

# **MULTIPLE MEASURES**

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# WHAT ARE MULTIPLE MEASURES?

- Measurements beyond standardized tests to place students into gateway (college-level) coursework
  - HSGPA
  - Placement exam (ACT or Accuplacer)
- At NCMC, English, math, and reading scores, along with HSGPA, are used to place students into math, English, science, and government/history courses.



# MULTIPLE MEASURES INITIATIVE

- HB1042 – directed all public institutions of higher education to replicate best practices in remediation
  - Passed in 2012, expected to be in place by 2015-2016
  - “Principles of Best Practice in Remedial Education” Executive Summary
    - *Common scores/multiple measures to place students into credit-bearing courses*
    - Encourage State Board of Education to adopt CBHE recommended college prep high school core curriculum
    - *Implement accelerated remedial education models*
    - Develop and implement early intervention strategies
    - Develop and implement threshold policies and practices
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# WHY THE PUSH FOR MULTIPLE MEASURES?

- Provides a more accurate measurement of a student's ability to succeed in college-level coursework
  - Relying on only one measurement (such as ACT scores) results in students being placed unnecessarily into remedial coursework
  - In public, 2-year institutions in MO, for every 100 students beginning college (first time, full-time):
    - 51 are enrolled in math remediation
      - 39 fail to complete the associated gateway course
    - 32 are enrolled in English remediation
      - 26 fail to complete the gateway
  - **Placement into remedial classes can be a barrier to completion!**
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# MULTIPLE MEASURES IN HIGHER EDUCATION

- 2016 survey found:
  - 57% of two-year institutions used multiple measures for math placement (compared to 27% in 2011)
  - 51% for reading/writing (compared to 19% in 2011)
- Increasing the number of students who complete their gateway math and English courses within their first year improves the students' chances of graduating
  - Using multiple measures allows for more students to be placed into corequisite or gateway in their first semester
- Complete College America initiative
  - Math Pathways
  - Corequisite Support
  - 15-to-Finish
  - Momentum Year

**COMPLETE  
COLLEGE  
AMERICA**

# NORTH CENTRAL MISSOURI COLLEGE MULTIPLE MEASURES IMPLEMENTATION

- Began using multiple measures for placement for spring 2017 enrollment (fall 2016 advisement)
- Combined EN101 and DS025 to create EN101W English I with Workshop (corequisite)
- Eliminated many math DS sections to encourage enrollment in math workshops (corequisite)
- Advise all first time, full-time students into EN101 and math pathway in their first semester



# CURRENT STATUS

- Successes
  - Many students entering gateway course or Workshop in first semester
    - Keeps students on track for graduation
    - Eliminates potentially several credit hours of DS coursework
  - Self-confidence of students
- Challenges:
  - Implemented math pathways, co-requisites, and multiple measures at the same time
  - Students with no HSGPA (homeschool, GED, International)
  - Manual process (test waivers, system wouldn't recognize HSGPA and test scores as a prerequisite)



# ON THE RIGHT TRACK

- 73% -- 3-year average success rate of NCMC non-remedial students successfully complete their gateway course
  - 73% -- 3-year average success rate for NCMC remedial students
  - 65% -- 3-year average success rate for NCMC remedial students passing the DS course and the gateway course
  - In the past year, initial signs are positive!
    - Students are completing their gateway course much quicker with a success rate of 60%
    - Will take more time to fully track these students all the way through to graduation
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# MULTIPLE MEASURES AND POWERCAMPUS

- GPA is not an option for prerequisite in PowerCampus
  - BUT – Both measures are stored data in Powercampus
    - Test scores is in TESTSCORES
    - High school GPA is in EDUCATION
    - Institution type is in EDUCATION
  - Exceptions
    - Test date is less than 3 years
    - Test date is not greater than today (human error)
    - Missing transcript date (official transcript not received)
    - HSGPA from 7<sup>th</sup> or 8<sup>th</sup> semester (18 months of HS graduation)
    - Missing Institution Type

## SOLUTION

- Create TEST\_ID and TEST\_TYPE for Multiple Measure Waiver types
- SQL Job
  - Insert Multiple Measure Waiver in TESTSCORES
- Modify course prerequisites to identify the appropriate waiver



# NEXT STEPS

- Create predictive models using data
    - Assist instructors with scheduling courses
    - Allow us to be proactive in advising students to seek out tutoring or other assistance
  - Explore the relative weight of the different variables/measures
    - Do test scores play more into the student's success? Or HSGPA?
  - Share information with high schools for possible college prep enhancements
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# QUESTIONS?

