

U.S. History Through Young People's Eyes

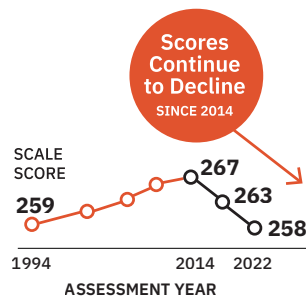
Evaluating the Impact of *Mission US* on Student Learning

Historical thinking skills are critical for fostering informed citizenship.

THE PROBLEM

Average scores on the National Assessment of Educational Progress (NAEP) U.S. History test for Grade 8 are declining

13% proficient in 2022



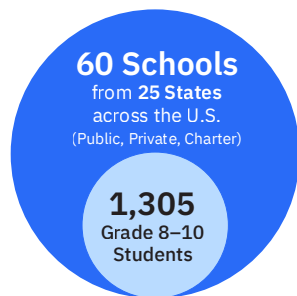
TESTING A POTENTIAL SOLUTION

Mission US: a series of interactive, first-person, role-playing history games and curricular materials

- Free
- Online
- Evidence-based



THE STUDY



Schools Randomly Assigned

Comparing *Mission US*

| | Mission US | Business-as-usual |
|--|------------|-------------------|
| Two <i>Mission US</i> games and activities | ✓ | ✗ |
| 1-hour professional development on <i>Mission US</i> | ✓ | ✗ |
| Dedicated website | ✓ | ✓ |
| Documents covering historical content areas | ✓ | ✓ |
| Regular curriculum | ✓ | ✓ |

Research Questions

Relative to business-as-usual classrooms, does using *Mission US* impact students'?

| | Measure |
|--|---|
| 1. Historical content knowledge | NAEP |
| 2. Ability to analyze historical documents | NAEP document-based questions |
| 3. Interest in history | Individual Interest Questionnaire/NAEP Interest Index |

FINDINGS

Teachers reported that *Mission US* increased students' interest and content knowledge.

- On average, students in both groups showed gains in historical thinking skills from pre- to post-test.
- This study showed no overall significant difference between groups.

Exploratory analyses showed that students in some schools significantly benefited from *Mission US*.

- Observed differences were explained by school-level factors, such as socioeconomic status and racial composition, rather than student-level variables.
- On average, students in well-resourced schools did better using *Mission US*; students in under-resourced schools did better under business-as-usual conditions.

IMPLICATIONS

***Mission US* is a fun supplement to traditional curricula.**

- *Mission US* was feasible to implement in a variety of grades and courses.
- Students who used *Mission US* learned as much as—and under some conditions, learned more than—those who didn't.
- Some schools might have more appropriate resources than others to adopt interventions like *Mission US*.
- Early evidence that *Mission US* is effective in some classrooms and not others merits further research.

Evaluating *Mission US*: Study Details

Mission US is a series of interactive, first-person, role-playing history games and curricular materials that address a critical problem facing our nation: students lack fundamental knowledge of U.S. history.

According to the most recent National Assessment of Educational Progress (NAEP, 2022), only 13% of Grade 8 students were proficient on the U.S. history assessment. Although *Mission US* is already widely in use, this **randomized controlled trial (RCT)** is the first large scale, national study to evaluate the impact of *Mission US* on students' history knowledge, interest, and skills.



Study procedures

Sixty schools from across the U.S. were randomly assigned to either the intervention group, where teachers were asked to supplement their existing curriculum with two *Mission US* games and associated curricular materials (“*Mission US* classrooms”), or to the comparison group that continued to use their existing curriculum and covered the same content (“business-as-usual classrooms”). The teachers in the study had never used *Mission US*. Data were collected from 1,305 students in Grades 8–10 to examine whether being in a school assigned to use *Mission US* increased students’ knowledge of U.S. history during the 1900–1950 time period, their ability to analyze historical documents, and/or their interest in history, relative to students in schools that were not assigned *Mission US*.



Were there differences in student outcomes?

This study did not detect significant differences in student outcomes between *Mission US* classrooms and business-as-usual classrooms. On average, students in all classrooms demonstrated increased knowledge of historical content.

Differences in teachers' perceptions

A greater percentage of teachers in *Mission US* classrooms agreed that they were **better able to teach the content and to help students build key historical thinking skills**—historical perspective-taking and historical empathy—compared to teachers in business-as-usual classrooms. Teachers were also asked about student engagement in history learning. On average, those in *Mission US* classrooms reported **higher levels of student engagement** than those in business-as-usual classrooms.

MISSION US IMPLEMENTATION

PROFESSIONAL DEVELOPMENT

- 1-hour professional learning session on *Mission US*
- Teacher dashboard & website
- Curriculum guide and documents covering historical content

MISSION US GAMES

- Two interactive games focused on the Progressive Era (~1910) and the Great Depression (~1929)
- Students made and tracked choices for game protagonists

CLASSROOM ACTIVITIES

- 3 in-class discussions per game
- 3 document analysis tasks
- 1 decision tracker to organize decisions made during the game

What does this all mean?

Our study points to several important considerations for both educators and researchers.

Mission US is a free online tool that can supplement social studies teachers’ curricula.

| Educators | Researchers |
|---|--|
| On average, while students using <i>Mission US</i> in our study did about the same as other students, teachers reported that students using <i>Mission US</i> had greater interest in history and learned more. Try it yourself! Find the free games and all associated curricular materials used in the study at mission-us.org . | The null findings in our study might be because of a relatively small sample size, heterogeneity in our sample, our sample’s pedagogical practices . . . or because there truly is no impact over and above business-as-usual. Further research is needed. |

Incorporating Mission US into curriculum takes time. About 72% of *Mission US* teachers reported students played both games in their entirety and on average did 11 of the 14 classroom activities. However, teachers spent more time on and did more activities for the first game than the second game.

| Educators | Researchers |
|--|--|
| Teachers who are new to <i>Mission US</i> may want to focus on just one game (or take more time for multiple games) in order to align the games with their curriculum. | Since familiarity with <i>Mission US</i> games may be an important factor, future studies may want to explore how teachers’ experience with digital tools, such as <i>Mission US</i> , relates to student learning outcomes. |

Many history teachers already use interactive materials as supplements. During our study, teachers used a wide range of supplemental materials to engage students: 78% of business-as-usual classrooms and 59% of *Mission US* classrooms used a digital game other than *Mission US*, such as PBS Learning and EdPuzzle). This suggests that when teachers were asked to implement *Mission US*, they were likely substituting—rather than supplementing—for other digital media or supplemental materials.

| Educators | Researchers |
|--|--|
| Teachers in this study—in both groups—went beyond their curricula to help students learn, often using digital games. Teachers who used <i>Mission US</i> told us that they particularly liked the new dashboard that shows student progress, as well as the curriculum guides provided for each mission. | The variety of instructional materials in business-as-usual classrooms may make it more difficult to see a difference in outcomes, so future research might want to be more prescriptive about what happens during the intervention period or directly compare two different supplemental curricula. |

Mission US can be implemented in many contexts. The study took place in public, private, and charter schools across the United States. The students were in a variety of history courses (for example, social studies, Advanced Placement U.S. History, and civics) in Grades 8–10, and used a range of curricula.

| Educators | Researchers |
|--|--|
| Teachers in all types of schools, grades, and social studies classes—and with different regular curricula—were able to integrate the <i>Mission US</i> games and activities into their curriculum. Further, teachers used <i>Mission US</i> for different purposes: to reinforce current curriculum, to review content previously taught, or to preview upcoming topics. | The variation in both the type of classrooms involved and the goals for using <i>Mission US</i> made it more challenging to detect an impact. Future research to better understand for whom and under what conditions <i>Mission US</i> is effective could focus on particular types of schools, courses, or student populations. Researchers could also recruit a larger sample than that used here, although recruitment was a profound challenge. |