Lending Voice and Bridging Gaps: Understanding STEM CCR Students Perspectives

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Illinois Community College Board

Agenda

Birdseye View: College and Career Readiness in Illinois

By the Numbers: STEM CCR Student Demographics

In their own words: Student experiences in STEM CCR programs

College readiness defined

"...the level of preparation a student needs in order to enroll and succeed – without remediation – in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate program." (Conley, 2007, P.5)

Conley College Readiness Model

Conley, 2010 p. 32

College and Career Readiness in Illinois

Illinois CCR Enabling Legislation (2007)

"The General Assembly finds that ... <u>Many</u> students enter college <u>unprepared</u> for the academic rigors of college and <u>require noncredit remedial courses</u> to attain skills and knowledge needed for regular, credit course work" (emphasis added).

Complete College America (2009)

- Illinois Pledge: 60% by 2025
- +600,000 graduates

Race to the Top Illinois Grant (2011)

- Accelerate key education reforms
- Close persistent achievement gaps
- Increasing student achievement

Illinois CCR Pilot Program (2008–2012)
Illinois State Funds (Math & Reading)

Illinois STEM CCR (2013–2015)
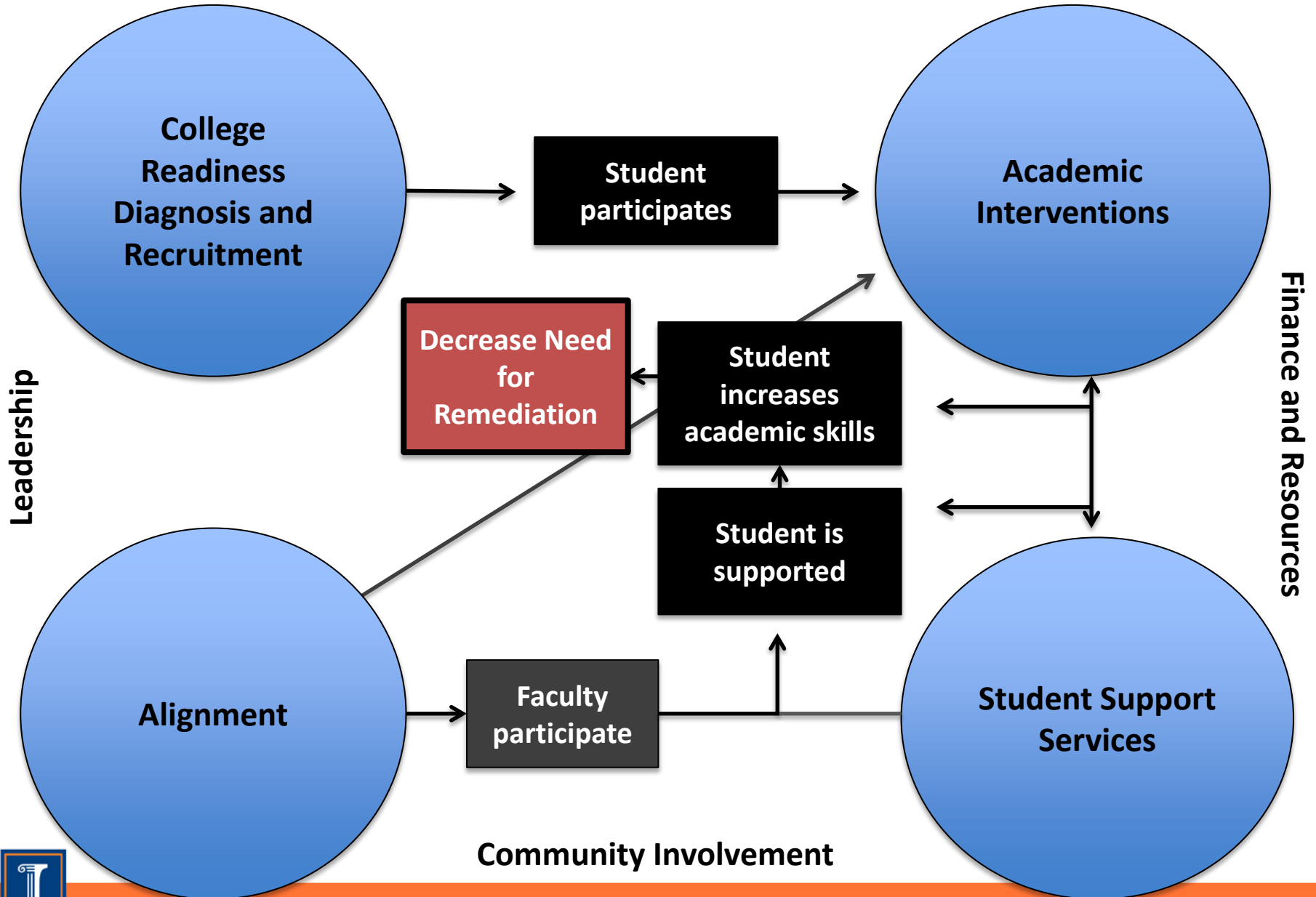Illinois RttT Grant (Math)

High School – Community College Partnerships

College Readiness Diagnosis and Recruitment

Student participates

Academic Interventions

Decrease Need for Remediation

Student increases academic skills

Student is supported

Alignment

Faculty participate

Student Support Services

Leadership

Finance and Resources

Community Involvement

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Illinois College and Career Pilot Act of 2007

"The General Assembly finds that … Many students enter college unprepared for the academic rigors of college and require noncredit remedial courses to attain skills and knowledge needed for regular, credit course work" (emphasis added).

The "Many" in Illinois: 93,000

Race/Ethnicity	Mathematics
All Students	20.7
Black/African American	17.2
American Indian/Alaska Native	17.8
White	22.3
Hispanic/Latino	18.8
Asian	25.2
Native Hawaiian/Other Pac. Isl.	21.0
Two or more races	21.1
Prefer not/No Response	19.7

Mathematics

African American	14
American Indian	19
Asian	71
Hispanic	26
Pacific Islander	46
White	53
All Students	41
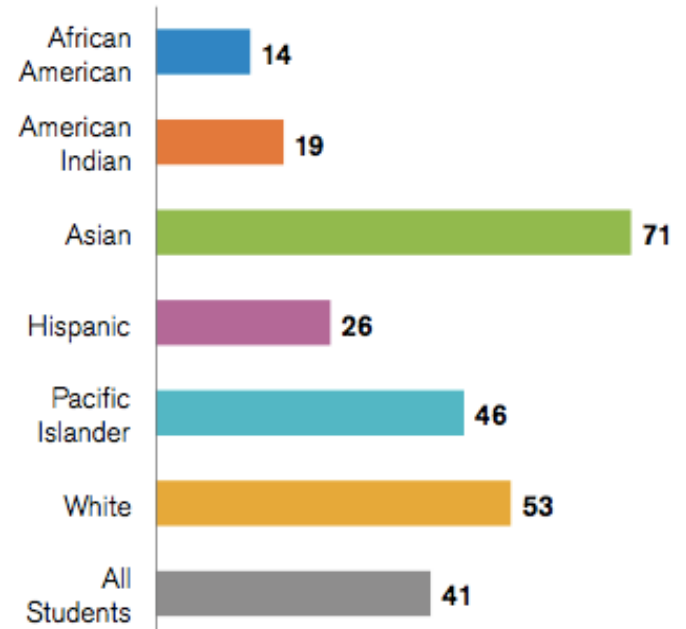
Problem: Includes every unready student
(low, medium, and high need), everywhere statewide…

How We Understand "Many"

Benchmark	2014		2013		2012		2011	
22+ (Ready)	41%	64,780.00	41%	65,600.00	44%	64,680.00	42%	60,690.00
20-21	8%	12,640.00	9%	14,400.00	9%	13,230.00	8%	11,560.00
19 below	51%	80,580.00	50%	80,000.00	47%	69,090.00	50%	72,250.00
Total	100%	158,000.00	100%	160,000.00	100%	147,000.00	100%	144,500.00

Average
12,957.50
(8.5%)

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The "many" in STEM CCR

500+ students.

Nearly 60% students of color

15% ESL

Nearly 60% female.

Current Grade Level	#	%
Junior (fall or spr.)	59	17
Junior (rising)	32	9
Senior (fall or spr.)	133	39
Senior (rising)	21	6
High School Graduate (summer after senior year)	96	28

Household Income

Income Range	Percent
> 10,000	13.6
10 -14,999	10.3
15 -19,999	5.9
20 -24,999	11.4
25 - 34,999	13.2
35 - 49,999	12.9
50 - 74,999	11.4
75 - 99,000	8.8
100 - 199,000	5.1
200 <	3.3

Estimated H.S. GPA

Category	Value
A/A+	12.9
A-	13.6
B+	17.3
B	19.5
B-	15.1
C+	13.6
C	5.1
C-	2.2
D OR LOWER	
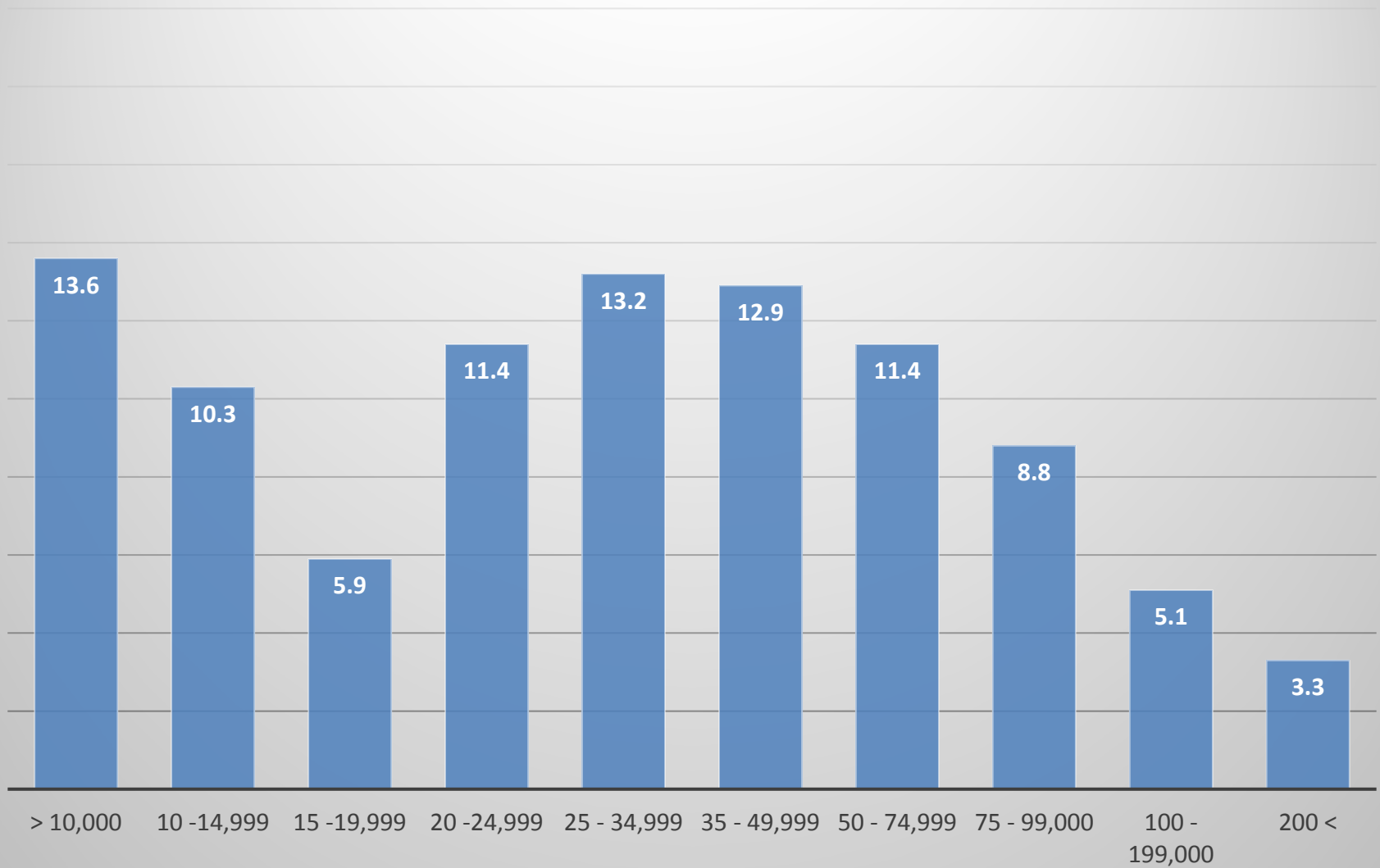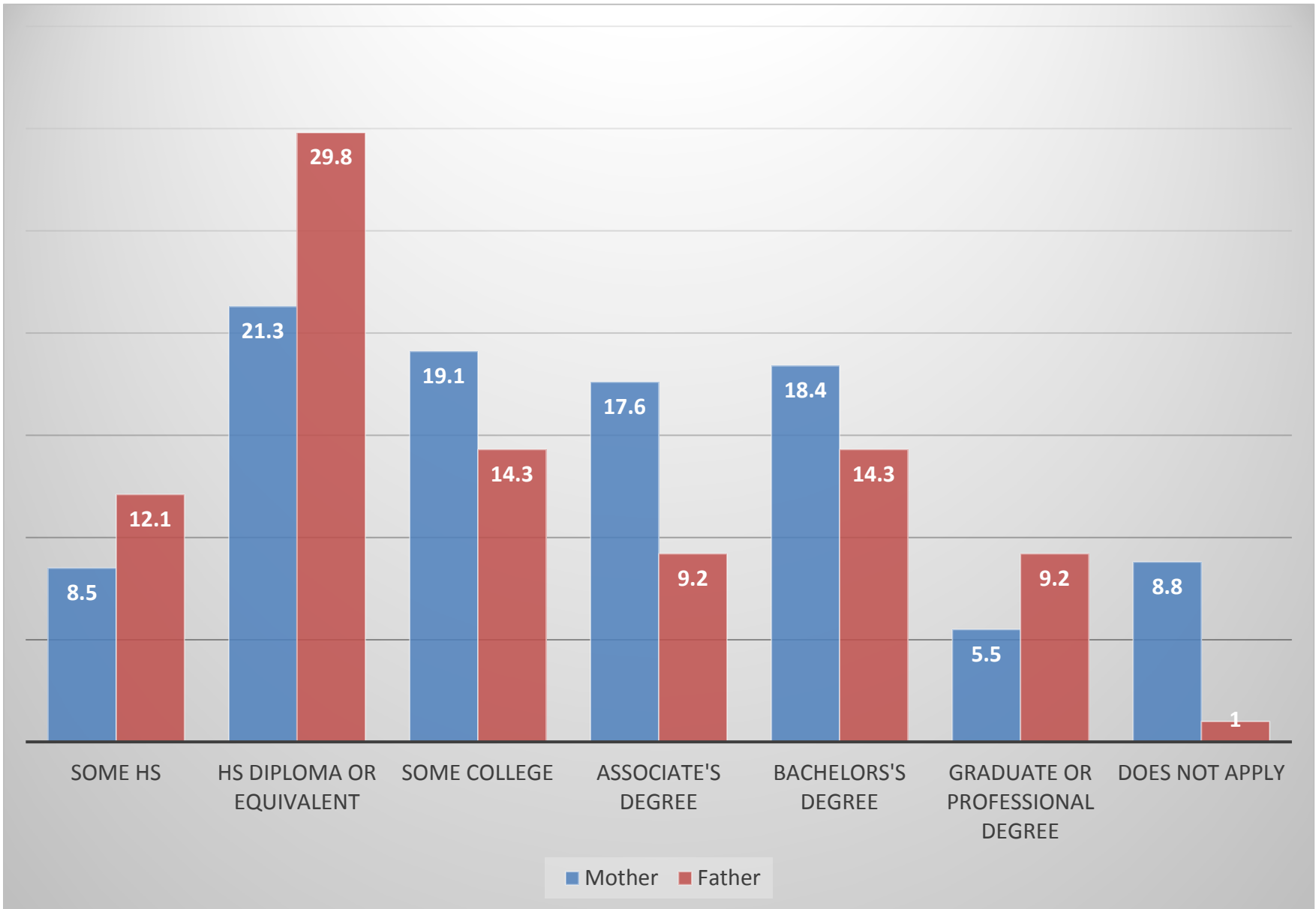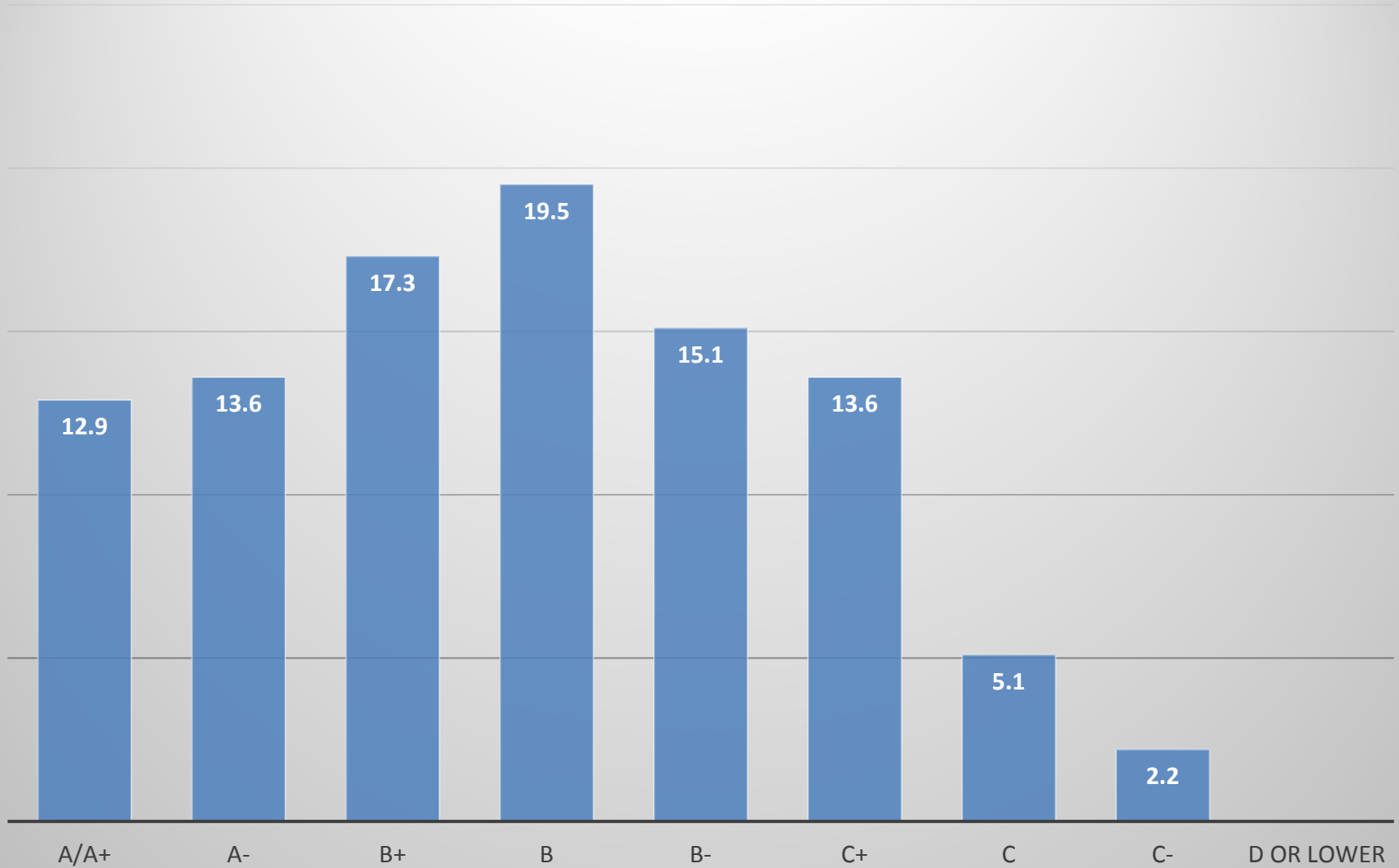
Evaluation Question:

How do students characterize their experiences participating in STEM CCR programs?

Why include student voice?

"Allowing the students to have a voice, even at the most basic level, results in the development of civic habits essential to democracy." (Mansfiel, Welton & Halx, 2012, p.25).

Learning Experiences

I feel accepted as a capable student by my instructors.

feel accepted as a person by my instructors.

My instructors understand that students come from different backgrounds.

My instructors show that they believe in my ability to do the class work.

My instructors are willing to give me individual help when needed.

Learning Outcomes

I have improved my math skills.

I have improved my ability to solve problems.

College Experiences

I understand my academic strengths and what I still need to improve.

I know the importance of not giving up and sticking through difficult…

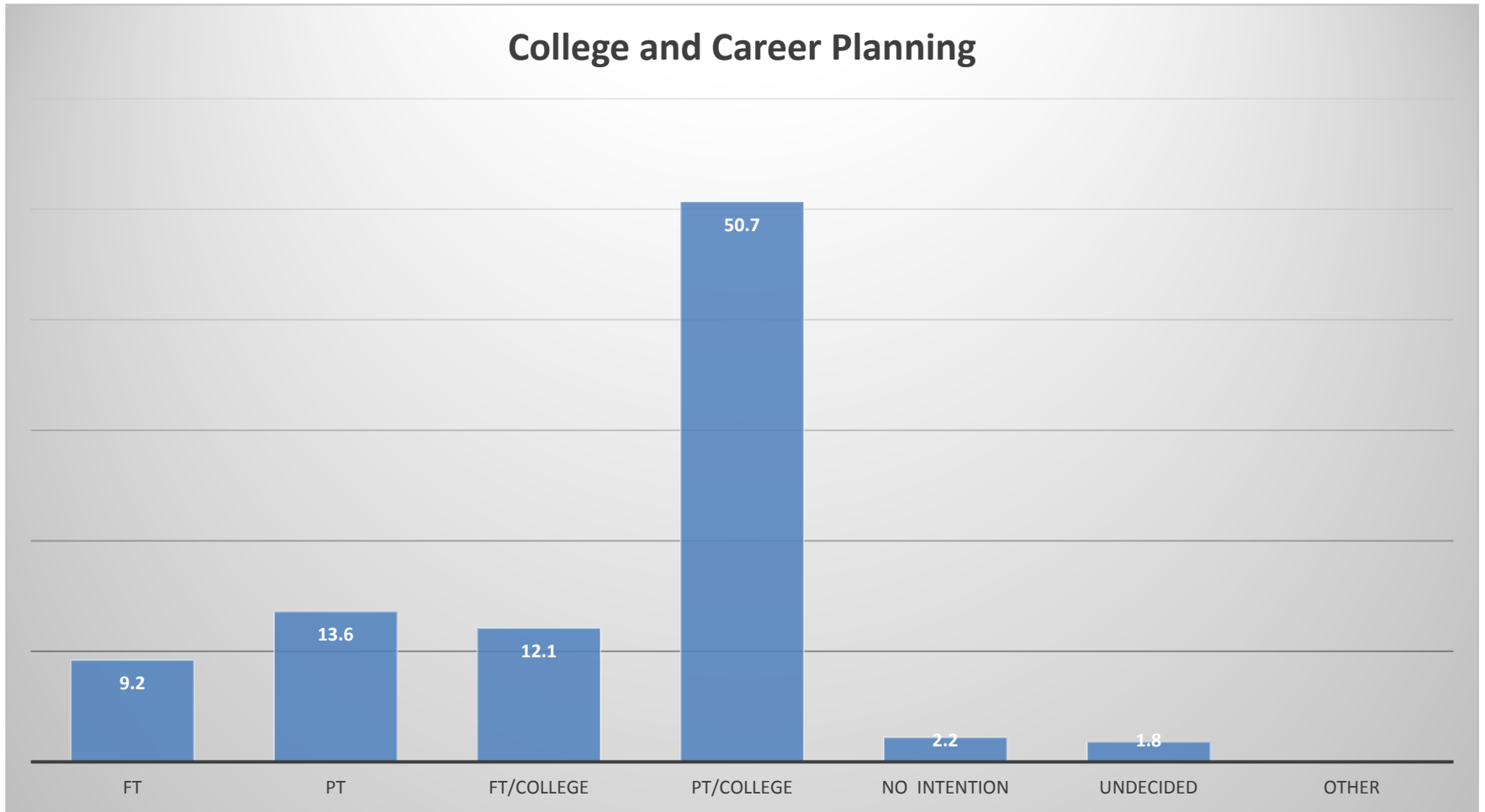I have gained the skills to succeed in college-level courses.

I understand college requirements.

I understand the costs of college.

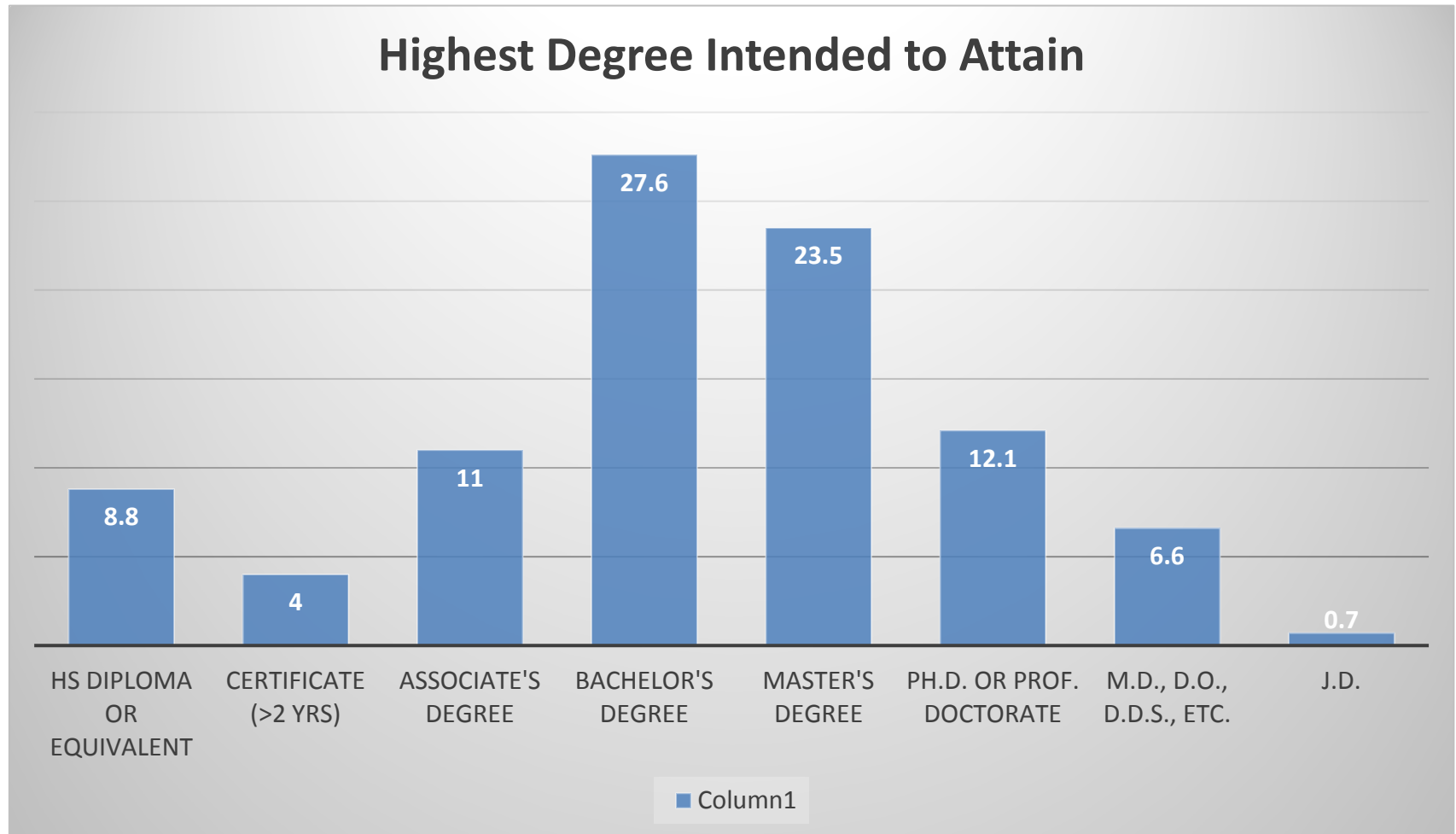I have an idea of what I want to do with my career.

Experiences in STEM CCR Programs

- STEM CCR Program helpful
  - Improving academic skills
  - Setting Expectations for College
  - Thinking about majors/careers

At first, I thought it was really easy, and that it was going to be dull. I was wrong. After about the third day the subjects got more intense, and the workshops we did after class were always fun, and taught me something new each time.

Some of the things that I've learned about the program really helped me gain experience with what I wanted to do with my career. I've also learned about other careers that could require some of the skills that I learned in the STEM program.

I had great experiences that will help me prepare for college such as meeting professors with great projects for us at the book club. Meeting the professors helped me understand what a professor expects from a student and I was able to learn different skills to prepare for class and assignments that can be given in the future.

The class was helpful yet the compass test does nothing for me, my score was lowered, I understand the material but when I comes to this stupid online test the questions are scrambled and its hard to follow/understand.

Challenges within STEM CCR

- Structural barriers
- Intrapersonal challenges
  - Academic skillsets
  - Motivation/Focus
- Pace of course
- New (advanced) math content

My biggest challenge is the language. English is not my first language therefore it has been hard for me to communicate with people and do some assignments.

I have faced a challenge that makes it difficult for me to stay on track with the program. The reason why is that on Mondays, Wednesdays and Thursdays I have softball conditioning and on Tuesdays and Thursdays I go to Wright college for my class.

I did face some challenges throughout the program. One of the problems I had is that the pace of the class. They sort of treat us like college kids but at the same time they treat us like we are going to college. It was a difficult time sort of adjusting to the class because i was never thinking that the class would be like this. Although the class isn`t that hard it does require many things within.

College Ready or Not?

- Information
  - Majors
  - Career pathways
  - College going process

I do feel ready for college. At first I didn't think I would even make it through my first year of high school but with some experience now, I can now see that things aren't that tough if you actually want to do it. I know that college is way much more different than here in high school but it takes a lot of practice and experience before even entering college. I feel like I will do fine in college as long as I know what I am doing and I keep striving for success.

Not really. I feel like I'm not even set for college. I definitely think this class will help me for college and the future. I just wish there was more we could do now to help with college costs and getting ready for it.

I feel ready for college. The STEM CCR summer bridge has helped me realize what the college life was like. I had an idea but I wasn't really sure on what it was really like. I feel more than ready because now I know what to look forward too when I graduate from High School.

I don't feel ready for college at all. I think that I still need a lot of help with my college options.

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