



Strengthening Mathematics Intervention Classes: Identifying and Addressing Challenges to Improve Instruction for Struggling Learners

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RESEARCH QUESTIONS

Mathematics intervention (MI) classes are taken by struggling students during the school day *in addition to* their general education mathematics classes

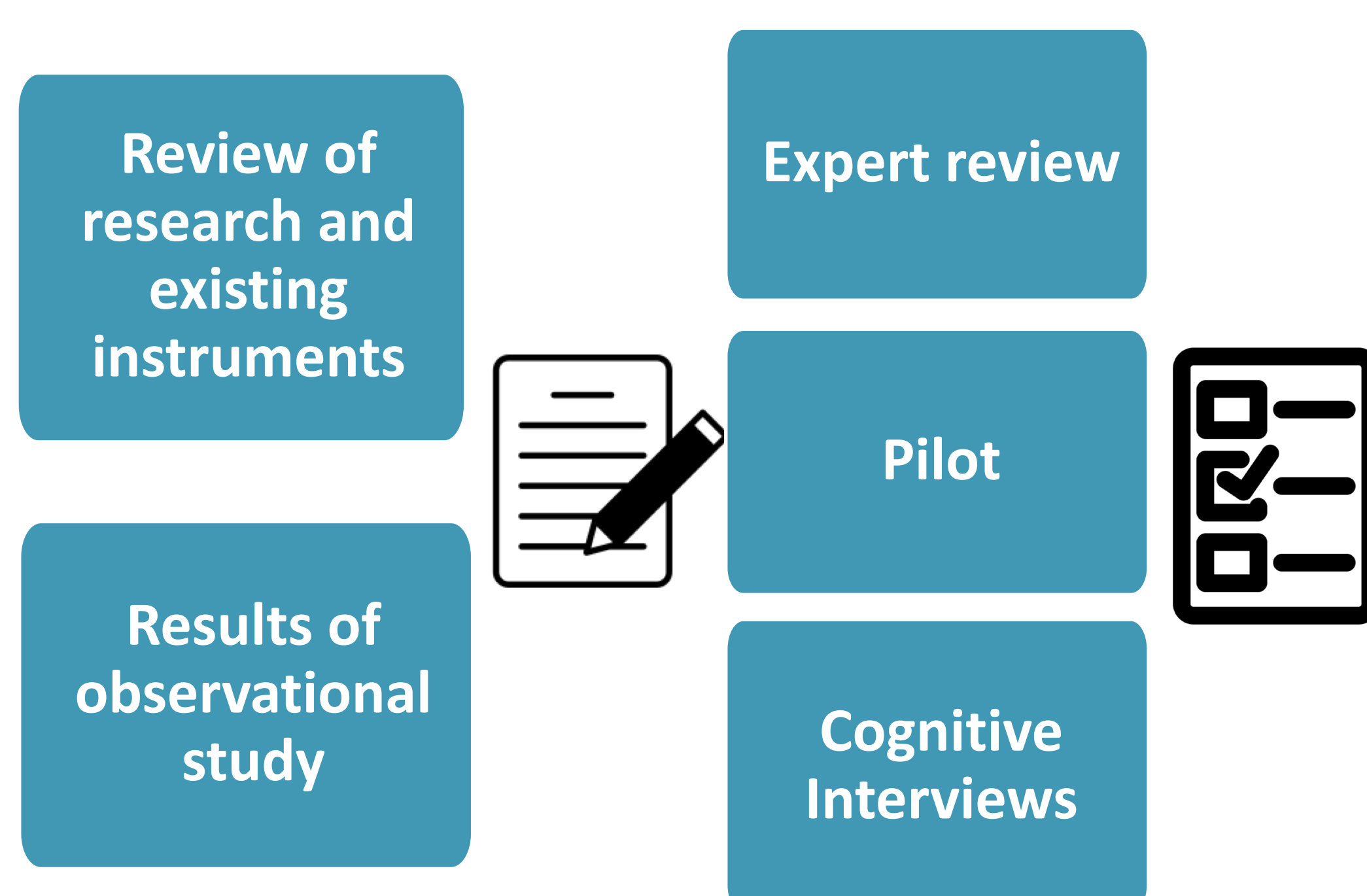
1. What percentage of public schools with grades 6–8 have MI classes?
2. What are the structures, practices, and challenges of MI classes?

OBSERVATIONAL STUDY

Observations: 54 MI classes (27 teachers)

Interviews: 27 MI teachers and 35 school or district mathematics leaders

SURVEY DEVELOPMENT



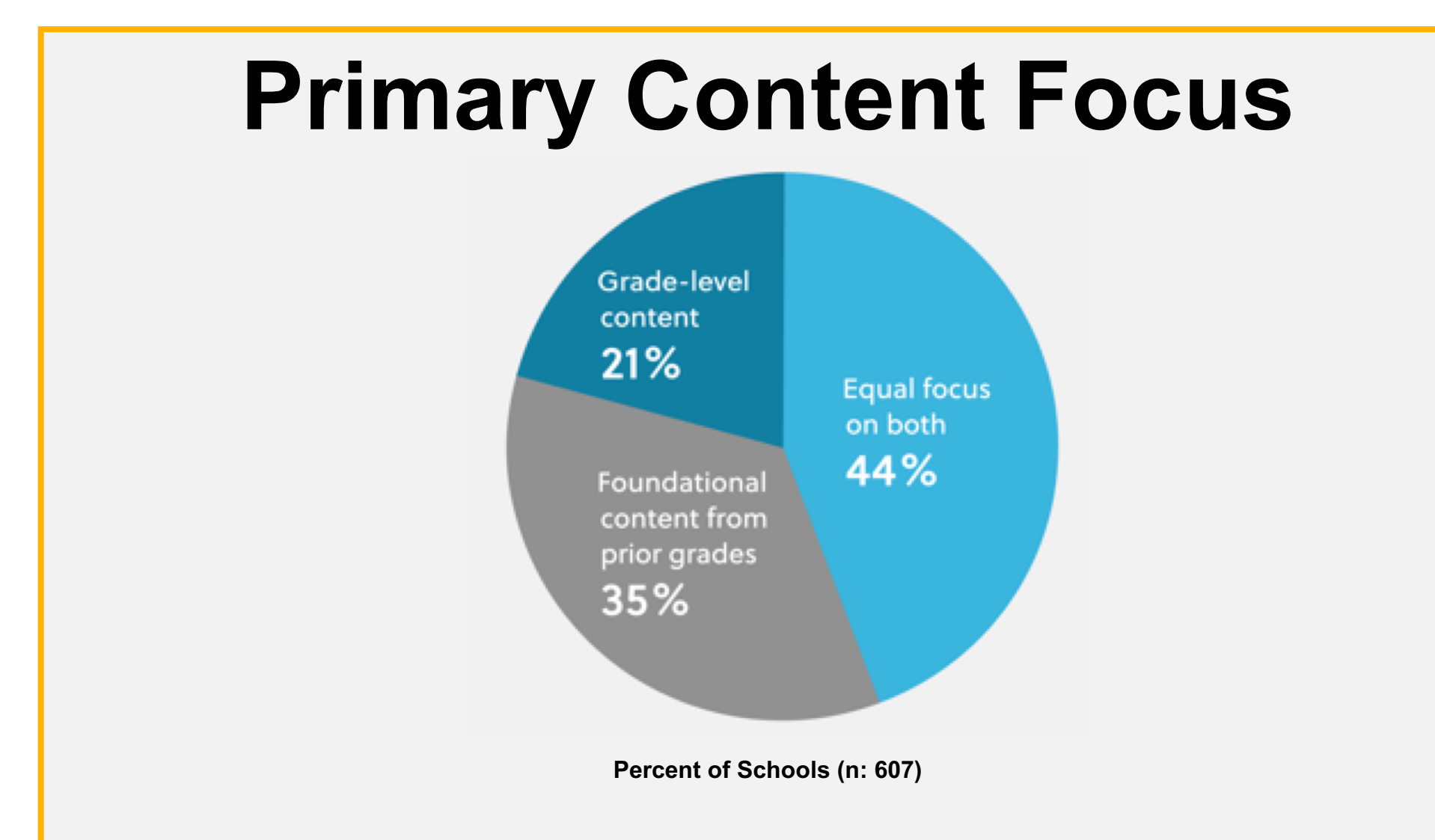
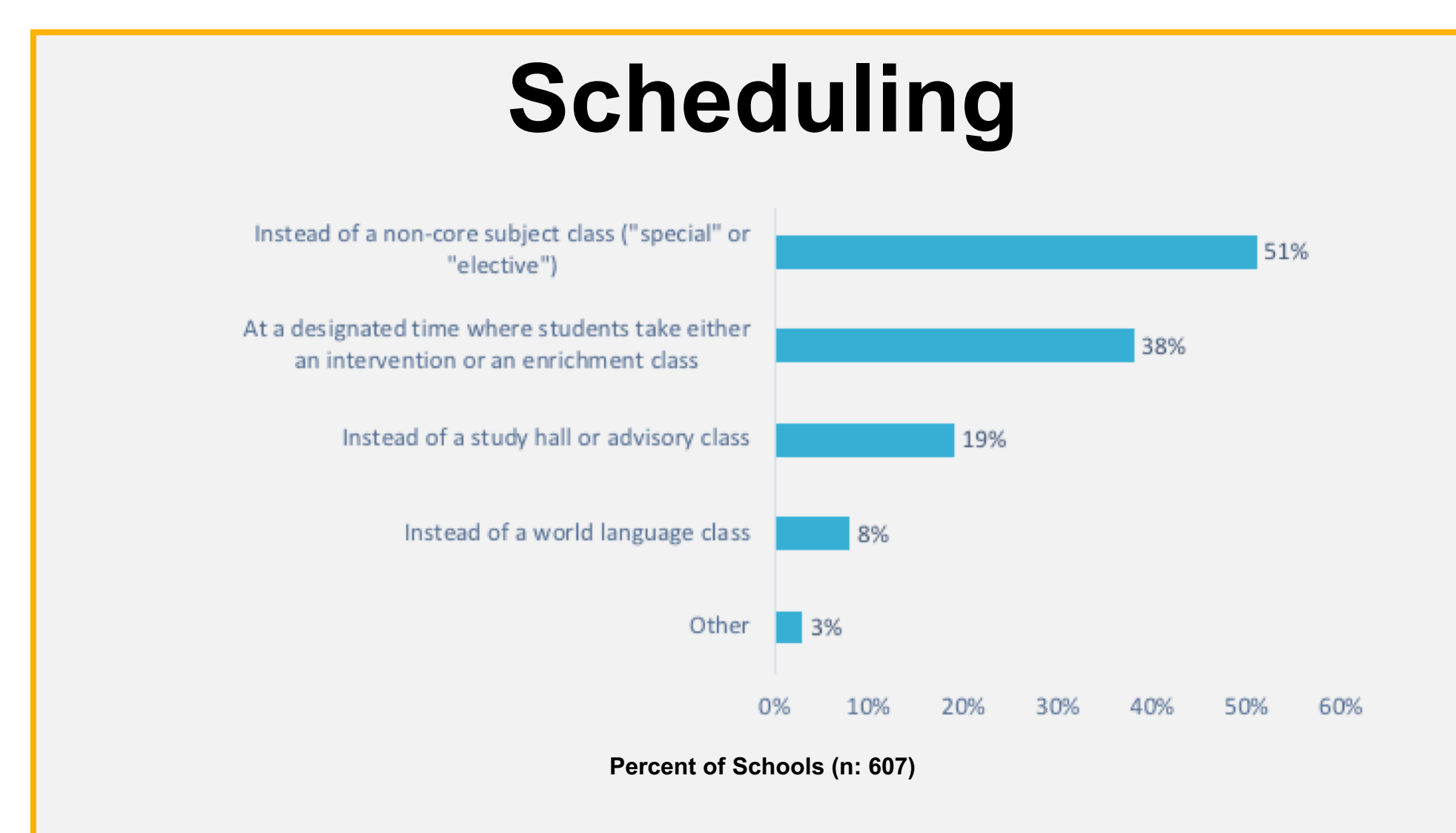
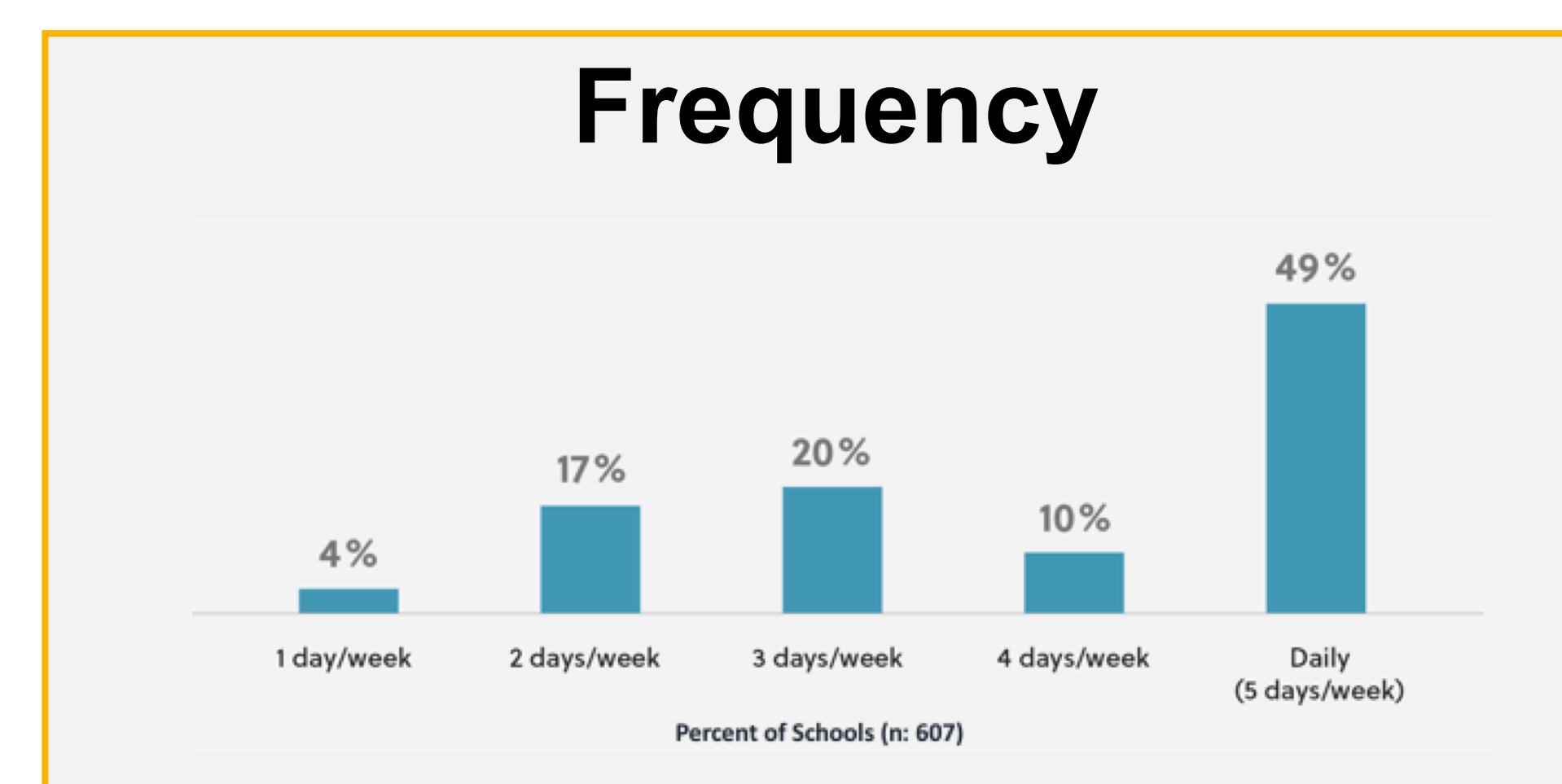
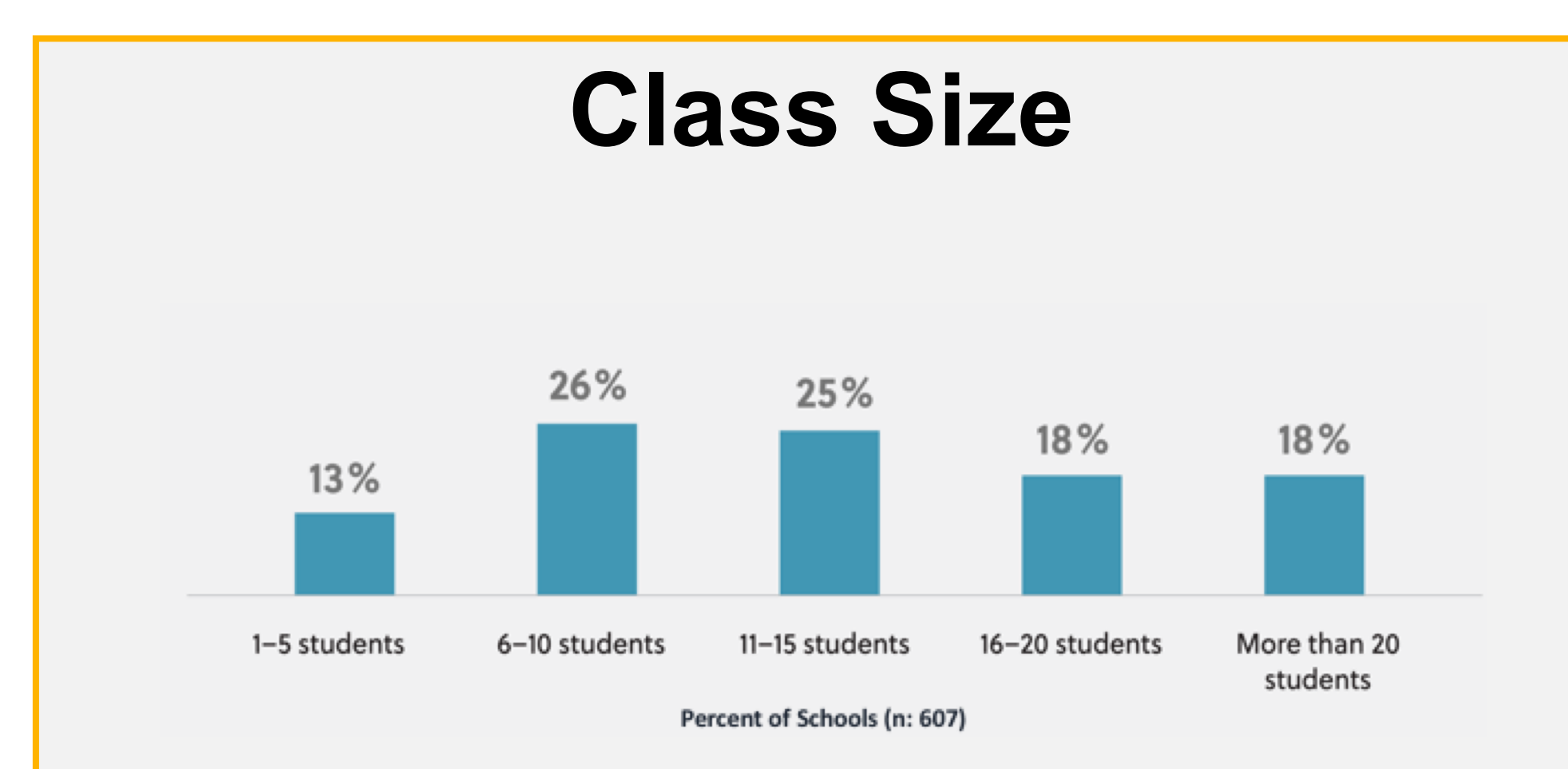
SAMPLE

Random sample of **2,024 public schools** (urban and suburban) with grades 6, 7, and 8, stratified by U.S. Census region and percent of students with free and reduced price lunch (FRPL). One respondent per school.

Response Rate: 876 schools (43%)

FINDINGS FROM THE NATIONAL SURVEY

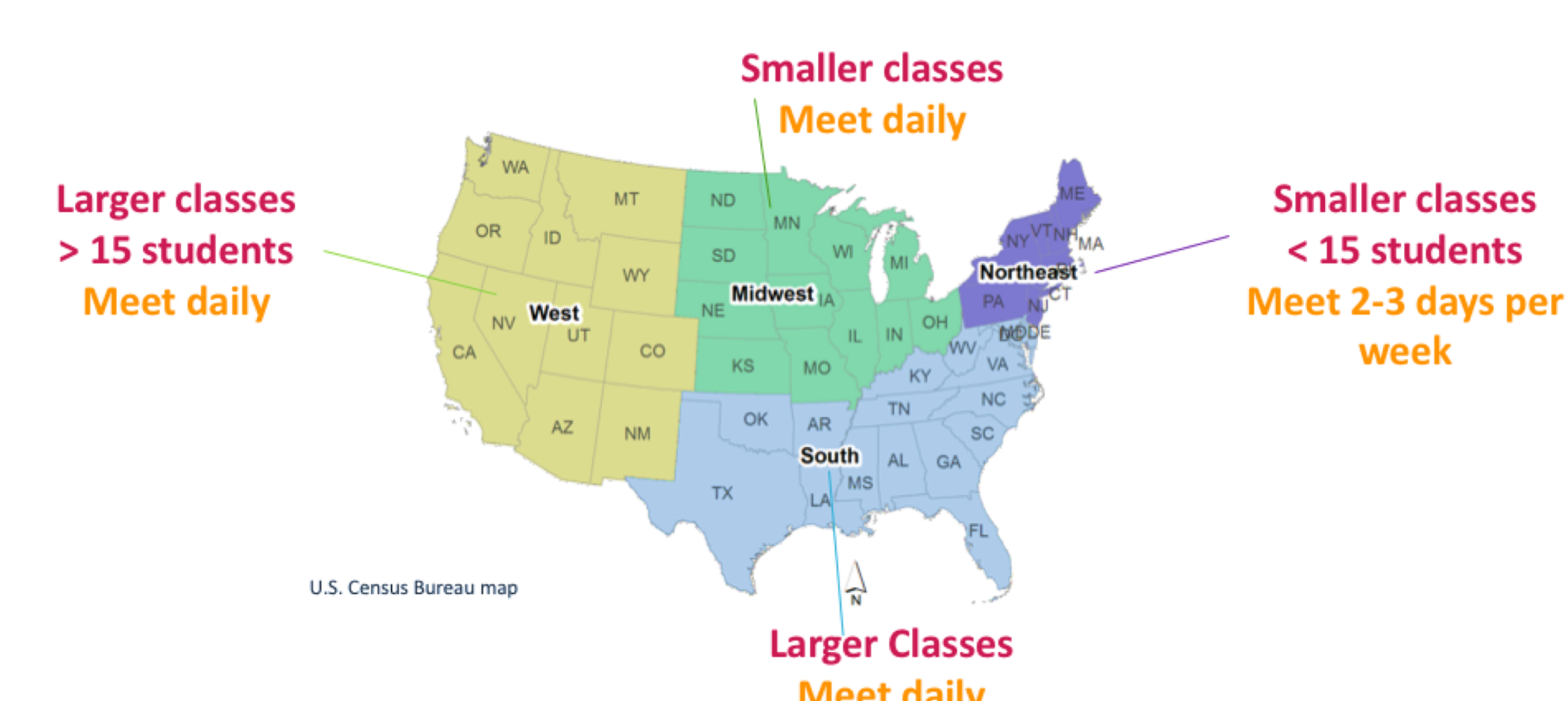
69% of schools had **mathematics intervention classes** for middle grades students during the 2016 - 2017 school year.



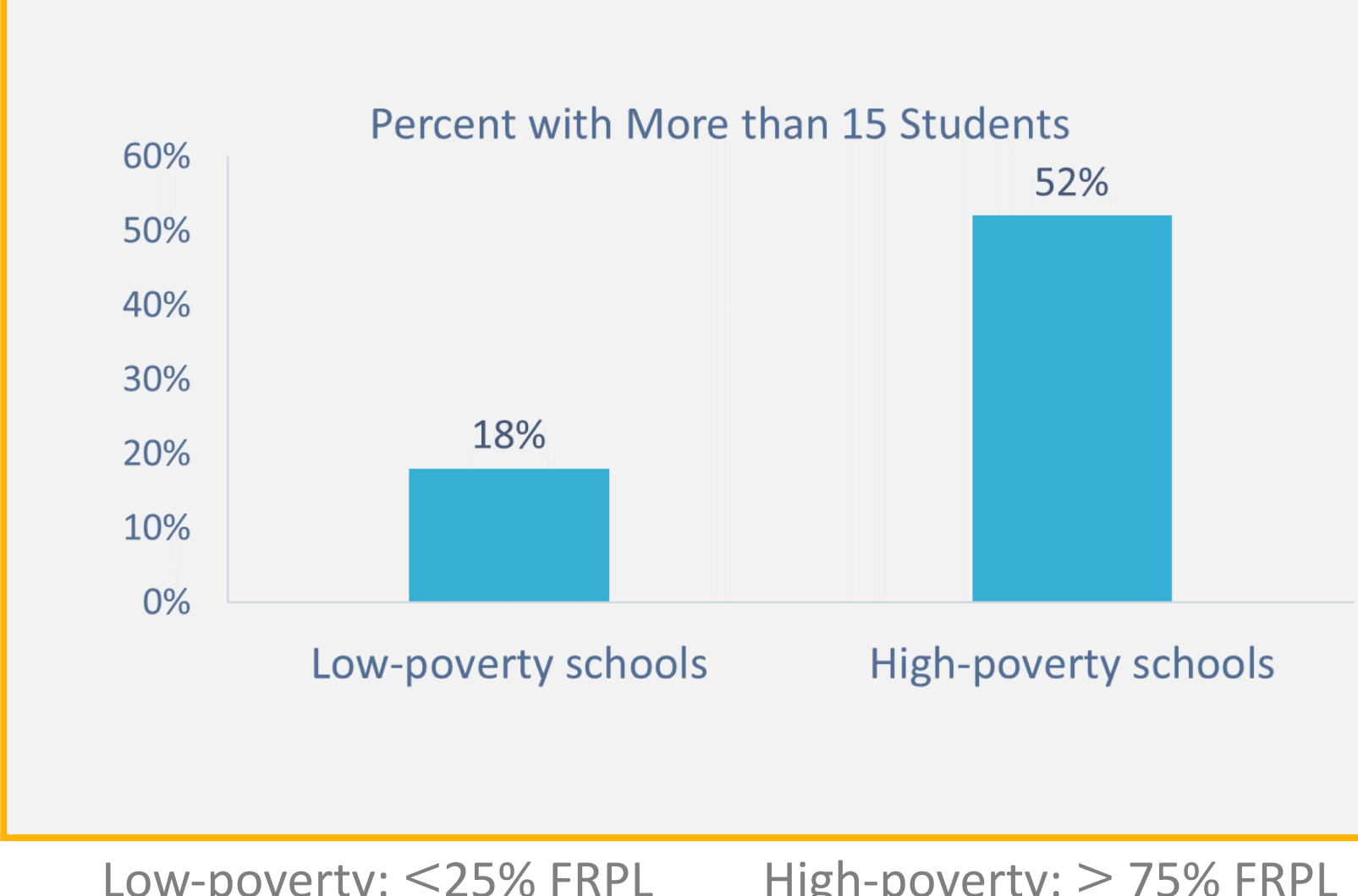
DIFFERENCES BY REGION AND SCHOOL POVERTY LEVEL

- No significant differences in prevalence of MI classes across the four U.S. Census Regions (**67% -74%**).
- Lower prevalence of MI classes in high-poverty schools (**63%**) than in low-poverty schools (**79%**).

Regions: Class Size & Frequency



Poverty Level: Class Size



COMMON CHALLENGES

Related to Students

1. Students in MI classes have a wide range of learning needs: **93%** of schools
2. Students have negative attitudes towards being in MI classes: **79%**
3. More students need MI classes than schools are able to serve: **72%**

Related to Teacher Supports

4. Little or no scheduled time to meet with other teachers about struggling learners: **69%**
5. Little or no professional development on intervention practices: **66%**
6. Little or no scheduled planning time for MI classes: **61%**

FUTURE RESEARCH ?

- What are effective ways to improve learning outcomes and motivate struggling students?
- What are effective ways to support teachers of MI classes?
- What is the impact of MI classes on student learning?
- What MI class structures and practices work for whom and under what conditions?

LEARN MORE

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