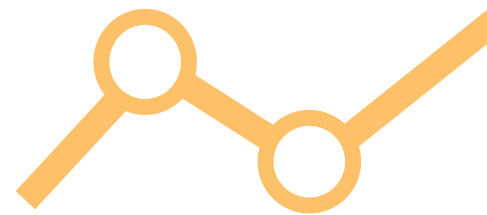




# Seamless Transfer Pathways:

Student-Centered Solutions to  
Improve Transfer Student Success



May 2019

**Education** Design Lab

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# Introduction

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## How might community colleges and four-year universities dramatically improve transfer and baccalaureate attainment rates by reframing the end-to-end experience from the student's point of view?

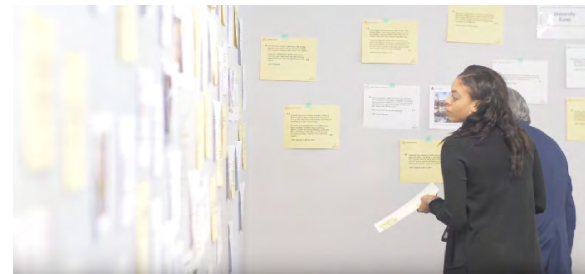
In Fall 2017, the Education Design Lab (Lab), with funding from the Michael & Susan Dell Foundation (MSDF), launched Seamless Transfer Pathways. This two-year design challenge, funded with four years of evaluation, seeks solutions to address the staggeringly low transfer and completion rates among community college students.

For 80% of students who enroll each year in a community college, the postsecondary journey begins with the aspiration to earn a bachelor's degree. But only 25% make the leap to a four-year institution within five years. And another 20% choose to complete a community college credential instead, according to NCEES and National Student Clearinghouse.

These statistics point to the moral imperative and the urgency to redesign pathways for non-elite students with the institutions that serve most of them: large public community colleges and universities. The Education Design Lab is grateful to the 100 institutions that applied for this design challenge. We hope that the work we were able to fund with the selected cohort will be helpful to the efforts of all transfer partnerships to dramatically improve outcomes.



[Watch our challenge brief](#) video on *Seamless Transfer Pathways* on YouTube.



[Watch our gallery walk and ideation process](#) video on YouTube.



[Watch how the STP teams formed pilots](#) on YouTube.

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# The Seamless Transfer Pathways Design Challenge

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Recognizing that many discrete interventions had been tested and validated over the past decade, the Lab set out to consider students' needs from end to end, with two- and four-year institutions and their students working together to define the problems, the barriers, the opportunity spaces and the solutions. We considered proven interventions as well as new concepts. The lens would be ground level, from the point of view of the student, every step of the way, but our responses could not be what many often call "point solutions." How would we push ourselves to be transformational? While with some of the Lab's design challenges, the institutions form their own design question, the north star for the scope of the challenge, for this one, the Lab and the funder, MSDF, set the bar high in hopes of attracting a coalition of teams that felt a similar moral imperative, a similar urgency. We set an overall goal to improve the transfer and graduation rates for community college students aspiring to earn a Bachelor's degree by 30% over six years.

In summer 2017, the Lab issued a call for community colleges and four-year institutions to join together to respond as a team. Prospective partners were encouraged to submit proposals highlighting how they would work together to create and test student-centered solutions that would move the needle on transfer student degree attainment and could be easily replicated across the higher education landscape. Over 100 institutions from across 25 states stepped up to the challenge. They competed for the opportunity to participate in a design year experience and

**We set an overall goal to improve the transfer and graduation rates for community college students aspiring to earn a Bachelor's degree by 30% over six years.**

receive dedicated coaching from education designers to build and launch a new seamless transfer pathway. Most of them told us that this was the first time they had opened up this channel of communication with their partner schools to discuss solutions beyond articulation agreements.

In the end, the Lab selected four teams (including one that brought a high school district to the table) to participate in the design challenge: Miami Dade College and Florida International University; Township High School District 211, Harper College, and Northern Illinois University; Collin College and University of North Texas; and Northern Virginia Community College and George Mason University.

# Designing & Building Seamless Transfer Pathways

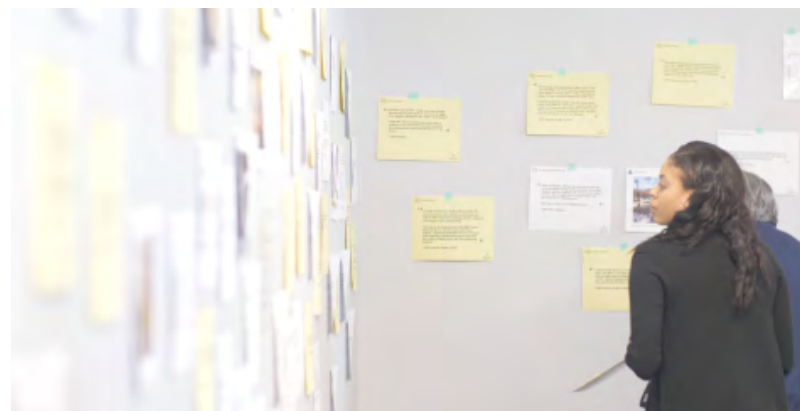
**“The design process really affords participants the opportunity to think about things critically, but also provides them the boundlessness to come up with some things that they wouldn’t have otherwise. It really challenges them to think differently. And higher education needs that.”**

Janet Marling, Executive Director  
National Institute for the Study of Transfer Students

## Begin with Data: Big Data and Small Data

Right from the start, we realized that requiring the institutional teams to bring the data to the table that tells the whole student journey was going to produce a gold mine of information, but a very difficult one to get to. The schools were asked to come to the [opening design session in Washington, DC](#), with their aggregate student data, and together we graphically mapped the story of each team’s Leaky Pipeline. “One of the biggest ah-has is trying to figure out where some of these students were going,” said one vice provost for Academic Affairs. “We were pretty surprised when we actually put all the numbers up and then you saw them.”

What did this combination of data tell us that the teams didn’t already know? Each team found different points in the student journey that were ripe for redesign, just based on the raw numbers of where students were falling out of their system. For most, it was somewhere just before or just after the transfer point. Looking at specific sub-groups was also insightful. The Texas team learned that they needed a solution for undecided students as they were having the worst outcomes and accumulating the most excess credits if they did make it through the Bachelor’s degree. The Illinois team recognized the need to consider Latino families in their solution.



Staff and faculty review student insights as part of the gallery walk process.

**“We began with the data. Having the Education Design Lab convene us with our data played an important role in getting us to share our data honestly and openly. Their independence and neutrality created a space for us to be transparent and explore the problem together. Seeing the raw data was uncomfortable at times, but sometimes it’s the hard truths that lead you to the best solutions.”**

Dr. Mark Mrozinski, Assistant Vice President of Workforce Development and Executive Dean of Community Education  
Harper College



Miami Dade College and Florida International University administrators, faculty, and transfer student develop student personas.

This was the time to bring in students. The big data informed an ethnographic research plan to get at students’ needs, behaviors and motivations. We did this in a variety of ways: journey maps, empathy maps and regular interviews with students, and observations at orientation events. We also engaged administrators and faculty. The highlights of this research were displayed as [a gallery walk that became a focal point for design sessions held at each host campus](#). While the core design teams were made up of no more than 10 staff from the partner institutions, the gallery walk invited up to 100 stakeholders, including students, from across the partner campuses to draw insights from the “small data” and shape the themes from which the pilot concepts would be drawn.

## Students Want to Belong

Seven themes emerged across all the campuses (see Figure 1). Two themes, belonging and trust, stood out as umbrella themes that informed everything else, e.g., why students stopped out, why they found the transfer experience difficult or struggled even if they achieved their goals. The five circles illustrate the five most compelling design opportunity spaces. The stars depict where the final pilots landed for each team and which themes became primary drivers for the next phase: concepts.

## Engaging Stakeholders Across Silos

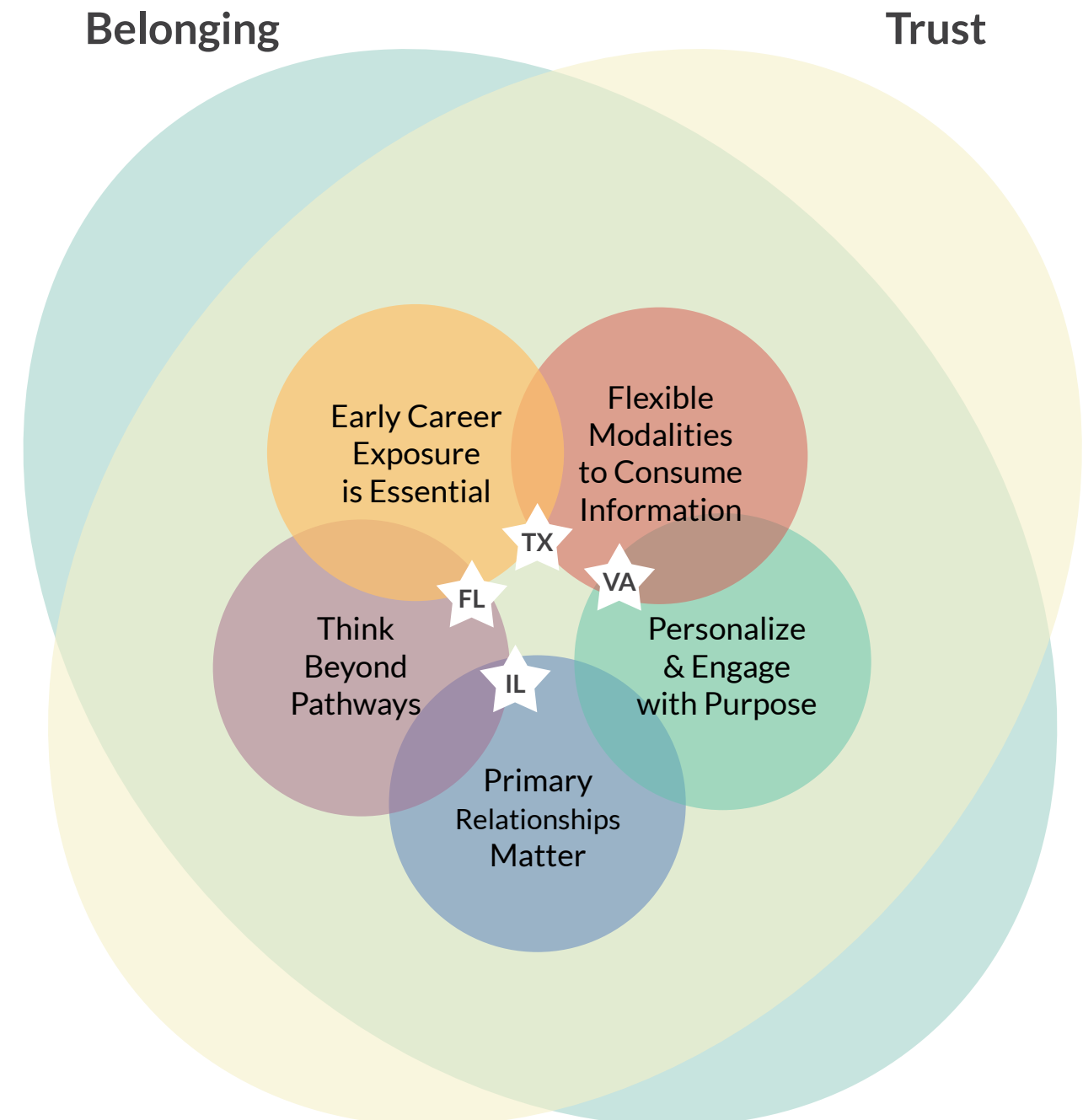
The phrase “not invented here” may have originated at an institution of higher education. It’s not the result of hubris, rather a side effect of the funding structures, governance and initiative fatigue that color operations at most colleges. We found that once we engaged a broad array of stakeholders on campus at the gallery walk and insight stage, they were hooked into wanting to be part of the co-design of concepts and prototypes. Co-creation really does serve as an antidote for “not invented here.”

In the concept phase, each team developed initial concepts hackathon-style, and then held a series of sessions around campus with faculty, students and administrators to pressure test those concepts. The Lab’s job was to keep the process disciplined, based on the insights and data, as well as pushing for ideas that were “transformational.” We used that term, but broke it down by helping each team create a [logic model](#) that we used to test different concepts against the 30% increase in attainment goals we had set. One of the participants described the process at this point: “We all left ... hopeful, excited ... and with real viability of what we were going to do, and that things were possible. They weren’t just out there in the cloud, now they were really possible ... We had reached where we wanted to be. It was magical.”

“True partnerships are being formed ... So often we tend to compete for the same population of students. Under this, we’re really creating a true partnership so that all our students have an opportunity to succeed.”








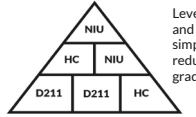

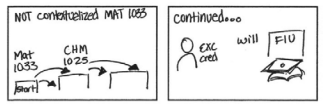






Heather Belmont, Former Dean,  
School of Science  
Miami Dade College

Figure 1. Emerging Themes Across Campuses



As we conducted our deep dive with each campus, two major umbrella themes emerged: belonging and trust. The five circles illustrate the five most compelling design opportunity spaces. The stars depict where the final pilots landed for each team and which themes became primary drivers for the next phase: concepts.

## Prototypes Developed

Collin/UNT	<b>Curriculum Pathway</b>  Faculty-driven curriculum alignment for lower division courses.	<b>Transfer Navigator Team</b>  Co-Collaborative communication dedicated for Transfer Students	<b>New Business Degree</b>  New Business Degree for the newly decided student.	<b>One Stop College Fair</b>  High-touch, high-tech college fair focused on streamlining communication and information needed for transfer students.
D211/Haper/NIU	<b>Business Marketing Pathway</b>  Career-focused, HS to Bachelor pathway to maximize credit transfer and shorten time to completion.	<b>Social Hub</b>  Cross-institutional virtual network for student supports and peer-to-peer engagement.	<b>What You Need to Know</b>  Just-in-time coordinated information delivery system and support services that leverages peers and cross-campus supports.	<b>Low Cost Bachelor's Degree</b>  Leveraging dual-credit and Harper Promise to simplify course selection, reduce swirl and increase graduation.
MDC/FIU	<b>Guided Pathways</b>  Co-branded term-by-term STEM guide with embedded academic and students supports.	<b>STEM-Based Math</b>  Contextualized Math learnings for STEM students.	<b>Counselors Connect</b>  Cross-trained counselors with shared vision for transfer student success.	<b>STEM AA Degree</b>  Specifically tailored STEM degree to streamline coursework and reduce excess credit accumulation.
NOVA/GMU	<b>Student Assist 24/7</b>  Real-time & on demand information for students that integrates support services & academic/course information.	<b>My Virtual Coach</b>  Virtual Success Coaches with flexible real time (synchronous) and non-real time (asynchronous) interaction to provide supports.	<b>Nighthawk Patriot</b>  Community event tailored towards prospective transfer students and their families seeking information on college through career navigation.	<b>ADVANCE Central</b>  A virtual + physical authoritative source for information for transfer students.

Prototypes developed and brought by each institution to a design session in 2018.

**“We all left ... hopeful, excited ... and with real viability of what we were going to do, and that things were possible. They weren't just out there in the cloud, now they were really possible ... We had reached where we wanted to be. It was magical.”**

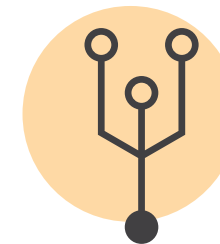
Janie Valdes, Assistant Vice President, Undergraduate Education  
Florida International University

Each team was asked to bring a “final four” of pressure-tested prototypes [to a spring 2018 design session](#). There was structured time to flesh out the concepts, a ‘shark tank’ style pitch session with detailed constructive feedback, and finally, a selection of one pilot for each team. There would still be an implementation and evaluation plan to develop and funding strategies in some cases. But, as the institutions are testing pieces of their pilots this academic year (2018-2019), they are set to launch their efforts more broadly in the fall of 2019. In the meantime, the pilot plans themselves are instructive for other institutions, and we are committed to sharing them as many of the design opportunities to fix the leaky pipelines are similar across institutions.

# The Seamless Transfer Pathways Pilots



**The Disappearing STEM Student: How to Save STEM Majors at Scale?**  
*TRANSFERmation*, Miami Dade College and Florida International University



**A Fast-Track Business Major for Undecided and Newly Decided Students**  
*B.S Degree in General Business*, Collin College and the University of North Texas



**Co-designing a New Degree with Parents and High School Students**  
*Degree in Three*, Township High School District 211, Harper College and Northern Illinois University (Illinois)



**A Third Way: Using AI to Connect Transfer Students to Their Cohort and Both Institutions**

VANCE, Northern Virginia Community College and George Mason University

# The Disappearing STEM Student: How to Save STEM Majors at Scale?

TRANSFERmation, Miami Dade College and Florida International University

From the beginning, Miami Dade College (MDC) and Florida International University (FIU) knew they would focus on STEM. The institutions share a large transfer student population – 80 percent of MDC students that transfer to Florida public institutions enroll at FIU – and many of those students choose a STEM pathway. Over 8,000 students entering their first semester at MDC say they are interested in pursuing a degree in STEM. After three years, about 2,100 of those students earn an AA, while most transfer to FIU. Of those, 53% graduate within four years.

Working with the Lab, MDC and FIU discovered that a seamless transfer pathway in STEM would require more than new course sequencing. While many STEM transfer students graduate from MDC underprepared to successfully complete FIU's rigorous course structure, a closer look at the data revealed other challenges such as length of time to completion, excess credits upon completion, inconsistent advising and monitoring, and profound student distrust of information.

Interviews with both successful and unsuccessful students revealed that the STEM transfer path is confusing not only for students, but also for the advisors, faculty and staff whose job it is to guide them. MDC students reported relying on peers or Google to support them in their transfer experience. Designing a



successful STEM pathway for transfer students would require the team to validate the role of students as peer advisors and rebuild trust overall.

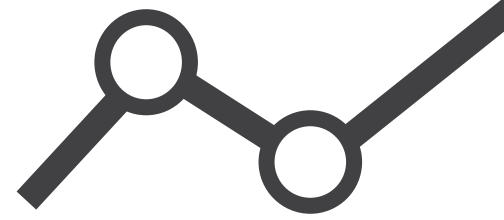
Enter TRANSFERmation, an interactive online roadmap for STEM transfer student success. The interactive tool will guide students on their journey, starting on the day they begin at MDC and charting all the major milestones to the day they graduate from FIU. Peers would serve as student ambassadors of the tool. If successful, the app could be scaled to other transfer partnerships in Florida. Bringing TRANSFERmation to life will require external resources. The team reached out to a private foundation, leveraging learnings from the design year to make the case for investment, and has been awarded funding to build the interactive tool.

## Less Time, Less Credits: Designing a Seamless STEM Degree

To build a new Biology course framework for transfer students, MDC and FIU need to overcome a major design hurdle: how to reduce both the time to complete the degree and the number of excess credits. The state of Florida charges students a penalty for excess credits. The Excess Credit Hour Surcharge, which is meant to incentivize students to complete their bachelor's degree quickly, charges a 100% surcharge of the tuition rate for every credit hour taken in excess of 110% of their program requirements.

STEM transfer students from MDC can pursue eight different curriculum paths toward a Biology major at FIU, where the credit limit is 120 credits. These paths vary anywhere from 125 to 136 credit hours for completion. No matter which path a student takes, they will be over the FIU credit limit, and some paths will put them over the 110% threshold. The longest path includes 72 hours at MDC, 12 of which will not count towards FIU's degree requirement. Getting to 120 credits will require full academic approval.

Unlocking this problem has the potential to solve for multiple challenges, including other STEM degree pathways and systemic barriers affecting transfer student success. For MDC and FIU, this is now their task: How can the institutions reduce time to degree through TRANSFERmation, and use these pathways to engage faculty and advocate for systemic change?



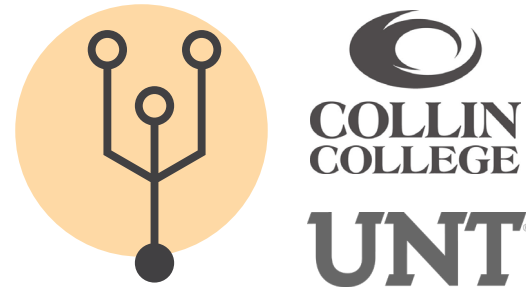
## A Fast-Track Business Major for Undecided and Newly Decided Students

*B.S Degree in General Business, Collin College and the University of North Texas*

The North Texas region is growing rapidly, and experts predict the region will surpass Chicago to become the country's third largest metropolitan region. As the region expands, so will job opportunities with increasing demands for postsecondary education. Collin College (Collin) and the University of North Texas (UNT) want to fast-track transfer students seeking bachelor's degrees and provide accessible pathways for the expected pipeline of students, 31% of whom are black and Latinx.

Students transferring from Collin are seeking a flexible education close to home that will allow them to complete a high quality undergraduate degree in a timely manner without excess debt. Students who come in undecided or pick a major late in their two-year college journey may face completion barriers such as time-to-degree and Texas's Excess Credit Hour Surcharge. While this experience is true across programs, the Texas team chose to focus on the business program first. Many students transferring from Collin to UNT identify Business as an interest, but most are missing the prerequisites needed to begin upper-level Business courses and they automatically incur an additional 18 credit hours.

The team knew there had to be a better option. They decided to create a General Business Degree for undecided and newly decided students, an entirely new curriculum. And they worked with faculty across both institutions to design it with input from students and advisors.



The new program is geared to accelerate students with an AA or AS from Collin toward a UNT degree within two years and a job post-graduation. The pathway will guarantee transfer to UNT and redesign the course structure to support flexibility in the application of non-business coursework toward a business degree, thus reducing excess credits. The newly designed degree will provide students the opportunity to combine outside areas of interest with a broad-based knowledge of business functions. The curriculum will be informed by business partnerships and employer demand and students will receive placements for career exposure.

The new degree has received accreditation approval by the Texas State Board of Higher Education and is seeking regional and discipline accreditations. Prior to obtaining the approval, the partners focused on training advisors and administered a survey to students that were or will be eligible for the degree. With approval in hand, the team will soon be ready to market this innovative opportunity to over 90 Collin College students who indicated an interest in learning more. The pilot will launch in fall 2019 at the UNT New College at Frisco.

## Co-Designing a New Degree with Parents and High School Students

*Degree in Three, Township High School District 211, Harper College and Northern Illinois University (Illinois)*

The Illinois team set out to create a seamless business transfer pathway for a growing population of first-generation and underserved students, including a large number of Latinos. Working with these students and their parents as co-designers helped the team recognize that providing greater transparency around time to earn a degree and total college costs to families would help to both improve and accelerate degree completion. The [NIU Business Degree in Three](#) will fast-track high school students from District 211 to Harper College and NIU toward a Bachelor's degree. Degree in Three students will create a personalized pathway and receive early exposure to careers, seamless academic advising and coordinated courses across the three institutions.

Candidates for the new program will be identified in high school, positioning them to take advantage of as much as \$20,000 in savings toward their degree. Students will leverage dual credit, AP courses, and a scholarship program at Harper College, Harper Promise, that offers eligible students the opportunity to earn their associate's degree for free. Degree in Three students would spend one year at Harper to complete their AA as well as prerequisites for NIU's School of Business. They would be guaranteed admission at NIU, where they would choose from eight tracks in business to complete their degree over two years.

The team is preparing to launch their pilot in fall 2019. Outreach to prospective high school juniors (the target cohort) and seniors at District 211, along with some entering first-year students at Harper College, is already underway. Over time, the team hopes to scale the degree model to more districts and expand it to more career pathways. With this new degree, high school students will become aware of affordable undergraduate options early on in their journey and be eligible to receive a Bachelor's degree within three years of earning a high school diploma, a key outcome for students and families weighing the costs and benefits of postsecondary education.



 Harper College

Northern Illinois University



# A Third Way: Using AI to Connect Transfer Students to Their Cohort and Both Institutions

VANCE, Northern Virginia Community College and George Mason University

George Mason University (Mason), Virginia's largest public university, graduates more transfer students than first-time freshmen. Every year, over 3,000 students transfer to Mason from Northern Virginia Community College (NOVA), the second largest community college in the country. Mason and NOVA aim to increase that number by harnessing the opportunity created by comprehensive general education offerings at community colleges to open more doors to undergraduate degrees. [ADVANCE](#), a program launched in 2017, seeks to clarify and streamline transfer paths between the two institutions, solving for barriers to completion, such as loss of credit hours, additional financial burden and longer time to a degree.

While ADVANCE solves for a smoother transfer experience with a single point of admission, aligned curricula, coordinated student services, guided pathways, co-curricular engagement and personalized success coaching, Mason and NOVA determined the need for a digital solution to maximize results. They envision VANCE as a mobile app that will connect students across both institutions to "just in time" information that will support their transfer success. Over time, the team will develop VANCE as a 24/7 AI coach. Programmed to address common pain points, VANCE will provide actionable and reliable



information to students with the goal of heading off misinformation and confusion, which can lead transfer students to slow down or stop their pursuit of a degree. Research into the right curriculum platform is currently happening in development, and AI faculty from the transfer partnership have been involved in its design with full implementation of the AI solution a few years off. In the pilot phase and early iterations, VANCE will enable Mason and NOVA to communicate to transfer students in one voice, pairing commonly asked student questions with standard answers. Providing consistent communications is key to efforts to scale student success coaching support. VANCE will support this goal by reducing the number of repeated questions fielded live by coaches and thereby improving efficiencies.

Student focus groups have identified a clear expectation among transfers that community is important. Transfer students don't define themselves by which institution they're attending, but rather, they claim a sense of belonging to both

NOVA and Mason, as well as to their fellow ADVANCE cohort members. That relationship begins in the very first semester, and student success coaches support them continuously until they graduate from Mason. VANCE promises a more personalized experience

## Conclusion

Seamless Transfer Pathways builds on the important movement of Guided Pathways. For the 80% of community college students who aspire to a Bachelor's degree, institutions should be able to present the path from beginning to end, with considerable optionality, transparency and affordability. But improving transfer student success requires more than guided pathways. We need new models that reimagine higher education and take into account the experiences and real needs of students and their communities.

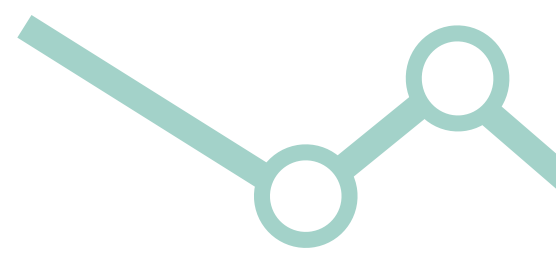
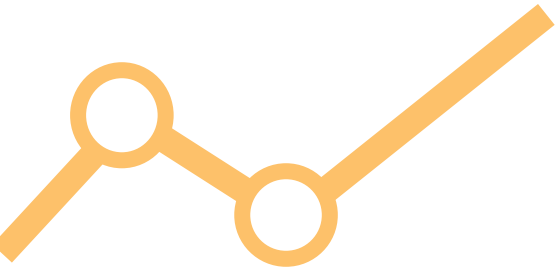
The Seamless Transfer Pathways pilots represent the efforts of forward-leaning transfer partnerships willing to do exactly that. Each embraces a student-centered approach and looks beyond the traditional model to solve for the future. Each brings a systemic analysis, informed by data and a regard for the broader ecosystem. Together, they are a window into what is possible at scale. Forty-six more transfer partnerships stood ready to undertake the design challenge, a remarkably strong response to our call for proposals, signaling both a need for greater supply of transfer models that work and a potential pipeline of promising strategies. Not one partnership was motivated by dollars.

to help transfer students achieve greater connectedness and to promote their success on any moment of any given day throughout their time at NOVA and Mason.

The invitation to take part in a structured design year with the support of education design coaches and minimal resources was enough of a draw. Every team came forward driven by a commitment to solve for an urgent problem that has immediate implications for their local community.

Transfer partnerships matter. They are a gateway to economic opportunity for underserved students. As local economies and workforce needs change, these partnerships find themselves on the front lines. True to their mission, community colleges, have evolved considerably over the last decade to provide accessible education-to-employment options to students, especially in the wake of the Great Recession and as higher education costs continue to rise. They are producing results. Recently, the Jack Kent Cooke Foundation reported [transfer students are more likely to graduate](#) than traditional students at selective institutions. Four-year institutions should be racing to capture that talent. Those institutions that are able to look out on the horizon and design well for the opportunity of transfer students will be rewarded. And we all stand to benefit.





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