



The Role of IR in Randomized Controlled Trials: the New Mathways Project Evaluation

John Diamond, MDRC
Jennifer Dorsey, Charles A. Dana Center

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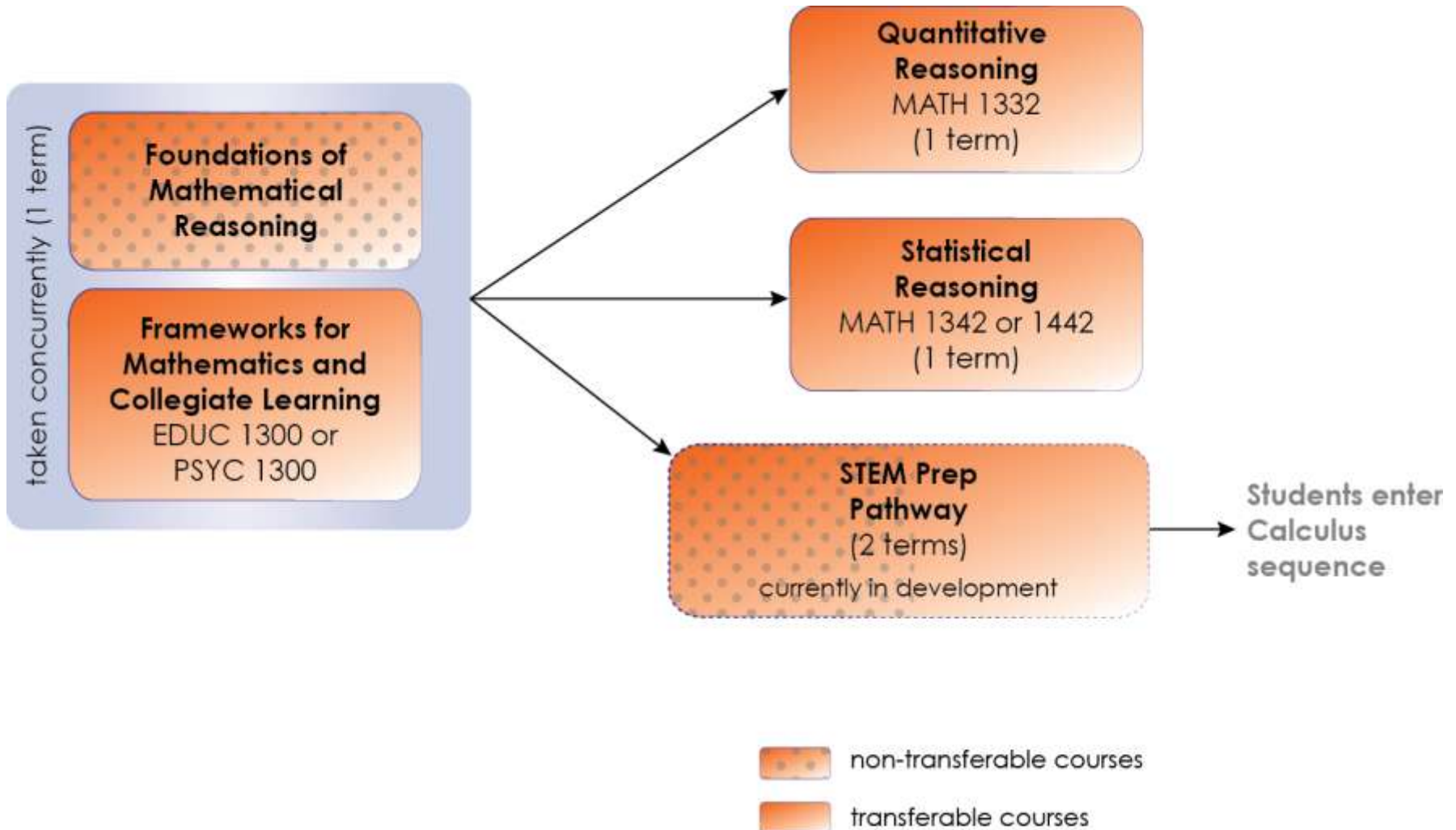
Outline

- Introduction
 - MDRC and the Charles A. Dana Center
 - The New Mathways Project (NMP)
- A primer on randomized controlled trials
- RCT implementation and the role of IR

Who We Are



The New Mathways Project



NMP Project Timeline

- Developing courses with feedback from faculty
- Started implementation this year with nine co-development colleges
- Nine colleges are currently participating in the mentorship program as mentees, with the goal of implementing in 2014 or 2015
- Co-development colleges and the Dana Center are working on issues of transfer with 4-year colleges
- Ultimate goal of implementing at all 50 Texas community colleges
- Program will scale nationally as well as within Texas

Evaluation Partnership with MDRC

- Working together for the last two years
- Worked with us to create tools to share with colleges
- Site visits to describe the implementation
- Statistical analysis of student data
- MDRC is preparing a pilot RCT in Fall 2014

RANDOMIZED CONTROLLED TRIALS: A PRIMER

Three Types of Program Evaluation

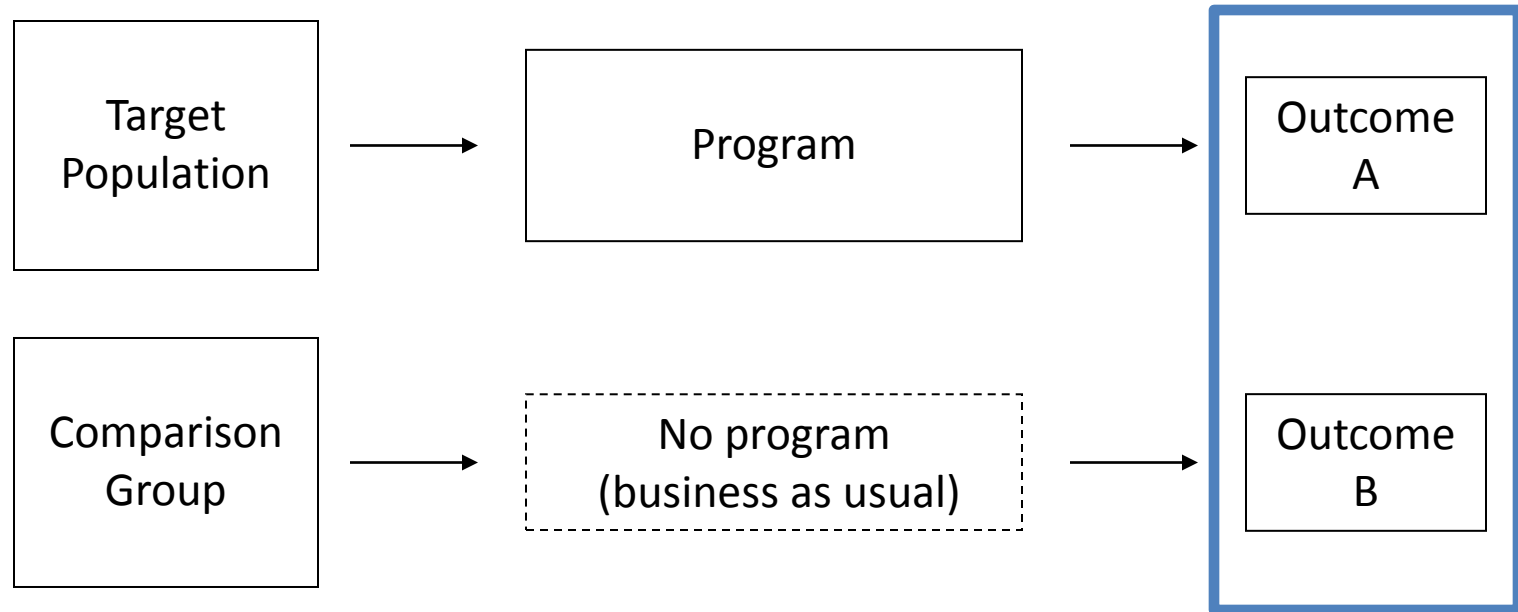
- Pre-Post Designs (non-experimental)
- Comparison groups (quasi-experimental)
- Randomized controlled trials (experimental)

Pre-Post Design

Group	GPA at Time 1	GPA at Time 2	Change
Participants	2.0	3.3	1.3

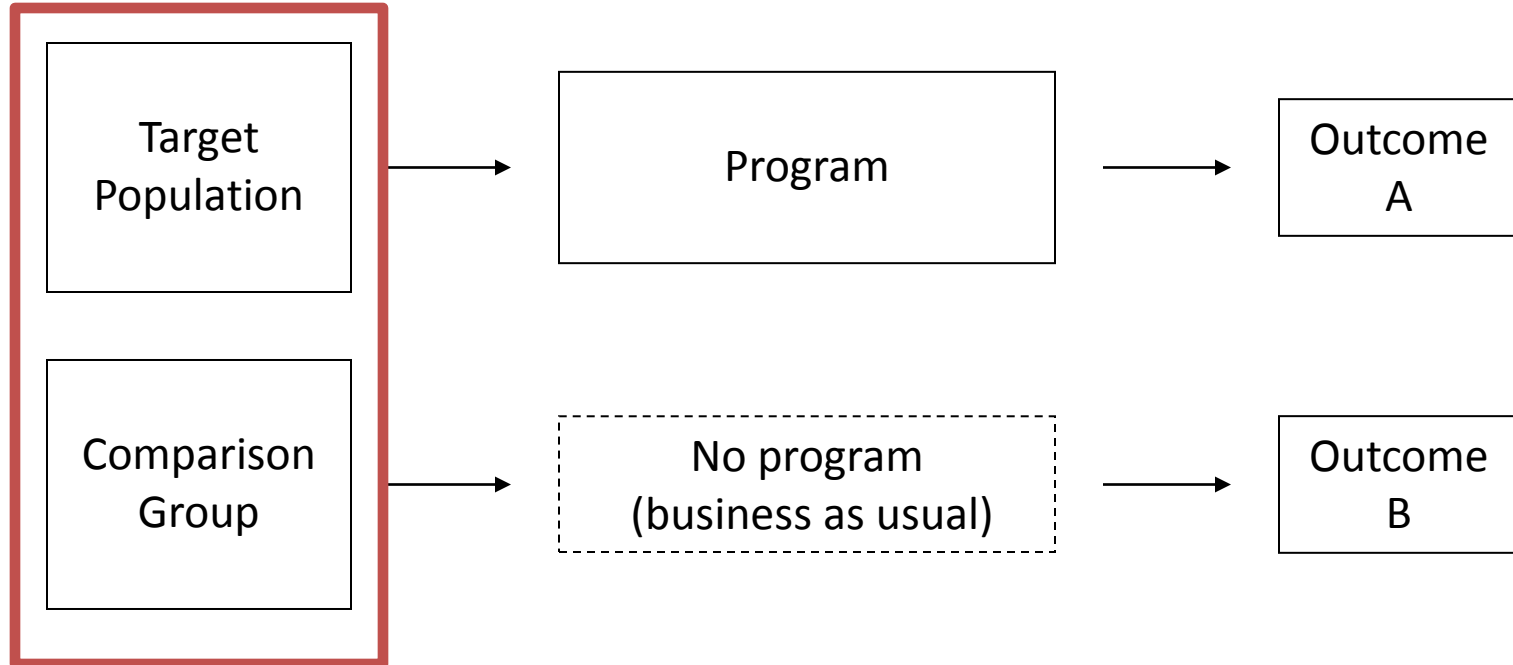
WOW!

Quasi-Experimental Design

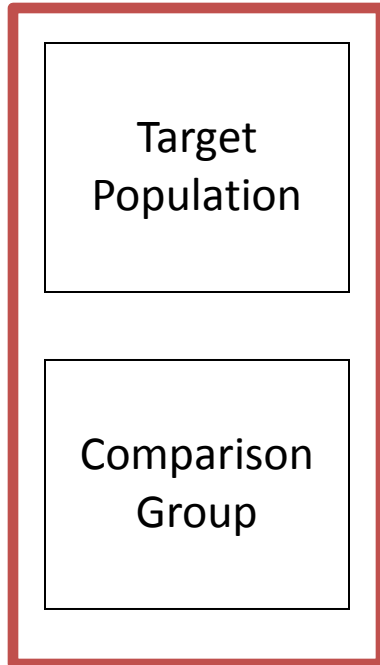


$$\text{Potential Impact} = \begin{array}{|c|} \hline \text{Outcome} \\ \hline \text{A} \\ \hline \end{array} - \begin{array}{|c|} \hline \text{Outcome} \\ \hline \text{B} \\ \hline \end{array}$$

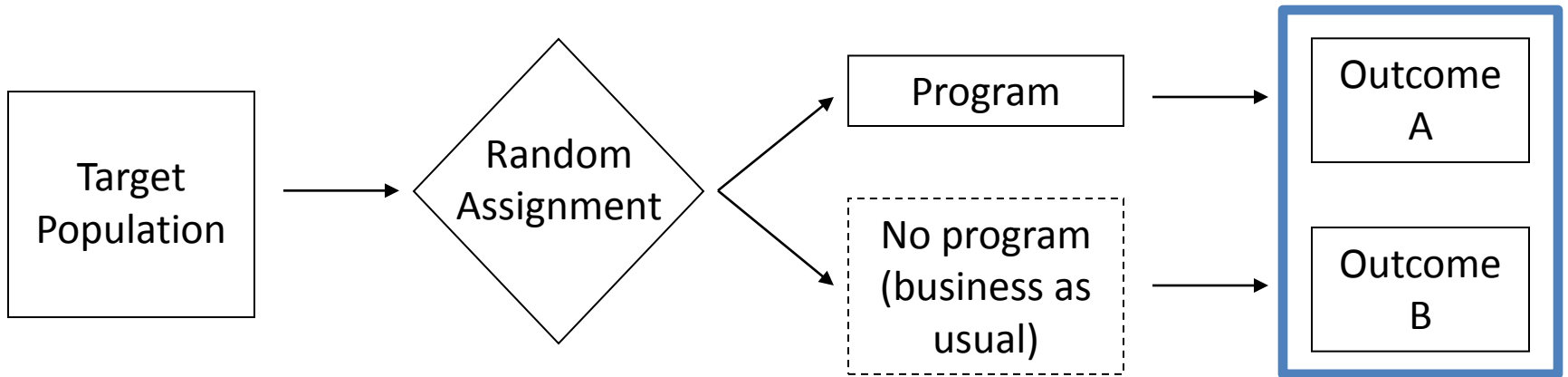
Quasi-Experimental Design



Quasi-Experimental Design



Random Assignment Design



$$\text{True Impact} = \text{Outcome A} - \text{Outcome B}$$

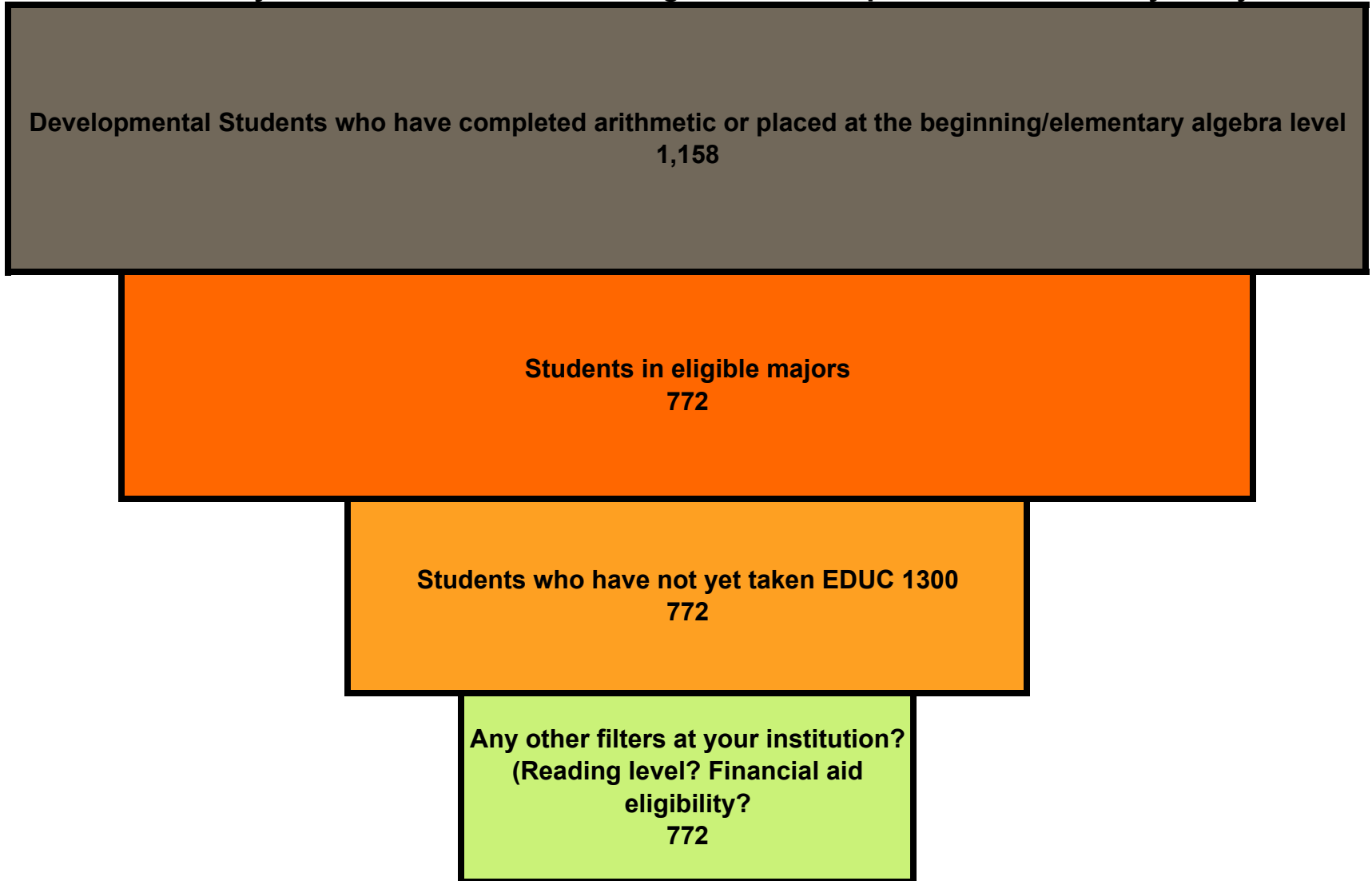
RCT IMPLEMENTATION AND THE ROLE OF IR

Identifying the Target Population

- A successful RCT depends on:
 - Which students are recruited
 - How many students are recruited
- A “funnel analysis” is often helpful.

NMP: An Example Funnel Analysis

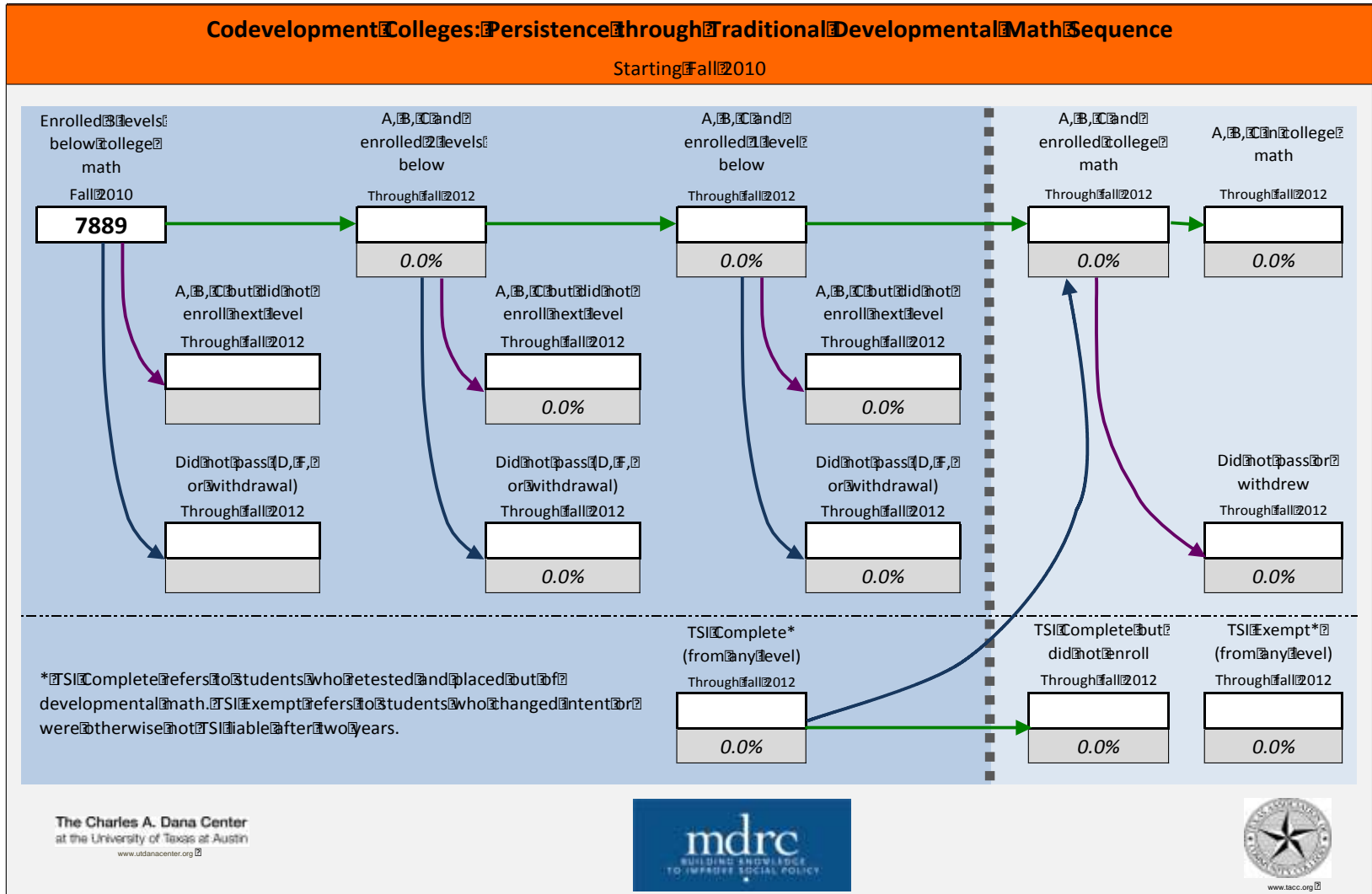
Funnel Analysis of Potential Students Eligible to Participate in New Mathways Project



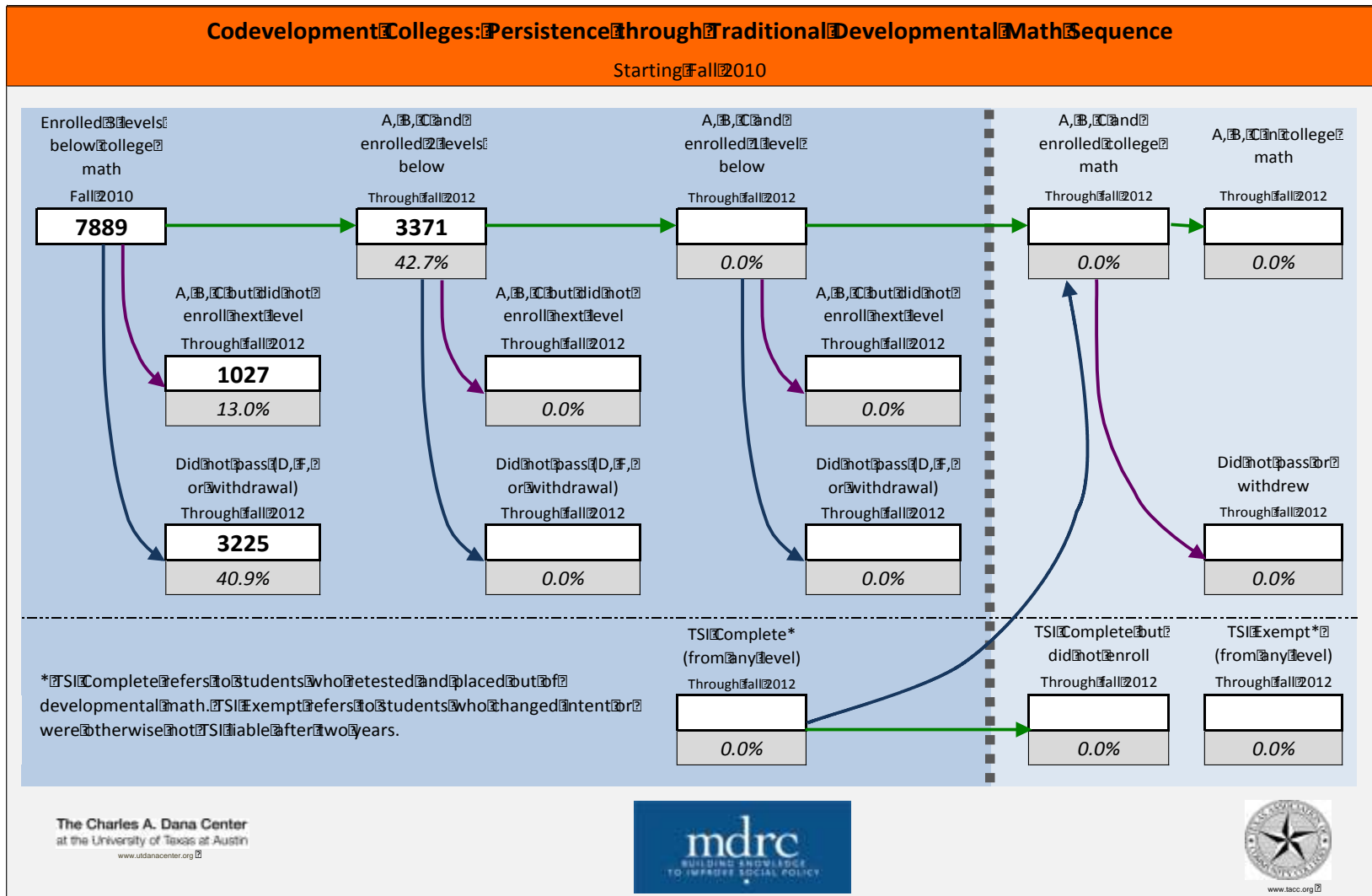
Recruiting Students for the Study

- Once the target population is defined
- NMP recruitment strategies have included:
 - Speaking to students in classes
 - Using social media and the internet
 - Hanging fliers in counseling and advising offices
 - Creating student testimonials
 - Including information in new student orientation

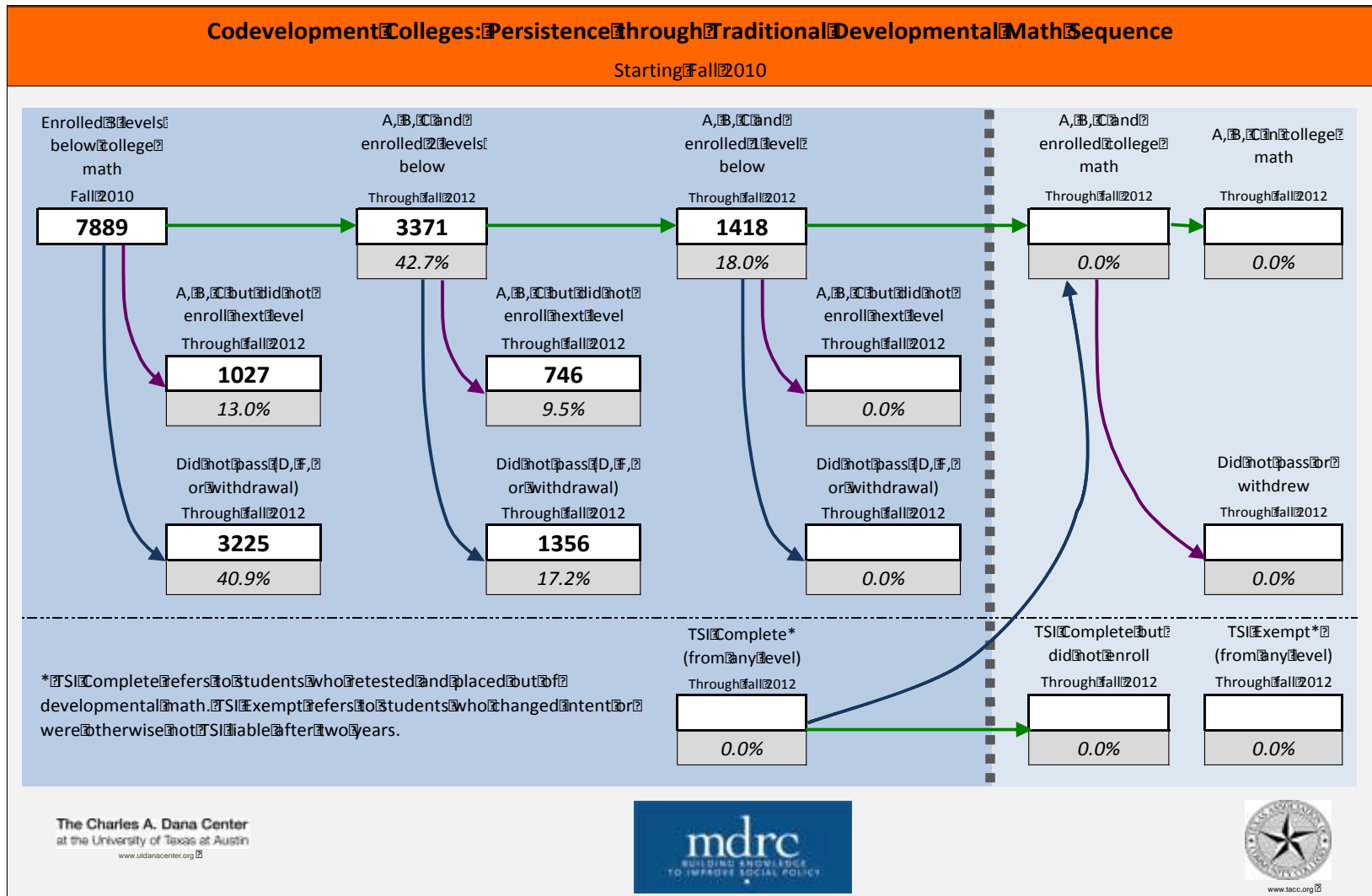
Persistence Tool: Students who Enrolled 3 Levels Down



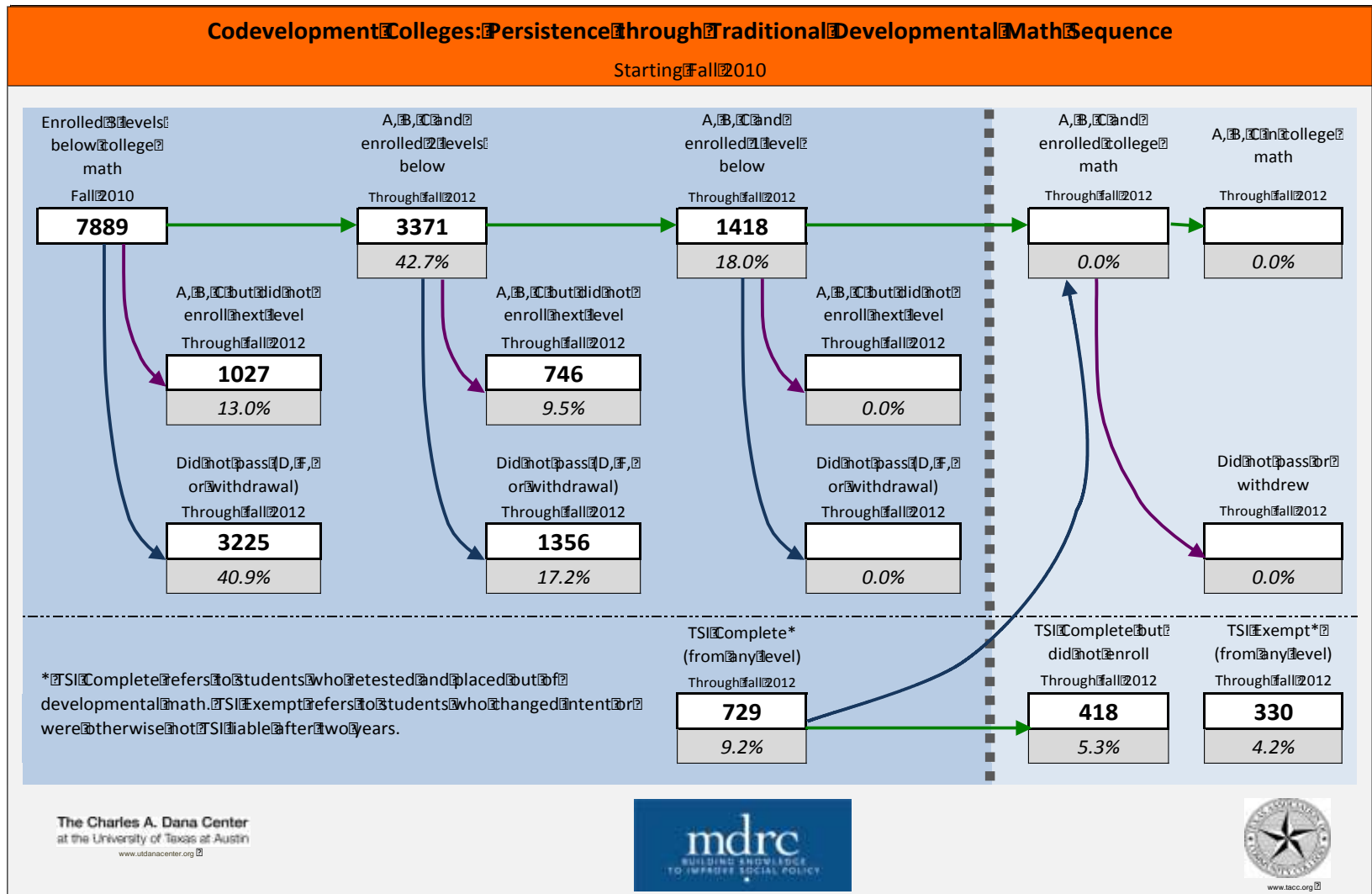
Persistence Tool: Students who Enrolled 3 Levels Down



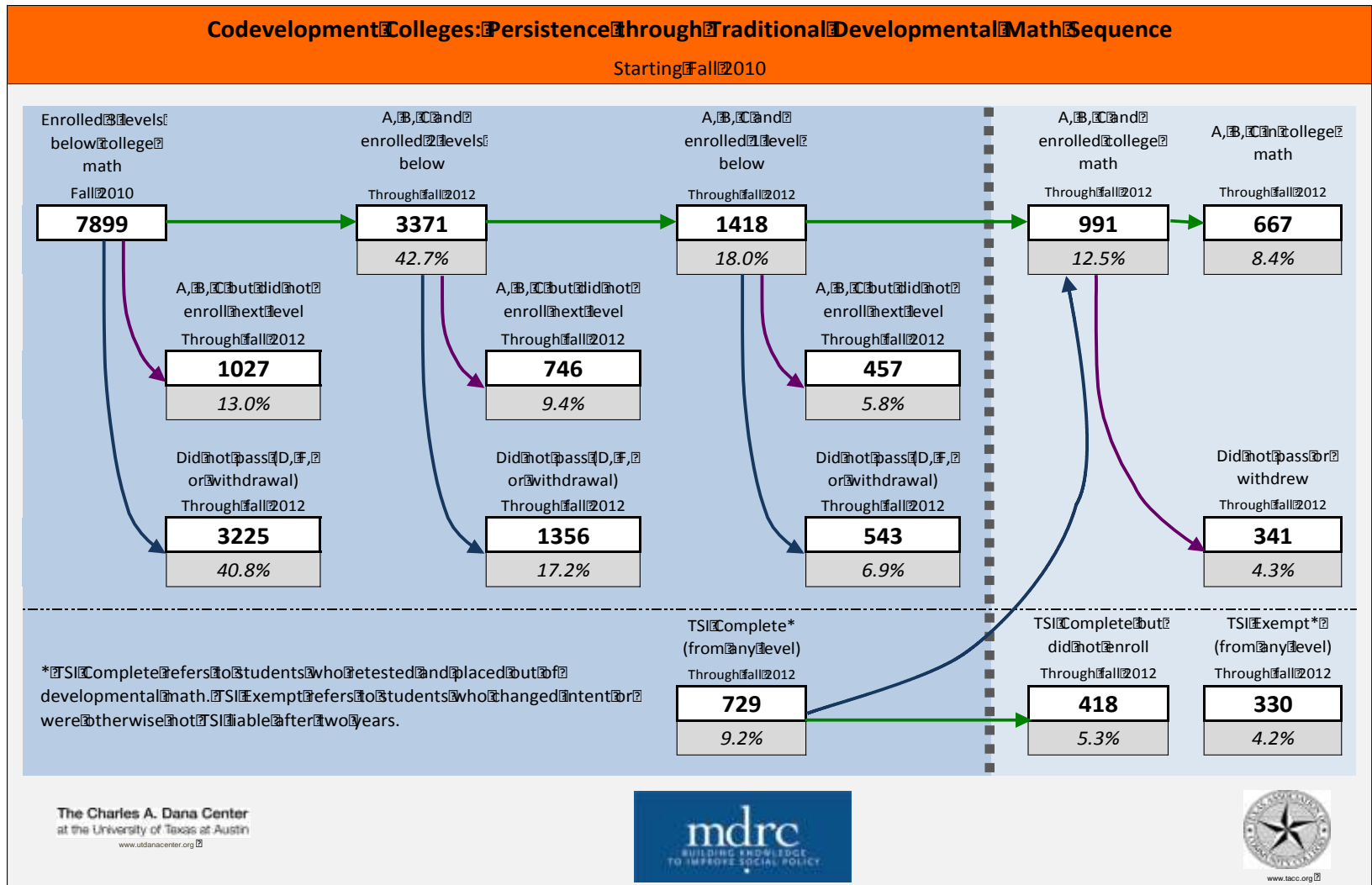
Persistence Tool: Students who Enrolled 3 Levels Down



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Persistence Tool: Students who Enrolled 3 Levels Down



Conclusion

- Thanks for listening!
- We hope this presentation has been helpful.
- Any questions?

Contact Info

John Diamond, Research Analyst

John.Diamond@mdrc.org

212-340-8620

www.mdrc.org

Jennifer Dorsey, Research Scientist Associate

DorseyJen@austin.utexas.edu

512-232-4728

www.utdanacenter.org