

REACH Program Analysis Findings

May 2020



REACH Program Analysis Background

- Part of larger effort to analyze programs over time
- Follows on [acceleration, special education program analyses](#)
- Intended to provide information to improve implementation of services for gifted students and determine if changes to the program are needed
- Steering committee created to provide input

REACH Program Background

- For students demonstrating exceptional intellectual ability who need experiences extending beyond the regular curriculum
- Current REACH program provides enrichment and/or acceleration in English Language Arts (ELA) and Mathematics in grades 3-8
 - ELA grades 3-5 receive 30 minutes extra time daily with a REACH teacher; grades 6-8 take a separate middle school ELA course - use above grade-level texts and complex/creative tasks
 - Math grades 3-5 and 6-8 are replacement courses

REACH Program Identification

- Universal screening of all students in grades 2 and 5
 - MAP, CoGAT, teacher recommendations
- Appeals process available each year
- Students identified based on consistent above-grade-level performance in comparison to peers (~top 5%)



Expected Outcomes of REACH ELA and Math Programs

- High levels of academic achievement in ELA and/or math
- Evidence of critical thinking and creativity
- Participate in honors-level and AP or ACP classes (such as AP Language, AP Literature, AP Calculus) in high school

Program Analysis Questions: Implementation and Outcomes

- ***Implementation:***

- *What does the current REACH program look like with respect to identification, participation, and curriculum and instruction?*
- *How does the current REACH program compare to research-based practices and peer districts?*
- *In what aspects of the program do teachers, administrators, parents, and students report strengths and areas for improvement? How satisfied are they with program implementation and outcomes?*

- ***Outcomes:***

- *To what extent are intended outcomes being achieved?*

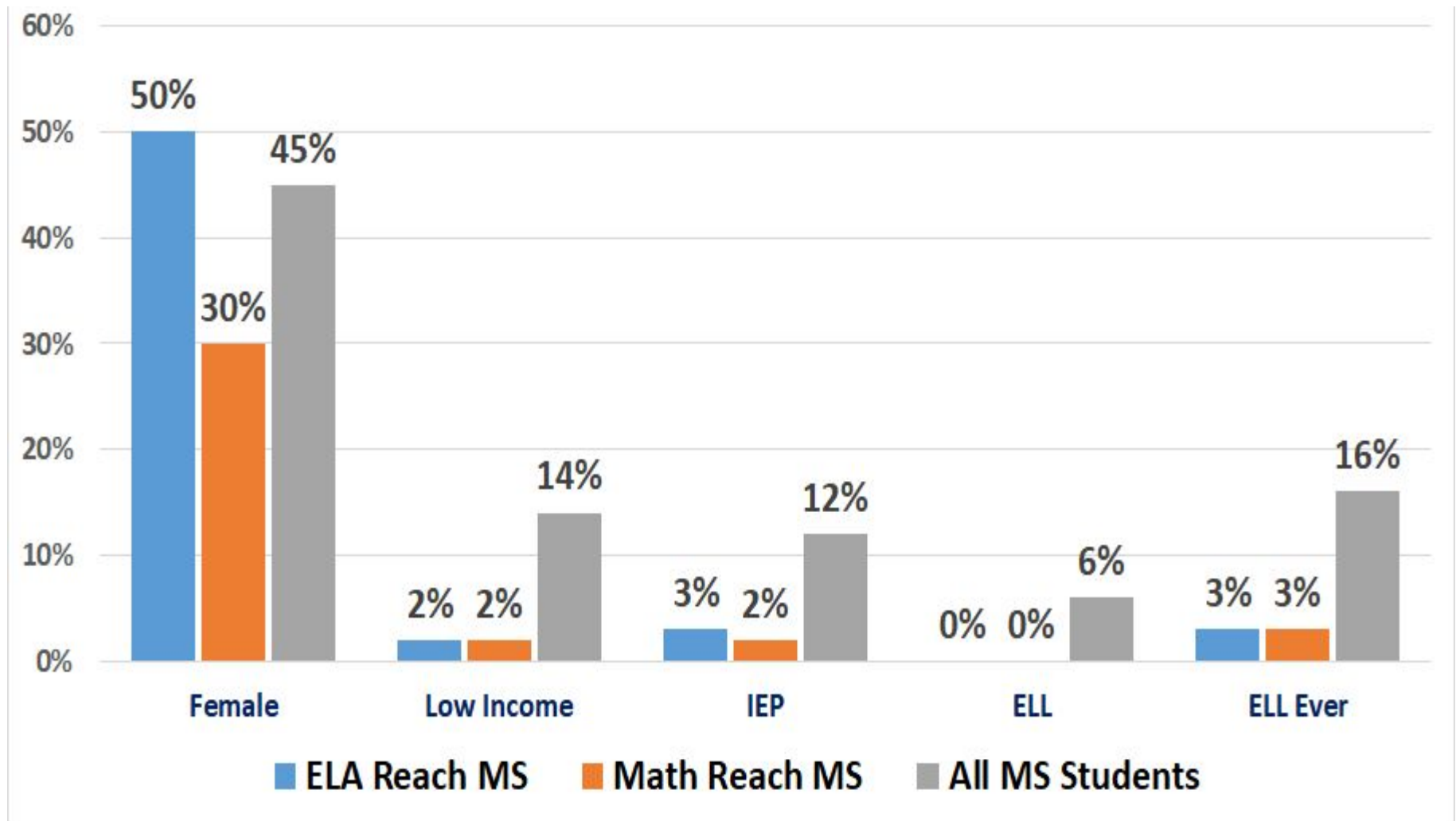
Implementation Question 1

Evaluation Question	Data Source(s)
Implementation	
<p><i>What does the current REACH program look like with respect to identification, participation, and curriculum and instruction?</i></p> <ul style="list-style-type: none">• How many and which students are identified for REACH? How has this changed over time?• How many and what type of staff provide instruction in the REACH program? What does instructional practice in REACH classrooms look like? What do student assignments/student work look like in REACH classrooms? How well do they match the rigor framework and align to the 6Cs (particularly related to critical thinking and creativity, two areas identified as goals for ELA)? What are student perceptions of rigor and alignment of REACH courses to 6Cs?	<p>Administrative student data (identification and enrollment)</p> <p>Human resources data</p> <p>Classroom observations</p> <p>Teacher log/self-assessment</p> <p>Sample of student assignments</p> <p>Student survey</p>

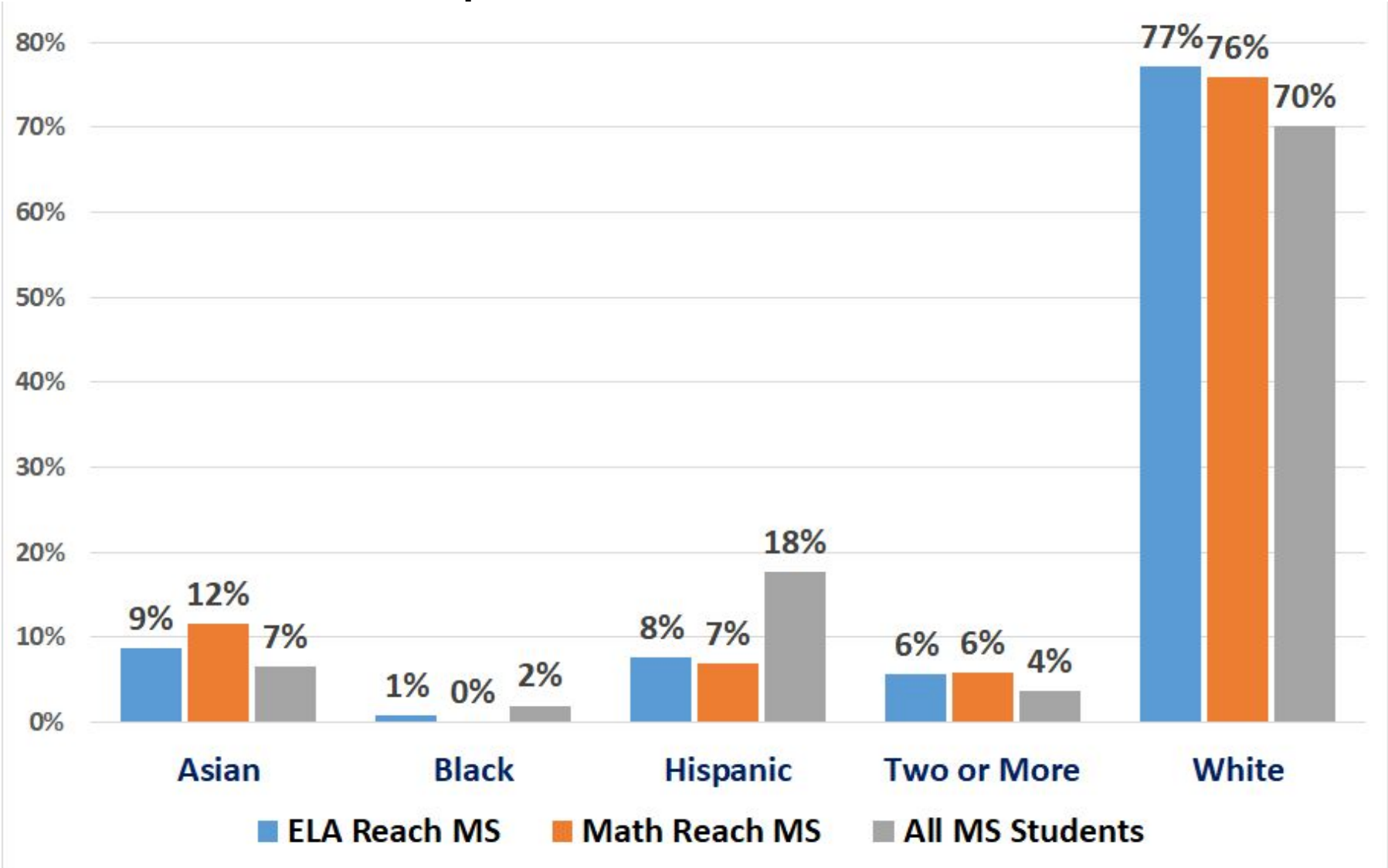
Across all grades and schools, 16% of students enrolled in REACH ELA and 12% in math classes

School	ELA		Math		Total Students
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	
Edison	22	13%	12	7%	163
Emerson	23	10%	20	8%	241
Field	32	15%	20	9%	214
Fischer	15	6%	6	2%	244
Hawthorne	43	16%	31	12%	261
Jackson	27	10%	19	7%	261
Jefferson	35	17%	22	11%	205
Lincoln	45	16%	26	9%	275
Bryan	151	21%	112	16%	703
Churchville	64	13%	49	10%	509
Sandburg	157	23%	117	17%	691
Total	614	16%	434	12%	3767

Females are underrepresented in REACH math; low income, EL, and students with IEPs are underrepresented in ELA and math



Hispanic and Black students are underrepresented in REACH; White and Asian students are somewhat overrepresented



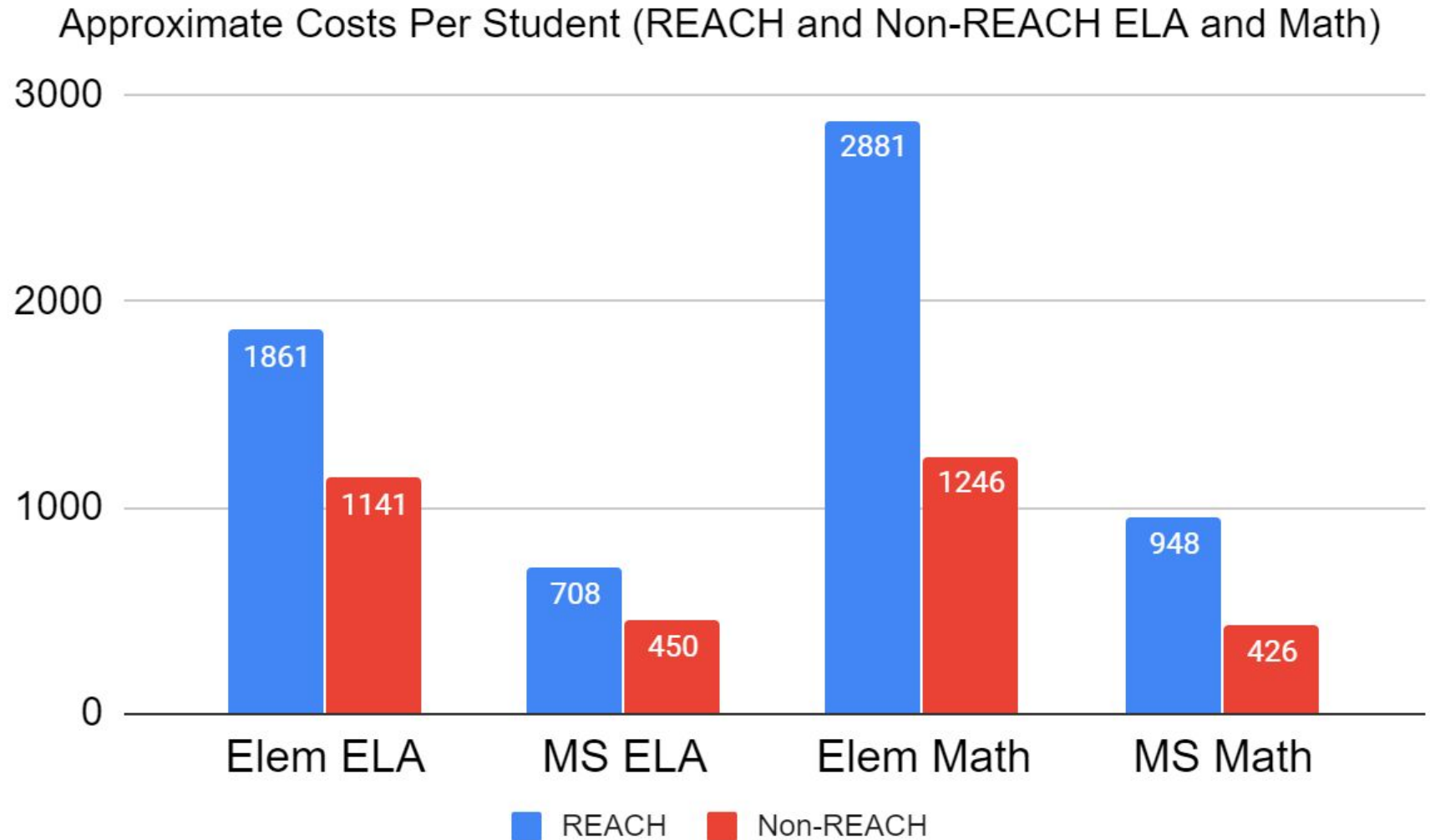
In 2019-20, 33 teachers provided instruction to REACH students, about half had gifted endorsements; average of 14 years of experience in the district

	ELA sections	ELA teachers	Math sections	Math teachers	Total sections	Total unique teachers
Elem	24	8	23	8	47	8
MS	16	13	14	12	30	25
Total	40	21	37	20	67	33

Average REACH class sizes are 10 or under for elementary and 20-23 for middle school

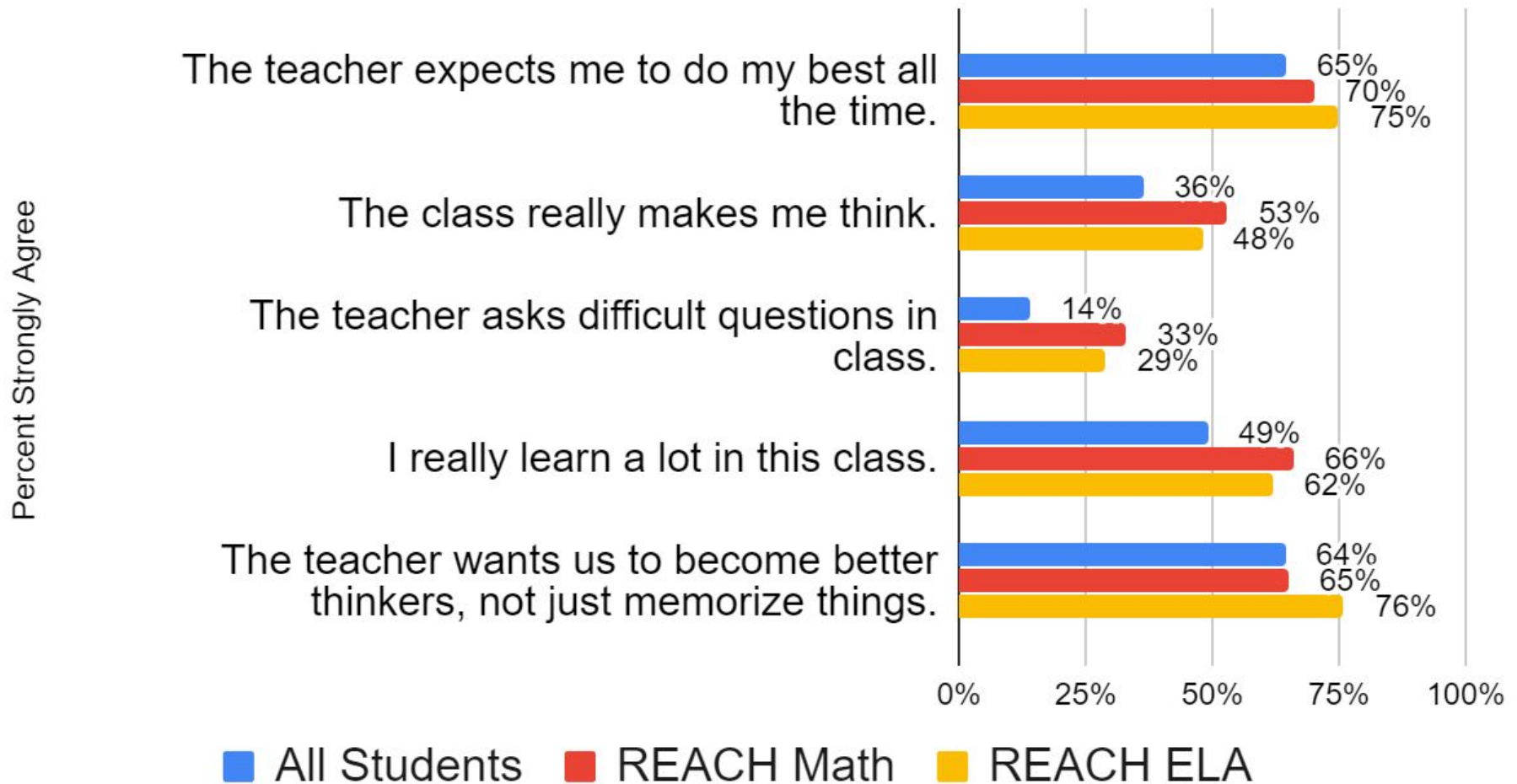
Subject and level	Average	Min	Max	Standard deviation
Elem ELA	10	3	21	4.3
Elem Math	7	1	13	2.9
MS ELA	23	17	29	4.1
MS Math	20	13	35	5.5

Structure & size of the program result in higher average per-student costs for REACH than non-REACH classes



Student perceptions of rigor in REACH classrooms mixed

Academic Press Percent Strongly Agree



Implementation Question 3

Evaluation Question	Data Source(s)
Implementation	
<i>In what aspects of the program do teachers, administrators, parents, and students report strengths and areas for improvement? How satisfied are they with program implementation and outcomes?</i>	Teacher survey/ focus group Principal survey/focus group Parent survey Student survey

Commonly cited strengths include perception of challenge, similar peers, pace, projects, teachers

	Admin	Teachers	Parents	ES	MS	HS
Challenge						
Similar peers, community						ELA
Acceleration, pace				Math		Math
Small classes						
Teachers, teacher support						
Curriculum, types of projects or activities				ELA	ELA	ELA
Working in groups, discussion, collab with peers						
Fun, engaging						
Freedom/choice and independence						
Preparation for York						Math

Areas of improvement include identification, serving more students, homework, choice, and skills

	Admin	Teachers	Parents	ES	MS	HS
Identification						
Serving more students						
Exit criteria/ongoing commitment or interest						
Communication with parents						
Info and communication about the program						
More time for ELA						
Too much homework, work						
More choice in ELA						
Move slower, more time to get help						
Specific skills taught and/or their utility/preparation for York						

Parents, teachers, and principals largely agree on goals; some differences in perceptions about achievement of outcomes

- Agreement among stakeholders that top goal is critical thinking and second most-commonly identified was related to providing mastery of basic content at a pace and depth appropriate to the capacity of able learners.
- Parents mostly believe program meeting outcomes except in creativity; majority of principals believe outcomes met for few or some students while teachers feel outcomes met for many or nearly all students
- About 80% of former students believe the program prepared them well or very well; about 17-20% “somewhat well” or less

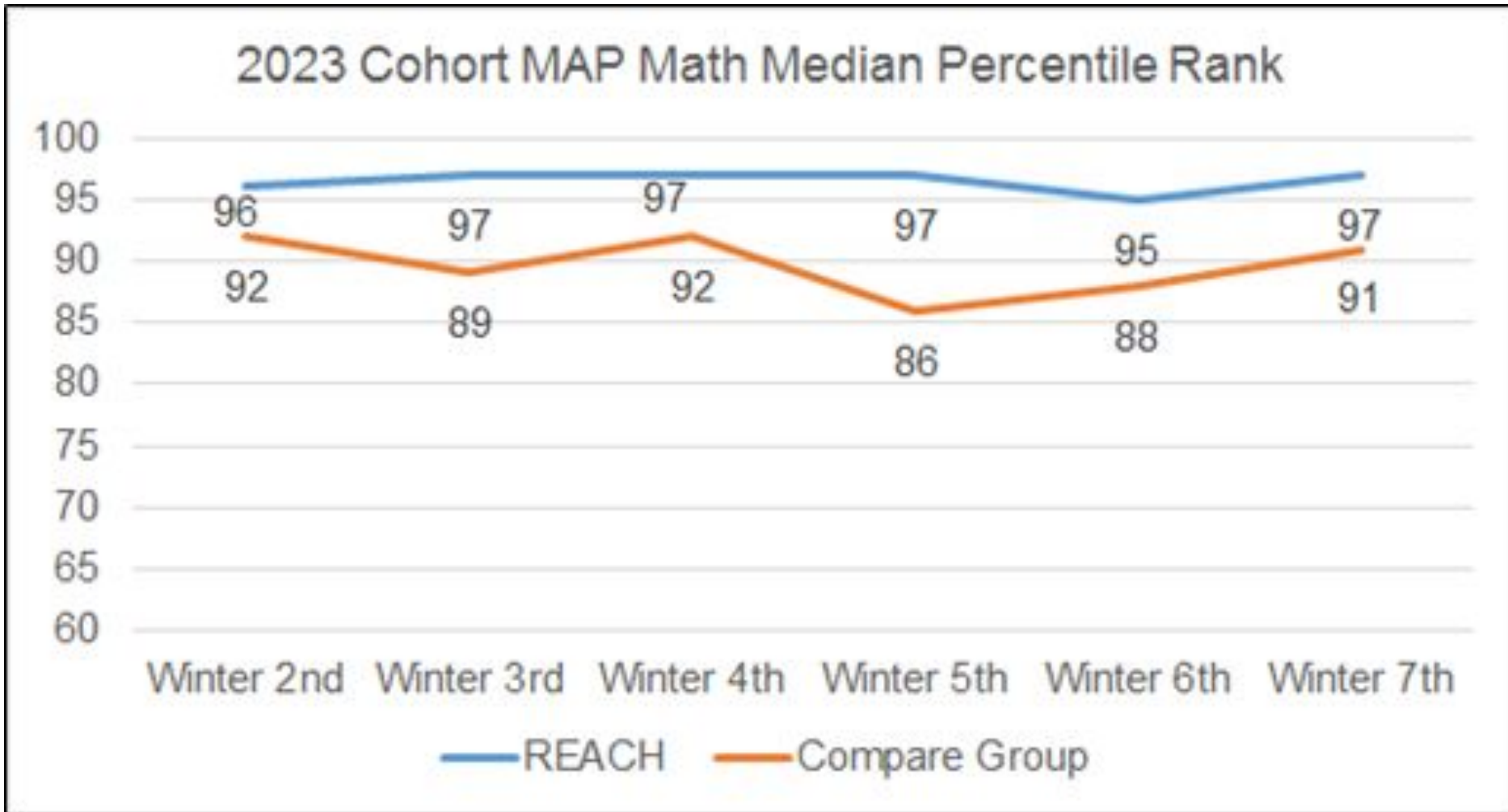
Outcome Questions

Evaluation Question	Data Source(s)
Outcomes	
<p><i>To what extent are intended outcomes being achieved?</i></p> <ul style="list-style-type: none"> • Are REACH students performing at high levels academically? How does their performance compare to their peers? • Do REACH students show high levels of critical thinking and creativity? How does their performance compare to their peers?* • To what extent do REACH students participate in honors-level and AP or ACP courses in high school? • How do the costs of the program compare to these outcomes? 	<p>Assessments and grades data (CoGAT, ISAT/PARCC/IAR, PSAT/SAT, grades in HS)</p> <p>Student work samples</p> <p>Coursetaking enrollment data</p> <p>HR/finance data</p>

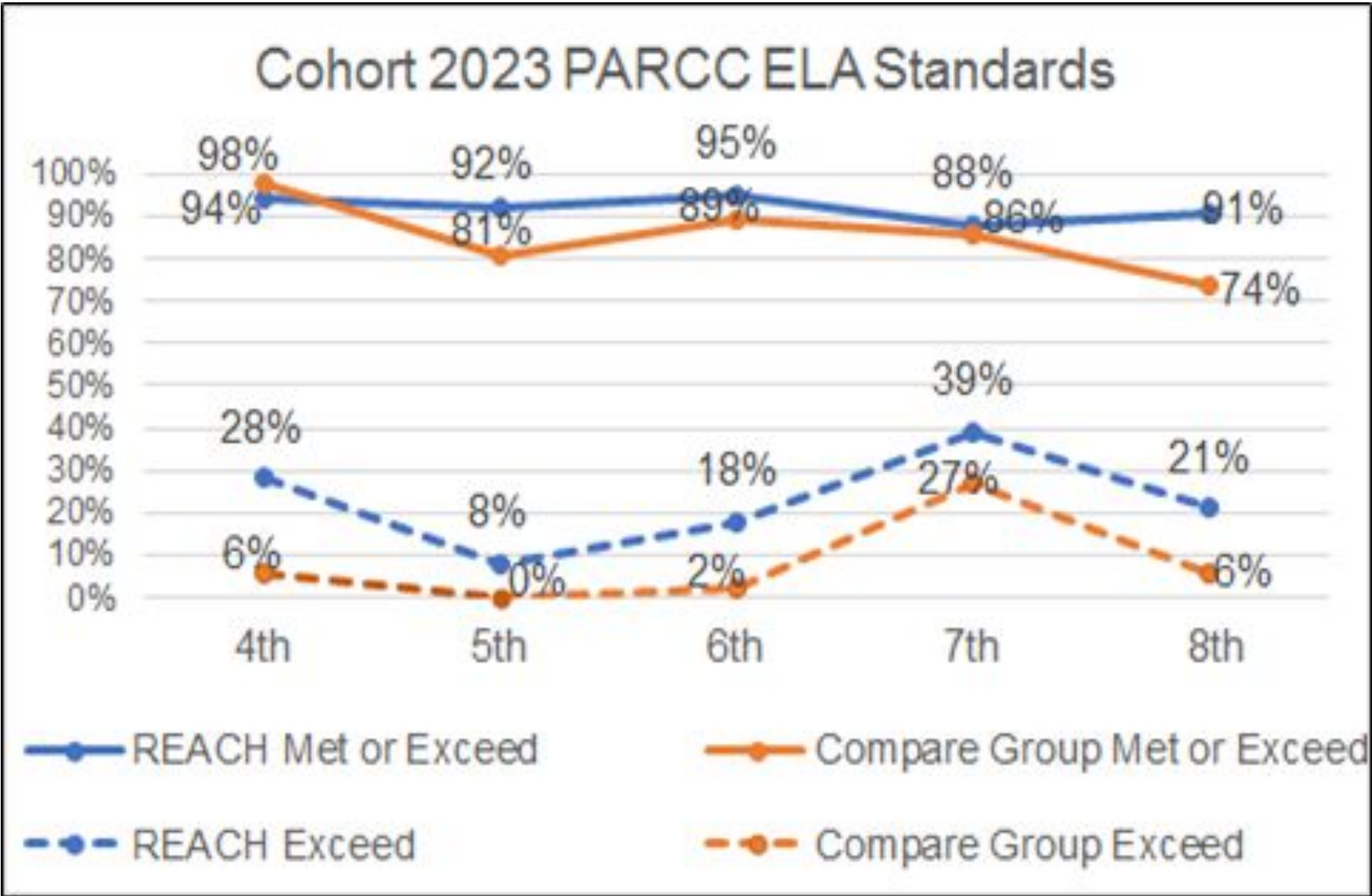
Analyzed data from 3 groups of students to examine academic outcomes in ELA and math

- Current 12th graders (Cohort 2020)
- Current 9th graders (Cohort 2023)
- Current 6th graders (Cohort 2026)
 - Note program more selective at grade 3 here
- For each group, selected a comparison group of students who were not identified for REACH but had rubric scores near cut scores

Patterns of performance for REACH and comparison group students similar over time on state tests, MAP, CoGAT; normative performance strong for both groups on MAP, CoGAT, PSAT, SAT though higher for REACH students



Percentage of students exceeding state standards on average
29% for ELA and 40% for math from grades 3-8



By grade 12, most former REACH math students take expected courses and do well in them; less defined pathways and more elective courses available in ELA so that fewer former REACH students take *only* honors/AP/ACP courses

Percent of Students Taking Expected Courses (Cohort 2020)



REACH Program Analysis Findings - Stakeholder Discussion and Next Steps

Feedback sessions

- Teacher Feedback Sessions (before and after school): 2/11/2020
- Administrator Feedback Session: 2/13/2020
- Parent Feedback Session: 1/27/2020
- Steering Committee Meeting: 1/16/2020 and 2/25/2020
- Board Presentation: 5/12/20 (originally scheduled 3/17/2020)

Discussion steps

- Step 1. [Review initial findings \(executive summary\)](#)
- Step 2. Discuss beliefs, gifted definition and students to be served, and intended outcomes of program
- Step 3. Prioritize areas of improvement which are likely to lead to desired outcomes based on impact/effort matrix
- Step 4. Prioritize potential actions for areas of improvement

Results of feedback sessions - top priorities

Items that were either major project or quick win across all	
Program: Improve communication about and from program	N
Identification: Address underrepresentation of some student groups and align identification to definition and beliefs	Y
Identification: Better serve students who may not qualify for REACH but who could benefit from rigorous work	Y
Identification: Develop clear exit criteria and/or process to revisit student interest and commitment over time	N
Identification: Consider moving identification process to spring	Y
Curric/instr - service delivery: Address elementary ELA time constraints	Y
Curric/instr - service delivery: Consider curricular and instructional approaches to improving rigor/depth of understanding in math and ELA (i.e. improve "exceeds" numbers)	Y
Curric/instr: Ensure REACH provides an intentionally different experience to general education and addresses goal of critical thinking	Y
Curric/instr - programming: Check homework/workload and opportunities for choice at MS in ELA	N
Curric/instr: Address differentiation/support opportunities within REACH classes	N
Other: Increase efficiency/cost-effectiveness of spending on REACH	N

Results of feedback sessions - specific ideas

- See results overview
- Agreement around many ideas in priority areas of identification, curric/instruction
 - Identification: school or group norms, talent development, clearly identify services for top 5% and other students, move to spring if possible
 - Curric/instruction: review of resources for classroom teachers and REACH, add'l materials for classroom to support learners (coaching, materials)
 - Differing ideas on exactly *how* to deliver services (minutes, structures - push in, pull out/replace, flexible/guest, start in 3rd?)
- And not a top priority in terms of impact but agreement around a handbook with all relevant information - goals, beliefs, definitions, processes, rubrics and consideration of re-evaluation from elem to middle

Next steps - timeline

Time Period	Activities
Spring/Summer 2020	<ul style="list-style-type: none">● Engage with external consultants (CTD-Northwestern) to continue development of plans● Update Board and community on plans
School year 2020-21	<ul style="list-style-type: none">● Develop new curricular materials and service delivery plans/schedules● Update community on plans● Implement initial changes to identification process
School year 2021-22	<ul style="list-style-type: none">● Implement changes to program and additional changes to identification as needed

More next steps

- Steering Committee
 - Meeting in summer to discuss work with CTD - Northwestern and communication plans
 - Fall meeting or virtual review of communication materials and other documents

REACH Program Analysis Findings - Appendix

Step 2a. Beliefs

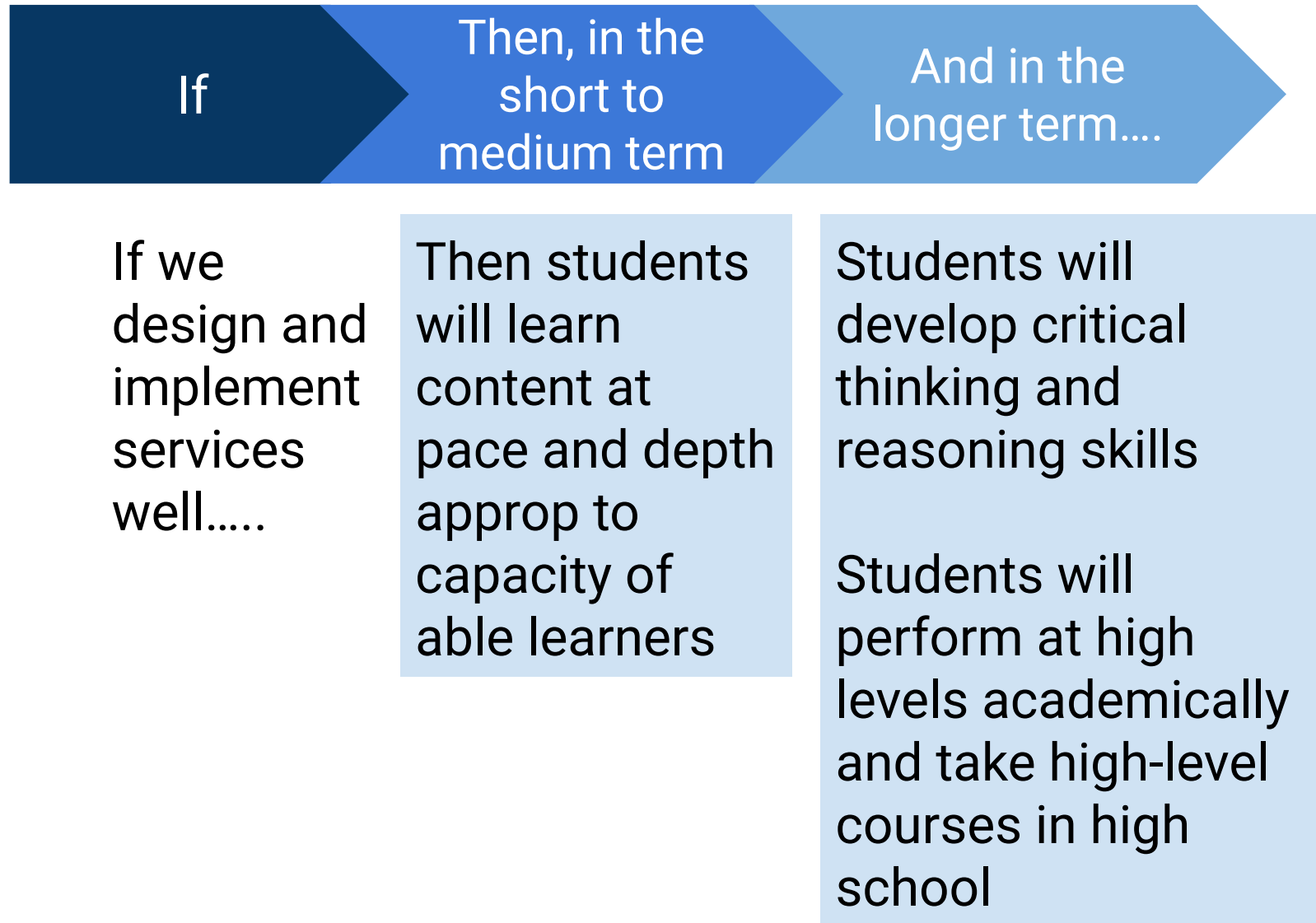
- We believe that:
 - Talented, high-potential learners are found in all cultures, ethnic backgrounds, and socioeconomic groups and these learners should have equal opportunities to develop their talents
 - High-potential or high-achieving students need services to develop their skills and talents
 - Services should be rigorous and differentiated
 - Students grow and develop at different rates and may demonstrate talents and aptitudes at different times or inconsistently

Step 2b. Definition

- Illinois: "Gifted and talented children" means children and youth with outstanding talent who perform or show the potential for performing at remarkably high levels of accomplishment when compared with other children and youth of their age, experience, and environment. A child shall be considered gifted and talented in any area of aptitude, and, specifically, in language arts and mathematics, by scoring in the top 5% locally in that area of aptitude.

We propose a definition based on the Illinois one for ELA and math, which suggests that we are intending to serve students performing in the top 5% with specific gifted programming.

Step 2c. Intended goals of program



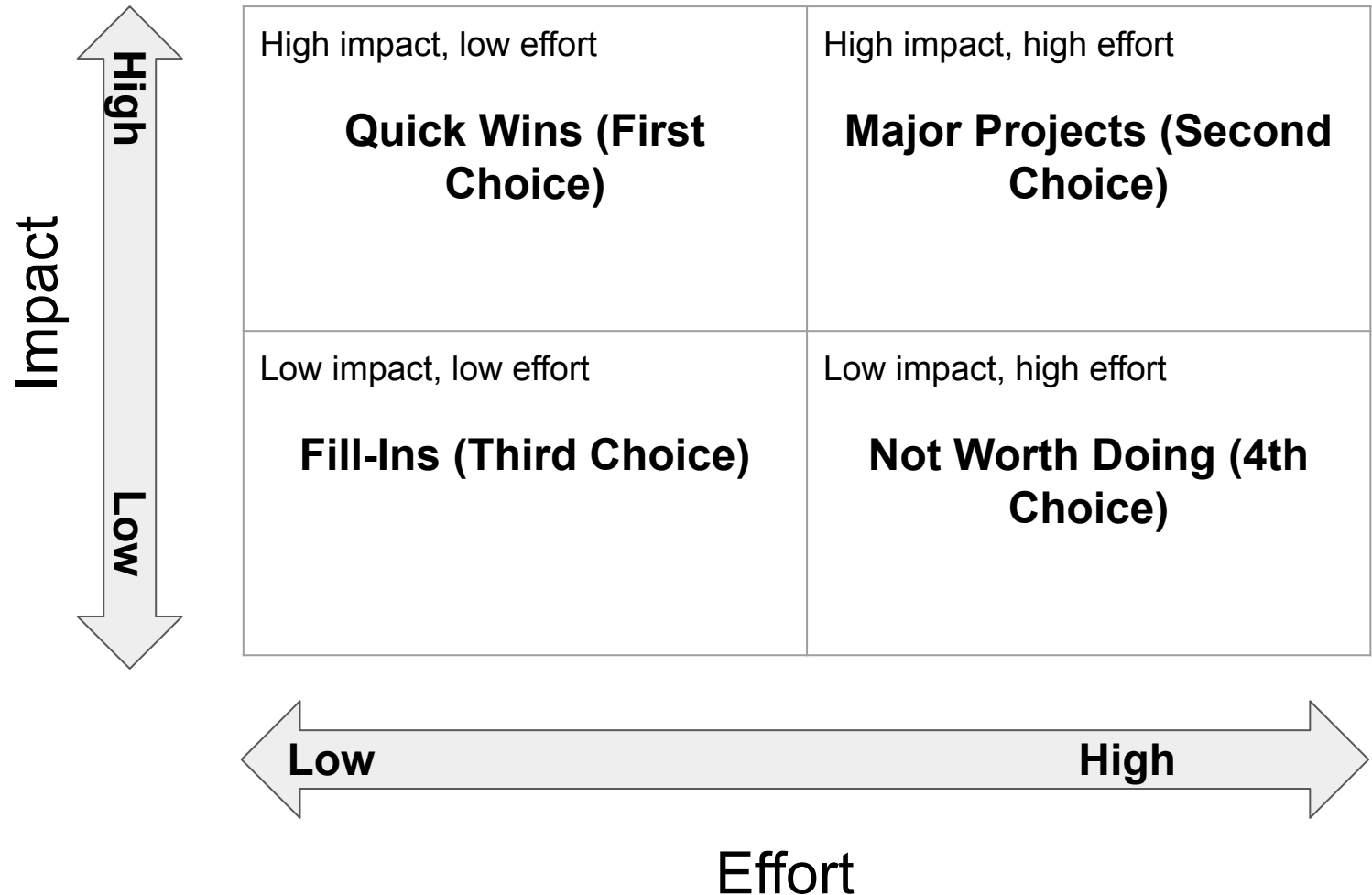
Step 2c. Measuring outcomes - sample

- At least 80% of students receiving services perform at “exceeds” level on IAR or similar state assessments in ELA and math on average across grades 3-8
- Students grow at least as much as their peers on state assessments in ELA and math
- At least 90% of students take high-level ELA and/or math courses (honors, AP, ACP) for at least 3 of their 4 years of high school
- Measures of critical thinking and reasoning (TBD)

Step 3. Prioritize elements in these areas based on impact/effort matrix

- Program: Improve communication about and from program
- Identification: Address underrepresentation of some student groups and align identification to definition and beliefs
- Identification: Better serve students who may not qualify for REACH but who could benefit from rigorous work
- Identification: Develop clear exit criteria and/or process to revisit student interest and commitment over time
- Identification: Consider moving identification process to spring
- Curric/instr - service delivery: Address elementary ELA time constraints
- Curric/instr - service delivery: Consider curricular and instructional approaches to improving rigor/depth of understanding in math and ELA (i.e. improve “exceeds” numbers)
- Curric/instr: Ensure REACH provides an intentionally different experience to general education and addresses goal of critical thinking
- Curric/instr - programming: Check homework/workload and opportunities for choice at MS in ELA
- Curric/instr: Address differentiation/support opportunities within REACH classes
- Other: Increase efficiency/cost-effectiveness of spending on REACH if possible

Step 3. Impact/effort matrix: which elements will lead to desired outcomes and best represent our beliefs and definitions?



Step 4. Prioritize elements in these areas based on impact/effort matrix (link to survey)

- Program: Improve communication about and from program
- Identification: Address underrepresentation of some student groups and align identification to definition and beliefs
- Identification: Better serve students who may not qualify for REACH but who could benefit from rigorous work
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- Other: Increase efficiency/cost-effectiveness of spending on REACH if possible

Step 4. Prioritize key actions for areas of improvement (link to worksheet)

Area	Possible actions	Comments or Suggestions
Program: Improve communication about and from program	Improve website Hold additional parent nights Encourage use of SeeSaw for REACH classes	We like these ideas! We don't like these ideas. Here is an additional idea.

Implementation Question 2

Evaluation Question	Data Source(s)
Implementation	
<p><i>How does the current REACH program compare to research-based practices and peer districts?</i></p> <ul style="list-style-type: none">• What does current research suggest are effective strategies for identification, curriculum, and instruction? What are the outcomes used to measure effectiveness?• How do districts similar to D205 in Illinois approach identification, curriculum, and instruction, and what are the specific goals of their gifted programs?	<p>Research/literature review</p> <p>Peer district interviews and document review</p>

Suggestions from peers and literature review

- Identification

- D205's identification process aligns with recommendations from research and practice and with peer districts (such as use of multiple sources of information, universal screening, etc).

- Curriculum and Instruction

- Most peer districts also use enrichment and acceleration approaches like D205
- Good evidence for acceleration though approaches vary; some evidence for other approaches though dependent on specifics of approach and implementation
- Literature also suggests rigorous, intentionally different, differentiated curriculum and instruction

- Service Delivery Model (When/Where/How Often)

- Variety of methods to deliver services among peer districts and nationally (pull-out, magnet, cluster grouping)