Charles A. Dana Center at
The University of Texas at Austin

Third-Year Report

December 2015

THE New Mathways PROJECT

Current Status

In the third year of implementation, we are seeing an impressive expansion of the NMP model across the state. In Fall 2015, 34 colleges (31 in Texas) were implementing the NMP model (Graphic 1 and Table 1). While some of these colleges use the NMP curriculum developed by the Dana Center, others are using homegrown curriculum or other curriculum packages to implement the model. Any college following the four principles of the NMP Model is considered to be implementing the model, regardless of what curriculum they implement. Those principles are:

I. Multiple pathways with relevant and challenging mathematics content aligned to specific fields of study
II. Acceleration that allows students to complete a college-level math course more quickly than in the traditional developmental math sequence
III. Intentional use of strategies to help students develop skills as learners
IV. Curriculum design and pedagogy based on proven practice

Graphic 1: Expansion of the NMP Program

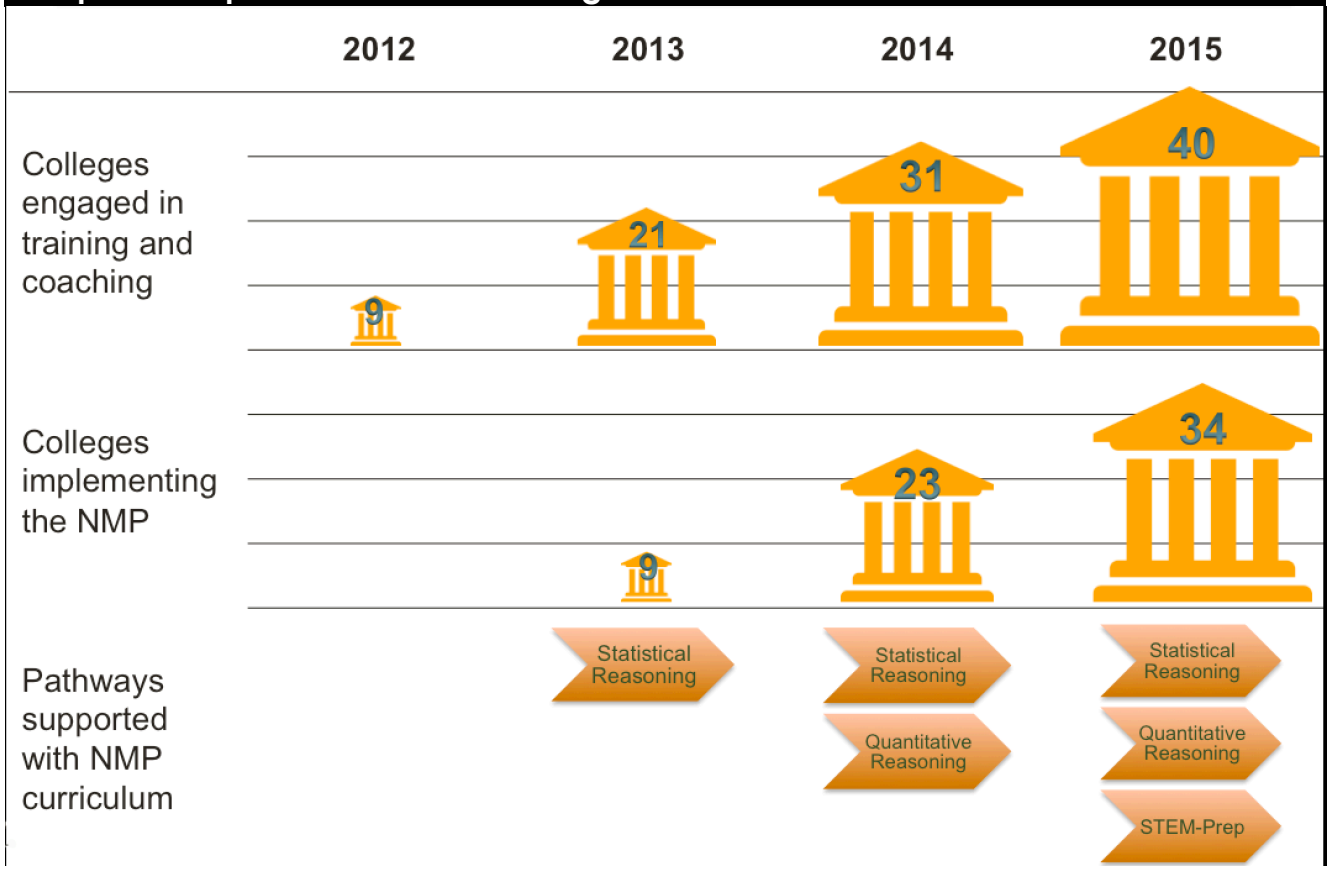
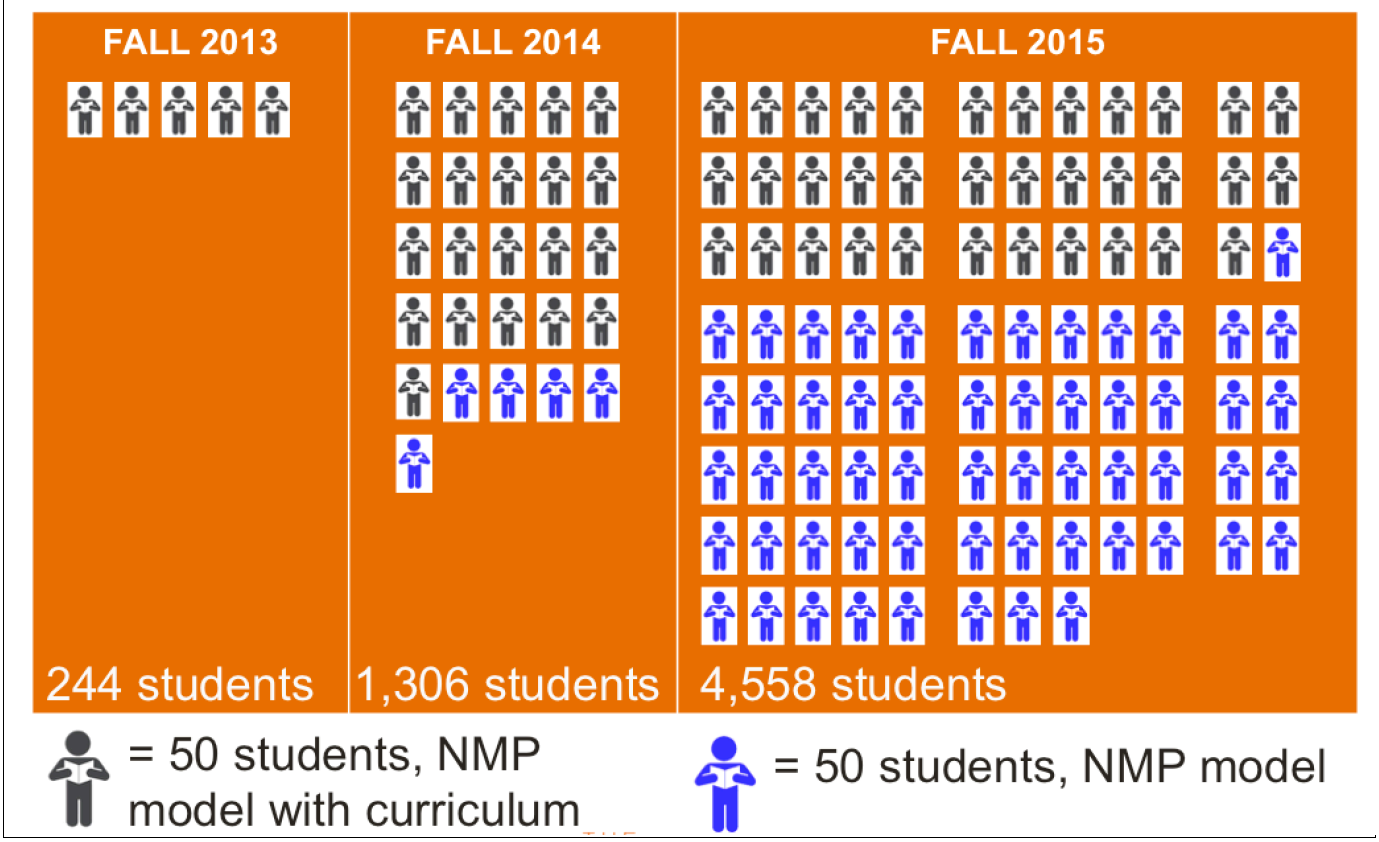


Table 1: Colleges Using the NMP Model in Fall 2015		
Alamo-Northwest Vista	Houston Community College	South Texas
Angelina	Kilgore College	Southwest Texas
Austin Community College	Lee	Tarrant County
Brazosport College	Lone Star–Kingwood	Temple
Clarendon	McLennan	Texarkana
Coastal Bend	Midland College	Trinity Valley
College of the Mainland	Navarro	Vernon
Dallas County–Brookhaven	Northeast Texas	Victoria
Dallas County–Eastfield	Paris	**Out-of-State Colleges:**
El Paso	Ranger	Berkshire, Massachusetts
Grayson	San Jacinto	Galatin, Montana
Howard	South Plains	Montcalm, Michigan

Graphic 2: Expanded Numbers of Students Enrolled in the NMP Model



In 2015, the Dana Center entered into a collaboration with Pearson to provide NMP courses on Pearson's MyMathLab platform. Twenty colleges (17 in Texas and 3 out of state) used the Pearson platform in Fall 2015 to offer NMP's *Foundations of Mathematical Reasoning* curriculum in their developmental mathematics classrooms.

In Spring 2016, the Dana Center–developed *Quantitative Reasoning* and *Statistical Reasoning* courses will also be available on the Pearson MyMathLab platform for colleges to use with their college-level math students. A version of *Reasoning with Functions I* (part of the STEM-Prep pathway) has also been developed on the Pearson platform and will be piloted in three colleges in Spring 2016. The Dana Center plans to release this STEM-Prep pathway course more broadly in Fall 2016.

Including colleges being mentored (Table 2), the Dana Center is actively working with 40 of the 50 Texas community college systems on implementing the NMP model. Seven other Texas systems are enrolled with the NMP and receive access to NMP tools, resources, and updates. Three systems are not enrolled with the NMP. The NMP initiative has facilitated steady and significant expansion of the program in terms of both the numbers of institutions involved and the number of students reached.

Table 2: Texas Colleges Being Mentored by the Dana Center in 2015–2016

Blinn College	Frank Phillips	Texas Southmost College
Central Texas College	Galveston College	Tyler Junior College
Collin College	Lone Star College System	Weatherford College
Del Mar College	Odessa College	Wharton College
El Centro College	Panola College	

Plans for 2015–2016

The rapid spread of the NMP model across institutions has been a great achievement, but we have had less success with supporting colleges to grow the program internally and across large systems. The Dana Center identified this challenge in Year 2 and continues to see this as a challenge in the work. The issues we identify as contributing to this challenge include:

- Transfer and applicability of college-level courses to programs at 2- and 4-year institutions
- Need for additional training and materials for advisors and other student support personnel to better advise students into math courses aligned to their program of study for advisors and other student support personnel
- Need to encourage and support mathematics departments to work with partner disciplines to identify math requirements for majors and programs of study aligned with professional recommendations

To address this challenge and its constituent issues, we are continuing our outreach to 4-year institutions through our Transfer Champions Initiative, with the twin goals of (1) highlighting institutions with exemplary transfer policies and (2) working with institutions with policies that are not conducive to math pathways to enact changes.

We are also developing resources to be used in outreach to programs of study at all Texas community college systems to help start the conversation about changing math requirements. We have also developed resources for use in advising offices to guide advisors in directing students towards the appropriate math pathway based on students' majors and plans for transferring to four-year institutions.

In addition, we have awarded scaling grants for to Dallas County Community College System (DCCCD)-Brookhaven College, Lone Star College – Kingwood, Midland College, Ranger College, and Victoria College. Grant recipients receive additional support from the Dana Center as they work towards the goal of enrolling 90% of FTIC college students into the math pathway best aligned to their program of study.

Another challenge that we identified in our Second-Year Report was that of supporting and documenting local innovations in implementing the NMP model. At that time we were gathering data only on colleges using the Dana Center–developed NMP curriculum, and not on those implementing the NMP model with other curricula.

To address this challenge, in 2014–2015 we worked with the Texas Success Center to develop the Texas Success Center Math Pathways Success Survey. In summer and fall of 2015, 37 Texas colleges completed this survey, including colleges that the Dana Center is not currently actively engaged with.

The information provided by these colleges enabled the Texas Success Center to evaluate individual colleges' implementations in light of the NMP model's four principles.

Moving forward, we will use this information in our outreach to colleges and will gather additional qualitative data on the ways that individual institutions are implementing the model.

The Dana Center is also working with MDRC and the Community College Research Center, who are conducting a randomized control trial to study the effects of the NMP on student success, focusing specifically on colleges using the curriculum to implement the model.

This study is a central focus of the new Center for the Analysis of Postsecondary Readiness and is an opportunity to learn from the work in Texas to identify which students can benefit from programs based on the NMP model. This study is currently

underway at El Paso Community College, DCCCD-Brookhaven College, DCCCD—Eastfield College (DCCCD), and Trinity Valley Community College.

Expansion Outside of Texas

The tremendous work of the Texas Association of Community Colleges and of individual colleges in Texas to implement the NMP has garnered national attention, and the Dana Center is receiving numerous requests to support similar work in other states. We see this national attention as an opportunity to further legitimize the concept of multiple math pathways and to highlight the work in Texas.

We are in our second year of collaborating with Complete College America to provide technical assistance to state teams in Colorado, Indiana, Missouri, Montana, Nevada, and Ohio. The collaboration with Complete College America is also giving us the opportunity to do intense work in the Houston area through the Houston Guided Pathways to Success project. In addition, we have just begun working to support Arkansas, Oklahoma, Maryland, Michigan, and Washington in NMP implementation.