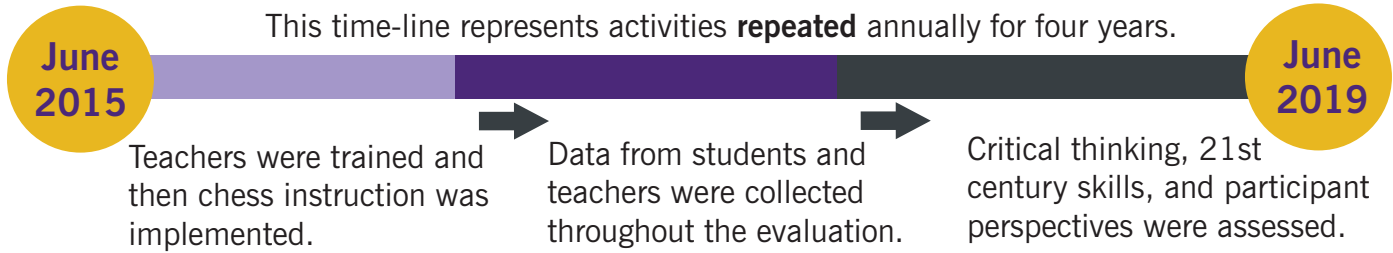




# Teaching with Chess



The **Alabama Chess in Schools (ACIS)** initiative occurred over **four years** at multiple public schools across the state. This program was evaluated to understand the potential relationship between scholastic chess instruction and student outcomes.



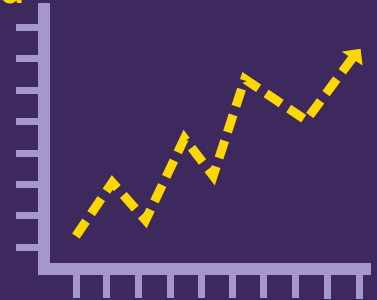
## Critical Thinking Skills

**1,551** students (grades 4-10) were assessed with the **Cornell Critical Thinking Test** in the **first three years** of the ACIS program.



### General Trend

The intervention group performed better than the control in the lower grades; not so much in the upper grades.



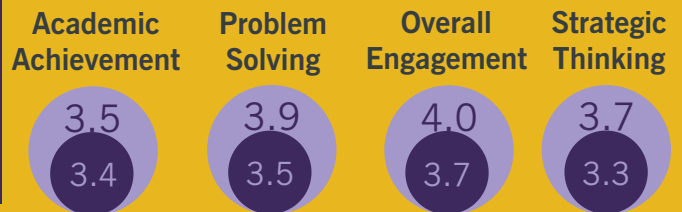
## 21st Century Skills

**8** 21st Century Skills were assessed via a retrospective pretest given to teachers.

**634** students were in the control group.

**1,502** students were in the intervention group.

Teachers generally rated intervention students higher, even if not significantly so. Overall means (response range was 1-5) across all grades are:



## Teacher and Student Perspectives

**62** teacher survey responses indicated that:

Students are better problem solvers.



Students are better at strategic thinking.

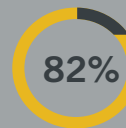


Students are better at thinking critically.

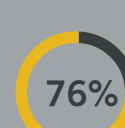


**1,286** student survey responses indicated that:

I work harder on my school work.



I can now do the hardest work if I try.



I am more excited about learning.

