

Turning on a (Virtual) Dime: How to Overhaul New Student Orientation in 3 Weeks

Christina A. Downey

Indiana University Kokomo

downeyca@iuk.edu

Kelli Keener

Indiana University Kokomo

Angela Siders

Indiana University Kokomo

Abstract: This case study will describe the rapid transition our Office of Student Success and Advising and Office of Admissions made from March 11 to April 7, 2020 in shifting all academic advising and new student orientation (NSO) from in-person to remote efforts due to the 2019 coronavirus disease pandemic. The Office of Student Success and Advising provides academic advising to all undergraduate students out of a single unit on campus (separate from any academic school). We partner with the Office of Admissions as they funnel students to NSO, where advising and related offices offer a rich program that culminates in students enrolling for their first semester. Our hallmark is our personal touch, so one might have predicted that being suddenly forced to rely heavily on technology to deliver our services would have greatly hampered our effectiveness. However, we leveraged our positive relationships as colleagues, our diverse knowledge of different technologies related to admissions, advising, and teaching, and the support of campus leadership in surging additional staff to our efforts to create both remote NSO and remote advising innovations that honor our developmental, holistic approach to student learning. Having successfully launched and achieved stronger enrollment outcomes than expected, we are convinced that our caring and collaborative professional culture is actually enhanced by our new embrace of technology. In addition, the broader array of technical and human touchpoints provides increased opportunity for assessing student learning and satisfaction with our process. Our practice is nothing like we imagined it would be prior to this experience, but we have already agreed that we will continue to apply many of these approaches into the future.

Keywords: remote advising, 1st-year experience, cross-campus collaboration, enrollment, student success.

New student orientation (NSO) is a milestone of the 1st-year college experience (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; van der Zanden, Denessen, Cillessen, & Meijer, 2018), representing not only the symbolic beginning of the college journey but also where critical steps of finalizing registration at a particular institution are completed. New college students feel a mix of excitement, anticipation, and anxiety as they begin college (Ward-Roof, 2010) and events such as NSO are frequently designed to reinforce positive feelings and allay negative ones. In addition, NSO gives new college students an early sense of what being an actual student on that campus will be like in their 1st year. This is one reason why colleges and universities invest considerable resources in delivering NSO experiences that showcase their strengths and culture to students (Alnawas, 2015; Kuh, Kinzie, Schuh, & Whitt, 2011). When colleges and universities are seeking to improve their outcomes (such as 1st-year retention), redesign of NSO is very often among their change initiatives (Hollins, 2009; Waiwaiole, Bohlig, & Massey, 2016) and indeed is a recommended practice in the student success

literature (Ward-Roof, 2010). Institutions that are recognized for improving student success outcomes and/or reducing equity gaps very often describe their NSO redesign efforts as core to improvement (Habley, Bloom, & Robbins, 2012). In recent years, improved technology and broader web access has led to colleges and universities increasingly offering NSO online. For example, in one recent study, 39% of sampled community colleges offered online NSO as their main program or as an option (Chan, 2017), and programs judged to be the strongest in design were easy to navigate, interactive (e.g., featuring embedded questions for assessment), included videos and testimonies from current students, and covered all essential information typically included in in-person NSOs.

At Indiana University Kokomo, a regional comprehensive university of approximately 3,100 students (2,900 undergraduates, nearly all in bachelor's programs) in North Central Indiana, NSO has been a particularly important part of our student success efforts since 2016. As part of the 2016–2019 American Association of State Colleges and Universities institutional learning community for student success known as Re-imagining the First Year, our Office of Student Success and Advising (OSSA) offered a proposal to redesign our NSO from the bottom up to focus more on student learning, engagement, and independence. The director of admissions (A.S.) was closely consulted in this redesign to support the changes proposed by the assistant vice chancellor for academic affairs and student success (C.D.) and the director of advising (K.K.) in the OSSA. The new structure retained an existing separation of processes that resembled a “friendly handoff” of students from Admissions (in Student Affairs) to OSSA (in Academic Affairs) at the point of in-person NSO. Under that model, Admissions was tasked with recruiting students and securing their RSVPs, but that was the main extent of their interactions with students. Events were delivered on campus for groups of up to 80 students each, with fall course registration being managed by an academic advisor in a classroom-like session. Though we were aware that online NSO was an option that some of our students might appreciate if available, our small campus valued the high-touch approach of our in-person NSO and were pleased with our strong student evaluations of the redesigned program.

A redesigned NSO was hardly the only large student success effort undertaken during recent years. As a small campus with positive, student-centered leadership from the chancellor on down, we have been able to elevate innovative ideas for student success and high-impact experiential learning in all programs with good results. We were proud to achieve increased retention rates concurrent with these changes, going from a 10-year low of 60% for the 2016 cohort to a campus record of 69.8% for the 2019 cohort. Enrollment growth related to these improvements resulted in reinvestment of increased tuition and state appropriations into our faculty, staff, and academic programs. Thus, our recent successes had sparked a creative and proactive culture across campus that we were expecting to ride into 2020–2021.

As is so often said now, “then 2020 happened.” On March 11, 2020, our campus received word that Indiana University Kokomo was shifting immediately to all-remote instruction for the remainder of the spring semester, with an extended spring break providing time for instructors to make a transition to remote teaching starting March 30. On March 16, it was confirmed that all NSO events and course registration of new students at Indiana University Kokomo would take place remotely through spring and summer of 2020, leading up to the first day of classes on August 24. These events are seared as a “flashbulb memory” on our consciousness (Winograd & Neisser, 2006), such that we can recall vividly where we were and how we reacted as each new decision arrived. Almost none of our planning since October 2019 seemed relevant anymore—we were called to action for a rapid-response redesign, with our first fully booked NSOs already scheduled for less than a month out. This is the story of how we not only achieved a complete and workable creation of an online NSO over a 3-week period, but also constructed a program that we are likely to retain postpandemic.

The Challenge of Rapid Change

The culture of our campus—especially since we have come to embrace a focus on student success—was already unusually collaborative, innovative, positive, and collegial. So when it came to the challenge of this redesign, we did not fear whether our colleagues would trust and support us. Instead, our concerns were technical: How could we teach students about their programs and our campus if we could not bring them into rooms and speak with them? How would we mass-register students for courses if bringing them into a computer lab and walking them through set steps were not possible? How would we gather the information we needed to recommend the appropriate first semester of courses to each individual student if we could not collect those data on the morning of orientation? And how could we build warm relationships with each student if we were limited to only remote means of communication? Quickly enough, though, another key aspect of our culture showed a possible path forward—the powerful investments that our institution had made in building out student-facing technologies for college success.

At Indiana University Kokomo, several key technologies buttress different aspects of our recruitment, orientation, advising, and teaching efforts:

- Salesforce: A customer relationship management (CRM) platform allowing automated, sequenced messaging to applicants and admits to our campus
- Canvas: A learning management system featuring intuitive page and module editors for engaging online learning material development
- Qualtrics: An online survey creation and distribution tool with features such as automated email triggers upon survey completion
- Zoom: Live remote video conferencing tool with chat and screen share features
- AdRx: Online advising documentation system developed at Indiana University that centralizes a wide array of student information data sources into a single intuitive space; includes search features for creating lists of students using key filters and different roles for varying levels of data access and connects to a student scheduling tool for easy access to advisors
- Box: Secure cloud storage and file-sharing space for sharing documents in real time
- Interactive Graduation Planning System (iGPS): A connected suite of online tools developed at Indiana University that include interactive 4-year degree maps, a login-protected planning space where students can sequence and store their semester course plans to graduation, and a section-selection tool that autoconstructs weekly class schedules according to the courses and criteria that students select.

For our redesign, we realized that we would need to leverage each of these technologies in a highly coordinated manner to recreate our NSO and registration process in the virtual space. Core was a goal of ensuring that every student would develop a positive relationship with our campus, learn to complete key tasks independently, and emerge with an individualized and appropriate first-semester schedule. Within 2 days of being notified that we would need to design a fully online process, we had vetted this three-stage procedure (Figure 1). Each of the steps in Figure 1 deserves elaboration in regard to process and how technology supported successful completion.

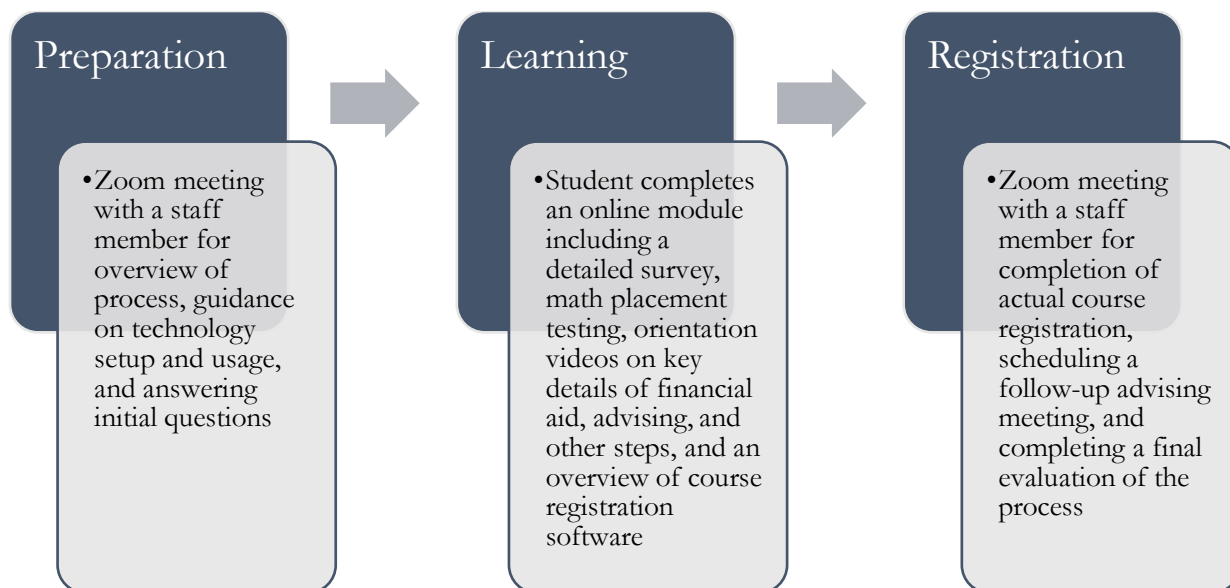


Figure 1. Remote new student orientation and registration procedure for spring and summer 2020.

Prework: Salesforce Communication and Staff Training

Our first challenge was to replace—in a positive way—all of the messaging we had been sending to students for months. Hundreds of students had been diligent in signing up for their NSO, and we knew that our highest achieving students had likely signed up for the earliest NSOs. To honor our earliest takers, our Admissions and CRM teams completely reprogrammed Salesforce to communicate the new process and dates for individual meetings via email first to those early students, and then gradually to all remaining students. This drove students to register for one of 120 different two-meeting options to be held over Zoom. We launched the overhauled Salesforce campaign by April 1, and 117 students registered for their two meetings within the 1st day. Salesforce then automatically sent follow-up communication with next steps, Zoom links, and appointment reminders.

To support the new process, we assembled a team of staff we called the Cougar Crew (after our campus mascot). All were Student Affairs professionals with varying experience in admissions and student programming whose regular duties had been disrupted by the pandemic, and none had an academic advising background. Leadership from OSSA provided the Crew a 4-hr crash course on how to help students use campus technology for tasks such as creating their first computing account and email, reviewing Zoom features, and navigating iGPS and our student information system to enroll in classes. Fortunately, our staff already were familiar with Zoom and Box (as they had been in use prepandemic for collaboration across different campuses of our institution), but tools such as Canvas, AdRx, and iGPS needed careful review. As one Cougar Crew member noted:

I was very excited to be a part of the Cougar Crew. I work in Admissions and it was great to see a side of the student registration process that I would normally not see or experience...just like anything new, I was nervous about this whole experience at first. I had lots of support from the Admissions and Advising teams and there was always someone available from those teams to answer questions and help solve any issues. Knowing that there was always someone to help and gaining experience day after day,

gave me the confidence to eventually learn how to problem-solve any issues on my own and answer those very tough student questions that they ask.

Preparation Meeting: Zoom

Students first met the Cougar Crew in their individual Zoom preparation meeting. Crew members asked students to share their screen and coached them through each mouse click to complete all setup steps, which were chosen to make registration at their second meeting smooth and efficient. Along the way, they introduced students to our Canvas site and advising survey (described later), collected questions and concerns, and then submitted specially designed fillable PDF forms to advisors via Box, which initiated the next steps for academic advising. Some advisors initially had hesitation about the structure, as our usual process centered on OSSA staff helping students create their accounts, set up their email, and prepare for math placement testing prior to NSO and on advisors group-registering students in person. However, they soon saw positive results for students from this individualized coaching:

When I first learned about the multiple meetings with the Cougar Crew before meeting with advising, I feared losing the contact with students. When they came to our initial advising meeting so prepared and comfortable with the technology [however], we were able to have better conversations about their concerns, goals, and courses they choose. While I still think that there is value in the [previous] small group registration rooms (getting to know both advisors, seeing future classmates & peers), I don't want to go back to the "normal" way of orientation and registration.

Learning About Campus: Canvas Orientation

After the preparation meeting, students were added to a specially designed Canvas site for online orientation. The designer (C.D.) created a simple site featuring a single required module focused on gaining critical knowledge, registering for classes, and completing essential tasks. With its supportive and conversational tone, highly visible headers and screenshots, and targeted color and boldfacing, the site was designed to make it not only obvious what material was required for completion but also clear that our campus was genuinely excited to have students join us in the fall.

One key choice was heavy reliance on videos created in Kaltura, a presentation capture technology integrated into Canvas. Students were required to watch videos presenting a welcome and overview, financial aid basics, academic advising, and how to complete key tasks (such as purchasing textbooks and a parking pass) online. Each was approximately 20 min long and presented as a shortened version of our actual on-campus presentation at NSO. Each advisor also recorded a brief greeting video where they introduced themselves, the main programs they serve, and their reasons they felt excited to welcome the new class. Due to our very compressed timeline, professional production was not possible, so the "look" of these videos was casual and transparently amateur. We wanted a student experience that was more engaging and authentic than page after page of text, so these videos served that objective.

The Canvas module contained links to two crucial information-gathering steps for academic advising: The College Success and Registration Prep Survey (or Prep Survey), and the ALEKS math skills assessment for placement. The Prep Survey was designed in Qualtrics to collect a range of key information needed for course and resource recommendations. Items asked about such things as student athlete status, state aid recipient status, intent to transfer to another institution after the 1st year, and prior college credit that would be coming from high school. In addition, the survey included

questions such as confidence about math or writing skills, food/housing/transportation insecurity, interest in disability accommodations, and a simple mental health screening question. While students could skip nearly any item that they preferred not to answer, almost every student answered every question and gave us permission to share their responses across campus as needed. When students completed the Prep Survey, an email trigger would automatically send results to clerical staff for recording in AdRx, our advising records system. Our required ALEKS math skills assessment was described in detail and linked to the Canvas site, where students took it unproctored online as one step of the NSO module.

To ensure that students completed all needed tasks, a part-time staff member furloughed from their on-campus duties was trained on the Canvas site and on key spreadsheets housed in Box containing information on students added to Canvas. This staff member was given a precise outreach schedule to make sure students stayed on track. For example, if a student had not accepted their invitation to Canvas by the day after their preparation appointment, or had not completed their ALEKS assessment by 2 days prior to their scheduled registration meeting, they received an email reminder. While labor intensive, this aspect of our plan was critical to making sure that each student completed their learning steps and gave us the information they needed for enrollment. As one advisor noted regarding student learning:

Taking a behind-the-scenes approach to registration preparation has actually helped me take on more of a coaching and teaching role in new student advising. There is such potential for learning in the advising space, but the urgency of registration too often takes precedence. The virtual orientation process gave students time to process information and to practice using technology before meeting with me. I was pleasantly surprised to see how comfortable students were using Zoom and navigating campus tools like Canvas that are critical to starting the semester successfully.

Registration Meeting: Zoom

Prior to 2020, NSO had become a critical moment in our advising curriculum—the first opportunity advisors had to build rapport with incoming students and to establish the pedagogical component of the academic advising relationship. To simplify course selection, advisors had provided students with paper-based scheduling “menus” with required courses clearly marked and notes about math placement and/or potential dual credit from high school. The classroom advising session, while efficient, did present a challenge to our holistic, developmental advising approach to each student. For this reason, an individual advising meeting became a required part of the orientation process. In this meeting, student and advisor had ample opportunity to ask questions of each other, review placement scores and dual credit, make any necessary schedule changes, and discuss pertinent campus resources. With the bulk of the “work” of schedule making accomplished prior to the advising meeting, the heart of the advising process—learning about the student through intentional, appreciative inquiry—could truly begin.

With the move to virtual NSO, responsibility for registering each student had to move from advisors to our Cougar Crew. Advisors developed a flexible and simplified fillable PDF registration planning sheet that the Crew used to help each student register following advisor recommendations of specific courses. This sheet had three primary sections: (1) 1st-year seminar, (2) general education recommendations, and (3) major recommendations and/or additional general education options. Each section contained an area to add comments about course permissions, math placement, and potential or earned dual credit from high school. The form also allowed space for observations or questions from the Crew member that could be used in each student’s postregistration individual advising

meeting. To register students, Crew members input the course numbers recommended by advisors into the Chat of their Zoom appointment. The student was then directed to share their screen and walked through the iGPS system to select those courses, build their schedule, and complete their registration. Importantly, students were “in the driver’s seat” during the technical steps of the process, giving them valuable experience with these tools. One advisor’s comment illustrates the anxiety created by the necessity of designing these forms and delegating the registration process to nonadvising staff, and how they came to appreciate the process over time:

Allowing staff outside of advising to assist new students with registration was a bit scary at first, but once we got going with our advising plan sheets, I felt better about the process. Knowing that students would be expected to follow through with a post-registration advising appointment also helped alleviate any worries that errors might have been made or that students wouldn’t recognize the importance of meeting with their advisor.

To transition students from NSO and registration to individual advising, Crew members concluded the registration meeting by guiding students to an appointment invitation from their assigned advisor. This step engaged students in valuable practice with two key outcomes of our first year advising curriculum: responding to advising outreach and taking ownership of their academic planning. An early concern that virtual NSO would decrease student response to the advising meeting requirement soon disappeared, as advisors’ calendars quickly populated with 1st year advising appointments in June and July. By the start of fall term, 90% of our virtual NSO participants had completed their required advising meetings, and the conversations in those meetings were consistently rich and fruitful. As one advisor noted:

The new online format of our NSO allowed for the student’s first meeting with an advisor to be about advising the student, discussing his or her goals, and building rapport. This first meeting wasn’t about enrollment and wasn’t overshadowed by all the questions new students have, because they had already met with a Cougar Crew member who alleviated most of their initial anxiety.

Outcomes and Accomplishments

As we moved through the fall 2020 registration season, we noted a number of both qualitative and quantitative indicators of the success of our overhauled process. Because the research standards of our institution emphasize student consent at the beginning of an interaction in order to collect human subjects research data, we did not have the opportunity to seek approval for formal data collection for this case study report. Therefore, we will share general outcomes but not report specific results or responses such that each student’s right to informed consent would be questioned.

Signup and Premeeting Steps

Our approach to using Salesforce to facilitate students signing up for both preparation and registration appointments at one time, and our subsequent communications that guided students through how to be ready for their preparation meeting, represented the most robust use of Salesforce for event management that we have ever attempted. Indeed, the central team at Indiana University who support this tool throughout the university were challenged to customize the tool for our approach, but met

and exceeded all our expectations. Students found the system easy to navigate and signed up in a timely manner, allowing our campus to monitor enrollment projections actively.

Prep Survey

Several hundred students completed this online survey as the first step of their orientation process. Not all students who completed the survey enrolled, but the overwhelming majority did. We were able to discern that about a third of students had a full-tuition state aid scholarship (important for their enrolled credits), about three quarters intended to use financial aid to support their enrollment, and just under half would be working more than 15 hr weekly during the semester. In addition, about a third were first-generation college students, nearly all intended to enroll full-time, and a small but significant proportion intended to transfer to another institution after their 1st year. We expected that we would see a higher proportion of high-need students this season than last, but various indices were actually very similar to those of the previous year (perhaps because more students with original intent to attend a large residential institution shifted plans and enrolled on our campus).

Postenrollment Survey

About one fifth of all students who completed registration submitted an online evaluation of the remote process after completing their enrollment. These responses were overall very positive. The individual guidance that students received from their Cougar Crew member received the highest ratings, with overwhelming majorities rating their quality of service at the top of the scale (*excellent*). Next most positive were the clarity of our email communication and the ease of using the iGPS registration tools, with well over half of students rating those as *excellent*. Initial steps of Indiana University account creation and quality of Canvas learning materials were rated as *excellent* by just over half of students. Nearly three of four students rated the overall process as *excellent*, and only a tiny minority of students rated any individual part of the process as anything less than *fair*. When asked to give their overall impression of our campus based on their registration experience, students showed near consensus in rating their impression as *very positive* (the top of the scale) and most commented when asked that they could not think of anything we could have done to leave them with a more positive impression.

Postadvising One-on-One Meeting Survey and Skills Assessment

Students have completed a survey for the past few years to provide us feedback on their individual advising meeting occurring after NSO and registration. We kept our survey items the same this year to see whether student response differed from in recent years, but results remained strong. Nearly all students reported feeling that their advisor was an active listener to their needs and concerns, had interest in their goals, helped them assess options and make choices they could feel comfortable with, helped make appropriate schedule adjustments when needed, and would be a person they intend to connect with again for future questions and needs. Our favorite item on this survey asks students whether they feel more confidence in their own ability to solve future problems having met with their advisor, and over 7 in 10 students responded *definitely yes* (the top of the scale) on this item. Comments were also very positive, with students noting how friendly and supportive all staff on our campus had been through this process (and through the challenges of the 2019 coronavirus disease (COVID-19) pandemic in particular). Finally, advisors recorded in a separate skills assessment what students were able to do independently when asked during the meeting, and they found that large majorities successfully shared their Zoom screen with their advisor, could navigate our main online portals and

their email, and were able to show their fall schedule to their advisor when asked. These technical skills are core to each student's success and demonstrate that students did learn through our process.

Enrollment Progress

Our registration pace for fall 2020 new beginner students was nearly exactly that of the previous 2 years, which were our strongest in our history. At census, 629 new students had enrolled, and only a very small number of students melted from fall classes prior to class start. Students on average registered for the same number of first-semester credits as in the recent past. We noticed at the start of the cycle that we got far ahead of last year's pace for the first 6 weeks, mostly because all students were served in individual preparation and registration meetings rather than at physical events on proscribed dates. Having worked out the "kinks" in the new process within the first 2-week cycle of preparation and registration meetings, we settled into a rhythm and never had to delay student enrollment due to capacity issues on our part.

Breaking Down Silos

It must also be noted that this effort brought the Office of Admissions and OSSA into closer partnership than we can recall in recent memory. Not only was the collaboration and delegation of responsibilities smooth and collegial, but the learning that each area gained about the other will improve our functions into the future. In particular, Admissions staff whose role is to recruit students to our campus and share their knowledge of our programs now have a deeper understanding of courses our students take, how course scheduling options change within an enrollment cycle, and how the campus General Education program is structured. All of this knowledge will help these staff be that much more effective in speaking with prospective students and their families about how we help students reach their goals. As one Crew member noted:

This experience created opportunities to see what we had been overlooking—the power of technology and the ability to bring a more personal experience from what some consider to be a very impersonal platform. Shifting to a virtual setting, learning new technologies and new skills was no doubt daunting and extremely challenging. However, shifting to our virtual media forced us to meet with students independently. The brilliant and unforeseen silver lining was that we did meet with every single newly admitted student in a one-on-one format and gave them a personal experience and immediate connection that our large group orientations just logistically cannot provide. Students were reaching out to crew members later in the semester asking the questions which meant their initial connection was meaningful and made an impact. A brilliant gift given in a dim time.

Final Take-Aways

The literature on student success increasingly emphasizes each student's relationship with the institution as a major factor in persistence, retention, and student success (Alnawas, 2015). Our major fears in making the transition to an all-remote NSO process were that we would not be able to put the pieces into place for successful and timely registration of students on campus and into the correct mix of courses; and, that we would lose the opportunity to share our friendly, accessible, student-centered culture with students in an authentic way that would help them feel confident about their

choice of our campus and in their own potential to succeed. Given all of the indicators described here, we believe we have been successful on both of these fronts.

COVID-19 has forced all colleges and universities to make adjustments that we never anticipated, and some institutions have struggled greatly under the strain for different reasons. In our case, we have created new ways of doing things—most of which are technology enabled—that are efficient, effective, and empowering to students. We have experienced how crisis can spark innovation when a strong institutional culture has already been nurtured, and when resources are in place to apply to new problems. While we never would have guessed it in March, we believe we are actually emerging from this journey more resilient, unified, and hopeful than ever.

Epilogue

As of the end of January 2021, we have largely completed our planning for the fall 2021 NSO and have launched registration for our first round of Zoom meetings. As the pandemic continues, we have retained nearly the entire structure of the 2020 NSO but will update our materials as we get closer to first appointments in early April. Unfortunately, we have seen students struggle greatly this fall under the weight of Zoom learning, masked/distanced in-person learning, and fully online learning as well as lessened opportunities to connect with one another and the campus. Our first-to-second semester persistence fell from 83.8% in fall 2019 to 76.6%, the lowest rate on our campus since fall 2006. However, we did see a nearly 30-point difference in persistence between students who completed the full NSO process (including their individual advising meeting) versus those who did not. We will use this to reinforce to our fall 2021 students the crucial importance of completing all parts of our process to best prepare for success.

Acknowledgments

We would like to thank the outstanding members of our teams who made our success possible: Kate Aguilar, Tara Bass, Chad Broecker, Sarah Byrd, Lori Collins, Josh Colvin, Alyson Davis Williams, Kim Evans, Ashlee Fivecoate, Jenny Frodge, Meghan Green, Heather Humphrey, Eella Kemper, Hillary Koon, Amy Lauriat, Becky Lefler, Jonatan Lopez Bracamontes, Rebekah Monroe-Boley, Quiana Preston, Chad Ratcliff, Candace Rhodes, Tracey Sala, Cheryl Schlemmer, Tara Scott, Adam Svoboda, and Lory Tulley.

References

- Alnawas, I. (2015). Student orientation in higher education: Development of the construct. *Higher Education, 69*, 625–652. <https://doi.org/10.1007/s10734-014-9794-1>
- Chan, M. (2017). Have you been oriented? An analysis of new student orientation and e-orientation programs at US community colleges. *College and University, 92*(2), 12. Retrieved from <https://proxyko.uits.iu.edu/login?url=https://www.proquest.com/scholarly-journals/have-you-been-oriented-analysis-new-student/docview/1922864443/se-2?accountid=11650>
- Habley, W. R., Bloom, J. L., & Robbins, S. (2012). *Increasing persistence: Research-based strategies for college student success*. Wiley.
- Hollins, T. N., Jr. (2009). Examining the impact of a comprehensive approach to student orientation. *Inquiry, 14*, 15–27.
- Kuh, G. D., Kinzie, J. L., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006). *What matters to student success: A review of the literature* (Commissioned Report). Washington, DC: National

- Postsecondary Education Cooperative. Retrieved from https://nces.ed.gov/npec/pdf/Kuh_Team_Report.pdf
- Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2011). *Student success in college: Creating conditions that matter*. San Francisco, CA: Jossey-Bass.
- van der Zanden, P. J., Denessen, E., Cillessen, A. H., & Meijer, P. C. (2018). Domains and predictors of first-year student success: A systematic review. *Educational Research Review*, 23, 57–77. <https://doi.org/10.1016/j.edurev.2018.01.001>
- Waiwaiole, E. N., Bohlig, E. M., & Massey, K. J. (2016). Student success: Identifying high-impact practices. *New Directions for Community Colleges*, 175, 45–55. <https://doi.org/10.1002/cc.20211>
- Ward-Roof, J. A. (Ed.). (2010). *Designing successful transitions: A guide for orienting students to college* (The First-Year Experience Monograph Series No. 13). Columbia, SC: National Resource Center for The First-Year Experience and Students in Transition.
- Winograd, E., & Neisser, U. (Eds.). (2006). *Affect and accuracy in recall: Studies of 'flashbulb "memories"'* (Emory Symposia in Cognition Vol. 4). Cambridge, England: Cambridge University Press.