DATA TELLS A STORY

IMPROVING OUR ACADEMIC PLANS FOR SUCCESSFUL COLLEGE COURSE-TAKING IN HIGH SCHOOL

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Teachers College, Columbia University

March 2014 MEMCA Winter Conference Meeting

NCREST

- National Center for Restructuring Education, Schools and Teaching
- Focused on school change, mainly in high schools
- Our team – college/high school partnership programs, especially Early Colleges

Related projects:

- MCNC – Middle College National Consortium schools
- **MEMCA – Michigan Early Middle College Association schools**
- MEMPHIS – District Early College initiative
- NEW YORK – Smart Scholars initiative
- BARD – High School Early College model
- SECEP – STEM Early College Expansion Project (I3 Grant: Michigan, Connecticut)

Session Overview

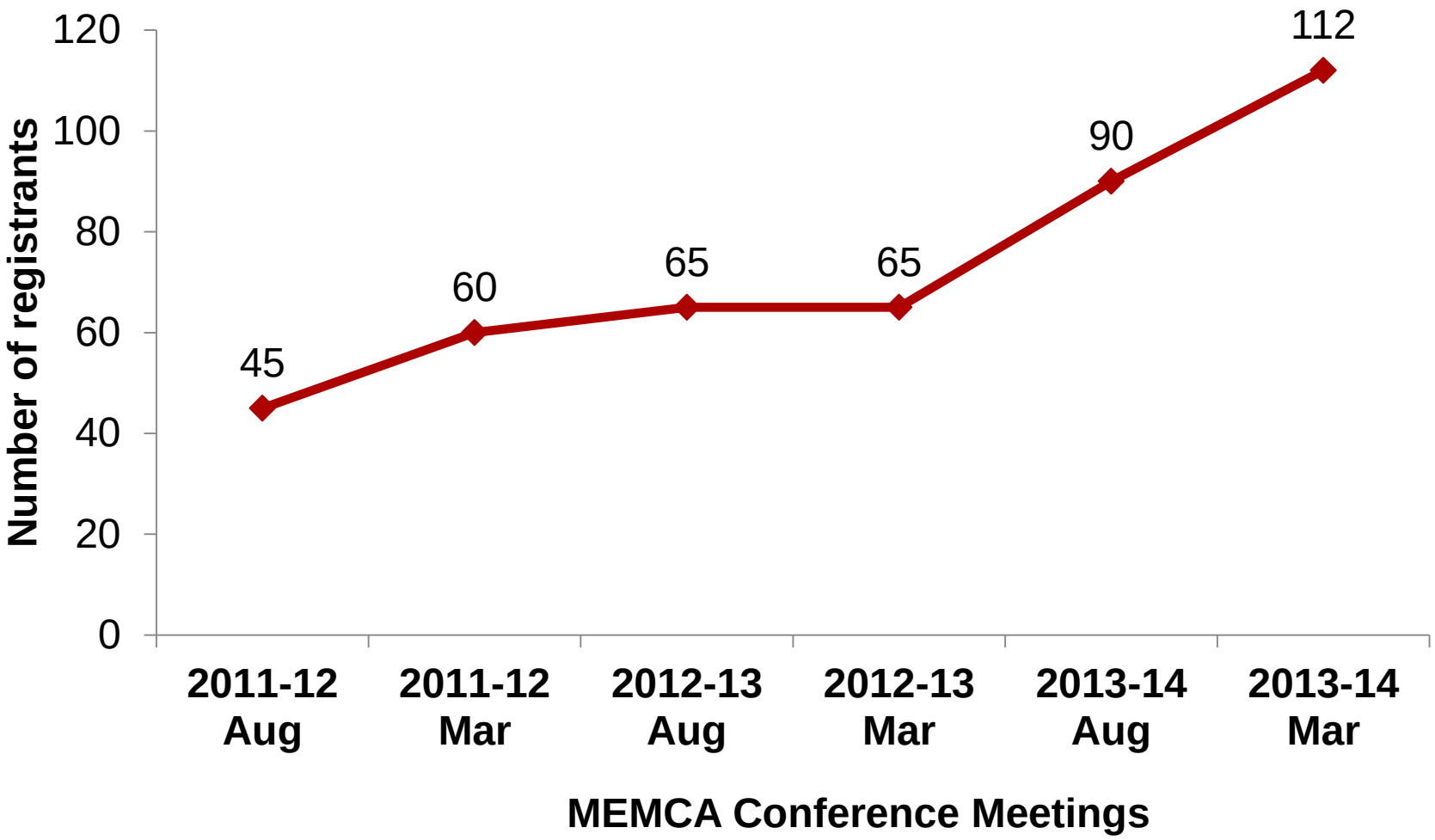
Your dual role:

- Continuous LEARNERS: Reflect on improving your own programs
- Practitioner EXPERTS: Apply your school-based knowledge to recommend best practices and strategies

Agenda

- Data tells a story
- Improving our academic plans
- Breakout groups
- Come back together (Wrap-up)

MEMCA Conference Interest



NCREST Data Workshops

Aug 2013 Data reports workshop	• Using data reports for school improvement and communication • Break out groups
Mar 2013 Early intervention system	• Academic preparedness • College knowledge • Academic tenacity
Aug 2012 College going culture and career readiness	• Full set of 3 core data reports • School Fact Sheets
Mar 2012 Using data to tell our program story	• Data audiences (classroom, school, external) • Selecting relevant data points • Pecha Kucha presentations
Aug 2011 What our data say about college readiness	• College readiness - David Conley framework • Contextual skills/awareness, Academic behaviors, Key content, Cognitive strategies

The Early College Data Project

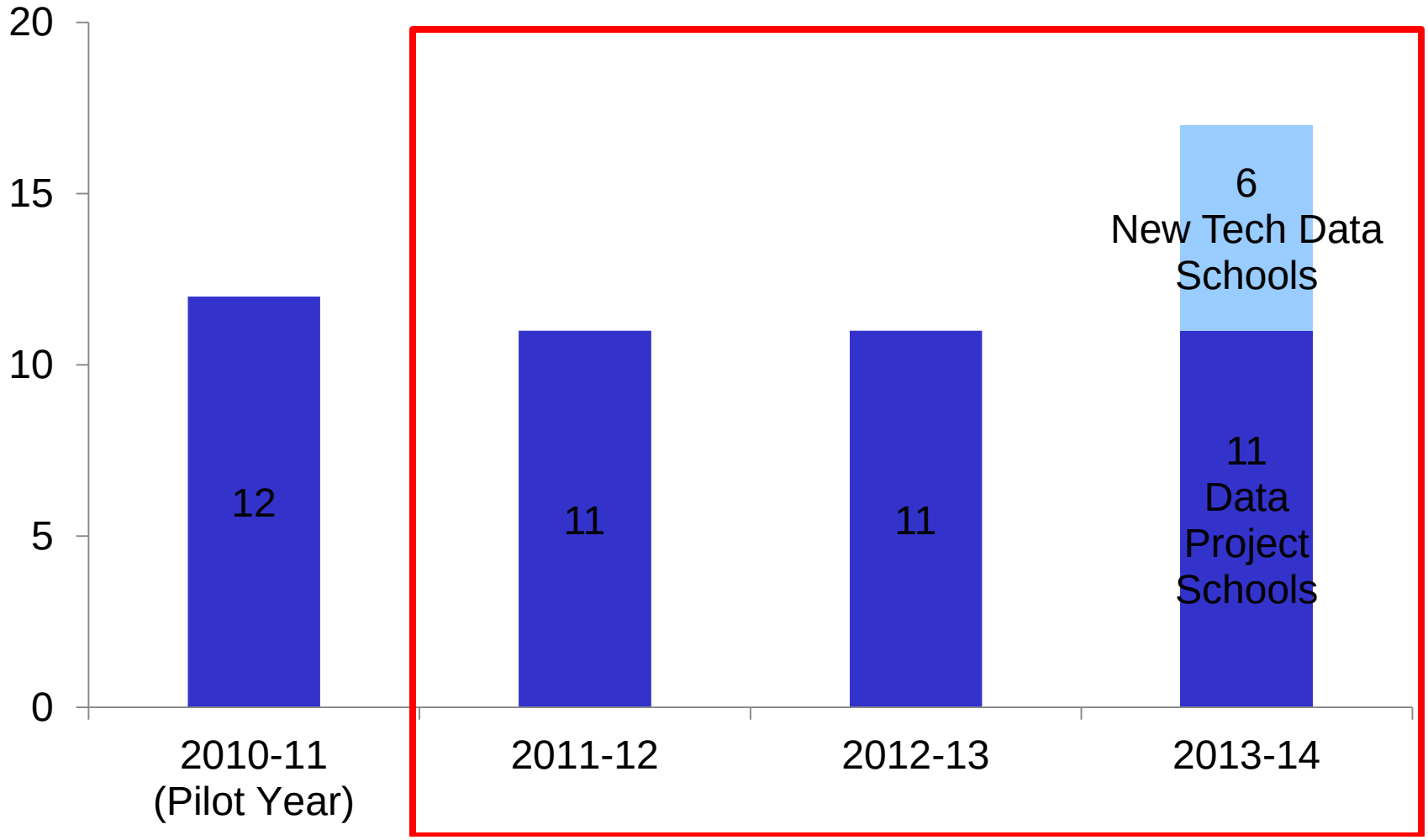
Who is participating (2013-14)?

- MCNC (23 schools)
- MEMCA (Michigan)
  - 11 Original Data Project Schools
  - 6-9 New Tech Schools

Core data activities:

- Data collection
  - School profile
  - College data
  - Student voices
- Data-informed decision making
  - Internal and external audiences
  - Regular data conversations
  - Building capacity

MEMCA Data Schools



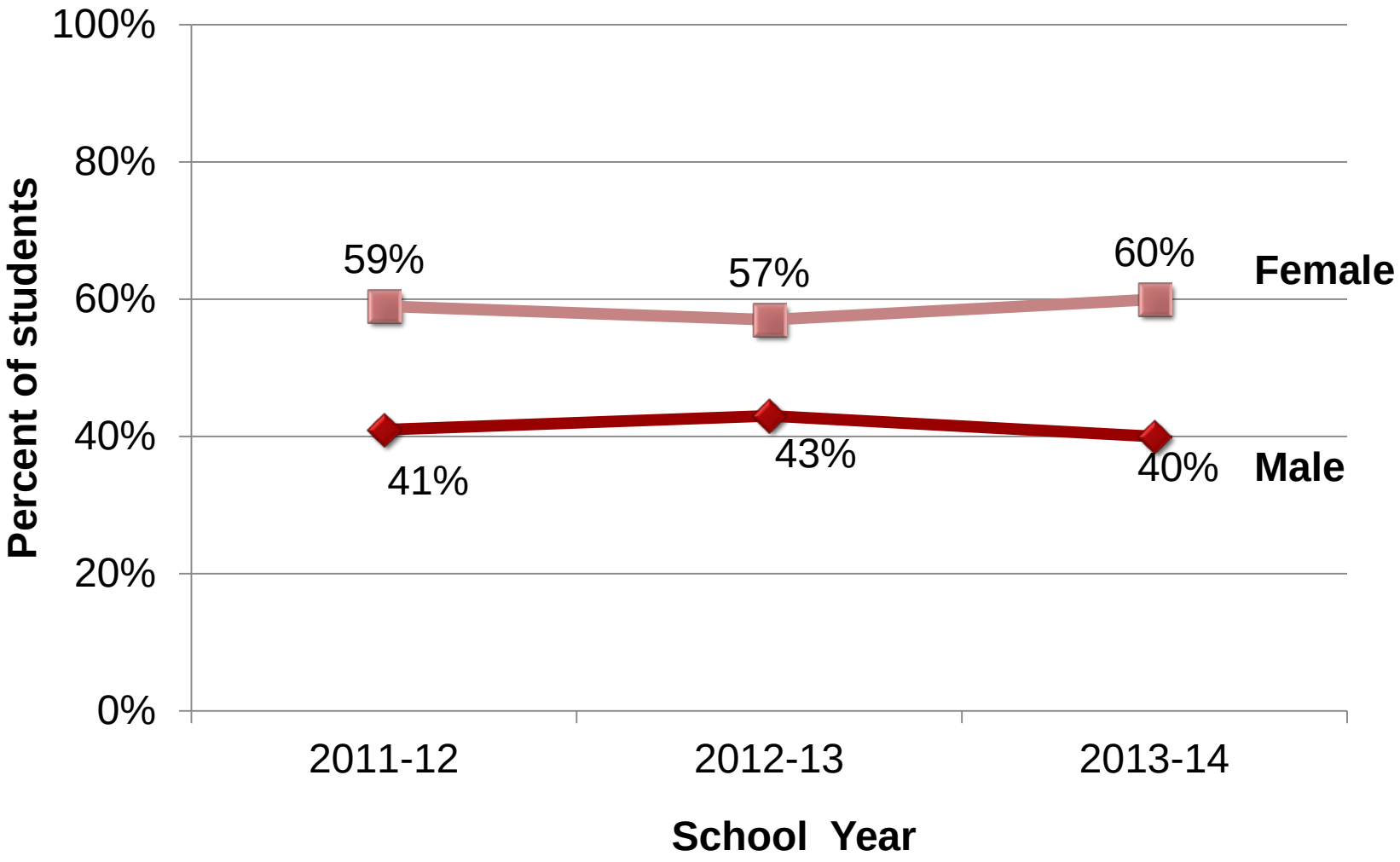
MEMCA Data Schools

Program/School	Postsecondary Partner	City
1) Bay Middle College	Bay D'Noc CC	Escanaba
2) Clare-Gladwin MC	Mid-Michigan CC	Clare
3) Early College Alliance	Eastern Michigan U	Ypsilanti
4) Genesee Early College	U of Michigan, Flint	Flint
5) Henry Ford EC	Henry Ford CC	Dearborn Heights
6) JCC-LISD Academy	Jackson CC	Adrian
7) EC of Macomb	Macomb CC	Clinton Township
8) Monroe County MC	Monroe CC	Monroe
9) Mott Middle College	Mott CC	Flint
10) Oakland Early College	Oakland CC	Farmington Hills
11) Washtenaw Tech MC	Washtenaw CC	Ann Arbor

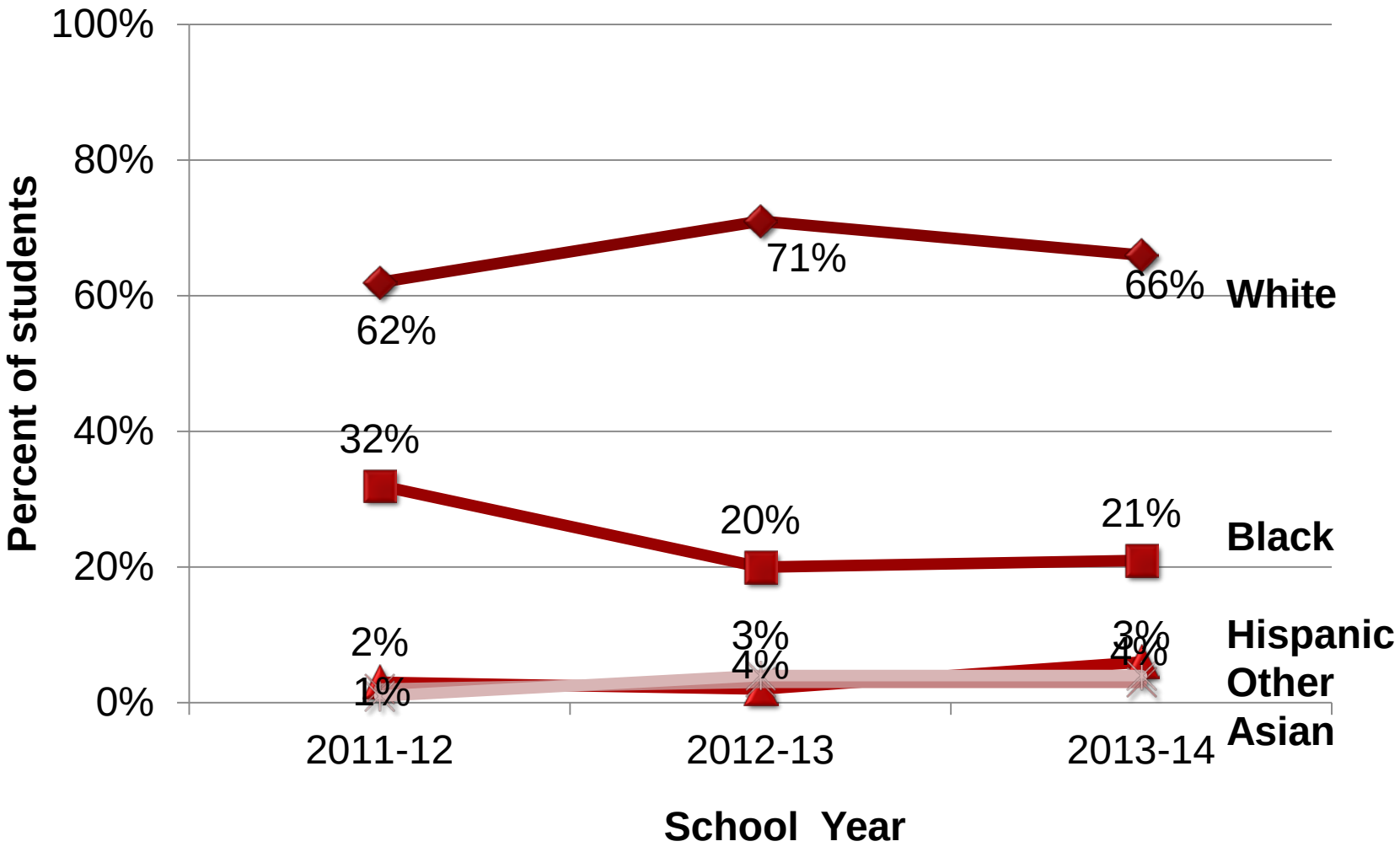
Data Activities Over Time

Data Activities School Year	College transcript data	School profile survey	Graduating student survey
2013-14	2,037 college course-taking students in 2012-13 (12 schools)	11 schools [+6 NT schools]	10-11 schools (Expected)
2012-13	1,739 college course-taking 2011-12 students (10 schools)	11 schools	7 schools 262 students 80% response rate
2011-12	1,526 college course-taking 2010-11 students (11 schools)	12 schools	8 schools 225 students
2010-11 Pilot Year	----	12 schools	5 schools 132 students

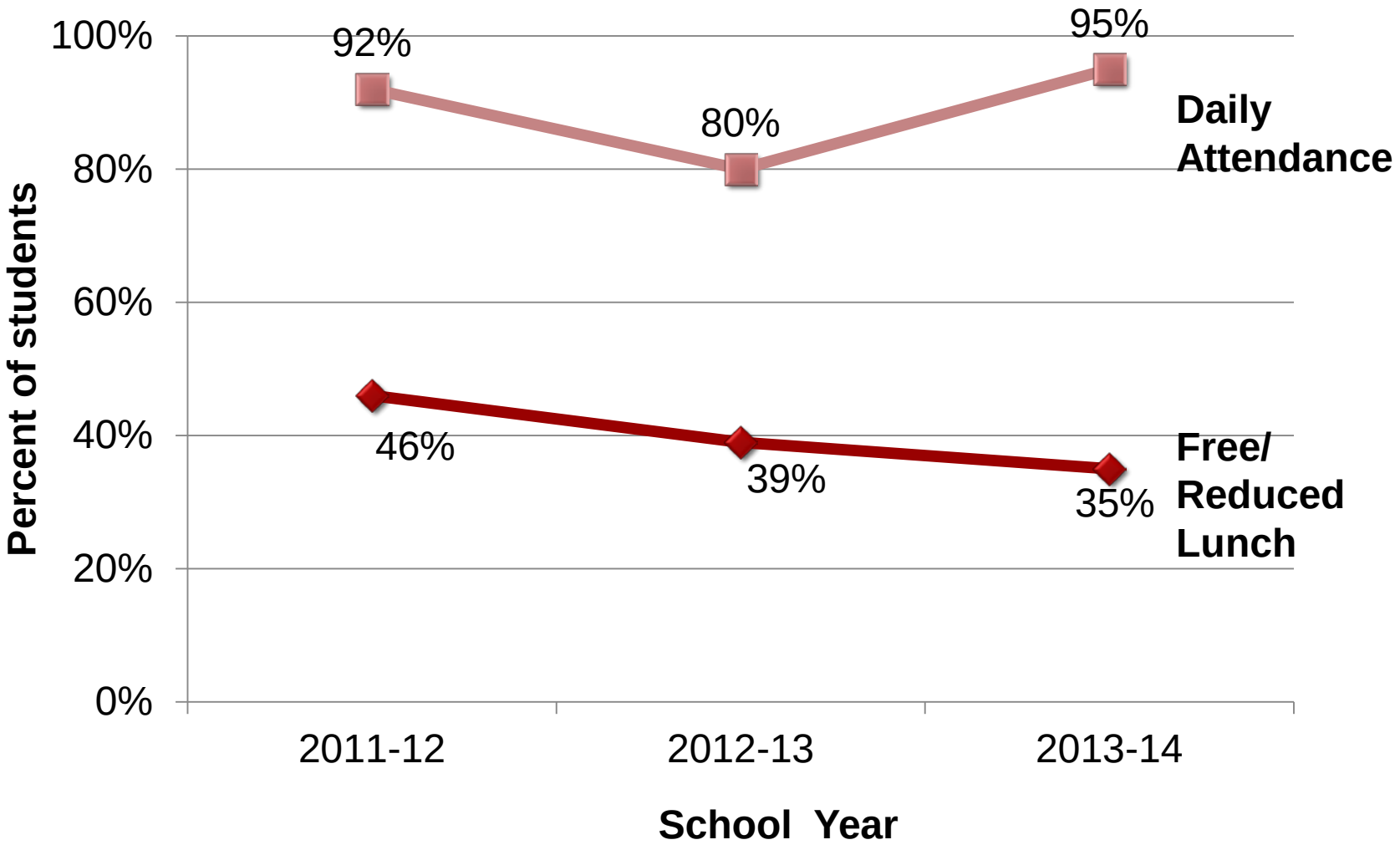
Gender


100%
80%
60%
40%
20%
0%
Percent of students
59%
57%
60%
Female
41%
43%
40%
Male
2011-12
2012-13
2013-14
School Year

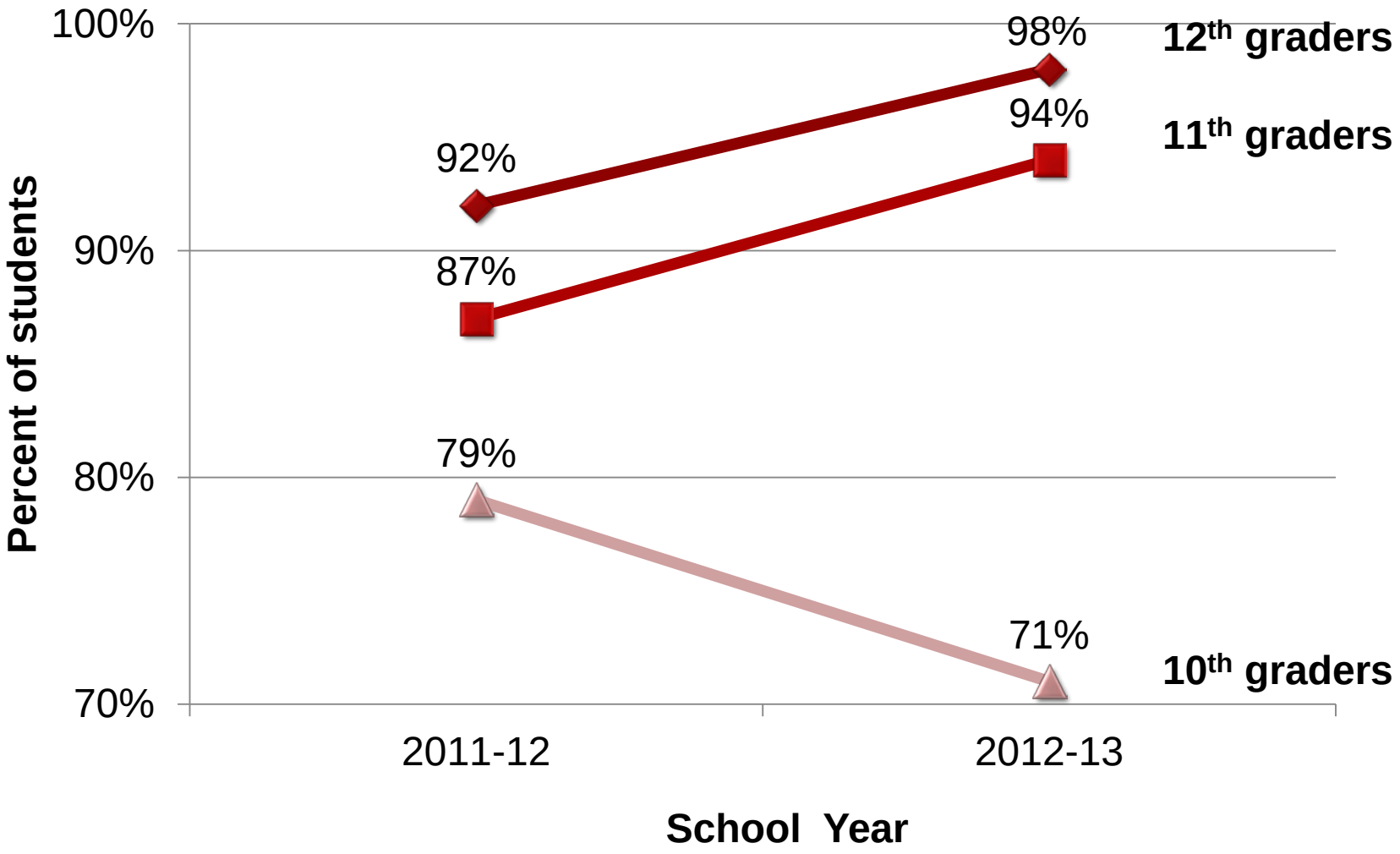
Race/Ethnicity



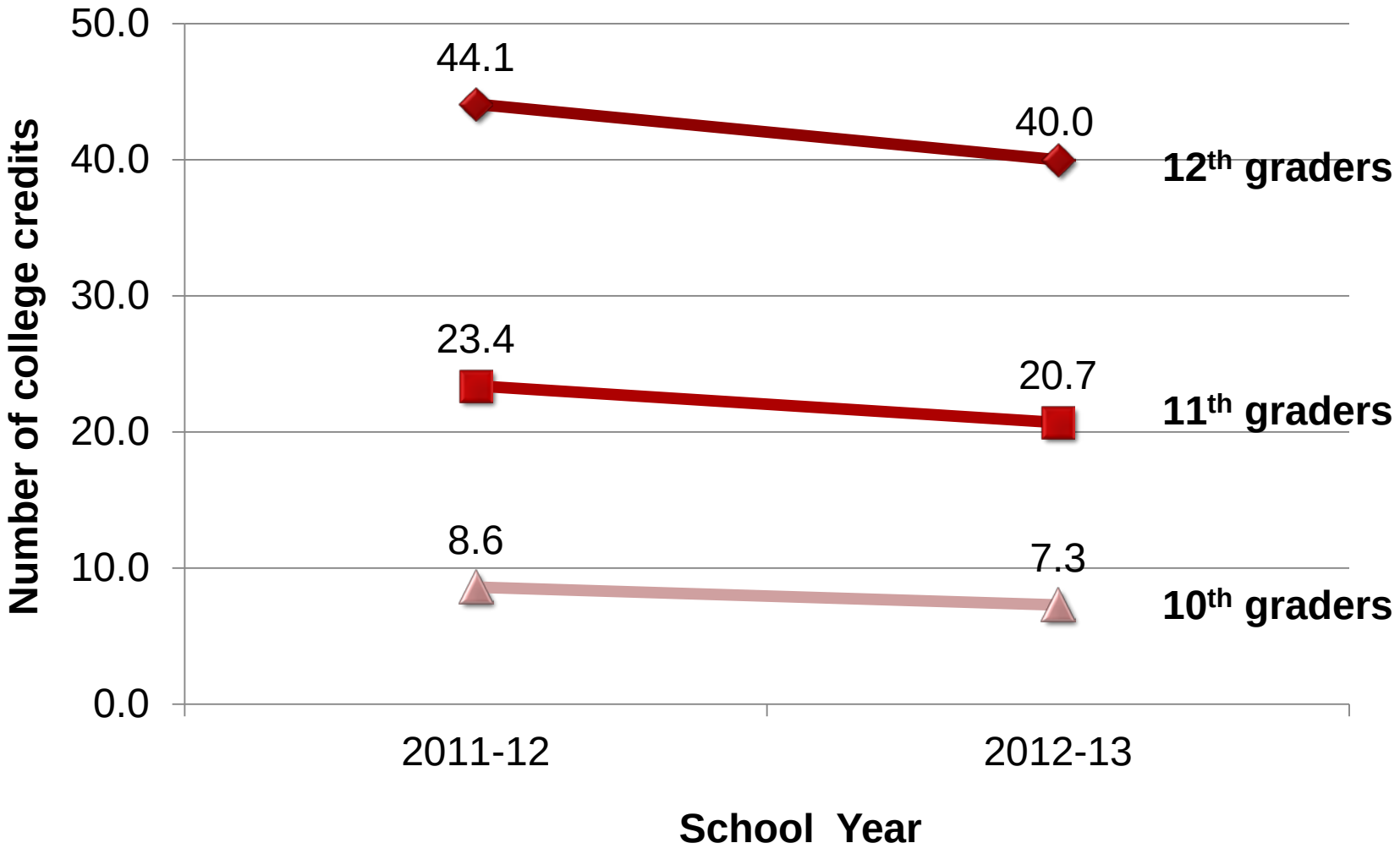
Free/Reduced Lunch vs. Attendance



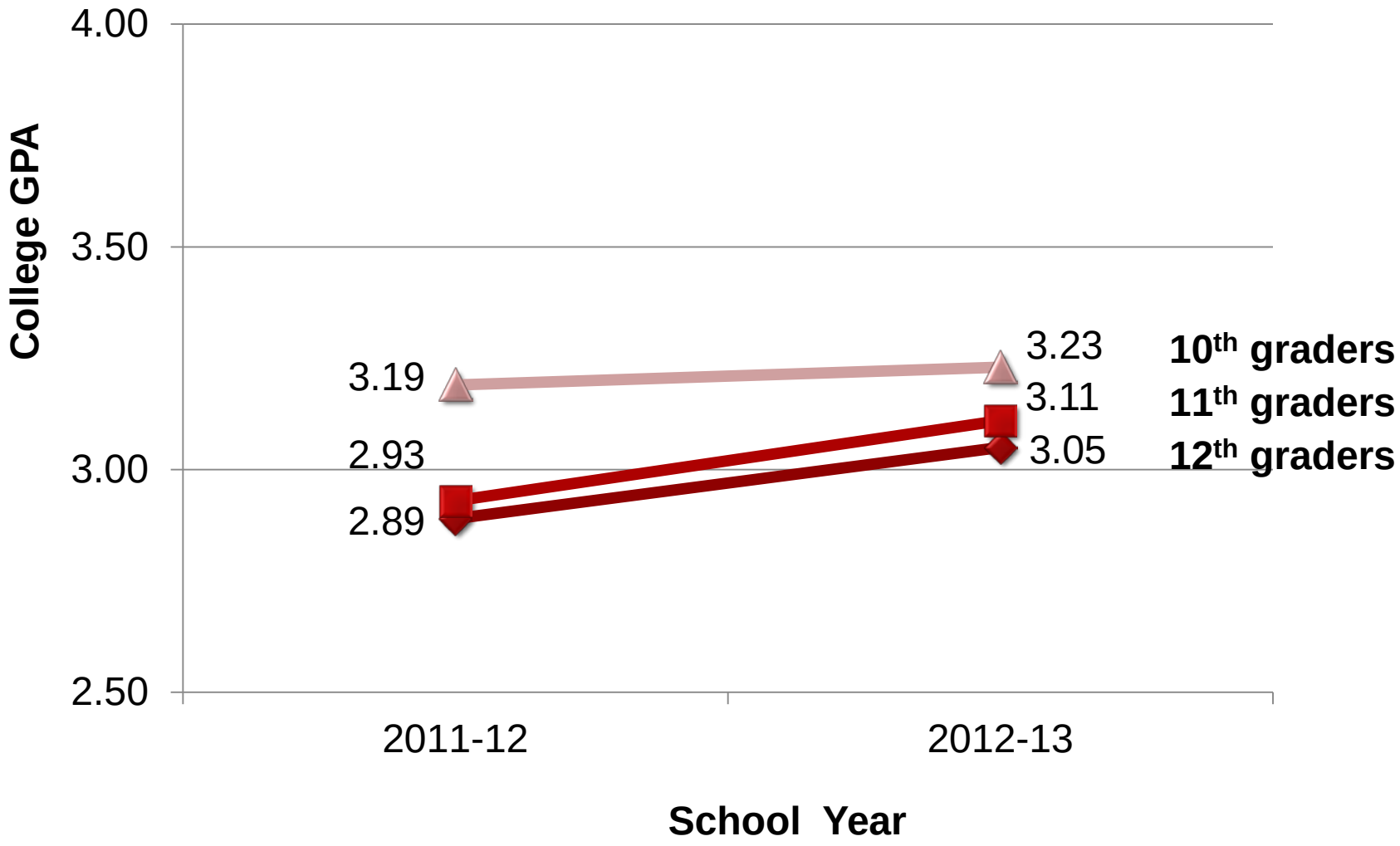
Student Participation in College Courses



Average College Credits Earned



Average College GPA



College Performance Summary: 2012-13 College Course-taking Students

2012-13 Grade	Number of College Course-taking Students	Cumulative College Coursework		
		Average GPA	Average Credits Earned	Percent of Courses Passed (C grade or higher)*
9th graders	39	3.49	1.9	95%
10th graders	486	3.23	7.3	92%
11th graders	761	3.10	20.7	92%
12th graders	512	3.03	40.0	92%
13th graders	239	2.68	46.2	84%
Total	2,037	3.07	25.0	90%

**Percentage of Courses Passed (C grade or higher):* Includes A, B, C, P (Passing), D and F grades in the calculation

What makes for a successful college course-taking program and experience for our high school students?

Write down your important 2-3 aspects.

College Course-taking in High School

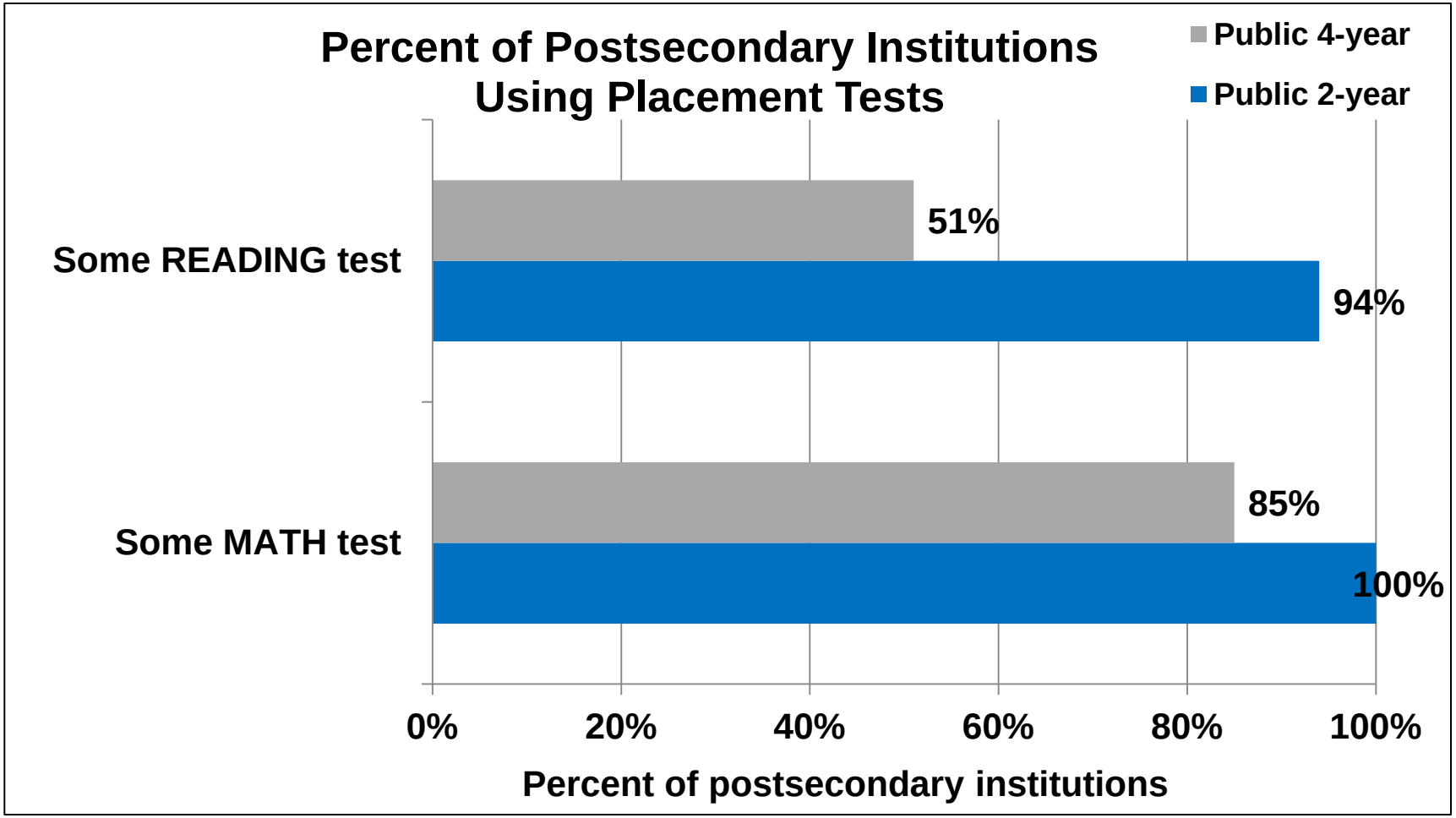
1. Ensuring our students are ready to start college courses in high school.

2. Improving our academic program plans.

Ensuring Our Students are Ready… to start college coursework in high school

- What determines readiness (to start college coursework)?
- Relevant skills

Assessment Use: 2-yr v. 4-yr Institutions



Source: Fields & Parsad. (2014).

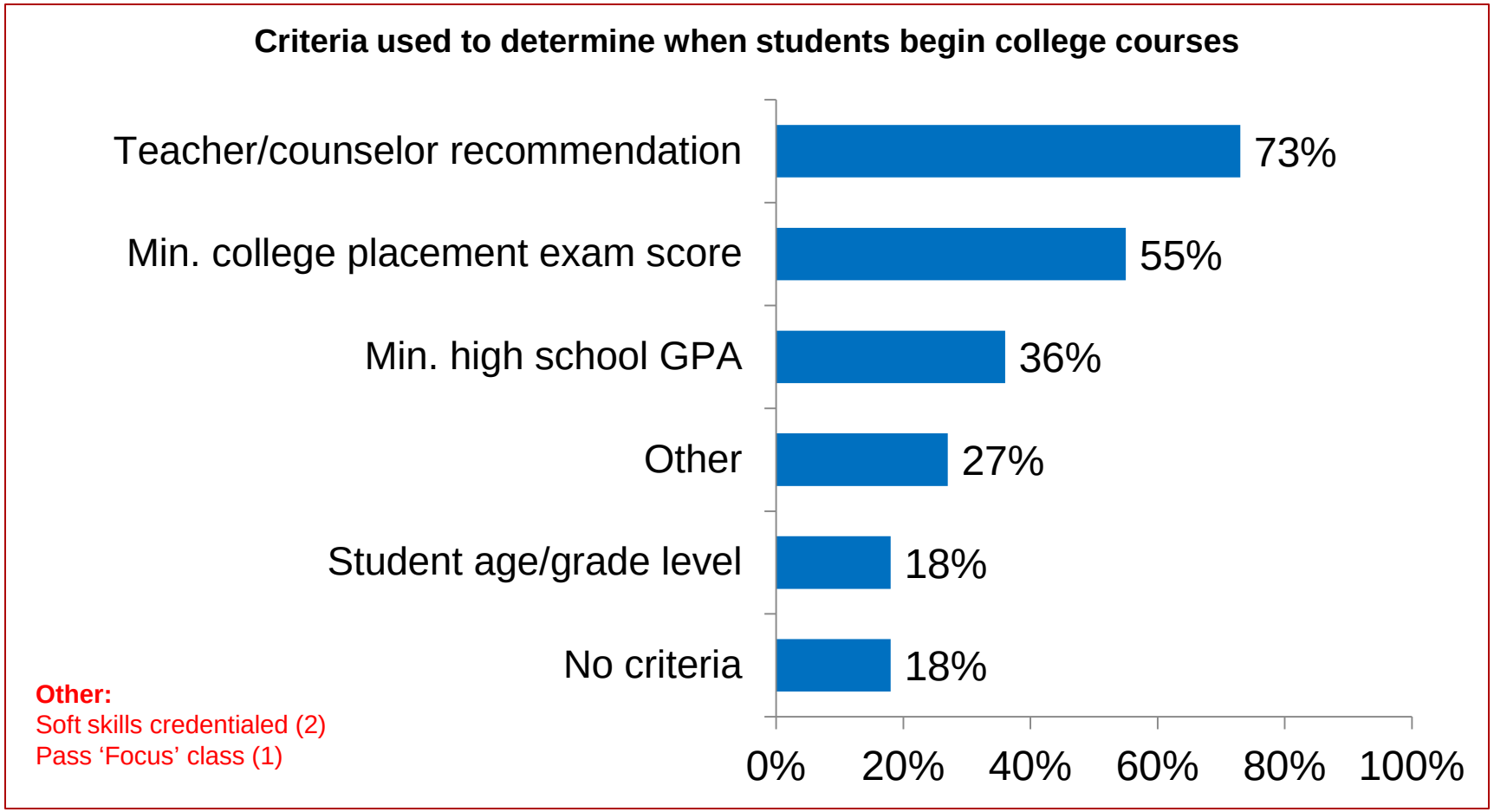
Most Frequently Used Math Tests

Most frequently used national standardized math tests:

- ACT (23%)
- COMPASS Algebra test (20%)
- SAT (17%)
- ACCUPLACER Elementary Algebra test (16%)
- ACCUPLACER (<5%)
- COMPASS math tests (<5%)

Source: Fields & Parsad. (2014).

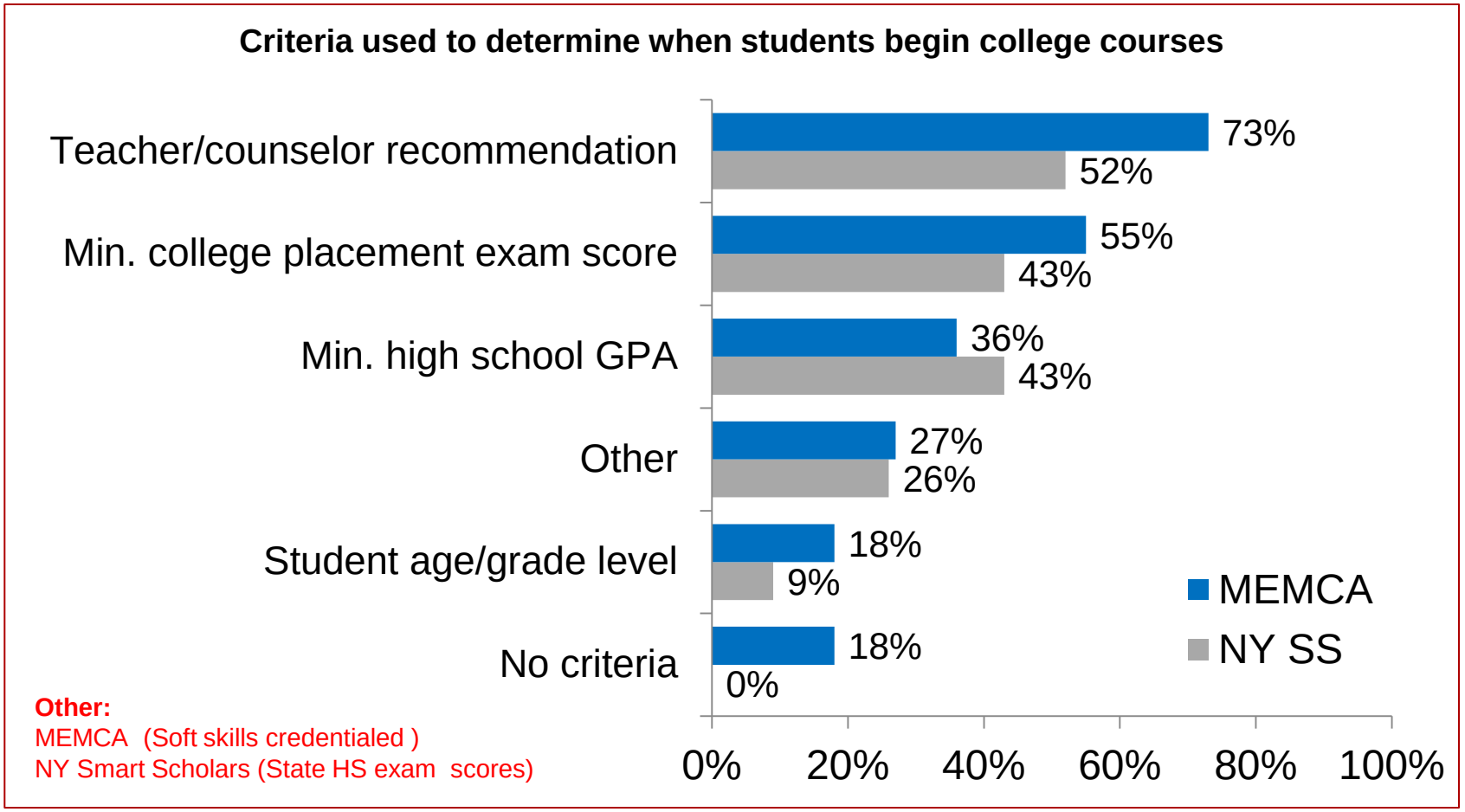
What Criteria do MEMCA Schools Use?



Note: Schools (N=11) were able to indicate multiple criteria.

Source: MEMCA School Profile Survey Data, 2013-14.

MEMCA v. NY Smart Scholars



Note: MEMCA schools (N=11), NY Smart Scholars schools (N=23) were able to indicate multiple criteria.

Sources: NYSED/NCREST Survey, 2012-13; MEMCA School Profile Survey Data, 2013-14.

What Does it Mean to be College and Career Ready?

- *A college and career ready student possesses the content knowledge, strategies, skills, and techniques necessary to be successful in a postsecondary setting.*

- *Not every student needs exactly the same knowledge and skills to be college and career ready.*

- *A student's college and career interests help identify the precise knowledge and skills the student needs.*

Source: Conley. (2014).

Relevant Readiness/Learning Skills

Learning skills students need to be ready for the range of postsecondary learning environments:

- Study skills
- Time management skills
- Goal orientation
- Persistence (determination, tenacity, grit)

  - Self-awareness (knowing how one is doing in their courses)
  - Help-seeking (knowing how to obtain necessary resources)
  - Technological proficiency (knowing how to effectively use technology)

Source: Conley. (2014).

For Us – 2 Types of Readiness

- General readiness for college and career
- Readiness to start college courses in high school

Ensuring Our Students are Ready to Start College Coursework in High School

1. What requirements do our students need to meet to enroll in college courses? Is it the same for all courses?

2. What are we doing to prepare students to start college courses in high school?

3. What about groups of students who struggle to attain readiness to start college courses? What are we doing about this?

Assessing Our Programs for Successful College Coursework in HS

- New considerations for academic plans
- Types of college courses
- College performance

Academic Plan

	Grade 9 Fall	Grade 9 Spring	Grade 9 Summer	Grade 10 Fall	Grade 10 Spring	Grade 10 Summer	Grade 11 Fall	Grade 11 Spring	Grade 11 Summer	Grade 12 Fall	Grade 12 Spring	Grade 12 Summer	Grade 13 Fall	Grade 13 Spring
English														
Math														
Science														
Social Studies, History & Government														
Physical Education														
Language														
Elective														
Seminar														
Other														
TOTAL Credits														
Standardized HS Tests														
Entrance/Exit College Tests														

Total HIGH SCHOOL units earned =	Total COLLEGE credits earned =

Academic Plan Considerations

- **Clear goals and expectation –**
  - Minimum number of college courses and credits for students
- **Sequencing –**
  - A continuum of courses that progress from easier to more difficult
  - Using college/career orientation and skills courses strategically
- **Rigor –**
  - Opportunities for students to take a rigorous high school curriculum
  - Appropriate level of challenge to keep students engaged but not discouraged
  - Vetting process of instructors*
- **Policy context –**
  - Dual enrollment and articulation agreements in the state or with specific colleges
  - State and national tests (e.g., ACT, SAT) for high school students
  - College entrance exams or other criteria required by partner college
- **Supports –**
  - Availability of supports to help students with coursework
  - Academic and social supports*

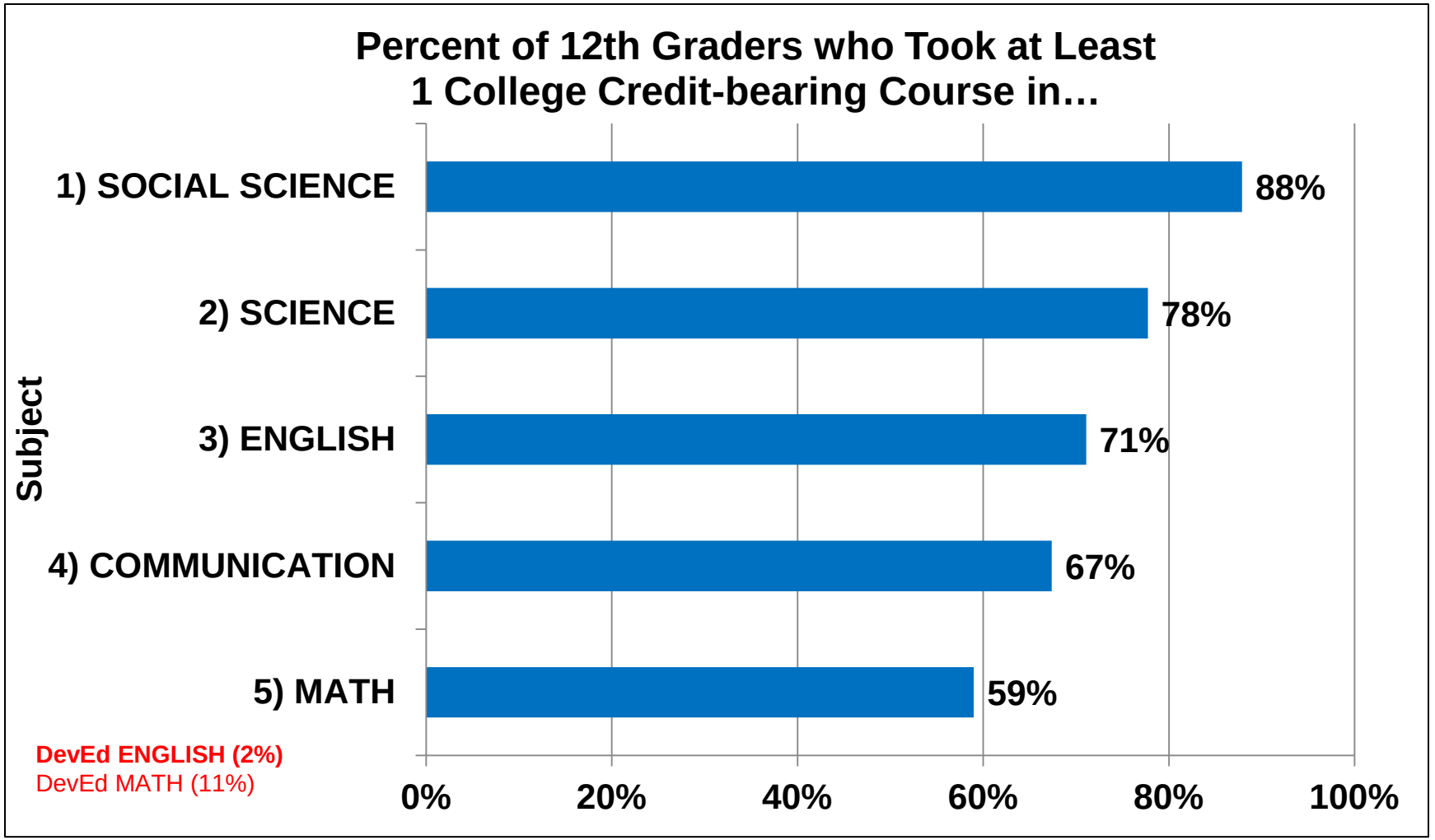
* Additional items included.
Source: NCREST. (2011). Early College: 10 Key Decisions.

College Course Enrollments by Subject/SchYr

(2012-13 12th Graders)

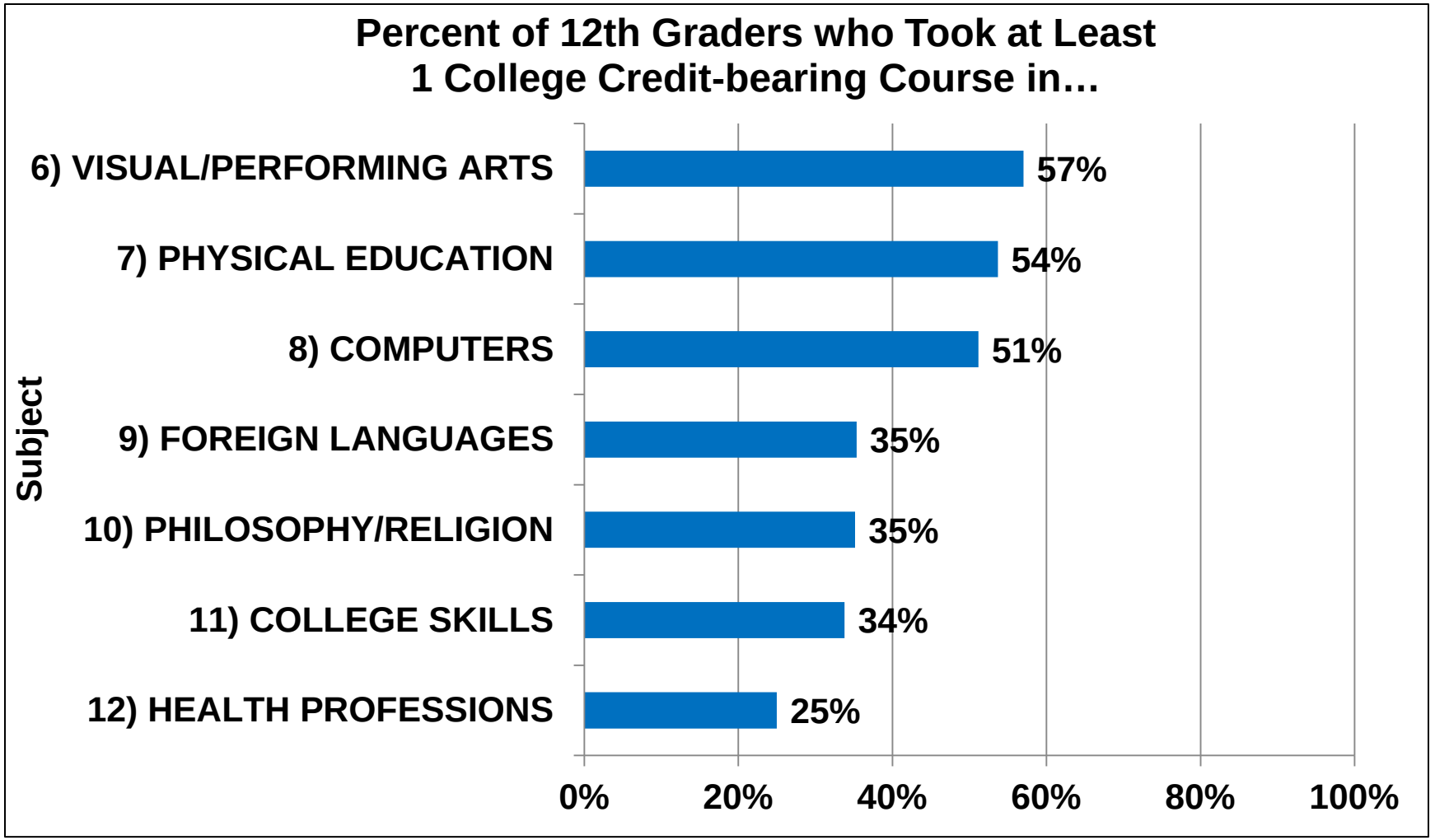
Subject	Gr 9 2009-10	Gr 10 2010-11	Gr 11 2011-12	Gr 12 2012-13	Total
BUSINESS	--	<1%	1%	2%	2%
COLLEGE SKILLS	51%	10%	2%	2%	3%
COMMUNICATION	--	11%	9%	6%	8%
COMPUTERS	9%	7%	6%	5%	5%
EDUCATION	--	--	1%	1%	1%
ENGINEERING	--	<1%	<1%	<1%	<1%
ENGLISH	16%	15%	10%	11%	11%
FOREIGN LANGUAGES		1%	3%	6%	4%
HEALTH PROFESSIONS	4%	10%	5%	5%	6%
MATH	9%	11%	12%	10%	11%
PERSONAL/CULINARY SERVICES	2%	1%	<1%	<1%	<1%
PHILOSOPHY/RELIGION	--	<1%	2%	4%	3%
PHYSICAL EDUCATION	2%	5%	3%	4%	4%
PROTECTIVE SERVICE	--	<1%	<1%	1%	<1%
SCIENCE	4%	7%	14%	16%	14%
SOCIAL SCIENCE	2%	16%	25%	18%	20%
TRADES	--	<1%	<1%	1%	<1%
VISUAL/PERFORMING ARTS	--	4%	7%	7%	7%
TOTAL	**<1% (45)**	**14% (1,027)**	**39% (2,858)**	**46% (3,369)**	**100% (7,299)**

Top 5 Subject Areas (2012-13 12th Graders)



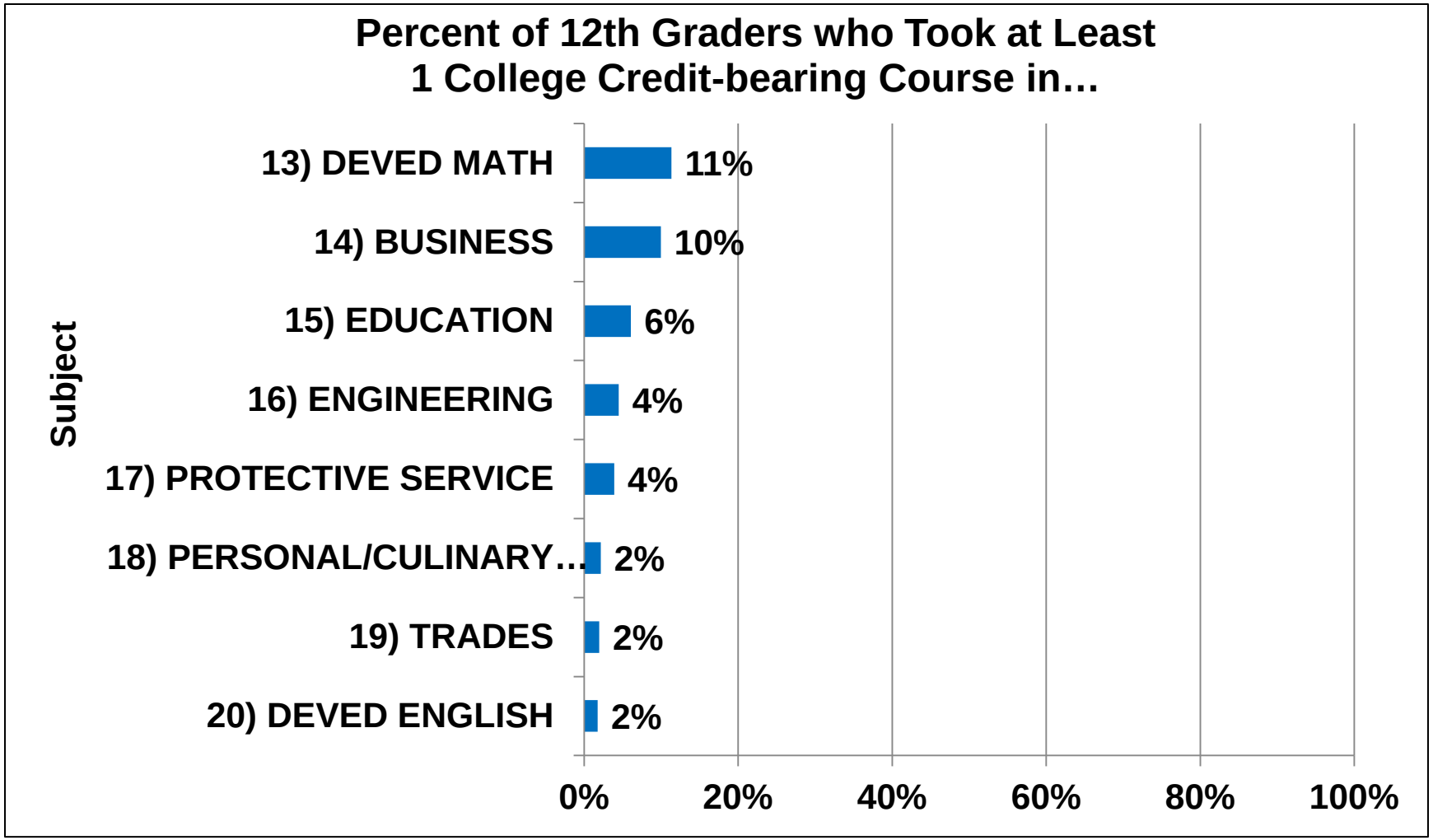
Source: MEMCA College Data.

More Subject Areas (2012-13 12th Graders)



Source: MEMCA College Data.

Remaining Subject Areas (2012-13 12th Graders)



Source: MEMCA College Data.

Top 5 Subjects Areas: Performance

Percent of College Course Grades Results (2012-13 12th Graders)

Subject	A	B	C	D	F	W
SOCIAL SCIENCE	47%	28%	15%	5%	4%	1%
SCIENCE	36%	34%	18%	5%	4%	2%
ENGLISH	59%	28%	8%	2%	2%	2%
COMMUNICATION	59%	28%	8%	2%	2%	2%
MATH	48%	27%	11%	5%	7%	2%

Source: MEMCA College Data.

Starter and Final Year Courses

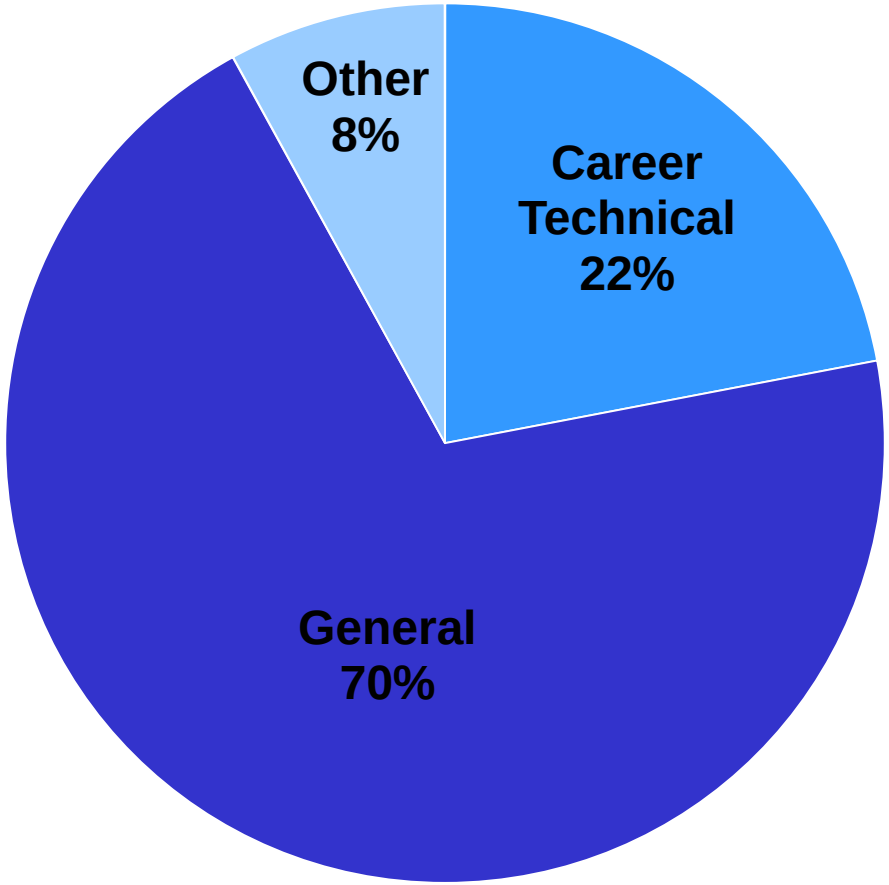
School	Course names – Grade 10	Course names – Grade 12
School A	• THEA 1001: INTRO THEATER ARTS • THEA 1101: INTRO TO ACTING • CORC 1130: MUSIC LANG HIST & CULT • SPEC 1103: COMMUNICAT TECHNIQ	• CHEM 1050: GENERAL CHEM 1A • ENGL 2301: INTRO CREATIVE WRITING • MATH 1011: PRECALC or MATH 1201: CALCULUS • PSYC 2810: ABNORMAL PSYCHOLOGY I
School B	• CPT101: Intro Comp or MUS105: Music App • PSY201: Gen Psych or SOC-101: Intro Soc • SPA101: Elementary Spanish I • COL03: College Skills	• ENG101: English Composition I • ENG102: English Composition II • BIO101: Bio Science I • MAT110: College Algebra or MAT120: Statistics
School C	• FA 205: DRAWING • FA 305: PAINTING • History or Political Science course	• EN 110: COLLEGE COMPOSITION • EN 114: PUBLIC SPEAKING • PS 100: GENERAL PSYC or SO 100: INTRO TO SOC • GS 111: COLLEGE SUCCESS SKILL • MT 112: SURVEY OF MATH
School D	• COM 115: Public Speaking • HPR 104: Health Career Opt & Readiness • CIS 118: Intro PC Applications • Criminal Justice or Health Careers course	• ENG 121: English Composition I • ENG 122: English Composition II • HPR 178: Medical Terminology • PSY 101: General Psychology I • ACC 101: Fundamentals of Accounting • MAT 135: Intro to Statistics

Source: MCNC College Data.

General Ed and Career Tech College Course Enrollments

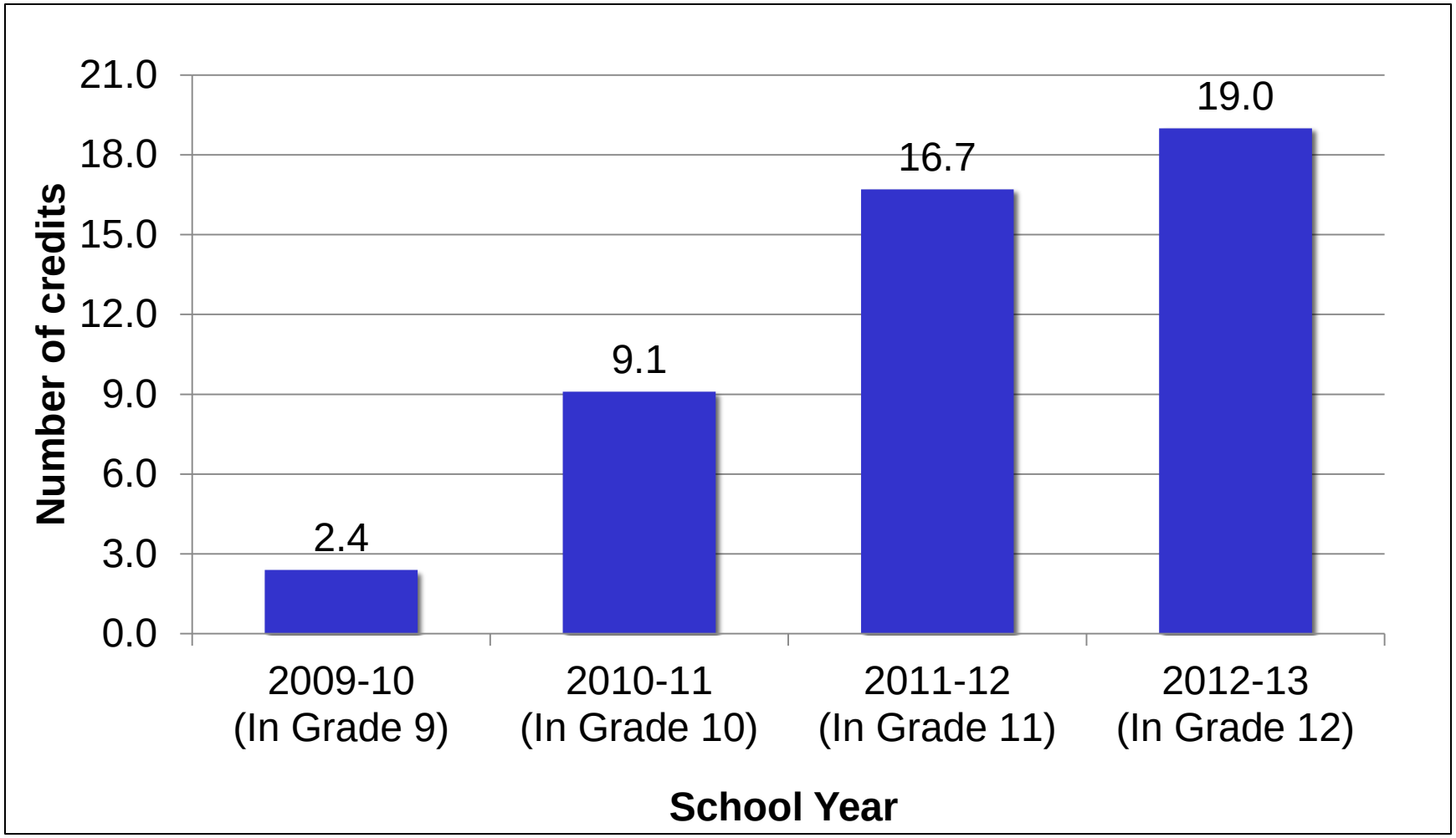
Percent of College Course Enrollments (cumulative during HS)

2012-13 12th Graders



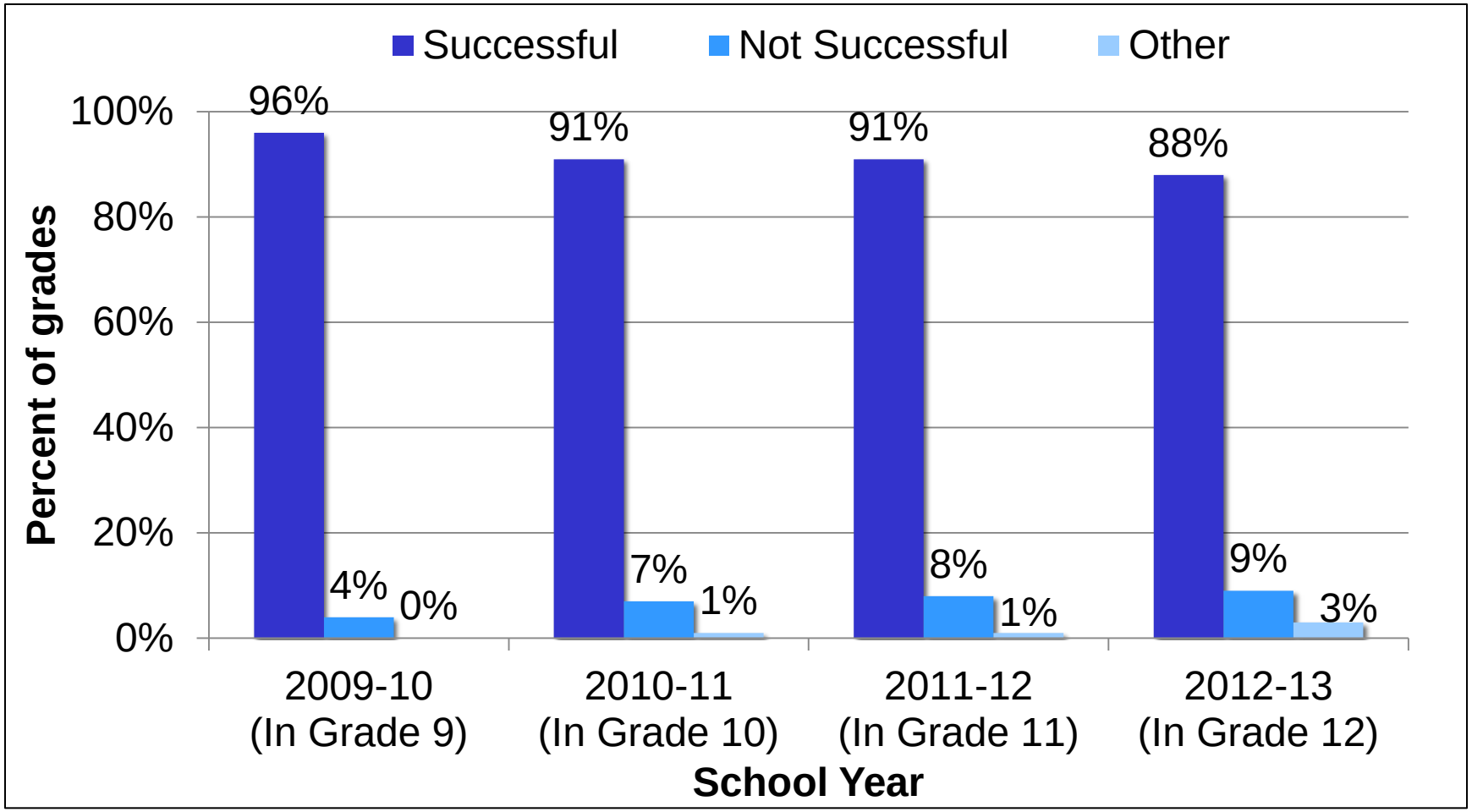
Source: MEMCA College Data.

Average College Credits Earned by SchYr (2012-13 12th Graders)



Source: MEMCA College Data.

College Course Grade Success by SchYr (2012-13 12th Graders)

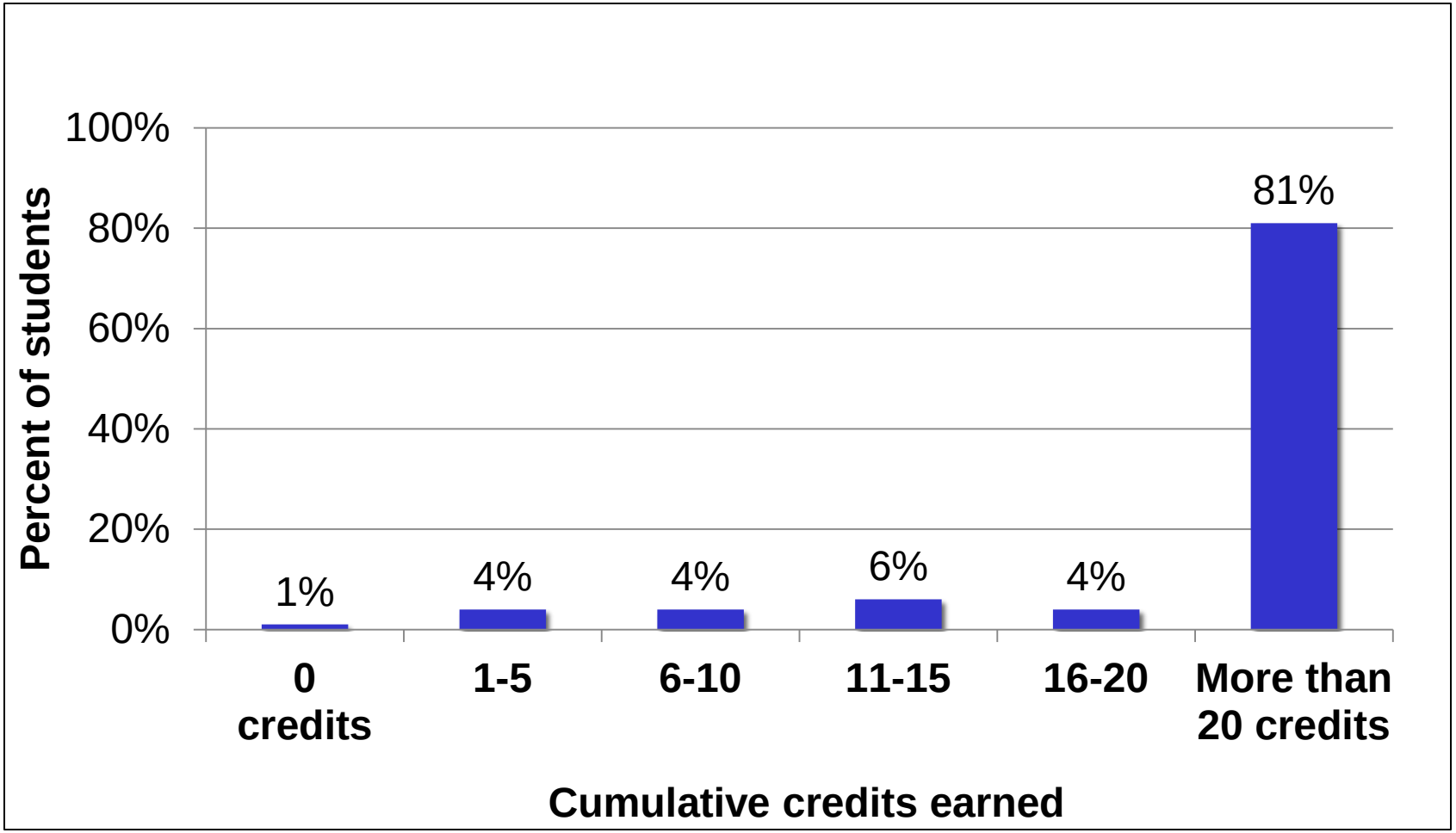


Successful = A, B, C; *Not Successful* = D, F

Source: MEMCA College Data.

92% = Cumulative course passrate at C grade or higher

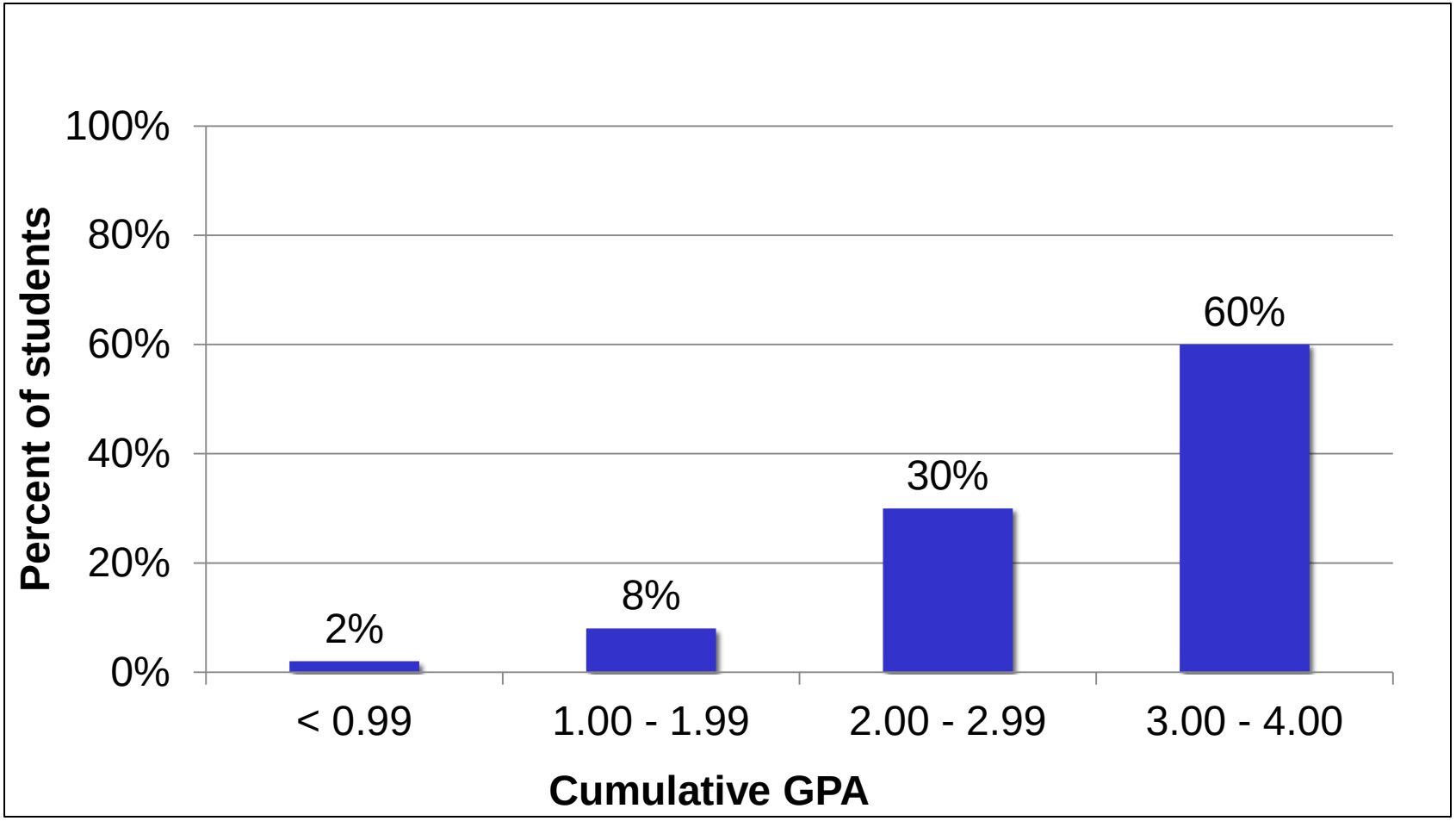
College Credits Earned, per Student (2012-13 12th Graders)



Source: MEMCA College Data.

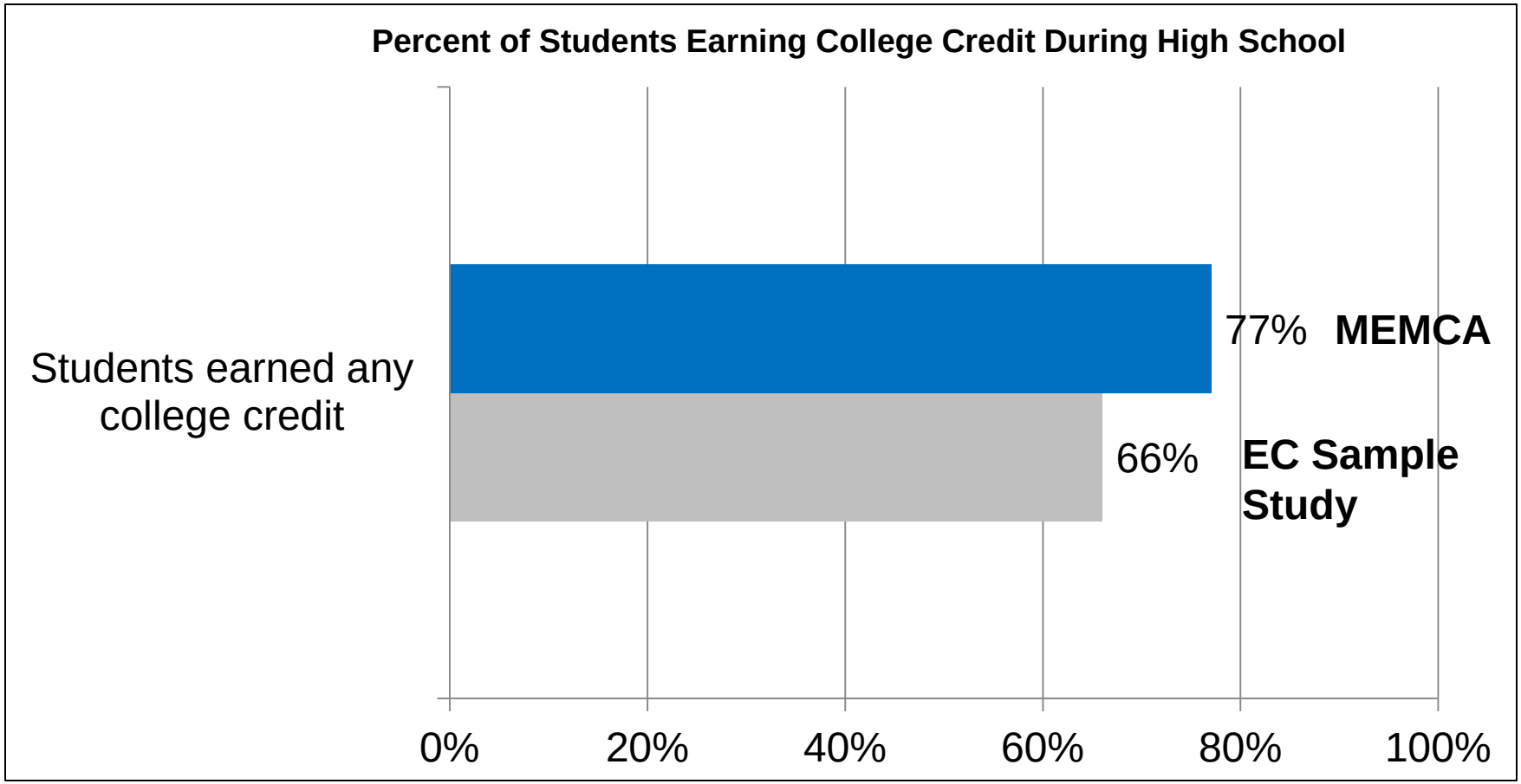
College GPA, per Student

(2012-13 12th Graders)



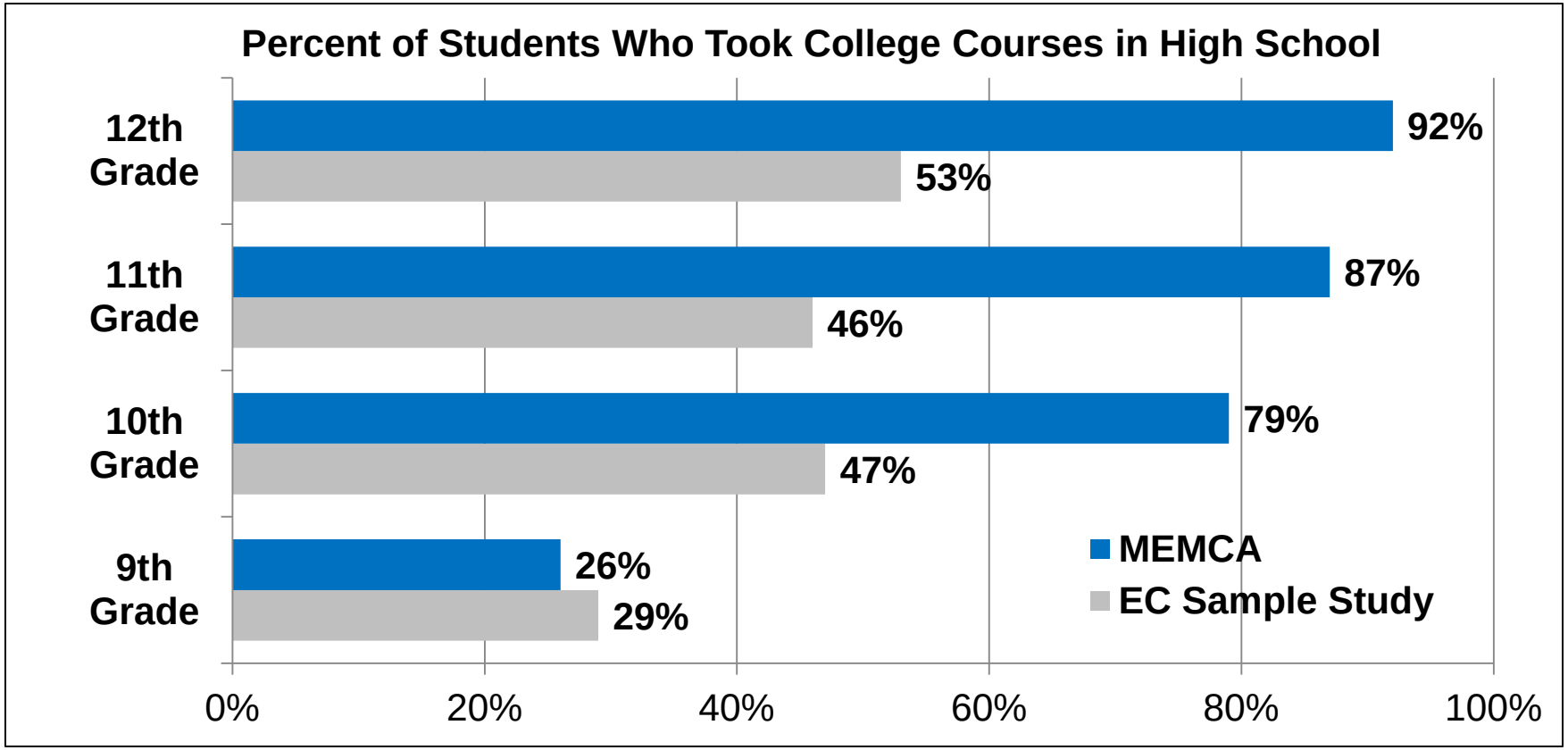
Source: MEMCA College Data.

EC Sample Study v. MEMCA



Note: Data reflect 2011-12 Early College students.
Source: AIR/SRI. (2013); MEMCA College Data.

EC Sample Study v. MEMCA



"[Re: National EC Study] Although the goal of Early Colleges is to get all student enrolled in college while in high school, our findings suggest that the Early Colleges did not meet this goal." (AIR/SRI, 2013)

Note: Data reflect 2011-12 Early College students.
Source: AIR/SRI. (2013); MEMCA College Data.

BREAKOUT GROUPS 10:15 – 11:20

- MEMCA Data Project Schools (3rd Floor)
- Other Participants (Main room)

What makes for a successful college course-taking program and experience for our high school students?

Go back to your original noted responses.
Any new thoughts?