



Strategies to Improve the Literacy Skills of Canadian Children and Youth

J. Douglas Willms

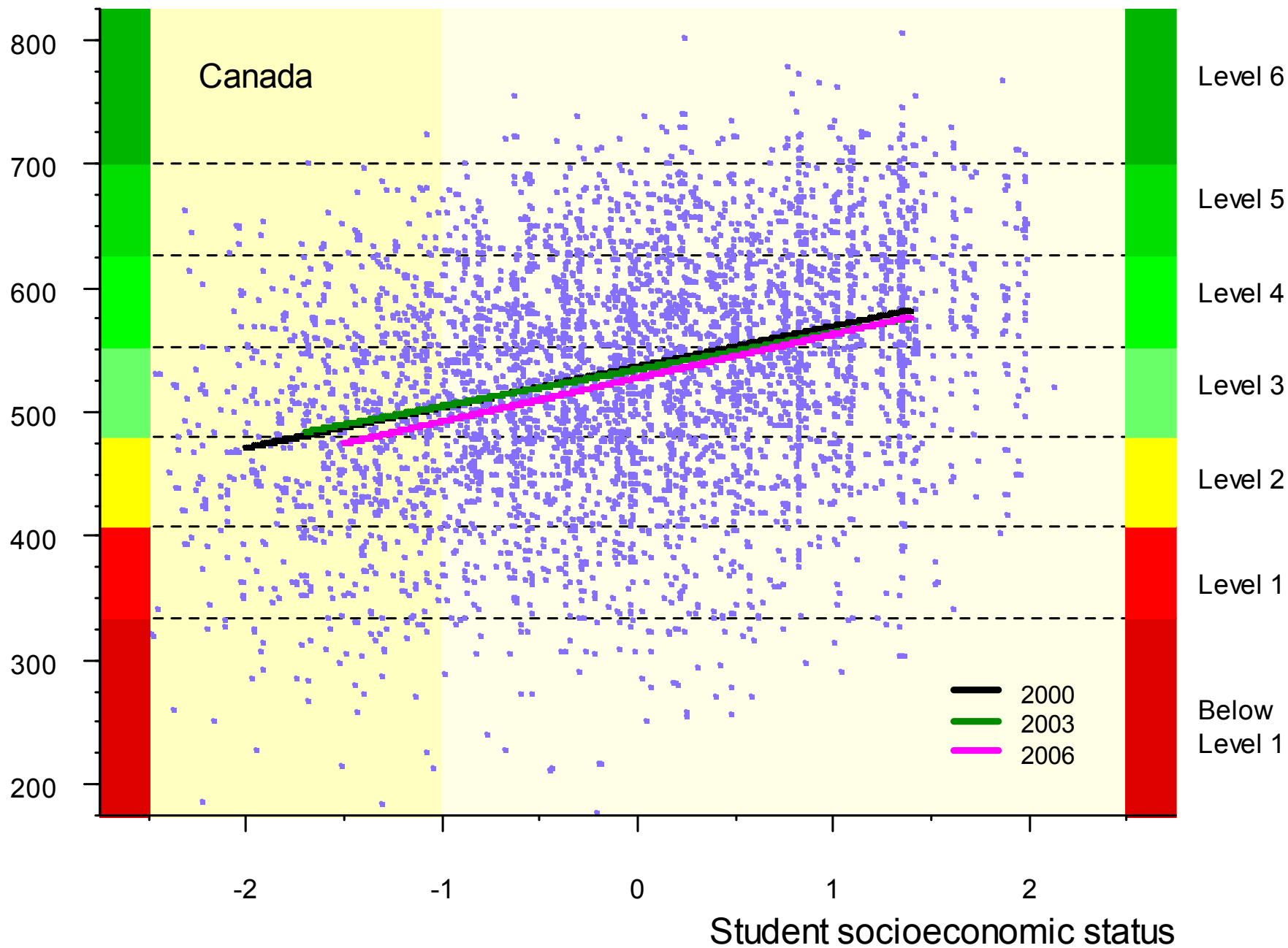
University of New Brunswick



How well do Canadian children fare in their literacy skills?



Student reading proficiency



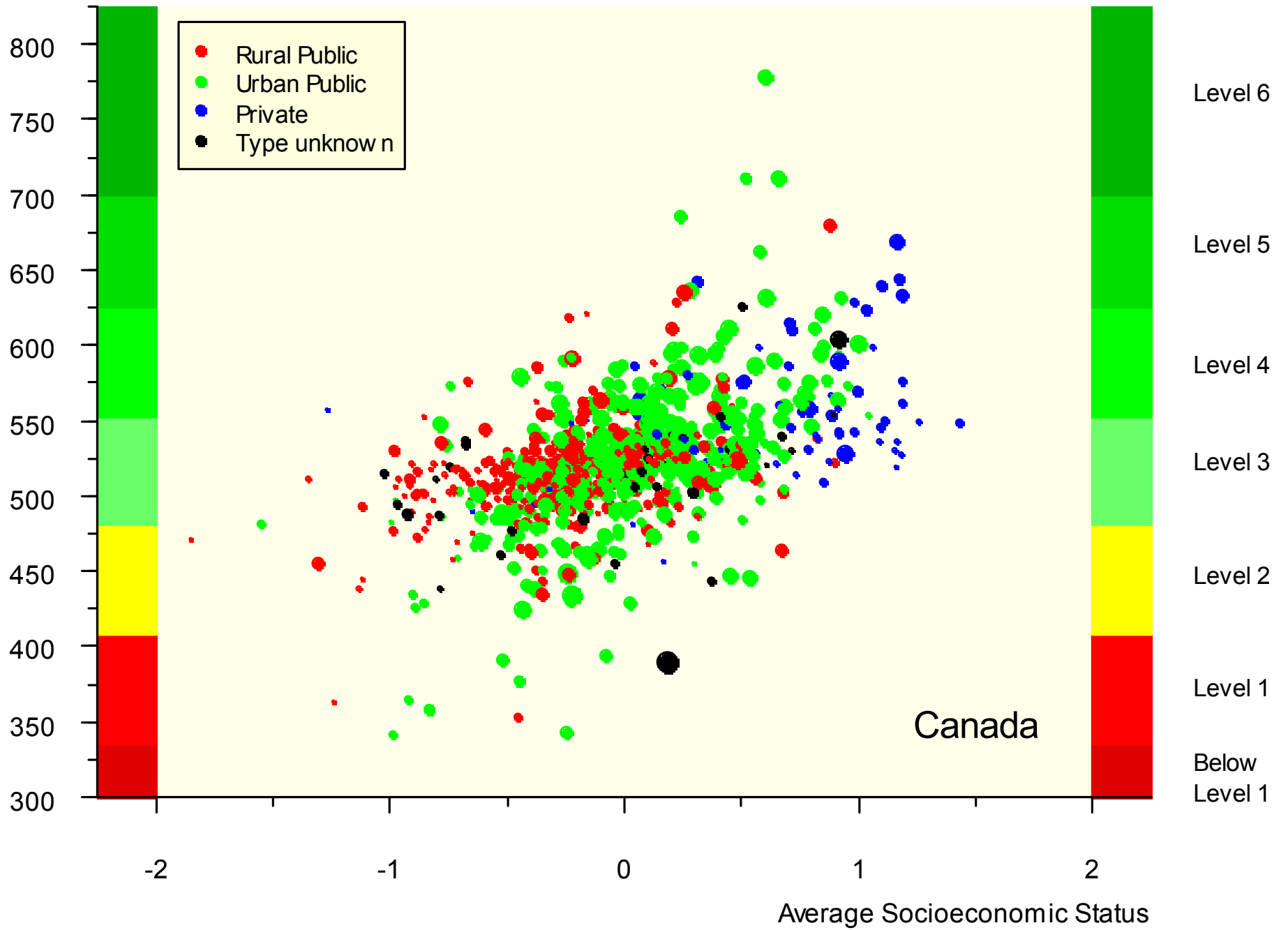
Literacy Skills in Canada have not improved over the past decade

The recent results provide evidence that reading skills in Ontario have reached a plateau.

In 2006, about 40,000 Canadian youth at age 15 had reading literacy skills at or below Level 1

About **29%** of 15-year olds scored at Level 2 or lower.

Average Reading Proficiency





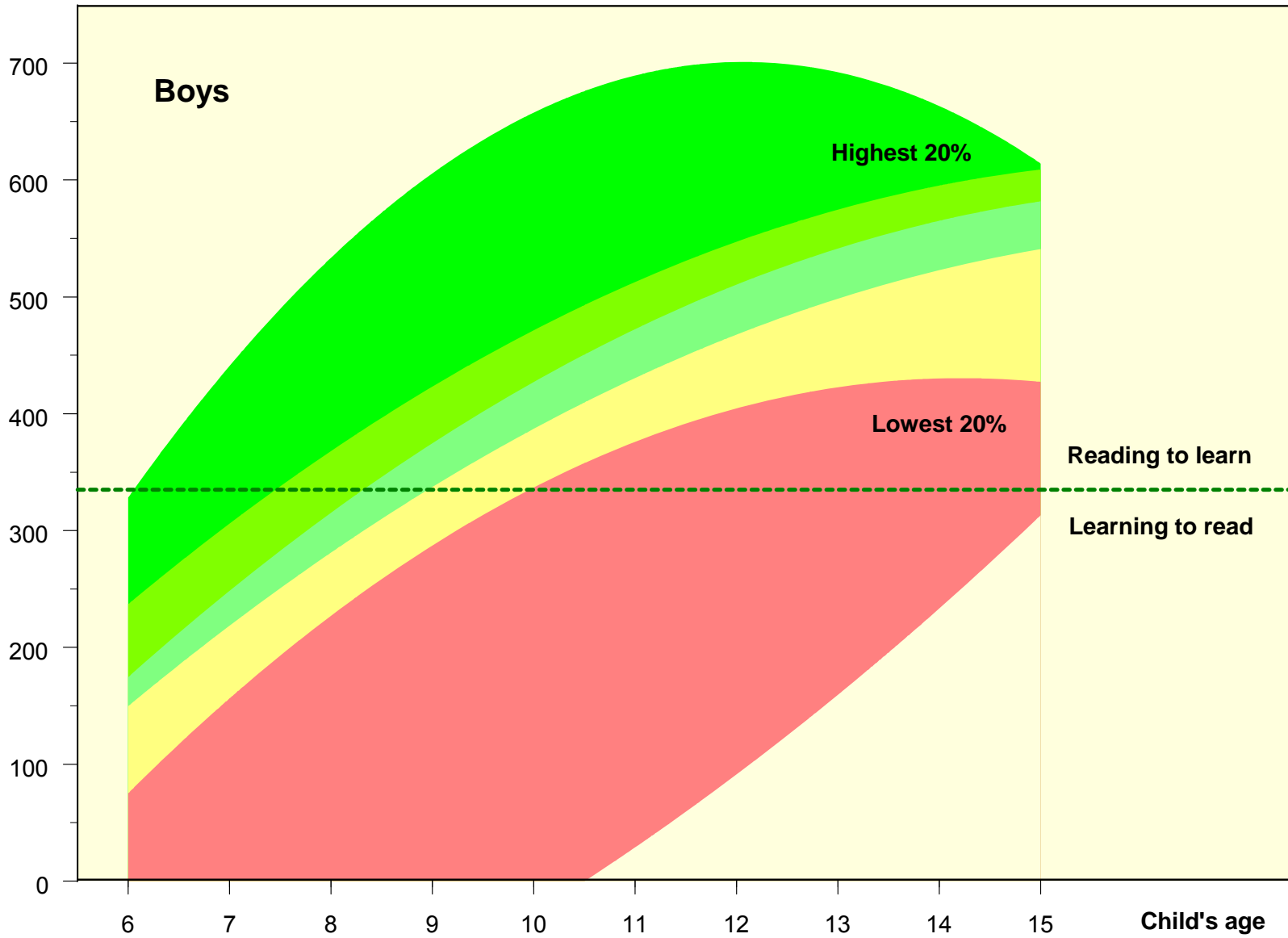
The critical transition from learning-to-read to reading-to-learn



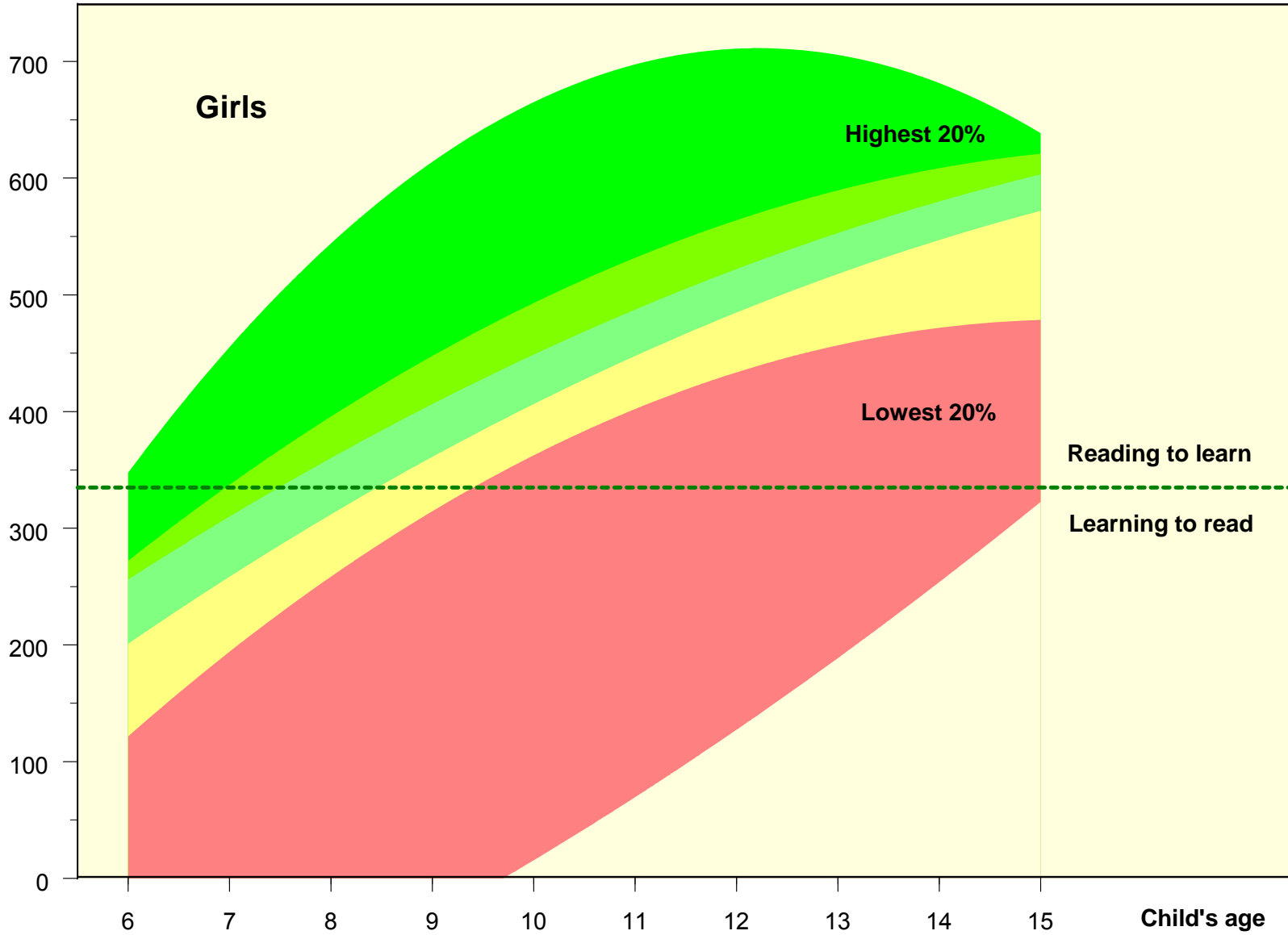
The ability to read is a fundamental skill for children's success at school, and ultimately for their long-term health and well-being.

The most critical transition is from *learning-to-read* to *reading-to-learn*. For most students this occurs at about age 8 or 9, or about the end of grade 3.

Reading Score



Reading Score



Girls

Highest 20%

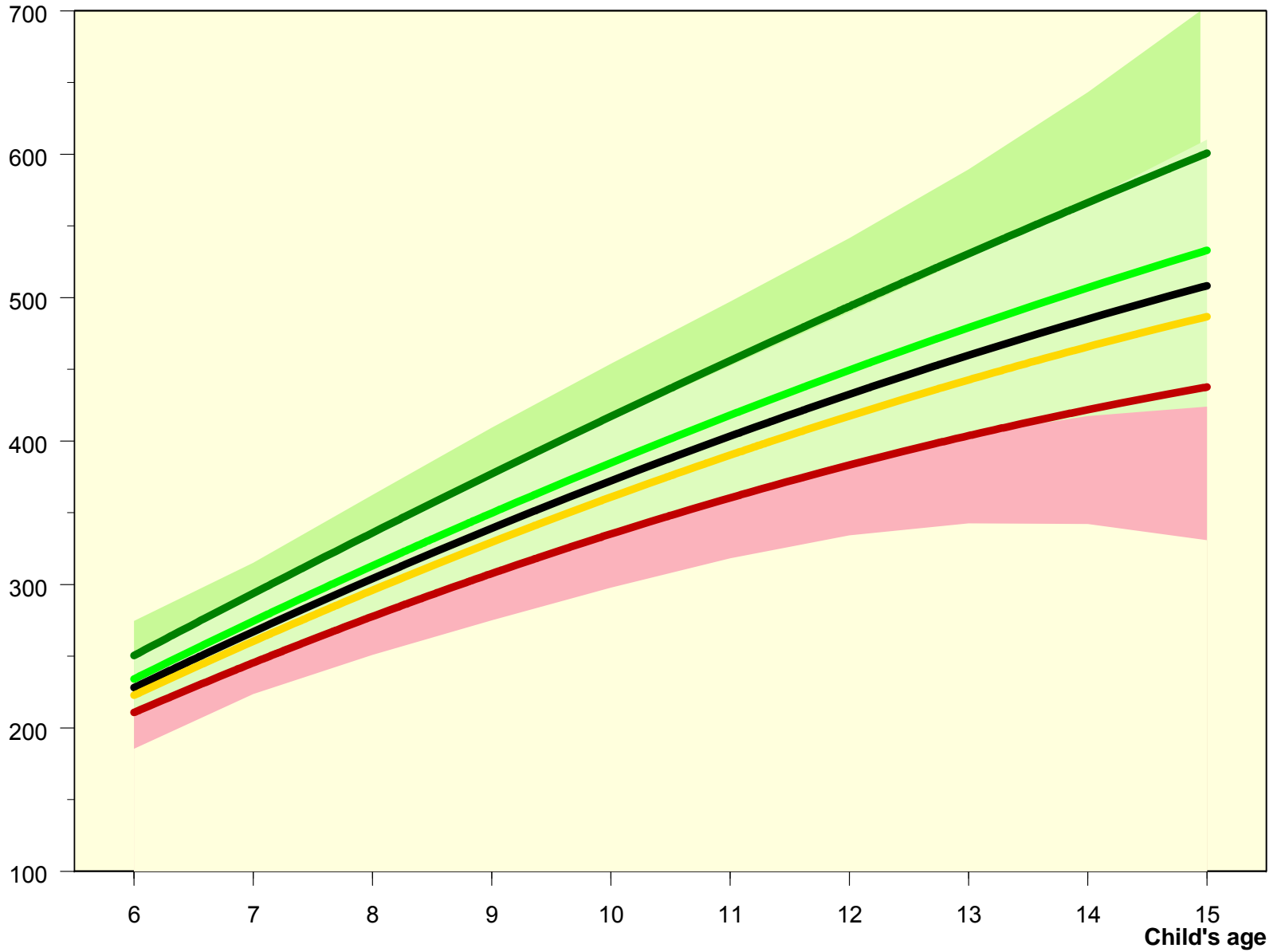
Lowest 20%

Reading to learn

Learning to read

Child's age

Mathematics Scores



Growth trajectories for mathematics, by age 8 performance quintile

Don't Wait to Fail

- Literacy trajectories are established early.
- Children on a low trajectory tend to stay on that trajectory and fall further and further behind.
- The later children are identified as needing support, the more difficult it is to catch up.





CRISP Model of Learning

Learning is a function of:

Quality Instruction

Productive Engagement

Enabling Context

Learning Time



**Learning
and
Wellness**
(Function)

Drivers of Learning and Wellness

**Quality
Instruction**

**Productive
Engagement**

**Enabling
Context**

**Learning
Time**

Drivers of Learning and Wellness

Quality Instruction

Productive Engagement

Enabling Context

Learning Time

Intentional design

Social

Teacher-student relations

Classroom

Relevance and rigor

Academic

Disciplinary climate

School

Guided by assessment

Intellectual

Expectations for success

Home

Student advocacy



Three Strategies to Improving Literacy Skills

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- Value-Added Models (VAM)
 - Intervention Effects
 - X-Efficiency






Assessing Value Added

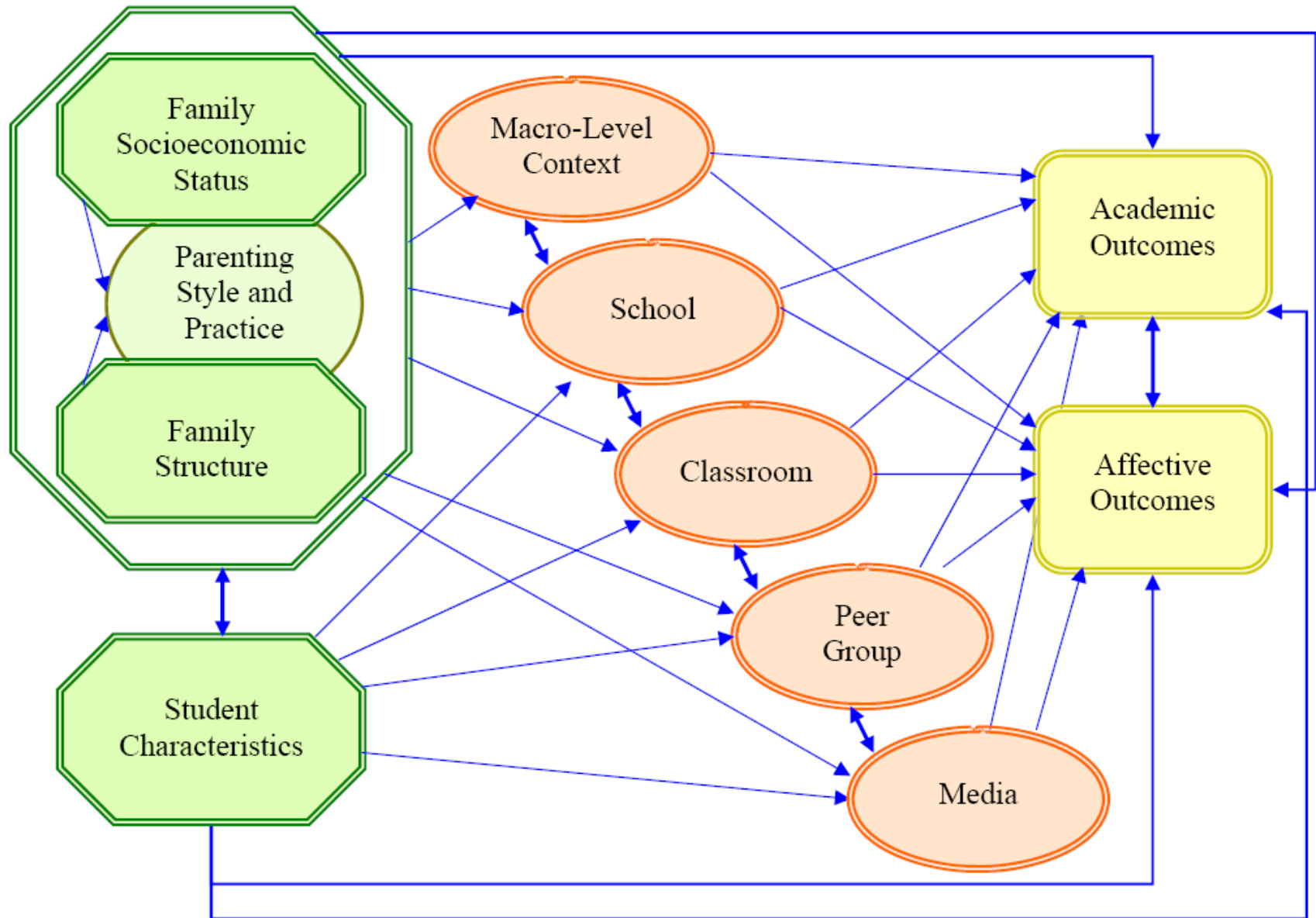
‘Value-added’ in education refers to the effects of schools and teachers on students’ learning outcomes.

In practice, year-to-year gains in students’ test scores are compared to some standard, typically the average test score gains for a jurisdiction, after taking account in some way of students’ family background.



‘Value-added Models’ describe the learning process with a complex set of statistical procedures that attempt to isolate the effects on student outcomes attributable to schooling processes from those due to family influences and other factors outside of the school.





Willms, 2005

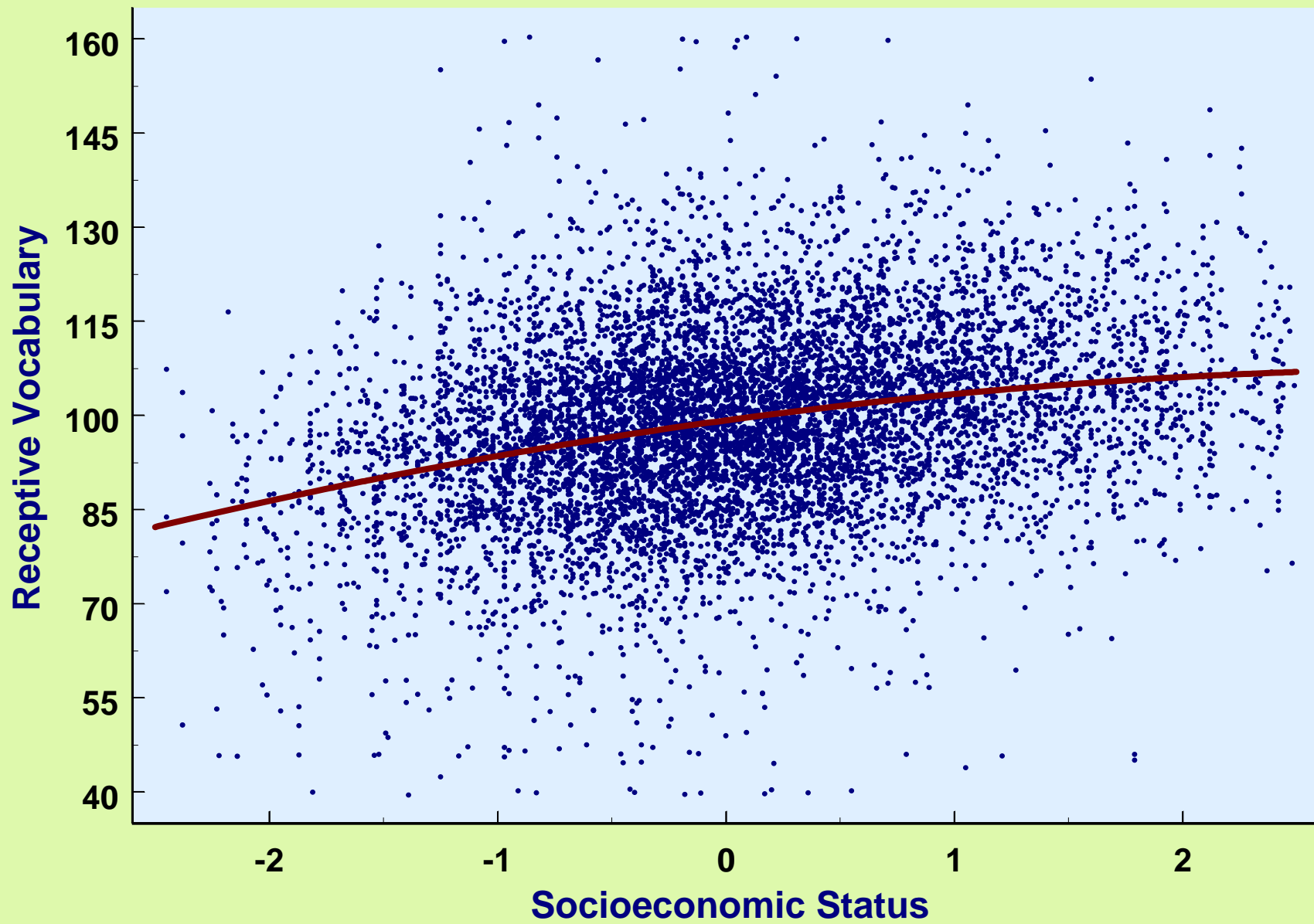


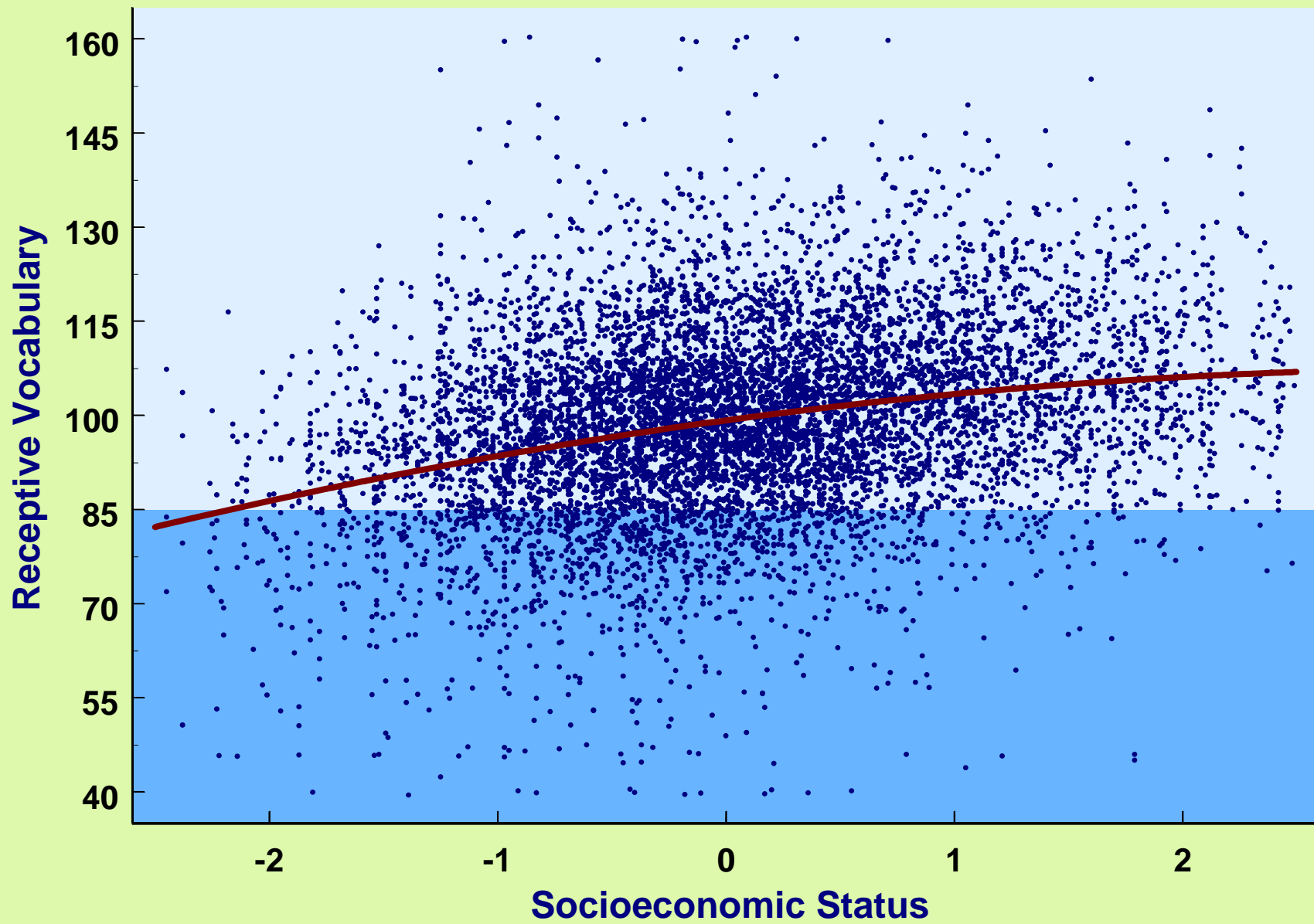
Assessing the effects of interventions

Data can be used to assess the effects of district, school and classroom interventions.

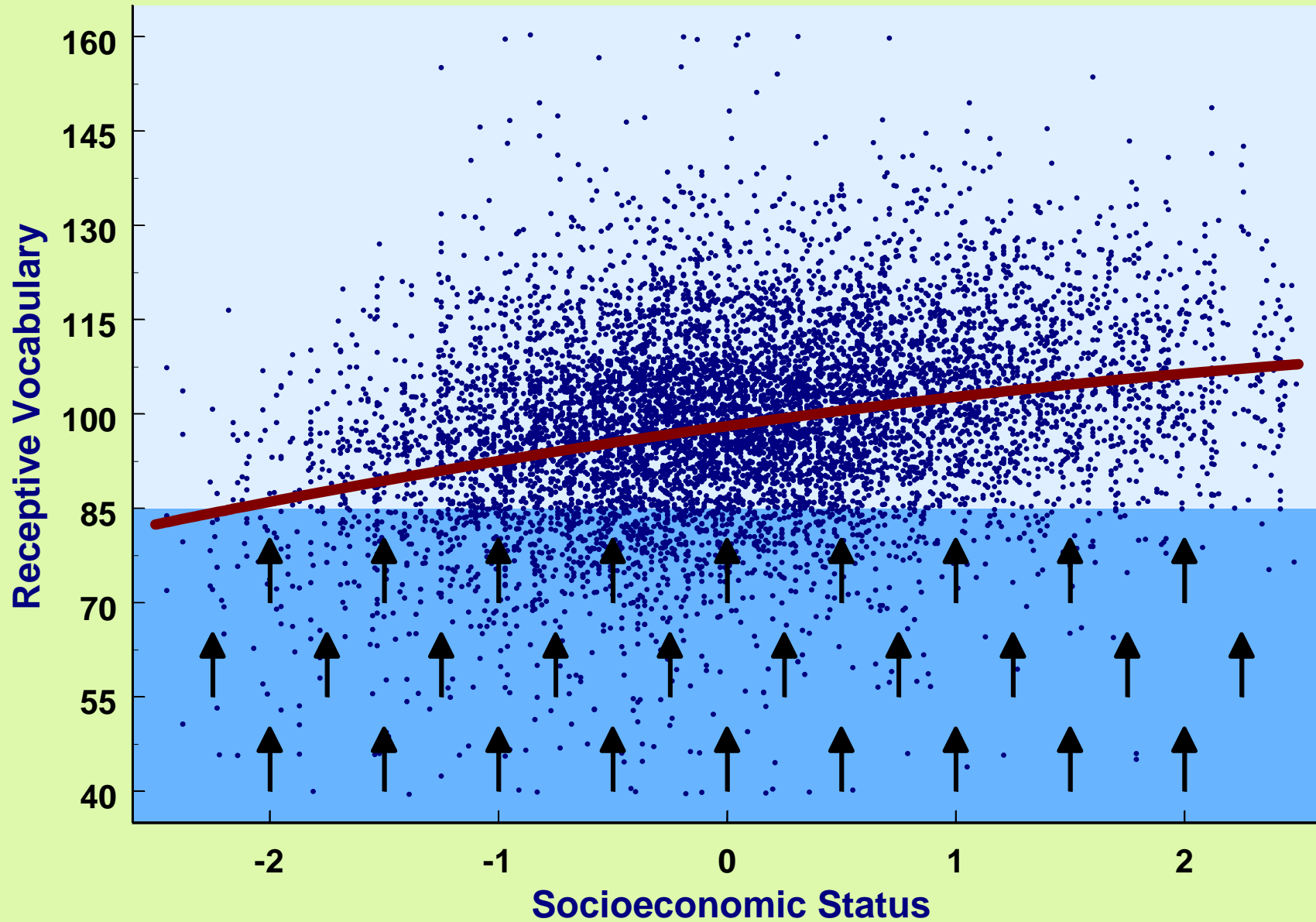
We can consider five types of interventions for 'raising and levelling the learning bar



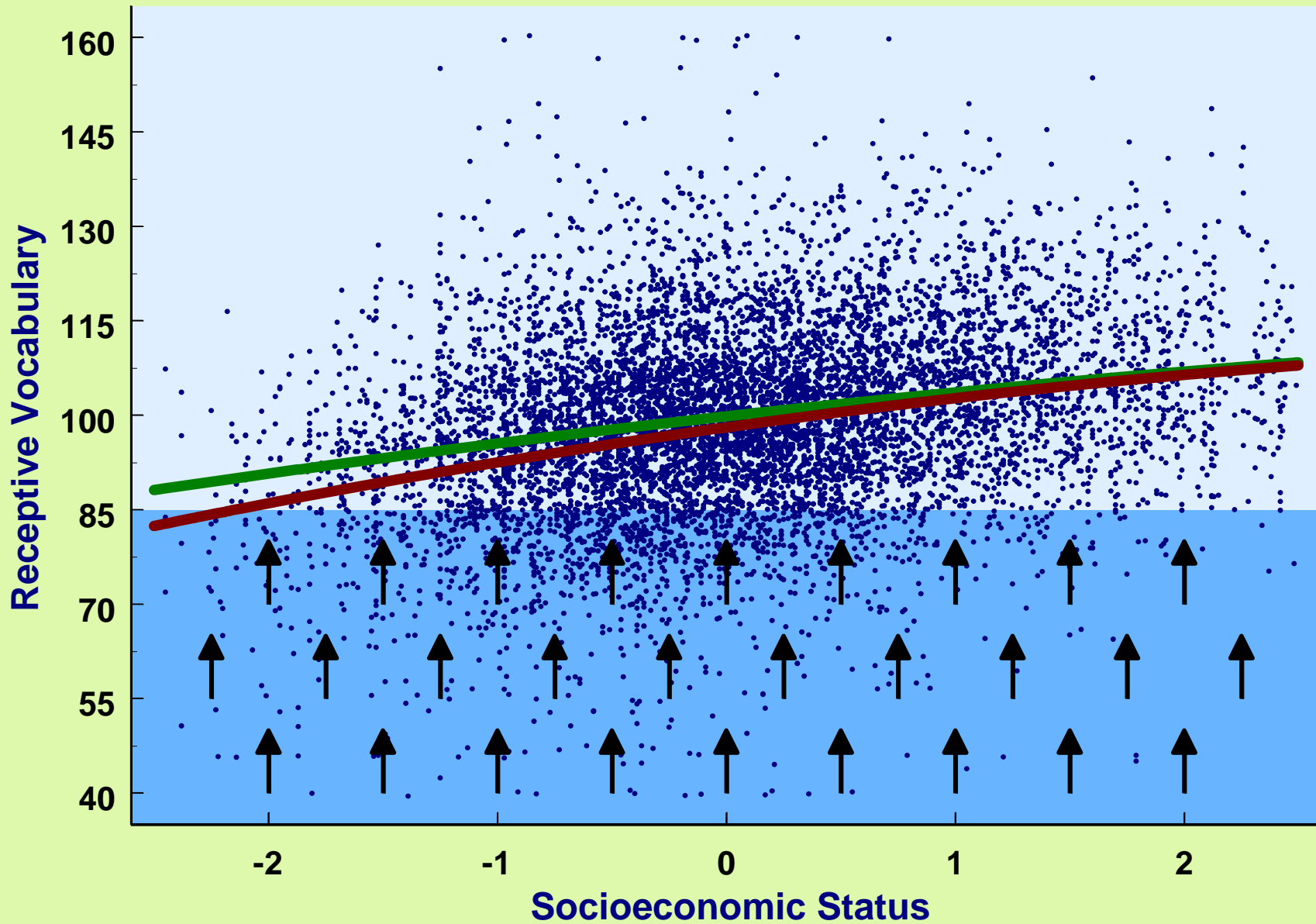




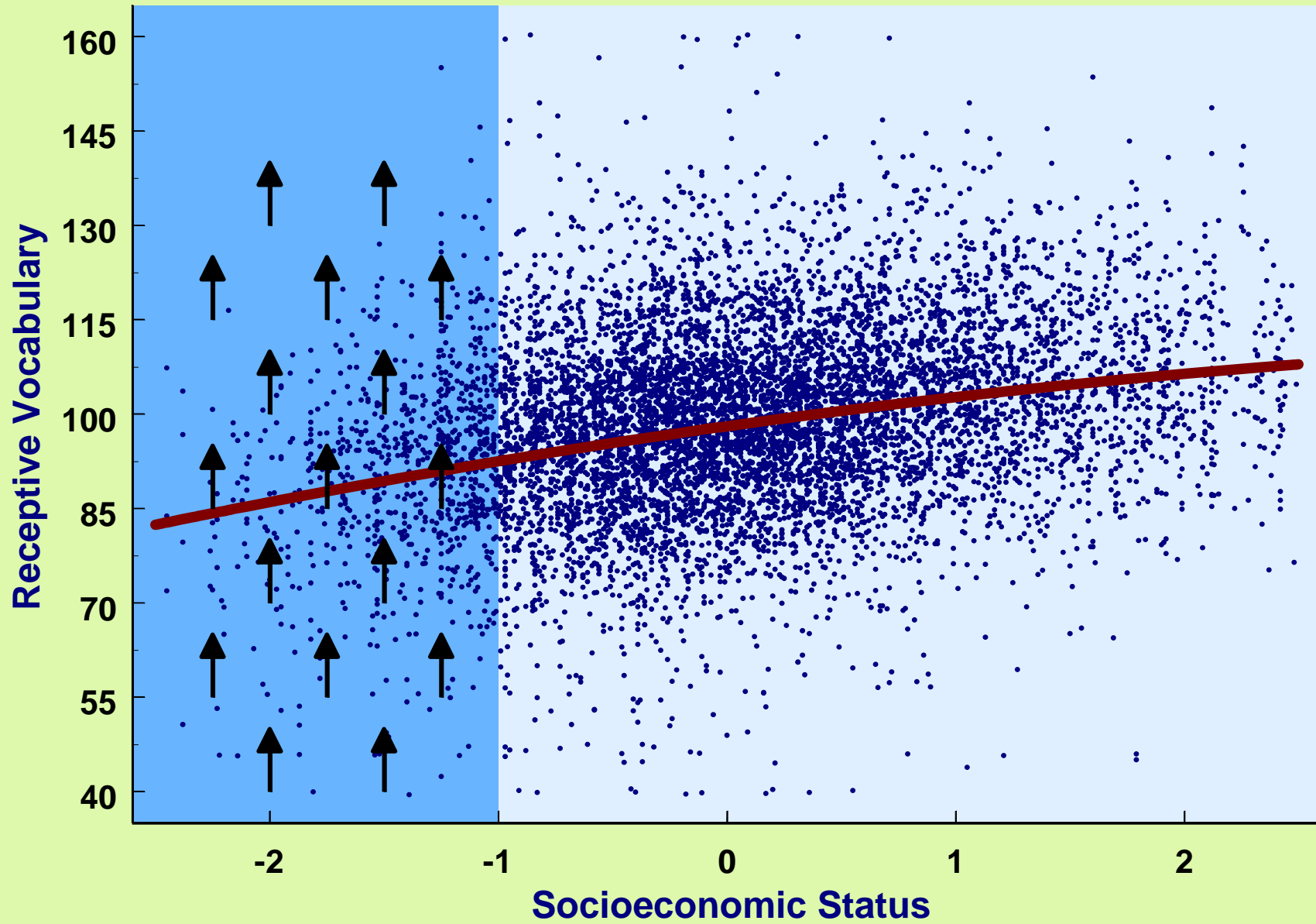
Performance-Targeted Interventions



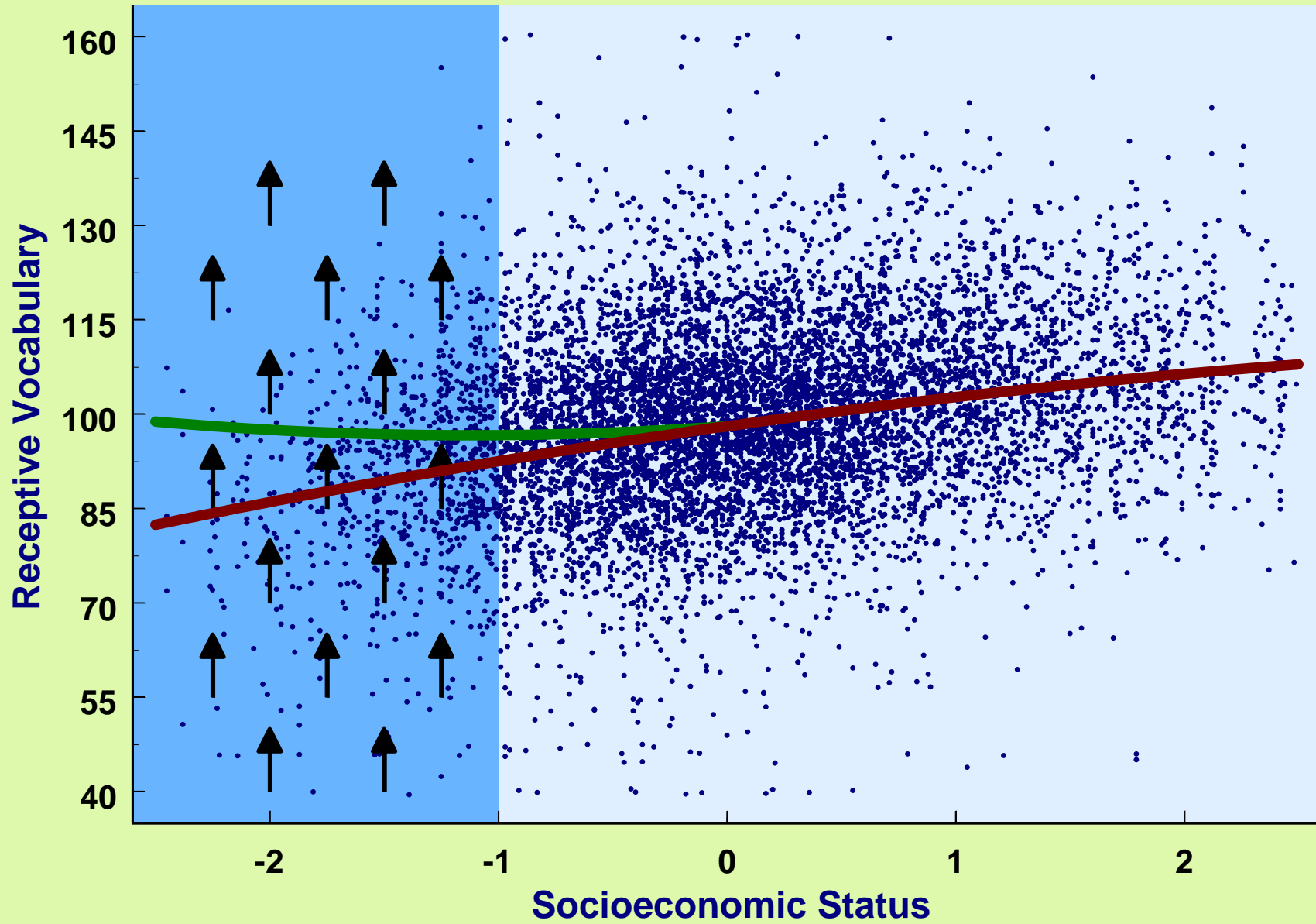
Performance-Targeted Interventions



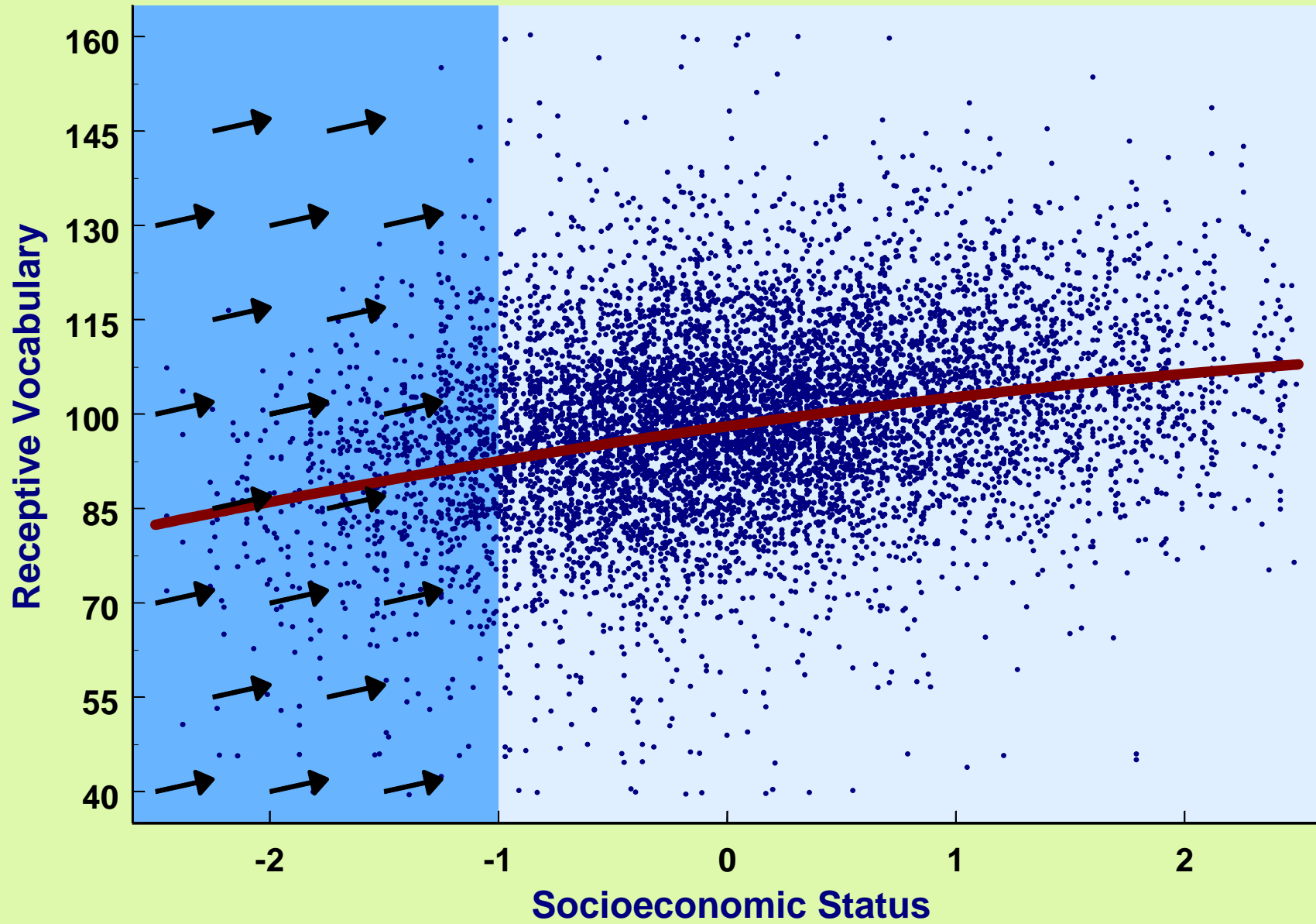
SES-Targeted Intervention



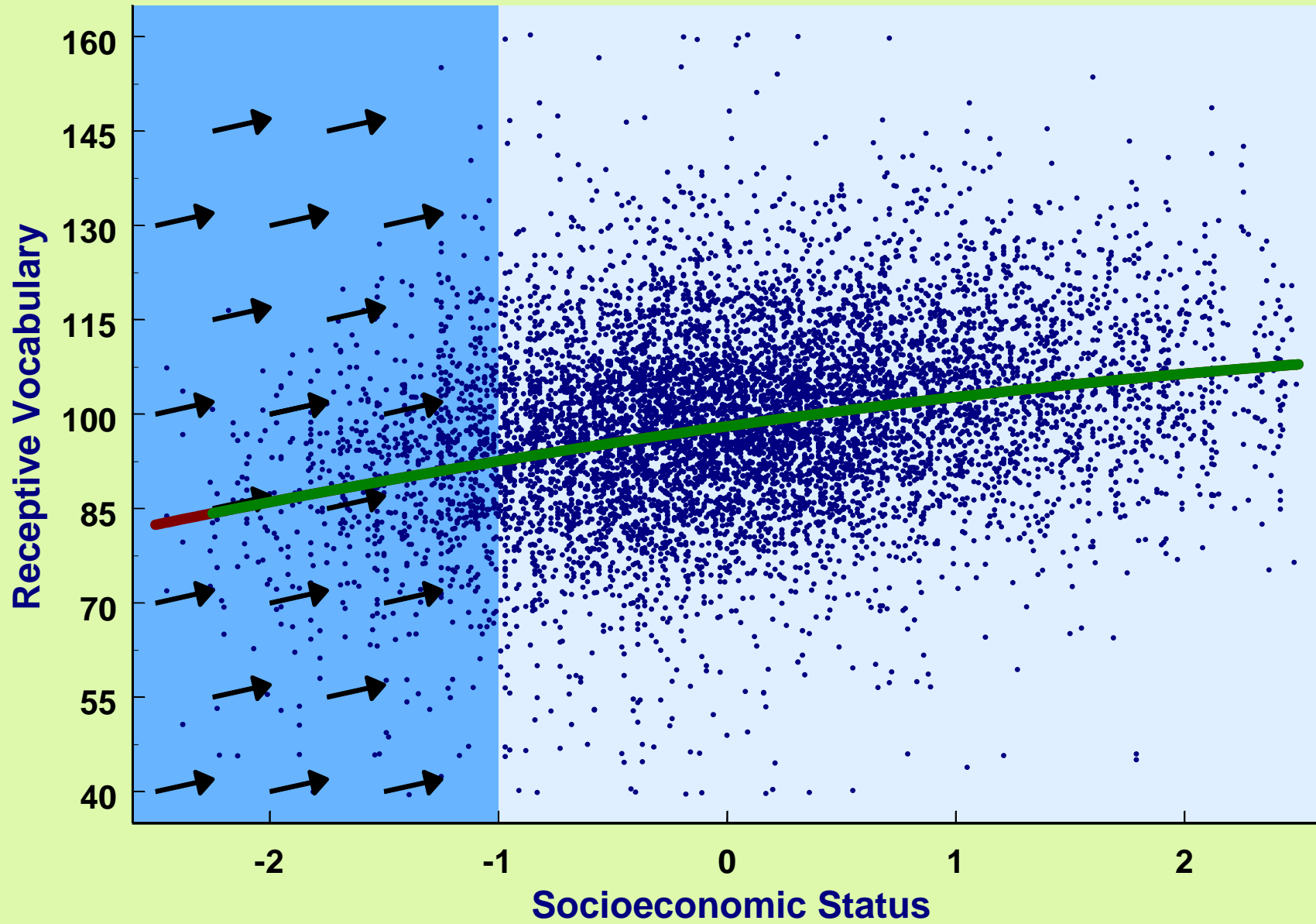
SES-Targeted Intervention



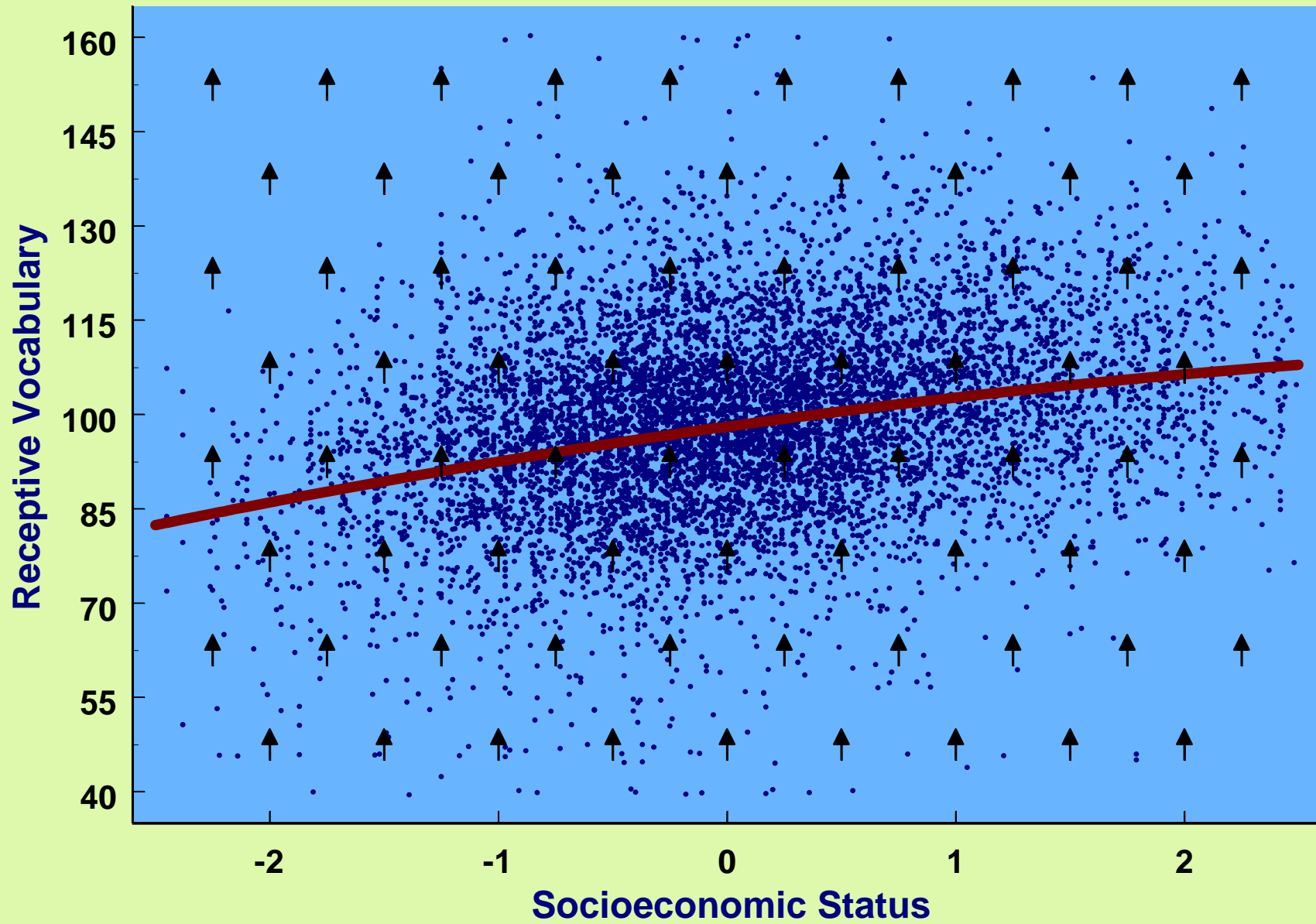
Compensatory Intervention



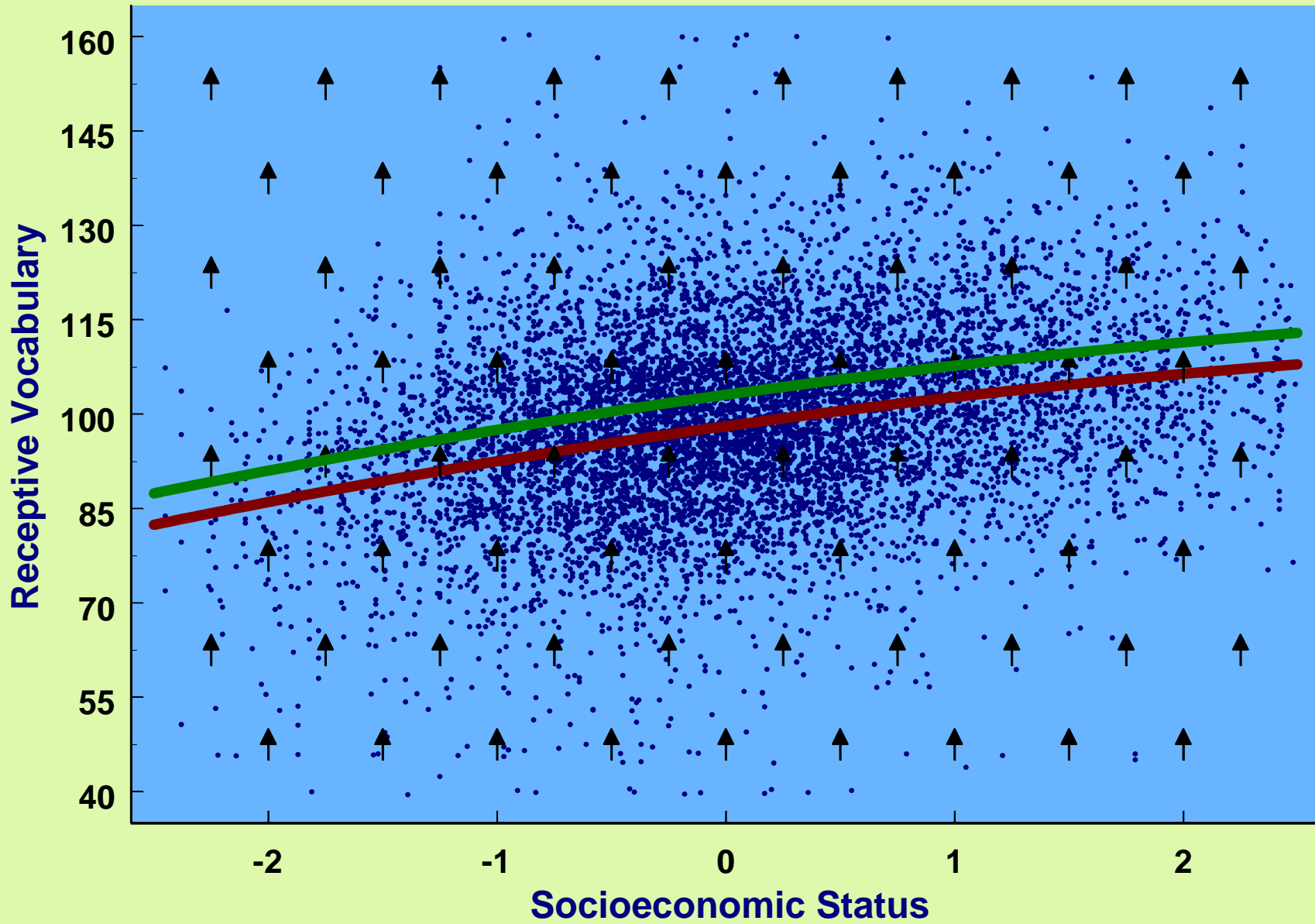
Compensatory Intervention

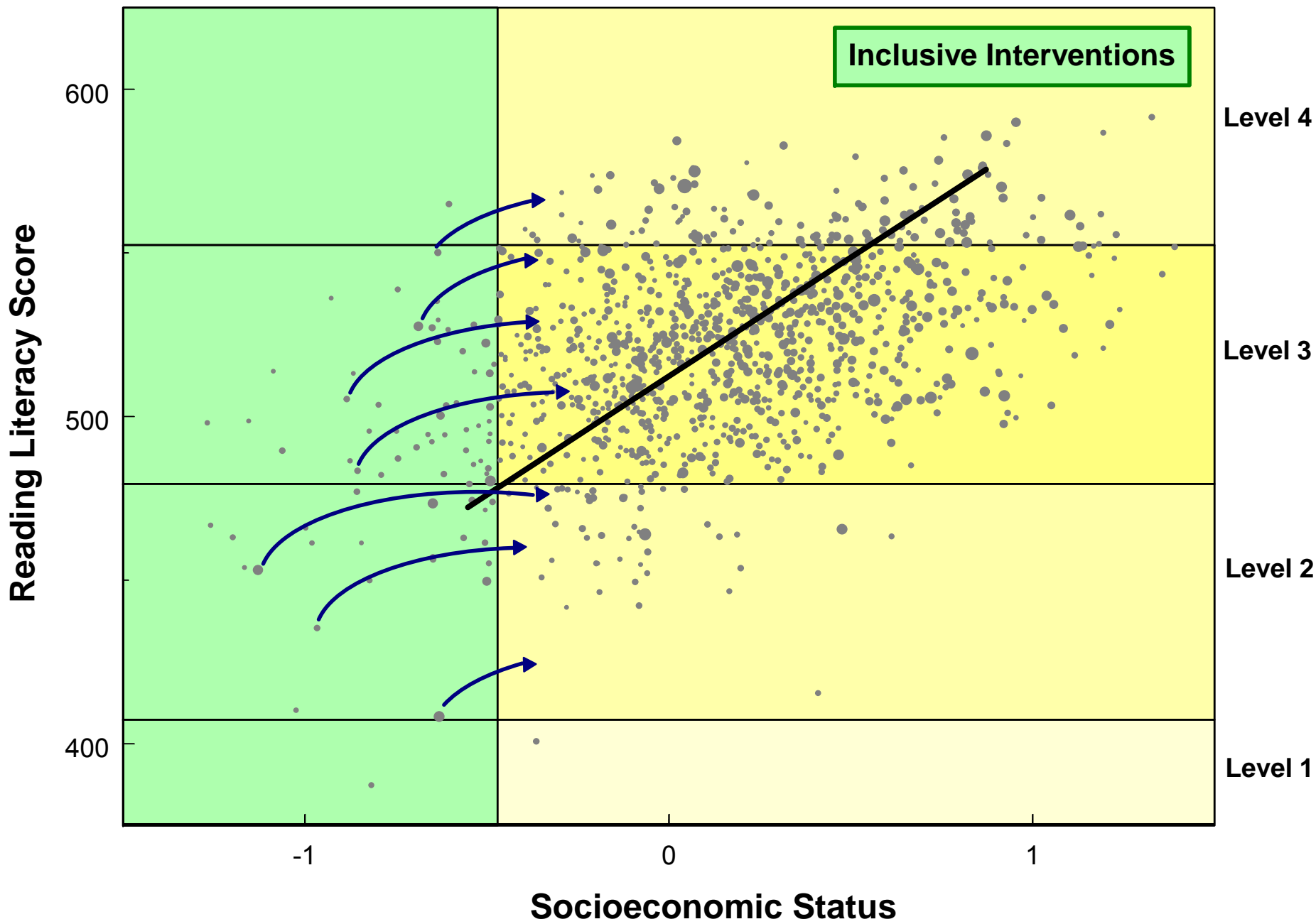


Universal Intervention



Universal Intervention








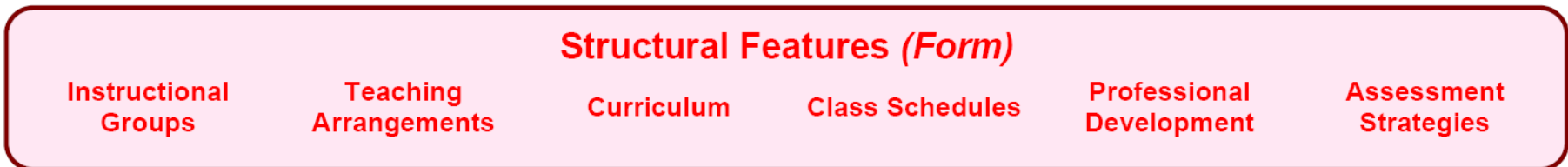
Informing a Dialogue about X-Efficiency

Harvey Leibenstein argues that changing organisational dimensions of the firm were more effective in increasing productivity than the allocation of inputs at the margin.

His ideas underlie Henry Levin's model for Accelerated Schools.



The *function* or core activity of schools is **learning and wellness**, while the *form* or **structural features** of schools are **those elements of schooling that support the core activity.**





X-Efficiency (*Process*)

Set clear objectives

Provide incentives linked to success

Use all available resources

Access information efficiently

Use productive technology

Adapt to changing conditions



**Learning
and
Wellness**
(Function)

Drivers of Learning and Wellness

**Quality
Instruction**

**Productive
Engagement**

**Enabling
Context**

**Learning
Time**

X-Efficiency (*Process*)

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Use all available
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Adapt to
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Structural Features (*Form*)

**Instructional
Groups**

**Teaching
Arrangements**

Curriculum

Class Schedules

**Professional
Development**

**Assessment
Strategies**



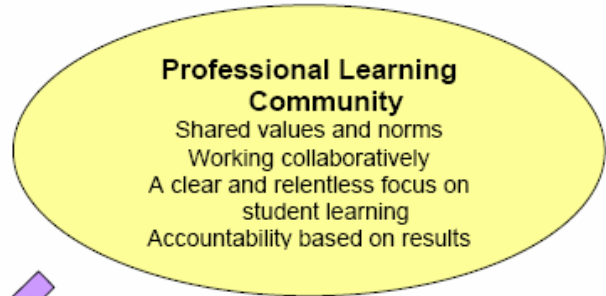
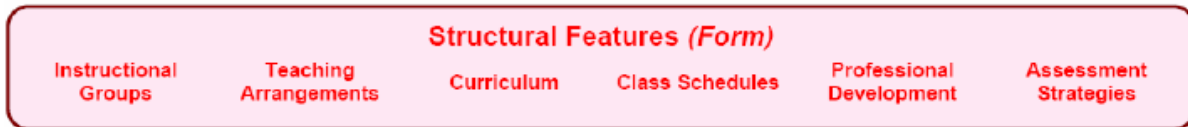
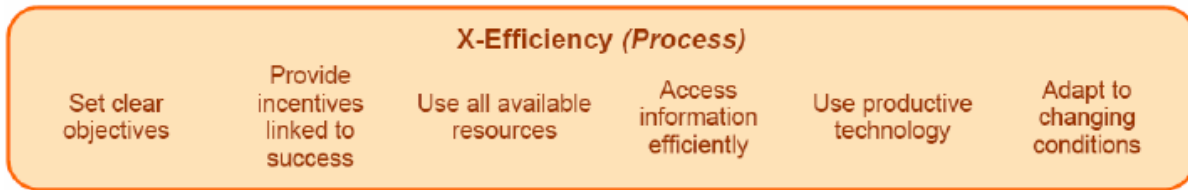
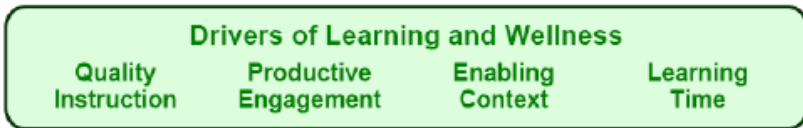
Key attributes of Professional Learning Communities

Shared values and norms

Clear and relentless focus on student learning

Working collaboratively

Accountability based on results





Getting Started

Effect a shift in school and district policy away from day-to-day operations to the core activities of **teaching and learning**.



Focus on factors that are *proximal* to the teaching-learning process:

improving quality of teaching by supporting collaborative teaching models

increasing student engagement

developing and supporting augmentative programs to increase learning time

intentionally supporting inclusive practices

focus accountability on clear transparent markers of students' success based on continuous assessment

Learning is a function of:

Quality Instruction

Productive Engagement

Enabling Context

Learning Time



First Steps

Examine gradients and school profiles for the district and for individual schools



Develop some simple measures of success that emphasize the transition from learning-to-read to reading-to-learn



Establish a district PD framework to create the 'special forces' team of teachers skilled in improving literacy



Support the development of a system of *leading indicators* that can inform school policy and instructional decisions and increase student engagement in learning.





Develop a strategy for increasing learning time with:

- after-school programs
- making the most of June
- summer learning



<http://www.unb.ca/crisp>



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