
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<td>12.18.2015</td>
<td>ASU News Now</td>
<td>ASU, partners team up to bring jobs to underemployed youth at 100,000 Opportunities Fair</td>
<td><a href="https://www.asunow.asu.edu/20151218-solutions-asu-partners-team-brings-jobs-underemployed-youth-100000-opportunities-fair/">https://www.asunow.asu.edu/20151218-solutions-asu-partners-team-brings-jobs-underemployed-youth-100000-opportunities-fair/</a></td>
</tr>
</tbody>
</table>
students using the me3 tool

Me3 is so easy to use, fun to work with and the students love the interaction. Thank you for introducing me to this awesome tool. So far every one of my students who have used it, love it. I can’t wait to get it into the classrooms.

Tim
Westwood HS Counselor

https://vimeo.com/137180012

counselors/teacher thoughts on the me3 tool

Me3 provides students with insight about themselves that links them to career choices they might not consider otherwise. Additionally, the alignment of current high school courses with university programs of study is an immense tool for post-secondary readiness.

Jennifer Anderson
Westwood HS Counselor

https://vimeo.com/137185215
Helping Students with eAdvisor

The eAdvisor system is designed to help you figure out what fits you as an individual; and the thing that will make you the happiest and maximize your contribution.

Elizabeth Capaldi Phillips, Founder of eAdvisor

https://vimeo.com/80414262

MAPP: Maricopa to ASU Pathways Program

Helping Advisors with eAdvisor

ASU Grads Ready to Start Careers

https://vimeo.com/134040650

https://vimeo.com/80414261

https://vimeo.com/127959295
STAYING ON-TRACK WITH eADVISOR

1. **degree search**
   Explore majors and careers. Outlines classes you'll need to take and when you need to take them.

2. **get your classes**
   ASU monitors major maps and trends to ensure there are enough seats in classes when you need them (includes critical and required courses).

3. **enroll with your advisor**
   Your advisor will help you enroll your first semester and review your major map with you.

4. **monitor your progress**
   View your personalized major map that details classes taken, grades earned, and term taken.

If you become off-track:

- **you get an email**
  An off-track message shows on My ASU

- **your advisor gets an email**
  You are required to meet before registering or adding more classes.

- **eAdvisor™ is a unique system that guides and supports you on every step of your college journey**
  You will review your degree and career goals to ensure it's still a good fit, go over degree requirements, and identify academic support resources to get you back on track.

eAdvisor™ is a unique system that guides and supports you on every step of your college journey.
### Questions 1-7
rated on a scale of 1-5

**October 2014 - March 2016**
**1183 surveys completed**

<table>
<thead>
<tr>
<th>Question</th>
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<tr>
<td>The career choices matched my interests</td>
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<tr>
<td>I feel more confident in the courses I need to take in high school to be prepared for my career or major</td>
<td>3.47</td>
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<tr>
<td>me3 was easy to use</td>
<td>3.80</td>
</tr>
<tr>
<td>The picture game was interesting/ fun</td>
<td>3.63</td>
</tr>
<tr>
<td>me3 helped me envision my future</td>
<td>3.21</td>
</tr>
<tr>
<td>How likely would you use me3 again during your high school career?</td>
<td></td>
</tr>
<tr>
<td>How likely are you to recommend me3 to a friend?</td>
<td>3.41</td>
</tr>
<tr>
<td>Have you viewed your timeline rewards, viewed details on the major or career, or explored the menu?</td>
<td>.76</td>
</tr>
</tbody>
</table>

**Questions 8**
1 yes, 2 no
Letters of Support
Arizona State University has received letters of support regarding the use of me3 in the classroom from: Tempe Union High School District, Mesa Public Schools, Phoenix Union High School District and Tolleson Union High School District.