Dana Center Math Pathways North Texas Regional Planning Session

June 19, 2017

Summary and Next Step Reports

At a regional convening of community colleges and their major transfer partners, the results of three focused discussions were captured and are summarized below. These issues, challenges, needs and potential actions will set the course for planning the next steps of the Dana Center Math Pathways regional work for the North Texas Region.

Transfer and Alignment of Math

**1. Examples of Best Practice**

* Math alignment and articulation between:
  + Weatherford College and Midwestern State Univ.
  + North Central Texas College and Uni. of North Texas
  + UNT has implemented math pathways and is engaged in a case study on the impact
* Fields of study (when used effectively) can direct alignment
* Need to discuss math competencies required for each major to determine math requirements – this would call for discipline specific convenings
* Share with TCCNS when adopted

**2. Data Needs**

* Impact of math on graduation rates
* Transfer vs. native student success
* Success in subsequent courses and success based on modality
* Concurrent enrollment
* Feeder patterns
* High demand program capacity

**3. Challenges**

* Math majors – transferability and knowledge of what will be accepted
* Some universities will not transfer math taught online or in dual credit
* Lack of transfer into major even with transfer equivalence
* issue with transfer when university partner requires a course not accepted but on transfer record
* Wide variance in math requirements in nursing
* Communication across institutions (especially multi-campus) and across majors
* Constant changes to requirements at institutions – need current guides
* TAMU calculus sequence different from CCs
* Need to increase collaboration and minimize competition around transfer

**4. Next steps – Potential Actions for 2017-8**

* Discipline specific convenings –share data on variance
  + Nursing (Nursing would be a great place to start because of common accreditation standards and amount of variation), Business and Computer Science as starting points
  + ACGM and math specialists as consultants
  + Examine learning outcomes and prerequisites
  + CAO, deans, department chairs and faculty represented
  + TAAMS conference as possible opportunity for discussion.
* Rename College Algebra
* Remove College Algebra from core (UNT has done this)
* Disseminate issues through AMATYC and TXMATYC publications

Advisors and Advising Administrators

Of the four goals of the Dana Center Math Pathways, today’s discussion will focus on identifying best practices and the planning necessary to provide the training and communication to support math pathways reform for advisors. With that goal in mind, we will explore the following questions:

1. **Share with us where your institution is with implementing Math Pathways. How has this been communicated to advisors at your institution?**

* Eastfield – Pilot Summer non-algebraic help of MDRC and Dana Center. Advising Director a part of initial study, orientation and implementation. Completed Training of Advisors and Faculty
* Northwest – Pilot over past year; Created a flip chart instrument of TSI score placement options to be used by Advisors and Faculty.
* DCCCD – last fall created own grid based on Diagnostic scores to include Statway. Redesigned Dev. Ed. Plan to pick a path and literature of What happens when you switch pathways?
* Collin – Statway/Mathway – Developed an intermediate bridge course. Co-requisite refresher class 2 weeks to prepare for College level.
* Emphasis on Holistic Advising – Placement based not just on scores, but last math taken to align with high school
* Tracking issue – a field needs to be added in Colleague to include math history - date of last math taken

1. **What has been a successful strategy for engaging advising staff in Math Pathway reform? And what has not been a successful strategy?**

* Division Dean visits Advisor’s staff meeting regularly.
* Advisor integral part of start of reform efforts.
* Embedded advisors within each campus department.
* Math dept. chair serve as advisor in summer and Liaison to the dept.
* Visual map for advisors/students and ongoing conversations.
* Intentional training in cross-discipline meetings academic and student services (face-to-face or webex)
* Showing students how their math placement ties back to the degree plan.
* Require to take Dev. Ed. 1st semester assessed.

1. **What components are necessary for a successful advising implementation of Math Pathways?**

* All campuses in a multi-campus district have a clear map and communication strategy
* FAQs for Advisors discussing next level questions or what if’s
* Develop a communication plan with student
* Enforce policy
* Curriculum alignment
* Front line professional development/networking

1. **If you had the opportunity to meet with the math faculty/administrators, what would you share with them about Math Pathways? AND From an advisors’ point of view, what is a successful strategy to ensure that every student enrolls in the appropriate math course for his/her program?**

* Timing of implementation
* Scheduling Issues ex. Promoting Stats and Cont. Math, but not enough courses being offered, NCBOs
* Clear communication between all constituents
* Consideration of advising among faculty, particularly when buffet of offerings.
* Continued advising for Dev. Ed. Students not just first semester.
* Faculty/Admins. should not cancel classes so early.
* Start with the end goal in mind. Where does the student plan on transferring? And What does the student think they want to be/Degree Program of Study?
* Advisors can communicate with Academic Affairs Director to contact Chair/Dean to open seats.
* Recommended Prerequisites should be cleaned up; if greatly beneficial to student should be a Required Prerequisite,
* Provide information for next questions for advising

1. **Is there information from today’s discussion that should be shared across the region via a white paper or other communication? What are your suggestions for further engagement around these issues? Not addressed** 
   1. Changing the “Algebra Mindset”
   2. Needs and strategies for professional development
2. **How do we collectively ensure that appropriate math courses are transferred from community colleges and applied to university degrees?**

* UTA Transfer Guides
* TCCNS needs updating
* Articulation agreement
* Dana Center
* Provide Students with Practice Problems from MATH faculty before taken the TSI, even if exempt.

1. **What critical action steps are needed at your institution to scale math pathways? What needs to be accomplished in 2017-18?**

* Math faculty and Advisors need to communicate better.
* Include front line personnel.
* More sections for non-algebraic pathway
* Re-train all; many have an “Algebra Mindset” and needs to change
* Communicate with all including administrative assistants.
* Engage Dual Credit Partners in Professional Development for better alignment
* Host Math Pathways sessions for ISDs, CCs and universities.
* Communication on websites for faculty, staff, and students. E.g. TCCNS website update
* Cut scores are they appropriate?
* Exceptions and exemptions may not be serving student well ex. Veterans.
* Schedule more sections of stat, contemporary math, quantitative reasoning – difficult to advise if courses are not available

8/23/17

Math Faculty Discussion of

Co-requisite Model and Legislative Implications

1. **Issues**

* Faculty credentials – how to structure where one cannot teach college level and another can?
* Much unknown including definition from the state
* Current Practice
* DCCCD – no co-req. offerings
* NCBO and CA found it hard to make
* Fall 2017 – NCBO developmental math (sem) to College level (Sem)
* UT Arlington – launching 5 credit, same instructor this fall
* UNT – all entry level has re-citation so all students get extra support
* Eastfield – modular approach – 8 week
* Cisco – 3 levels of dev. ed. – routes offer 2nd course
* UCTC – doing CA co-req – 6 hour course – 5 credit hours did not work
* Grayson – CA and 1 hour lab in stat: currently for bubble students

1. **Needs**

* Communication with registrar and students
* Training for faculty and advisors about options

1. **Challenges**

* Communication! Registrar, faculty, advisors,
* Need a definition of co-req.
* How to meet the needs of our on-line students
* Banner etc. tech systems will need retooling
* Advising – intake needs to adapt so students enter the right co-req.
* Scheduling –
  + Summer = will students come? Will they do math 4 days a week
  + Master course schedules and timelines
* Faculty
  + Investment
  + Credentialing

**4. Next Steps: Potential Actions for 2017-8**

* White paper to summarize today’s discussion
* Participate in the rule making
* Expand discussion at fall leadership conference