Algebra I and College Preparatory Diploma Outcomes Among Virginia Students Who Completed Algebra I in Grades 7–9: Digging Deeper into Local Data

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REL Appalachia at SRI International

Welcome and introductions

Ryoko Yamaguchi

Agenda

Time	Agenda item
11:00 – 11:10 a.m.	Welcome and introductions
11:10 – 11:25 a.m.	Results from the Virginia Longitudinal Data System: Algebra I and college preparatory diploma outcomes
11:25 – 11:45 a.m.	Digging deeper into local data: Algebra I in grade 7 • Staunton City Public Schools • Harrisonburg City Public Schools
11:45 – 12:00 p.m.	Implications for policy and practice

REL Appalachia Student Success in Mathematics partnership staff

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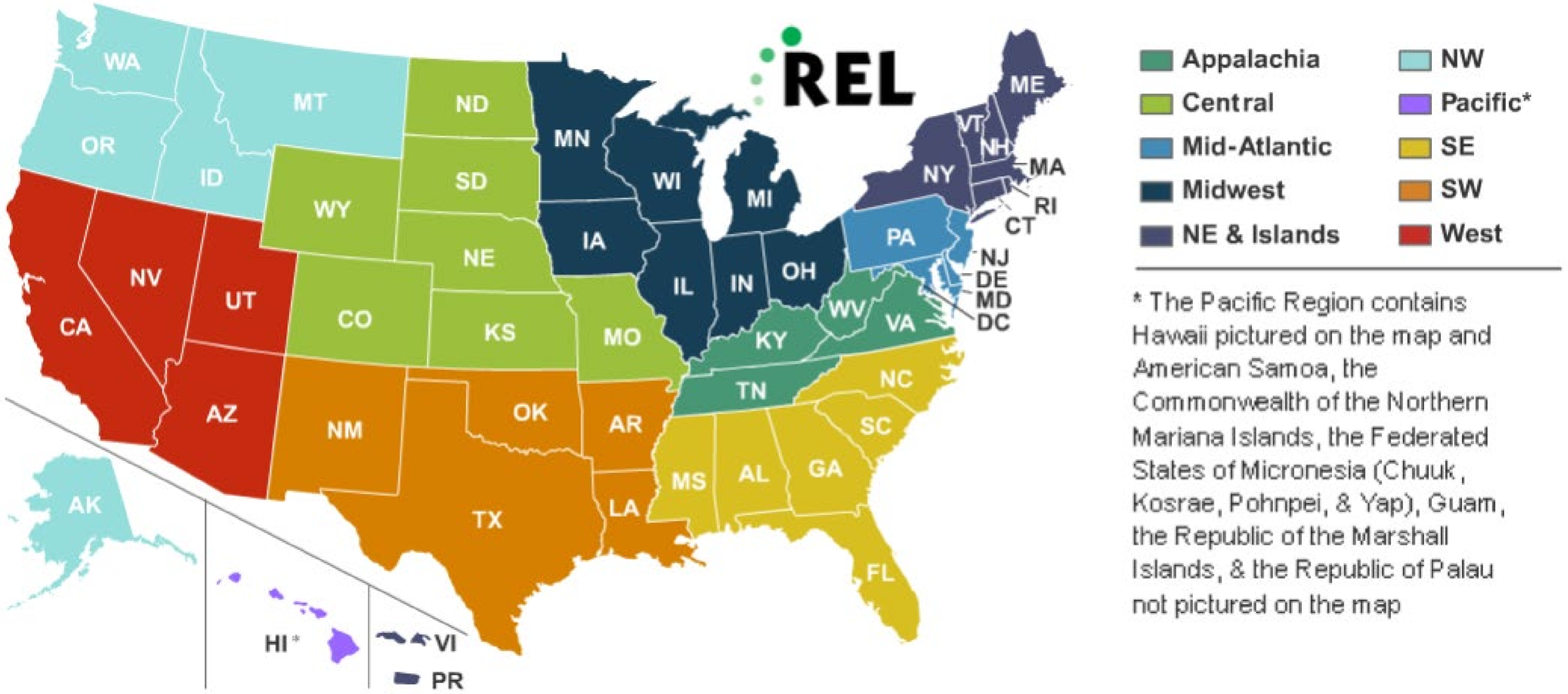
The Regional Educational Laboratories



The **10 RELs** work in partnership with stakeholders to **support a more evidence-based education system.**

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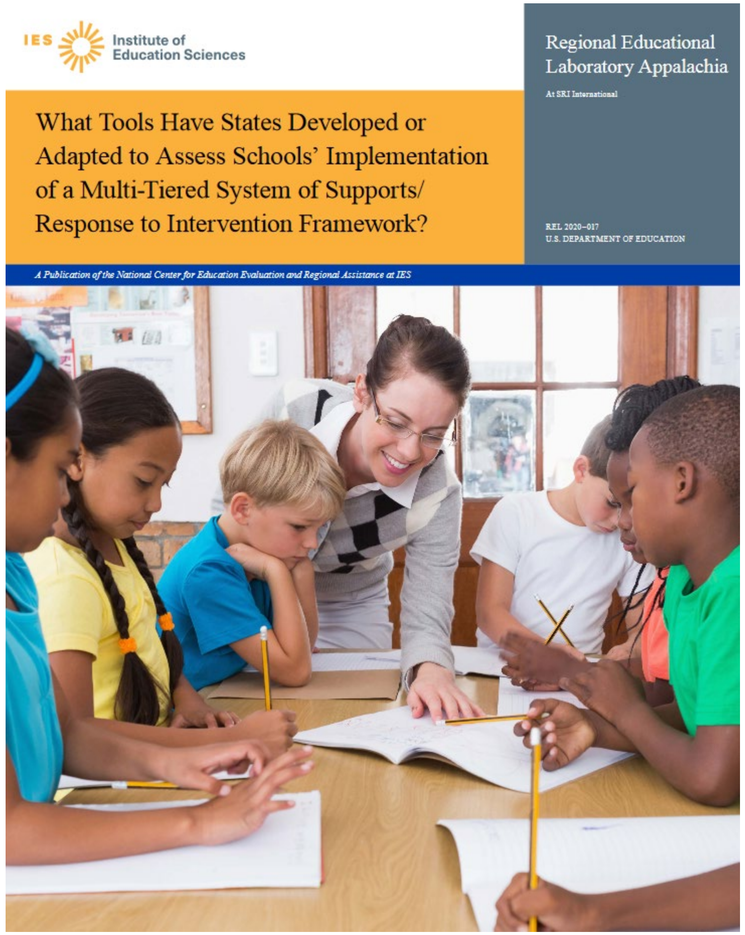
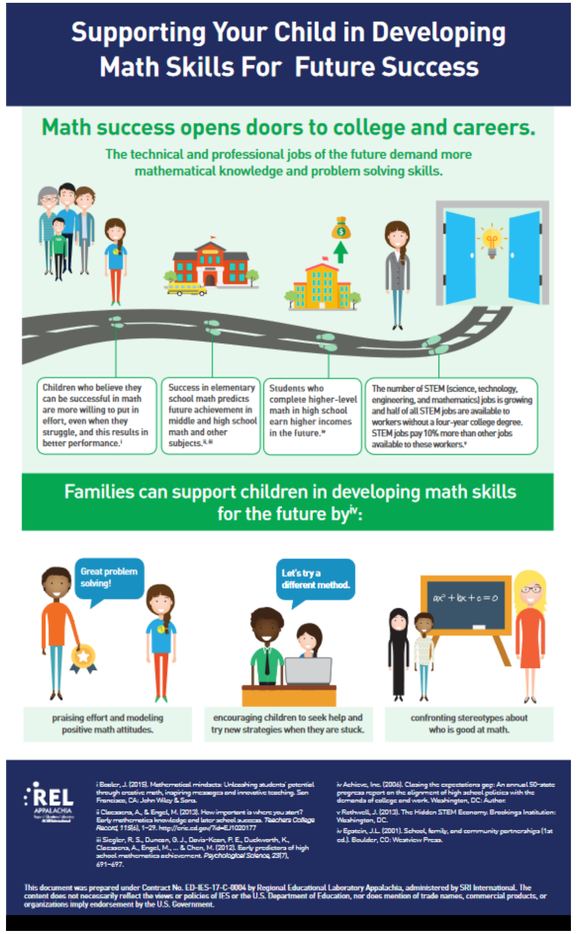
Applied Research



Training, Coaching, and Technical Support

Dissemination



Student Success in Mathematics partnership: Virginia school divisions

Results from the Virginia Longitudinal Data System: Algebra I and college preparatory diploma outcomes

Rebecca Schmidt

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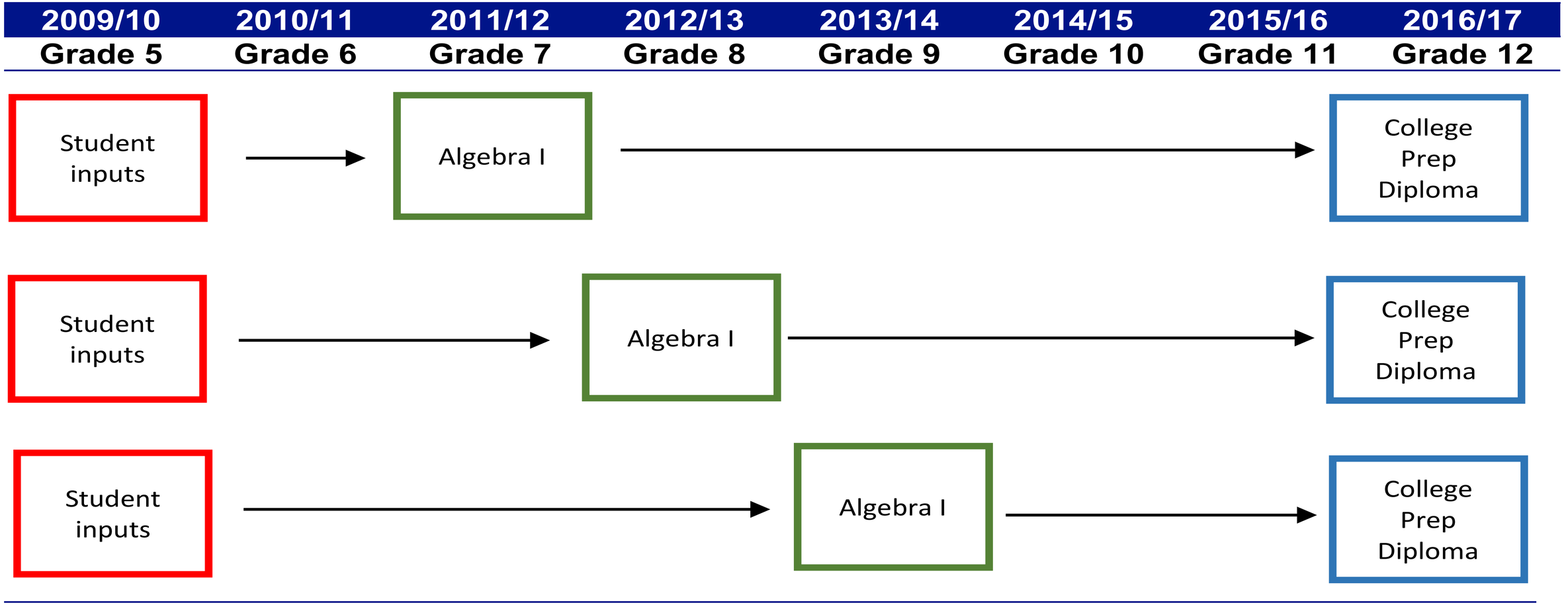
Goals of the study

- Goal 1: Understanding the **characteristics** of students in different math coursetaking pathways of Algebra I by grade 9.

- Goal 2: Understanding the **outcomes** of students in different math coursetaking pathways of Algebra I by grade 9.

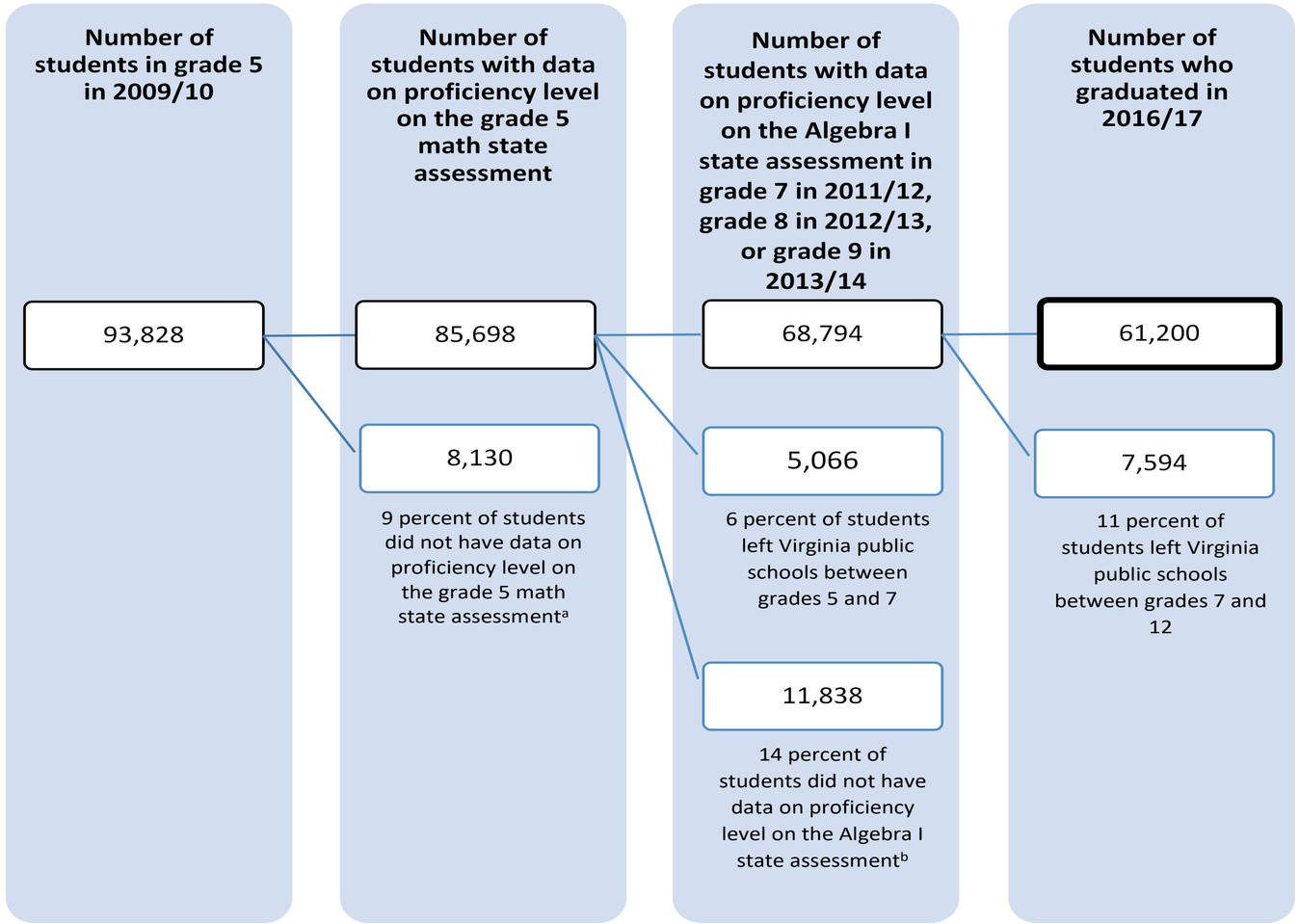
Description of the study



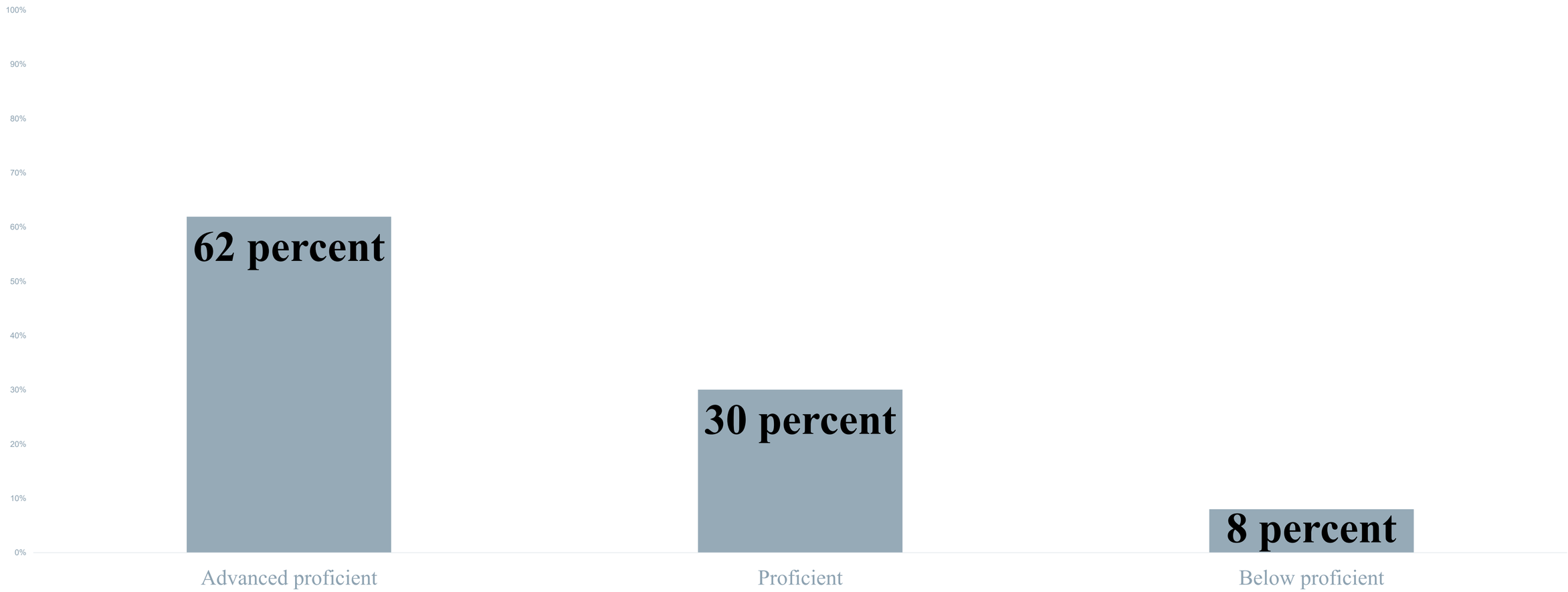
Study population from the Virginia Longitudinal Data System

Graduating cohort of 2017

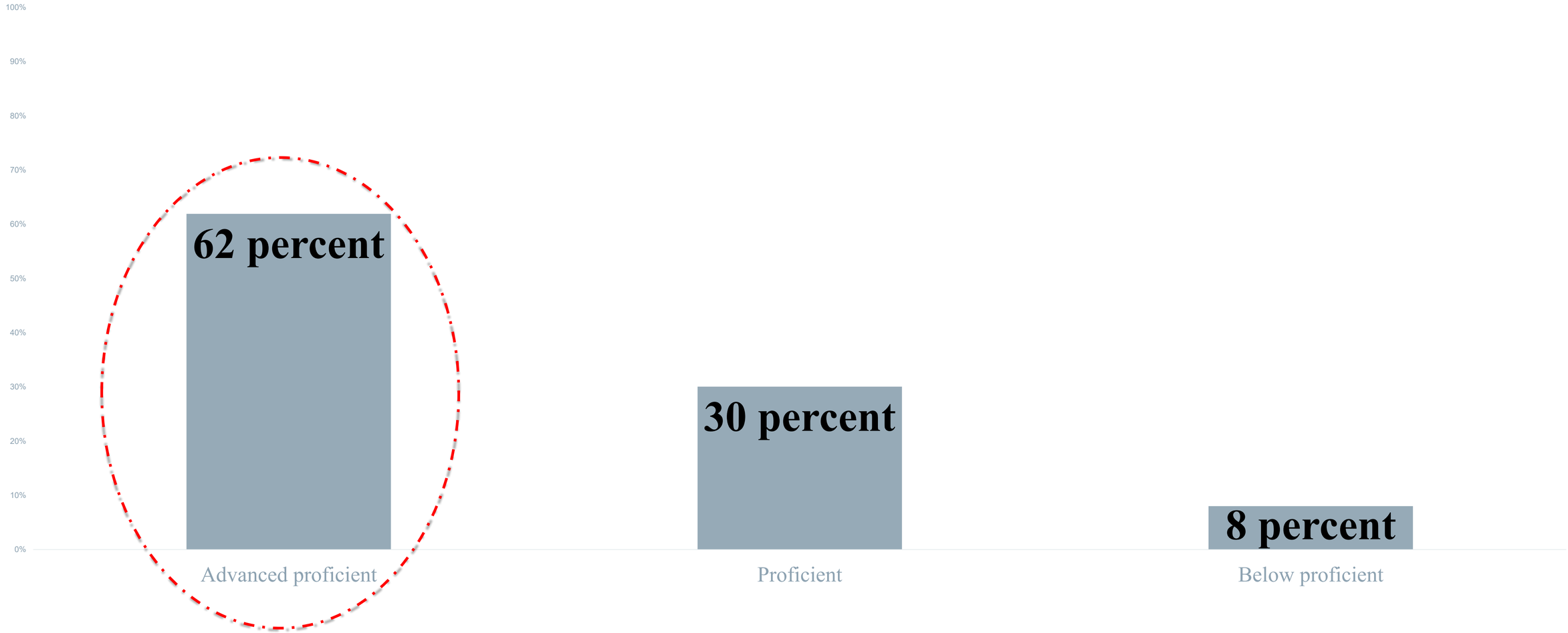
- All students: 61,200
- Economically disadvantaged (ED) students: 22,196 (36 percent)
- English learner (EL) students: 3,108 (5 percent)



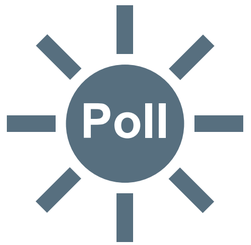
Of the 61,200 students in the study, 62 percent scored Advanced Proficient in grade 5 mathematics.



Let’s drill down and look at the students who scored Advanced Proficient in grade 5 mathematics.

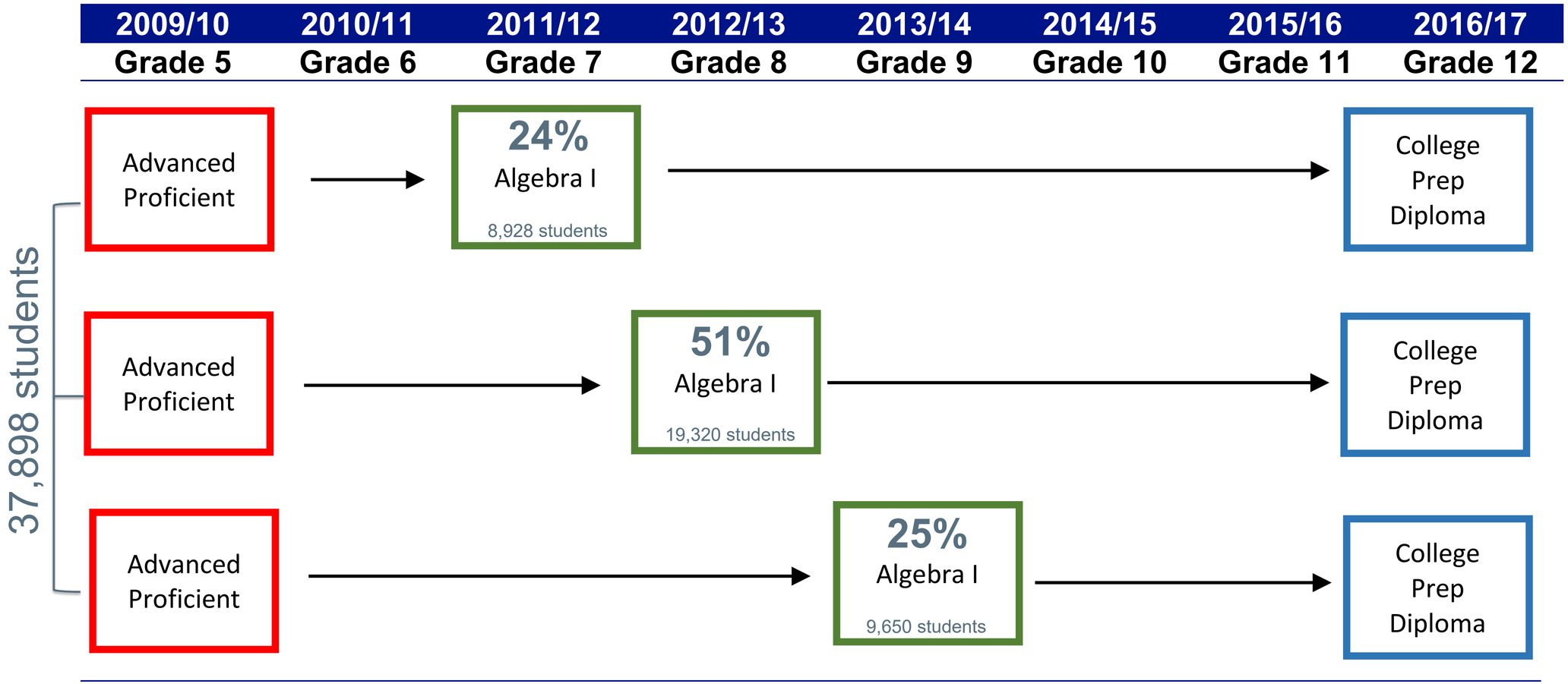


Among the students who scored **Advanced Proficient** in grade 5 mathematics, what grade level do you think has the highest percentage of students completing Algebra I in Virginia?

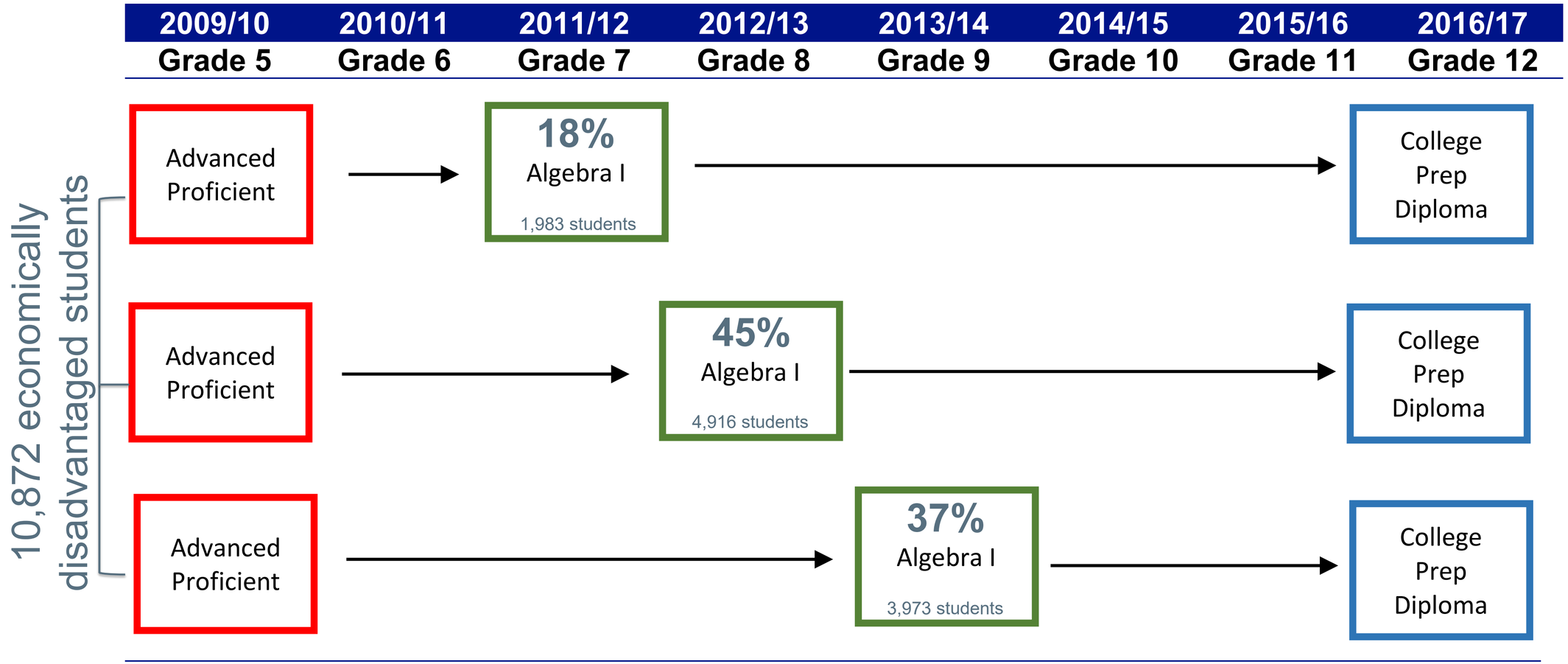


- Grade 7
- Grade 8
- Grade 9

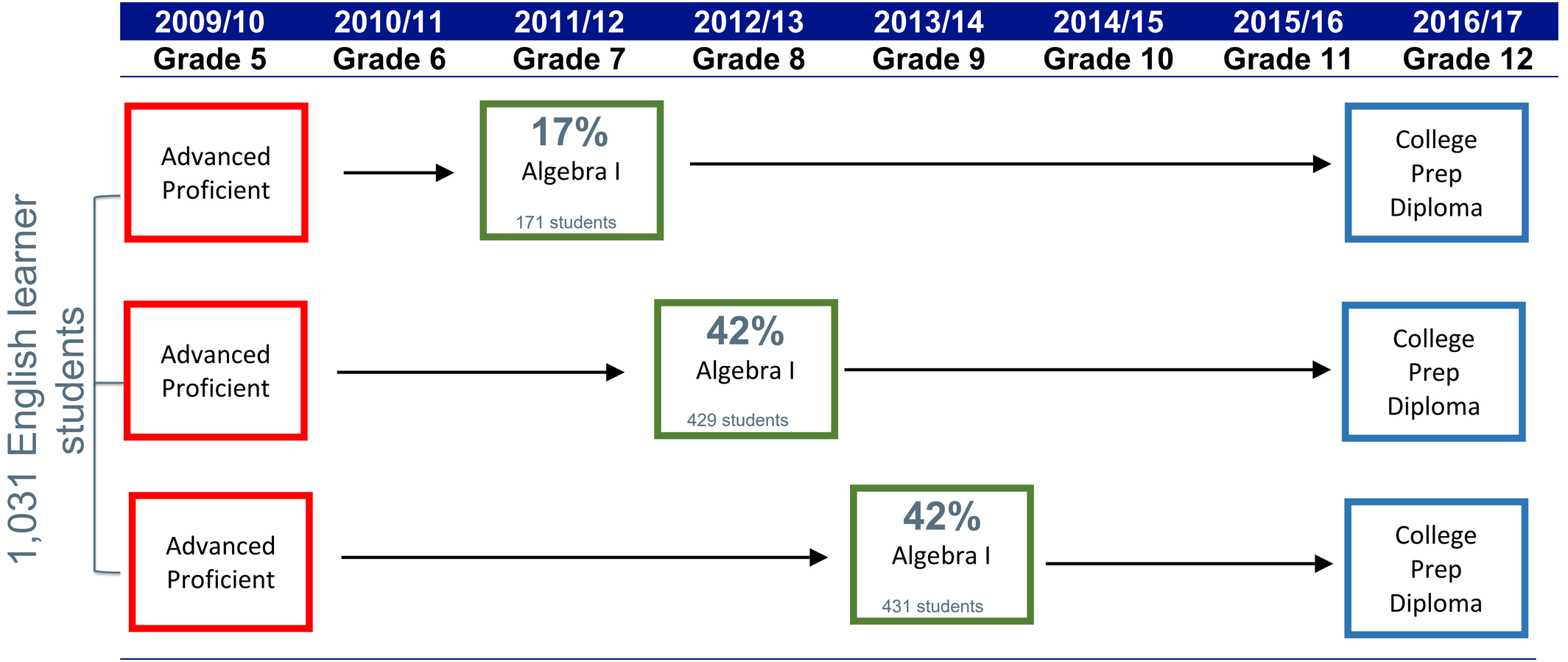
Among students who scored Advanced Proficient in grade 5, 51 percent completed Algebra I in grade 8.



Among **economically disadvantaged students** who scored Advanced Proficient in grade 5, 45 percent completed Algebra I in grade 8.



Among **English learner students** who scored Advanced Proficient in grade 5, 42 percent completed Algebra I in grade 8.



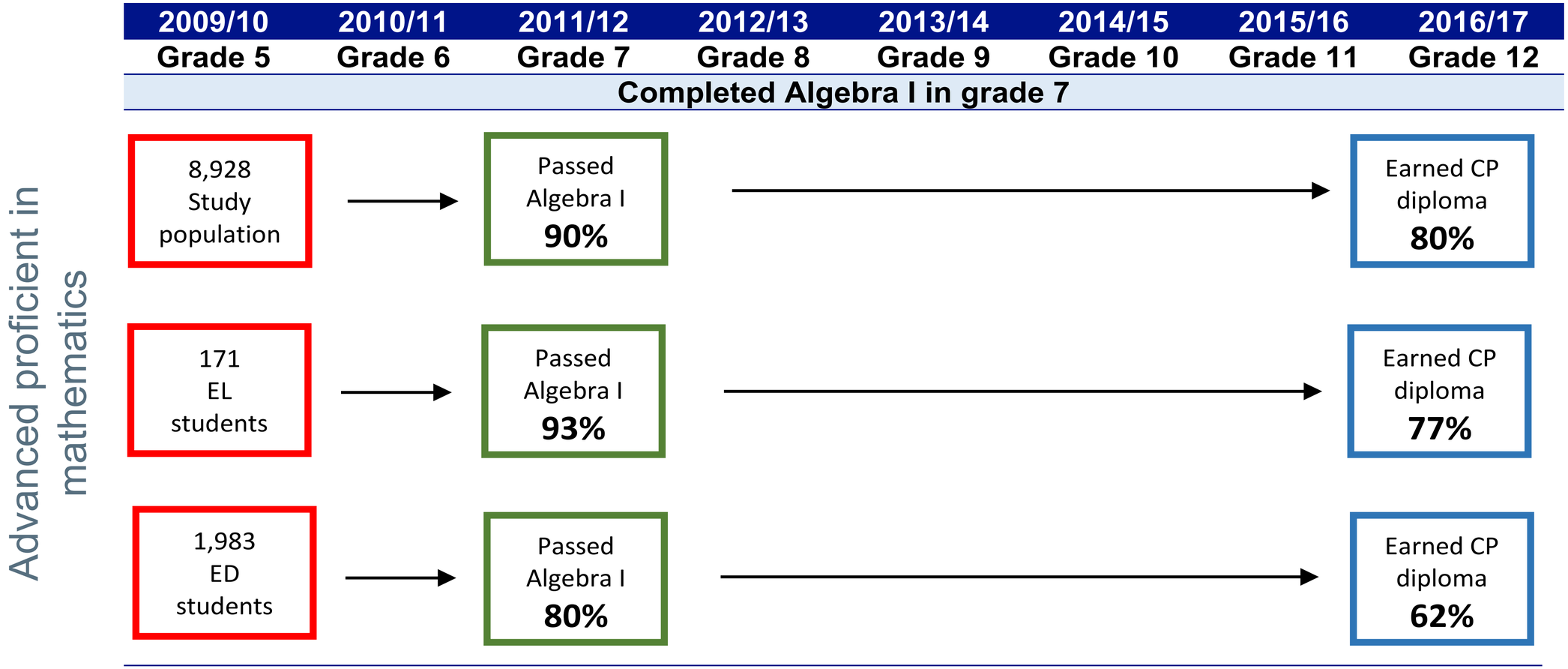
Among the students who scored **Advanced Proficient** in grade 5 mathematics, which group had the highest percentage of students who graduated with a college preparatory diploma?

Poll

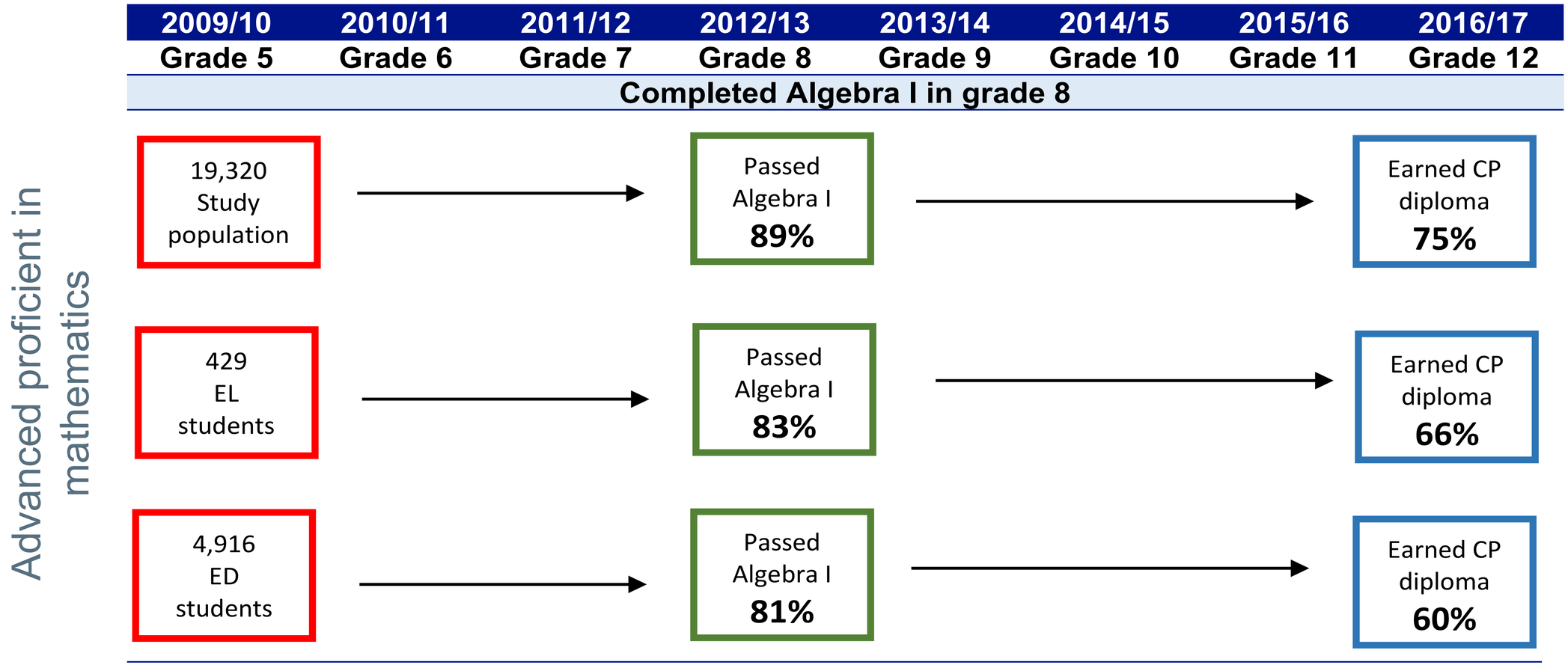
The group who completed Algebra I in:

- Grade 7
- Grade 8
- Grade 9

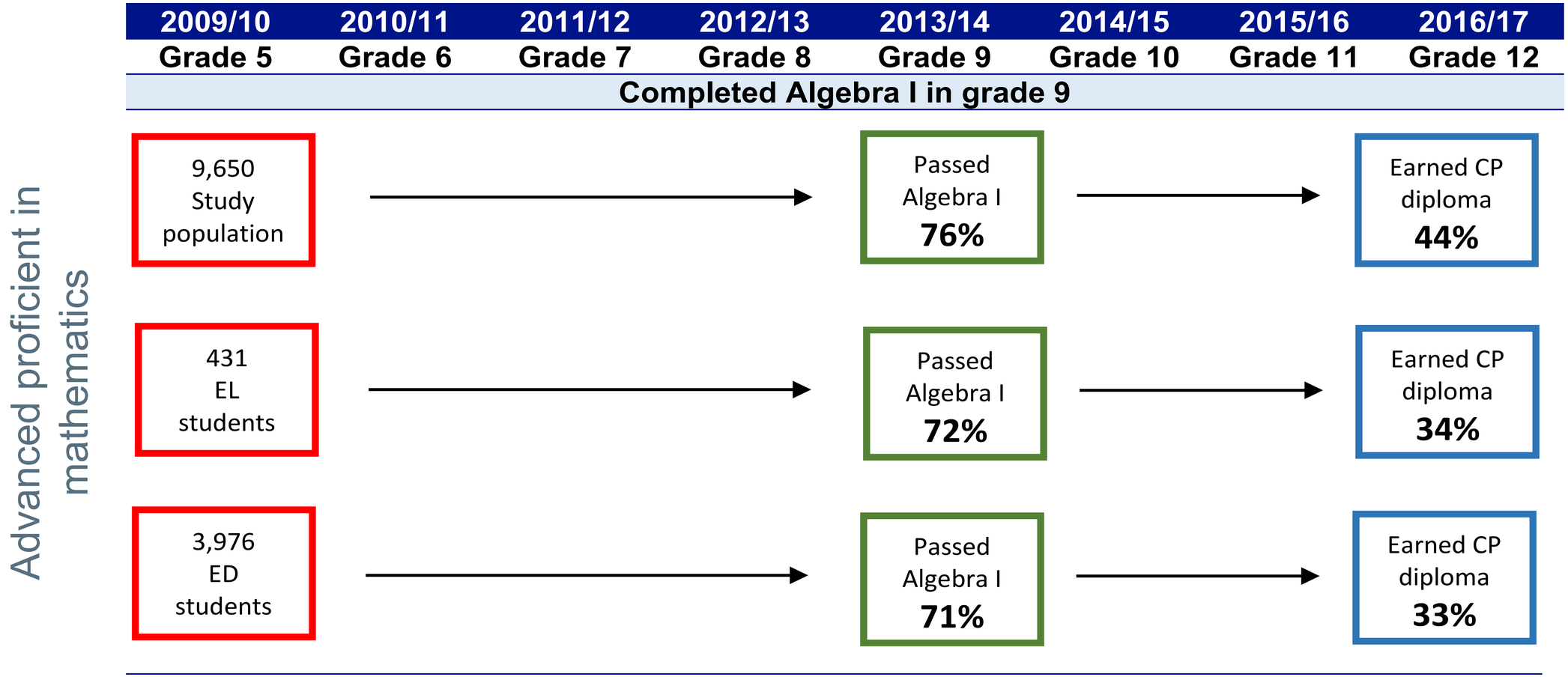
Among students who scored Advanced Proficient in grade 5 and completed Algebra I in grade 7, 80 percent earned a college preparatory diploma.



Among students who scored Advanced Proficient in grade 5 and completed Algebra I in grade 8, 75 percent earned a college preparatory diploma.



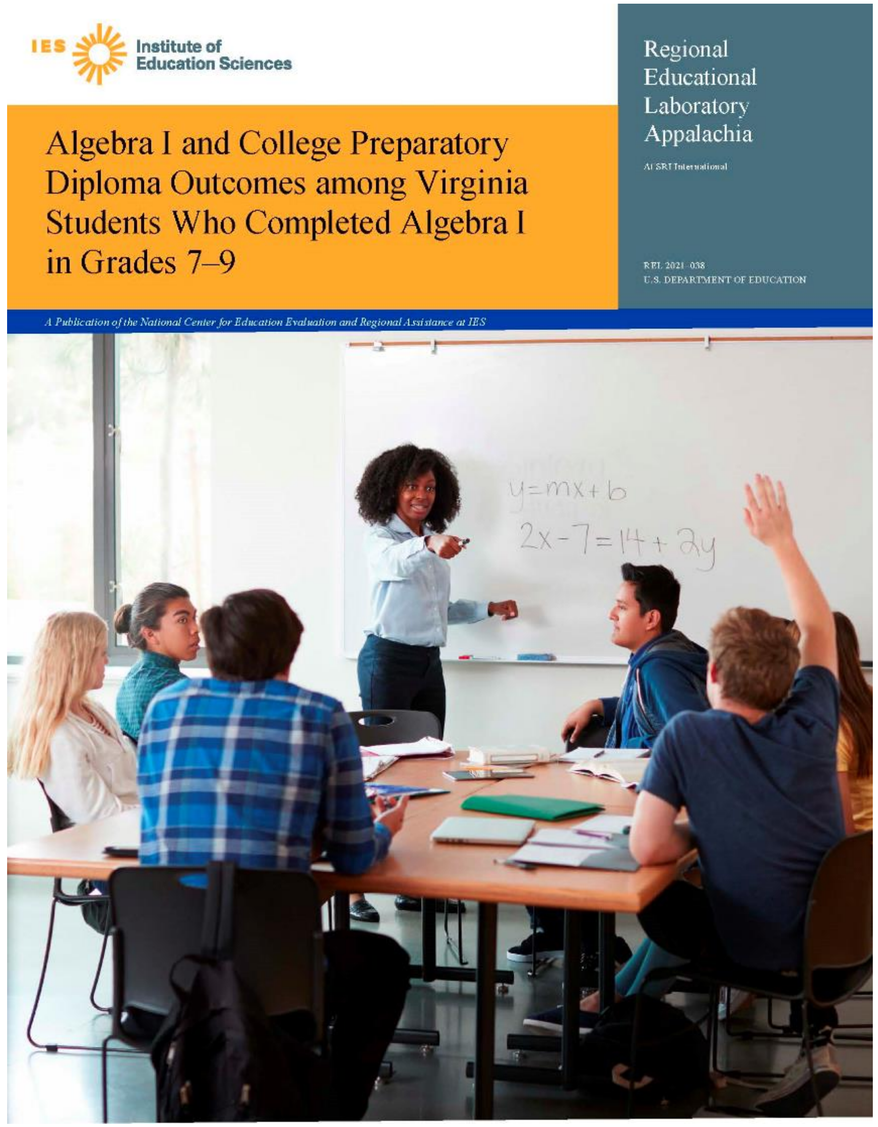
Among students who scored Advanced Proficient in grade 5 and completed Algebra I in grade 9, 44 percent earned a college preparatory diploma.



For more information

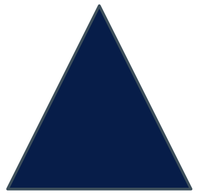
Access the full report, appendices, and study snapshot on the U.S. Department of Education, Institute of Education Sciences website:

- https://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=4577

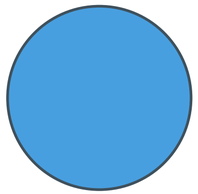


Pause and reflect

What is something that **squared** with your experience?



What are **three points** you want to remember?



What is a lingering question still going **around** in your mind?

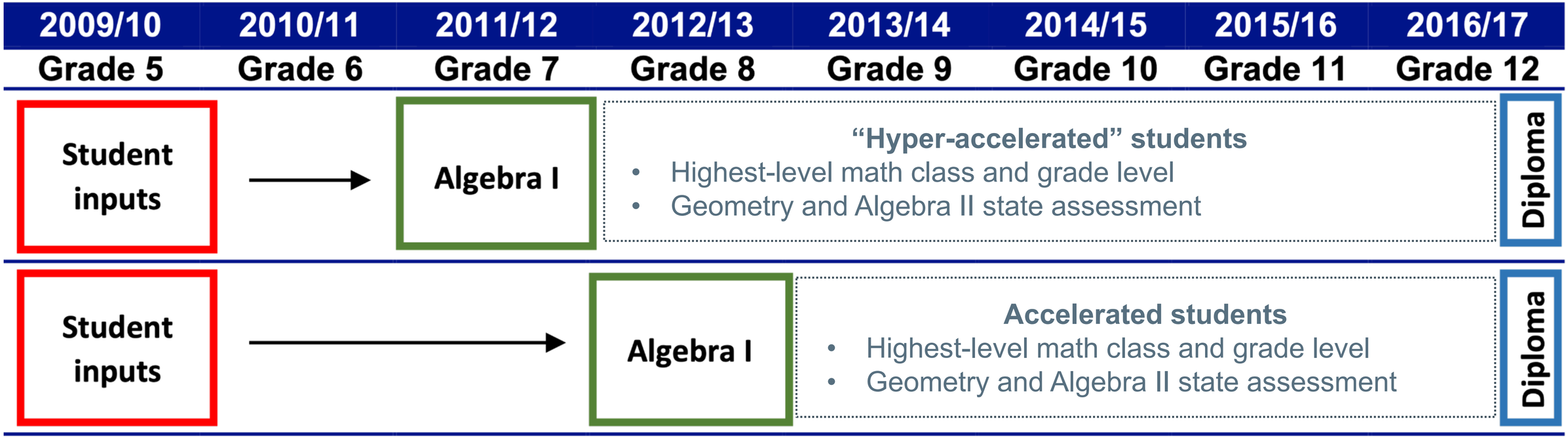
Digging deeper into local data: Algebra I in grade 7

Ryoko Yamaguchi

Stephanie Haskins

Brian Nussbaum

What is the story of students who completed Algebra I in grade 7? How does it compare with grade 8?



Subgroups by:
- Economically disadvantaged students
- English learner students
- Grade 5 math proficiency levels

Subgroups by:
- College preparatory diploma
- Standard diploma

What is the story of students who completed Algebra I in grade 7?

Stephanie Haskins
Executive Director of Instruction

Brian Nussbaum
Secondary Mathematics Coordinator

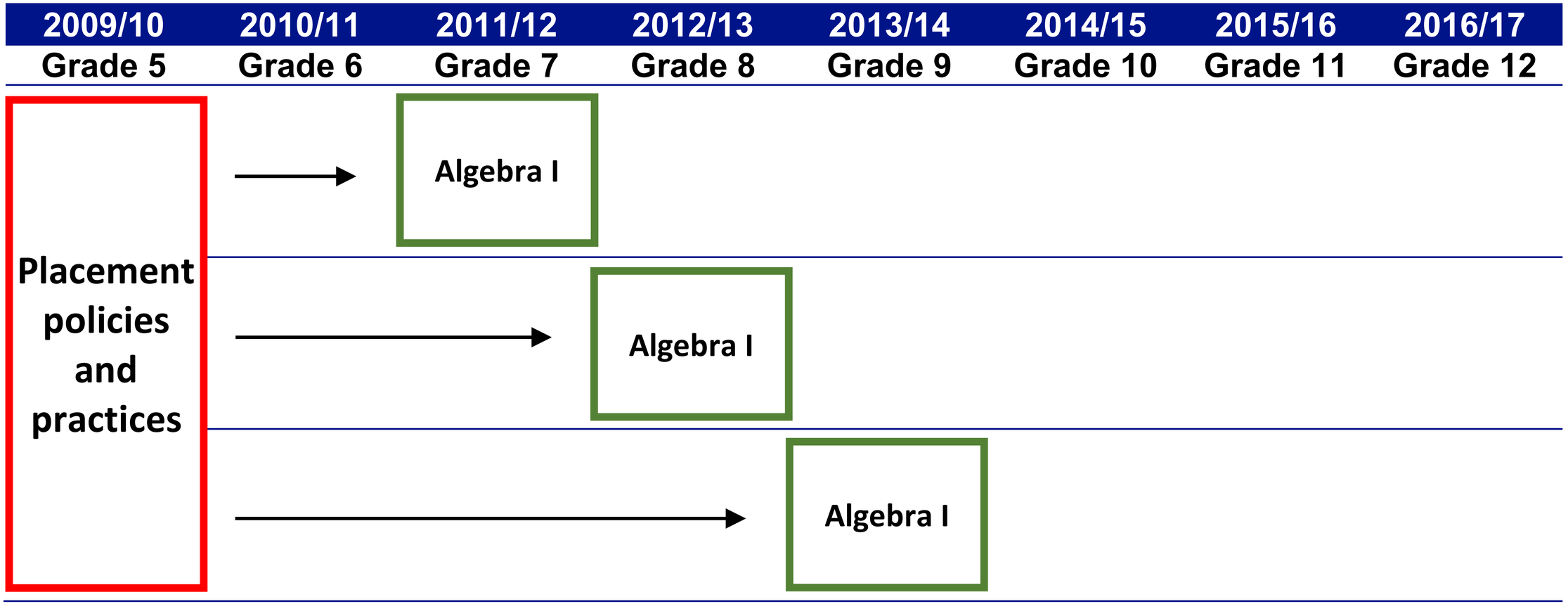
Implications for policy and practice

Ryoko Yamaguchi

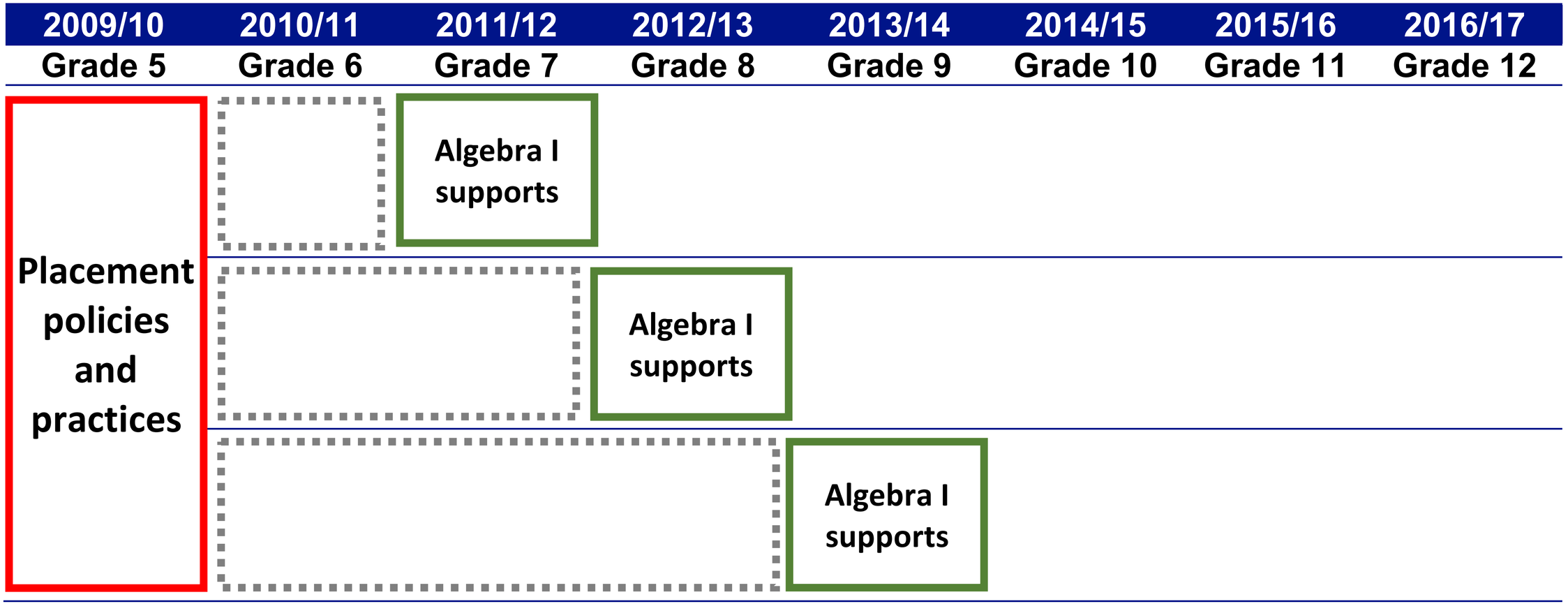
Stephanie Haskins

Brian Nussbaum

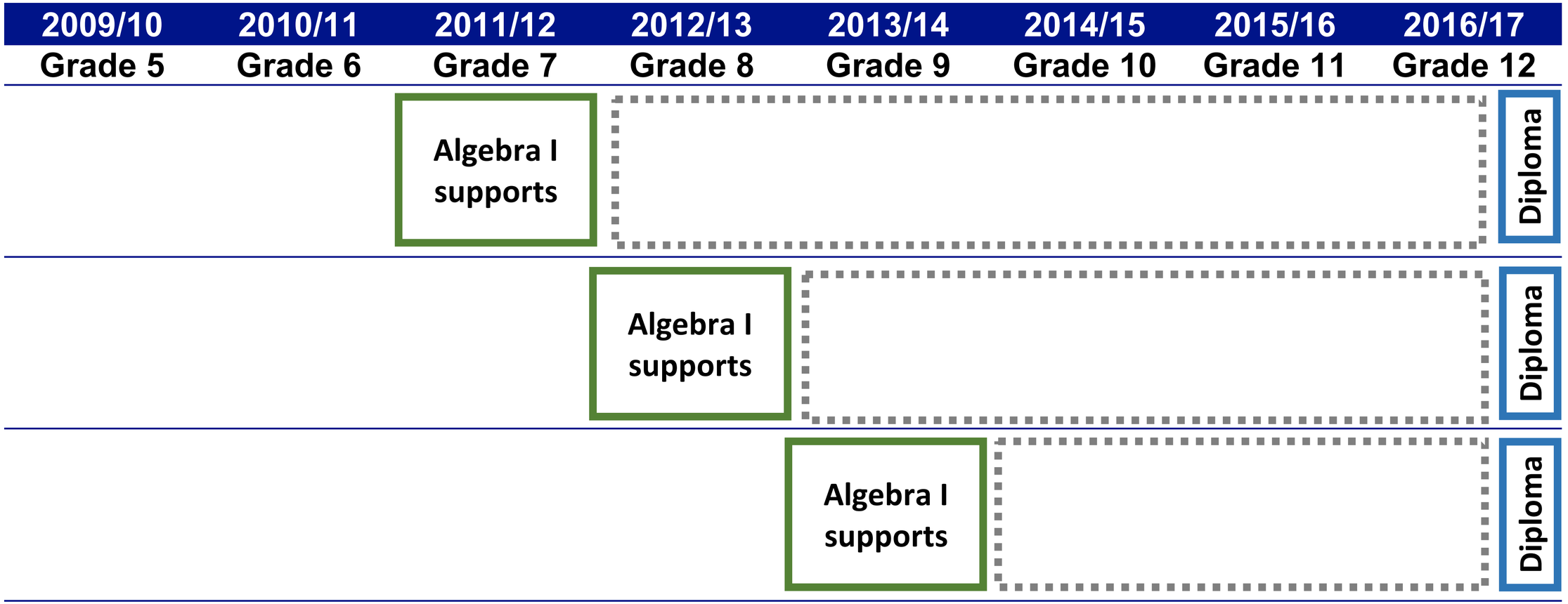
Reflect and discuss: Algebra I placement policies and practices



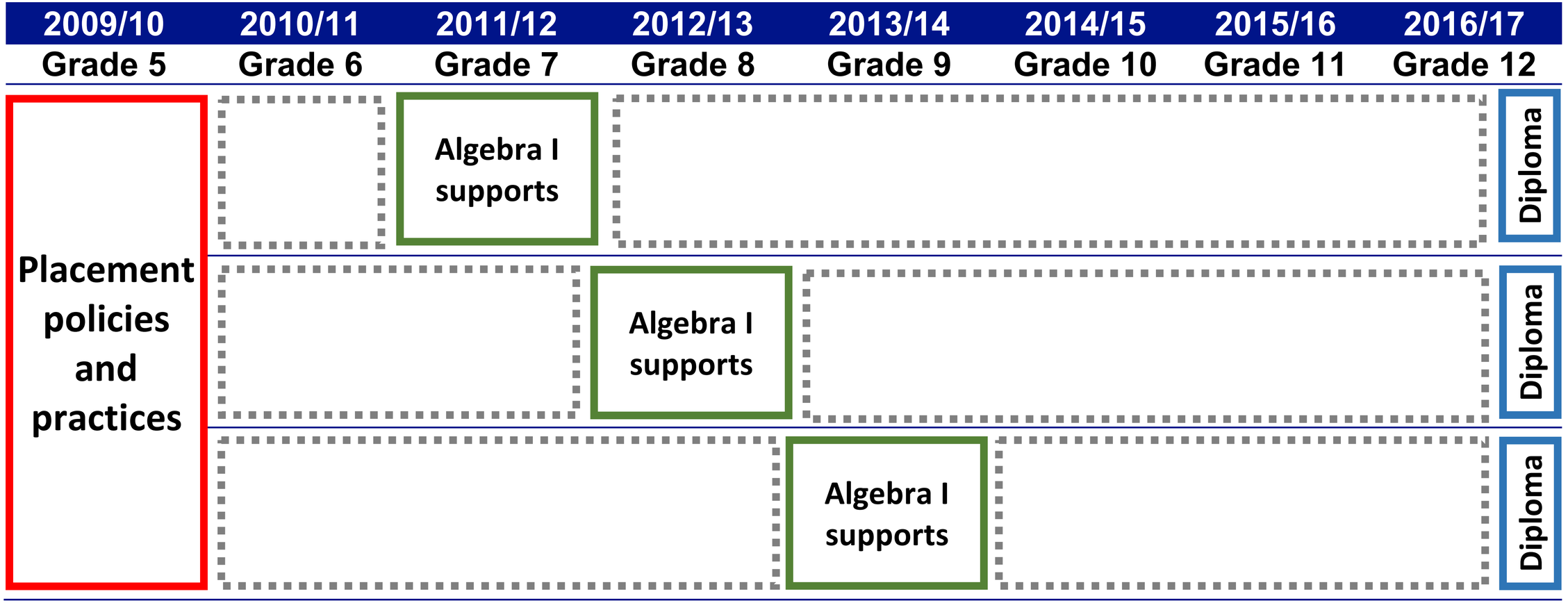
Reflect and discuss: Instructional supports before and during Algebra I



Reflect and discuss: Instructional supports after Algebra I to ensure college and career readiness at graduation



Reflect and discuss: Improving policies and practices throughout each student's mathematics coursetaking pathway



Thank you!

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Questions?