

PURPOSE

The *Quandary* Curriculum Project involved the development, implementation, and evaluation of a multi-option curriculum for use with *Quandary*, a free nonprofit, award-winning game designed for ethical decision-making. Researchers from Tufts University conducted this study in 5th-9th grade classrooms across the United States during the 2018-2019 school year.



HIGHLIGHTS

The findings show high engagement and improvement in students’ ability to discern facts from opinions, perspective taking, and concern for others. Teachers reported universal satisfaction with the curriculum.

PROGRAM

Teachers selected one of three research-based curriculum options designed to facilitate teaching with *Quandary* (curriculum options found in detail at quandarygame.org/resources):



Essentials	Subject-Based Links	Project-Based Learning
Applies the four <i>Quandary</i> episodes to multiple areas of student growth (e.g., critical thinking, perspective-taking, empathy, ethical reasoning)	Expands the <i>Quandary Essentials</i> curriculum to support direct links to subject-specific topics and content (e.g., Earth Science and Geography, Social and Emotional Learning)	Expands the <i>Quandary Essentials</i> curriculum to apply student learning to real-life ethical issues

RESEARCH OVERVIEW

The study involved a multi-group comparison design across the three *Quandary* groups and a comparison (no program) group, using mixed-method formative and summative assessments.

Recruitment. Recruitment of educators involved a nationwide effort to include geographic and demographic diversity.

***Quandary* program groups participation.** 624 students completed the pre-*Quandary* survey and 252 completed the post-*Quandary* survey. Twelve teachers across 9 states taught one of the curriculum options, completed both pre-and post-*Quandary* surveys, and provided feedback throughout the implementation.

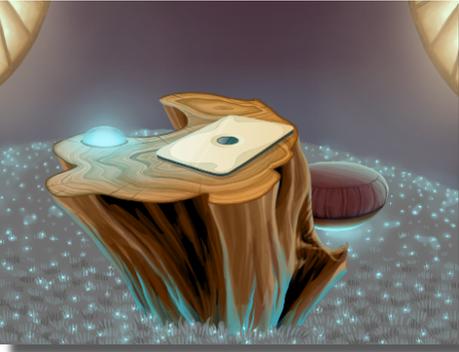
Comparison group participation. A separate sample of 49 students completed the pre- and post-surveys without *Quandary* curriculum exposure, serving as a comparison group.

Program feedback and engagement assessments. Educators completed forms throughout their participation on the feedback of the program and perceived student engagement.

Student outcome assessments. The core student outcomes of interest at pre- and post-test included measures of fact vs. opinion comprehension, perspective-taking, and prosocial attitudes. Exploratory outcomes included identity salience (related to caring for others and leadership) as well as moral reasoning and perceptions of classroom climate.



KEY FINDINGS



Program feedback and engagement

87% of students enjoyed playing *Quandary*

100% of teachers were satisfied with the *Quandary* curriculum

83% of teachers reported that students were very or extremely engaged with *Quandary*

Core student outcomes*

Increase in **fact vs. opinion comprehension** from pre- to post-test among students in the *Quandary* groups

Increase in self-reported **perspective taking** from pre- to post-test among students in the *Quandary* groups



Exploratory student outcomes*

Increase in **other-oriented identity salience** from pre- to post-test among students in the *Quandary* groups

Increase in **leadership-related salience** from pre- to post-test among students in the *Project-Based Learning* group

Increase in positive perceptions of **classroom climate** from pre- to post-test among students in classrooms in the *Project-Based Learning* group

***Comparison group outcomes:** There was no change across all outcomes for students in the comparison group.



IMPACT

The findings in this report build on the prior body of research showing the effectiveness of *Quandary*. When paired with a tailored curriculum, the program shows high engagement and enjoyment of the game and universal satisfaction from teachers. Data shows that *Quandary* is a fun and engaging option for teachers looking to capture students' interest while fostering skills related to critical thinking, understanding facts, reasoning about ethical situations, and caring about others. Analysis of outcome measures show that the program enhances students' ability to discern fact from opinion, take the perspective of others, and identify as other-oriented (i.e., as someone who cares for others). The *Project Based Learning* curriculum holds particular promise for school-wide classroom climate and social emotional learning initiatives, showing additional findings related to an increase in leadership identity and perceptions about positive classroom climate.



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