

NC DAP

Developmental Math

- ▶ History
- ▶ Problem
- ▶ Purpose of the Experiment
- ▶ Proposed solution
- ▶ Data collection

DEI History

- ▶ Diagnostic testing will assure appropriate placement in modules
- ▶ To support proper student placement in courses
- ▶ Reduce
 - ▶ Student time in Dev math
 - ▶ Financial aid resources allocated to developmental education
- ▶ Accelerate students into their program of study
- ▶ Successfully complete their gateway math course

NC DAP

Assessment Valid?

Why do we need to validate the process for non-course credit using NC DAP?

- ▶ The NC DAP may allow students to “guess” their way to mastery.
- ▶ The “cherry picking” of DMAs through assessment may leave gaps in student learning.
- ▶ A more accurate assessment of mastery may be needed.

Identifying the Problem

NC DAP score		Secondary assessment score
DMA-010	7	27.94%
DMA-020	7	6.8%, 37.42%, 54.1%, 34.01%
DMA-020	8	34.01%
DMA-030	7	51.35%
DMA-030	8	1%, 51.35%
DMA-040	7	34.9%, 32.81, 32.81
DMA-050	7	25%

Purpose of the Experiment

Guilford, Lenoir, Robeson

The purpose of the experiment is to assess the validity of NC DAP when pre-requisites for higher level modules are not mastered at the time of non-course credit.

Proposed Steps for Validation

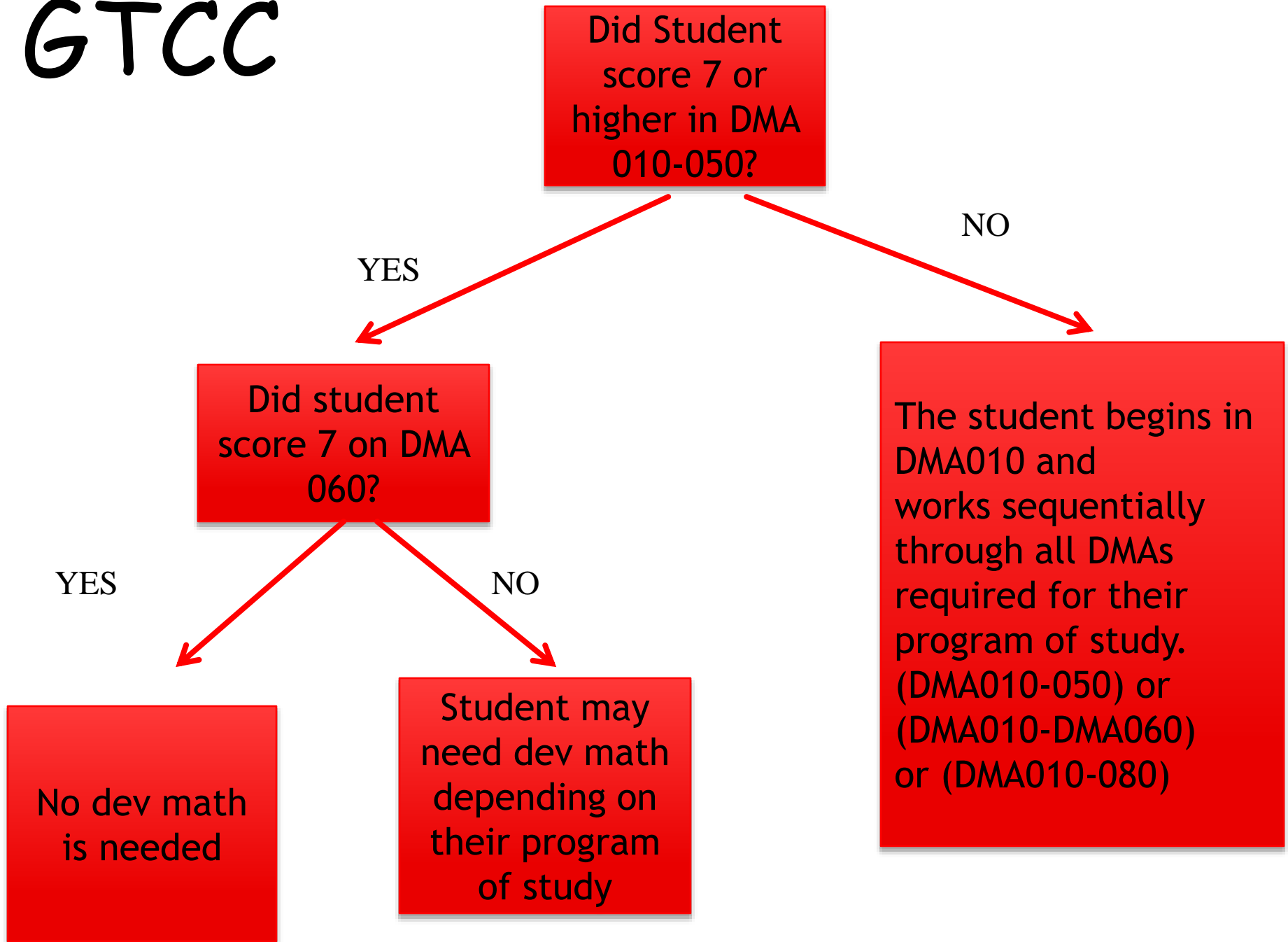
- ▶ NC DAP assesses individual modules as part of a sequence.
- ▶ However, students may be able to show mastery at higher level modules without passing the pre-requisites.
- ▶ Students who do not show mastery for pre-requisite modules will be offered a common module assessment to demonstrate mastery.
- ▶ If the student is successful, he or she will receive non-course credit for the module(s) in which pre-requisites have not been satisfied.
- ▶ If the student is unsuccessful, he or she must complete the sequence without consideration of non-course credit.

Assessment Sequence

Guilford and Robeson

- ▶ Mastery must be demonstrated in DMA 010-050 (Guilford)/DMA 010-030 (Robeson) or begin in DMA 010
- ▶ Work consecutively through the modules
- ▶ Opportunity to accelerate via secondary assessment
- ▶ Common secondary assessment

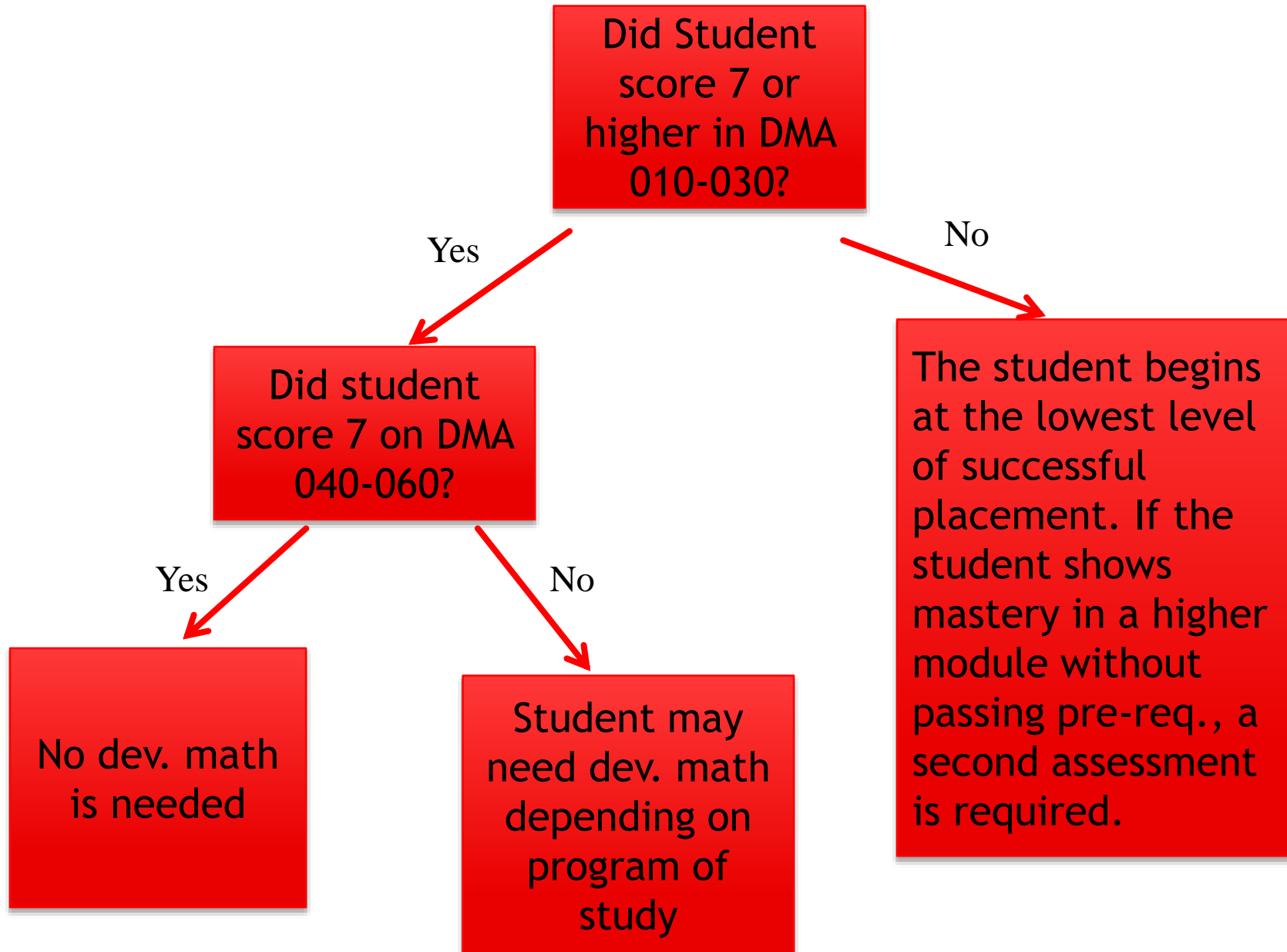
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Assessment Sequence Lenoir CC

- ▶ Students will be assessed in modules 010-030.
- ▶ If the student shows mastery in all modules, assessment for 040-060 is delivered.
- ▶ If the student does not show mastery in sequence, the student must begin at the lowest level reflected on the assessment.
- ▶ To receive non-course credit for higher level modules, a common secondary assessment will be delivered.

Lenoir will assess students for DMA 010-030 and 040-060 based on initial scores.



Lenoir

Sample Placement Scores

#	Date	Duration (min)	DMA 10	DMA 20	DMA 30	DMA 40	DMA 50	DMA 60
1	1-05-15	128	2	6	5	-	-	-
2	1-05-15	177	10	11	12	9	7	8
3	1-05-15	124	-	-	-	-	-	-
4	1-05-15	221	1	1	3	-	-	-
5	1-05-15	150	5	7	7	-	-	-
6	1-05-15	120	1	7	1	-	-	-
7	1-05-15	153	2	5	4	-	-	-
8	1-05-15	227	5	6	9	-	-	-
9	1-05-15	148	2	6	6	-	-	-
10	1-05-15	78	6	7	6	-	-	-
11	1-05-15	100	-	-	-	-	-	-
12	1-05-15	99	6	5	6	-	-	-
13	1-05-15	56	5	8	4	-	-	-
14	1-05-15	49	2	5	8	-	-	-

Data Collection

Guilford Tech, Lenoir, Robeson

- ▶ NC DAP scores recorded in TSUM
- ▶ Grade on secondary assessment
 - ▶ In class diagnostic
- ▶ Success in each DMA
- ▶ Success in gateway curriculum course
- ▶ March 2015 to March 2016



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