

Social Studies Techbook

Logic Model

Study Type: ESSA Evidence Level IV

Prepared for:
Discovery Education

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EXECUTIVE SUMMARY

Discovery Education engaged LearnPlatform by Instructure (LearnPlatform), a third-party edtech research company, to develop a logic model for the *Social Studies Techbook*. LearnPlatform designed the logic model to satisfy Level IV requirements (*Demonstrates a Rationale*) according to the Every Student Succeeds Act (ESSA).¹

Logic Model

A logic model provides a program roadmap, detailing program inputs, participants reached, program activities, outputs, and outcomes. LearnPlatform collaborated with Discovery Education to develop and revise the logic model.

Study Design for *Social Studies Techbook* Evaluation

Informed by the *Social Studies Techbook* logic model, LearnPlatform developed a research plan for a study to meet ESSA Level III. The proposed research questions are as follows:

1. To what extent are Grade 6–8 students using *Social Studies Techbook*?
 - a. How much time are students spending on the platform on average?
 - b. How many and what types of activities have students completed on the platform?
2. How does Grade 6–8 student usage of *Social Studies Techbook* relate to student learning of social studies content knowledge, as evidenced by end-of-course standardized assessments?

Conclusions

This study satisfies ESSA evidence requirements for Level IV (*Demonstrates a Rationale*). Specifically, this study met the following criteria for Level IV:

- Detailed logic model informed by previous, high-quality research
- Study planning and design is currently underway for an ESSA Level I, II, or III study

¹ Level IV indicates that an intervention should include a “well-specified logic model that is informed by research or an evaluation that suggests how the intervention is likely to improve relevant outcomes; and an effort to study the effects of the intervention, that will happen as part of the intervention or is underway elsewhere...” (p. 9, U.S. Department of Education, 2016).

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Introduction

Discovery Education engaged LearnPlatform by Instructure, a third-party edtech research company, to develop a logic model for *Social Studies Techbook*. LearnPlatform designed the logic model to satisfy Level IV requirements (*Demonstrates a Rationale*) according to the Every Student Succeeds Act (ESSA).

The study had the following objectives:

1. Define the *Social Studies Techbook* logic model and foundational research base.
2. Draft an ESSA Level I, II, or III study design.

Previous Research. Maintaining student engagement is a key challenge for social studies education (Grant, 2013). Studies show that student engagement facilitates learning (Lei et al., 2018). In social studies, student engagement is built and maintained using research-based instructional approaches. These support how social studies outcomes improve when students:

1. Engage with curricula constructed around the process of inquiry (Grant et al., 2017; Manfra & Bolick, 2017);
2. Relate social studies concepts to their own historical and cultural contexts as well as their daily lives (Aronson & Laughter, 2016; Byrd, 2016);
3. Connect social studies content to other subject areas (Graham et al., 2020; Taboada Barber et al., 2015);
4. Feel empowered to choose between multiple means of engagement, representation, action, and expression (Ok et al., 2016); and
5. Demonstrate their learning through authentic assessments (Chen & Yang, 2019; Duke et al., 2021; Reed et al., 2021).²

1.) Inquiry-based curriculum. Inquiry-based learning is an instructional method that uses students' natural curiosity to advance their understanding of a given topic. Students generate or are provided with a question that does not have a simple answer (e.g., a question about the roots of a persistent social concern), and attempt to answer it through research, source evaluation, and logic. Planned inquiry is a type of inquiry-based learning in which the instructor supports students by constraining the scope of the inquiry and guiding them towards specific learning outcomes. The College, Career, and Civic Life (C3) Framework, developed by the National Council for the Social Studies (NCSS) is an approach to social studies instruction that emphasizes planned inquiry (NCSS, 2013). As of 2023, 37 states have incorporated the C3 Framework into their social studies standards (Grant et al., 2023). Inquiry-based learning improves academic outcomes across multiple content areas (Öztürk et al., 2022).

² The definition of authentic assessment is not wholly agreed upon. One common definition is "a form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills," (Mueller, 2005, p. 2).

2.) Relation to self. Nearly 50 years of research indicate that a learner is more likely to recall information when they can relate it to their own lives (Bentley et al., 2017). Culturally relevant teaching uses this self-reference effect to enhance learning by connecting course content to students' lived experiences. In social studies, specifically, culturally relevant teaching encourages students to connect historical and cultural events to their own lives and multiple perspectives, which increases engagement and leads to better learning outcomes (Aronson & Laughter, 2016; Byrd, 2016). In addition to improving course grades, the engagement that results from culturally relevant teaching helps to develop students' sociopolitical awareness and critical thinking skills (Aronson & Laughter, 2016).

3.) Interdisciplinary connections. Culture is one of the 10 themes identified in the NCSS curriculum standards. Literature, music, and art are all means of expressing culture (NCSS, 2010). Integrating the arts into social studies curricula increases student engagement and extends students' understanding of abstract concepts by providing context (Burstein & Knotts, 2010). For example, examining art produced in the time and place surrounding a historical event encourages students to consider the perspectives and experiences of the individuals who lived through that event. Such contextualization reframes history as the cumulative result of the actions of individuals, rather than as a list of things that happened. Writing deepens students' understanding of the content by leading them to make connections, identify and resolve conflicting or missing information, and organize their thoughts (Graham et al., 2020). Additionally, students must recall what they have learned in order to write about it. This retrieval practice improves students' ability to remember this information in the future (Arnold et al., 2017).

4.) Multiple means of engagement, representation, action, and expression. Universal Design for Learning (UDL) is a research-driven framework to improve and optimize teaching and learning based on how people learn. UDL emphasizes the need to design instructional materials, evidence-based learning activities, and assessments to maximize inclusivity and accommodate a wide range of learners. This framework was developed in response to findings indicating that learners differ in why they are motivated to engage with the content, what they are able to perceive and comprehend, and how they are able to interact with the content and demonstrate their understanding (CAST, 2018). By allowing students to choose between multiple means of engagement (why), representation (what), and action and expression (how), UDL promotes growth and learning for students of all abilities (Al-Azawei et al., 2016; Almeqdad et al., 2023; CAST, 2018).

5.) Authentic assessment. Project-based learning is a learner-centered, inquiry-based instructional approach. Across subjects, project-based learning has a greater effect on academic achievement than traditional instructional methods, and this effect is stronger for the social sciences than the physical sciences (Chen & Yang, 2019). Students who learn through this approach develop strategies to solve complex, real-world problems. In presenting their solutions, students demonstrate their mastery of relevant knowledge and skills. The real-world relevance of authentic assessments—like those found in project-based learning—engage and motivate students, which

improves their performance on tasks ranging from the authentic assessments themselves to high-stakes standardized tests (Koh, 2017).

Discovery Education's *Social Studies Techbook* incorporates all of the above features in efforts to improve students' social studies learning outcomes. *Social Studies Techbook* is C3-aligned and grounded on research that champions inquiry-driven curricula wherein students develop their understanding of current and historical events by evaluating evidence, applying social studies concepts, and making connections to other sources of knowledge.

Logic Model

A logic model is a program or product roadmap. It identifies how a program aims to impact learners, translating inputs into measurable activities that lead to expected results. A logic model has five core components: inputs, participants, activities, outputs, and outcomes (see Table 1).

Table 1. Logic model core components

Component	Description	More information
Inputs	What the provider invests	What resources are invested and/or required for the learning solution to function effectively in real schools?
Participants	Who the provider reaches	Who receives the learning solution or intervention? Who are the key users?
Activities	What participants do	What do participants do with the resources identified in Inputs? What are the core/essential components of the learning solution? What is being delivered to help students/teachers achieve the program outcomes identified?
Outputs	Products of activities	What are numeric indicators of activities? (e.g., key performance indicators; allows for examining program implementation)
Outcomes	Short-term, intermediate, long-term	Short-term outcomes are changes in awareness, knowledge, skills, attitudes, and aspirations. Intermediate outcomes are changes in behaviors or actions. Long-term outcomes are ultimate impacts or changes in social, economic, civil or environmental conditions.

LearnPlatform reviewed Discovery Education resources, artifacts, and program materials to develop a draft logic model. Discovery Education reviewed the draft and provided revisions during virtual meetings. The final logic model depicted below (Figure 1) reflects these conversations and revisions.

Problem Statement: In social studies, students should be at the center of their learning where they learn through planned inquiry, application of literacy skills, and studying historical evidence. Students are likely to do better in social studies when they can relate historical and cultural events to their own lives and when both students and teachers are engaged. *Social Studies Techbook* is designed as a highly engaging, inquiry-based program with activities that allow students to see themselves as active citizens and relate historical and cultural ideas to their daily lives.

Inputs

What does *Social Studies Techbook* provide?

SOCIAL STUDIES TECHBOOK PROVIDES

- A standards-based digital textbook that allows educators and students to experience vetted social studies content through differentiated inquiry-based lessons and activities
- Professional learning (PL) and ongoing support resources incl. access to Educator Supports Channel¹ and Discovery Educator Network (DEN)²
- Variety of performance tasks for students to choose how to demonstrate their learning
- Access to primary and secondary sources for analysis and application to performance tasks
- Accessibility features (e.g., text to speech, closed captioning, video transcripts and different Lexile levels, authentic Spanish translations, and translation support in 180+ languages)
- Support via a district communication toolkit, partner success team, and education support teams
- Integration with district-wide systems (e.g. LMS, Google, Microsoft, etc)

DISTRICT PROVIDES

- Technology resources (e.g., online applications, physical devices, software)
- Human resources (e.g., full/part time staff, volunteers)
- Financial resources (e.g. grant funding)
- Material resources (e.g., classroom supplies, facilities, instructional content, professional learning)

Participants

Who uses *Social Studies Techbook*?

- Students in 6th–8th grade
- Educators
- School and district administrators

Activities

How are participants using *Social Studies Techbook*?

STUDENTS

- Access *Social Studies Techbook* platform
- Access in-person and online content, resources, and activities within each concept (i.e., planned, inquiry-based lesson)
- Complete interactive formative and summative performance tasks that allow for synthesis and evaluation of primary and secondary sources
- Participate in active learning through content and evidence-based classroom discourse on social studies topics
- Synthesize and evaluate text to construct evidence based claims, arguments and recognize multiple perspectives related to social studies topics

EDUCATORS

- Access platform usage, outcome, and progress data for students
- Assign concept content, primary and secondary resources, and activities within classroom instruction for whole group, small groups, or individual students
- Assign formative and summative performance tasks
- Access support resources incl. prep. materials and standards alignment information
- Provide opportunities for students to participate in group discussions that promote understanding of historical importance and cultural relevance
- Participate in site/district-led professional learning webinars and live events
- Participate in school-based professional learning community (PLC) teams³
- Observe peers' use of *Social Studies Techbook* to reflect on best practices either directly or through PL conversations

ADMINISTRATORS

- Access platform usage, outcome, and progress data for students, educators, and schools
- Participate in site/district-led PL webinars and live events
- Participate in school-based PLC teams
- Provide relevant resources, updates, and ongoing support to educators through district collaboration and communication channels (LMS, PLCs, Email, Social, PL)
- Embed *Social Studies Techbook* content within school and/or district policies and curricula
- Ensure users have access to and awareness of *Social Studies Techbook* and available training supports (Educators Support Channel, Professional Learning, DEN)
- Access, monitor, and drive product usage and engagement with the program on a regular basis

Outputs

What are the measurable results of implementing *Social Studies Techbook*?

STUDENTS

- Number of unique students who accessed platform and frequency of access
- Number and type of online content, resources, activities, and concepts accessed
- Number and nature of concepts, and formative and summative performance tasks completed
- Formative and summative performance task scores
- Student-reported efficacy for planned inquiry

EDUCATORS

- Number of reports downloaded/accessed
- Number of unique educators who accessed platform and frequency of access
- Number and type of concept content, resources, and activities accessed and assigned by educators
- Number and nature of formative and summative performance tasks assigned
- Number and type of support resources accessed by educators
- Frequency of discussion groups established between students and educators
- Number and type of PL hours attended and completed
- Number and nature of PLC teams
- Number and nature of PLC meetings between educators and administrators concerning *Social Studies Techbook* implementation, updates, and professional learning support
- Frequency of educator peer observations

ADMINISTRATORS

- Number of reports downloaded/accessed
- Number of unique admins. who accessed platform and frequency of access
- Number and type of PL hours attended and completed
- Number and nature of PLC teams
- Number and nature of PLC meetings between educators and administrators concerning *Social Studies Techbook* implementation, updates, and professional learning support
- The extent to which *Social Studies Techbook* content is embedded within district policies and curricula and its use promoted, supported, and encouraged by administrators, as measured by district-level and school-level professional learning sessions, PLCs created and maintained, and the district communication toolkit

Outcomes

What are the expected changes or impacts of using *Social Studies Techbook*?

SHORT TERM

Students

- Have access to differentiated social studies instruction and activities that allow students to access social studies content, reflect on their understanding, and to synthesize and analyze information
- Increase interest in social studies learning
- Learn how to evaluate sources/documents and use evidence to communicate conclusions
- Are engaged and motivated through lessons and activities that are inclusive and relevant to their daily lives and personal interests
- Learn about important civic ideals and how they relate to their own lives

Educators

- Have access to rigorous, research-based social studies resources and digital tools that promote an inquiry-based approach to instruction
- Have access to performance tasks where students demonstrate analysis and synthesis of social studies ideas
- Provide learning activities for students to choose from based on their interests and strengths
- Teach the social studies standards for their grade
- Spend less time on lesson preparation and more time on classroom instruction as well as providing timely feedback and facilitation to students
- Are able to use discussion questions to evaluate the proficiency of their students at different points in their learning
- Have access to rich data about their students' social studies learning
- Increase participation in professional learning opportunities and communities

Administrators

- Promote the use of inquiry-based instruction to improve understanding of social studies ideas
- Have more information about students' social studies learning in their school or district

INTERMEDIATE

Students

- Measurably improve understanding of social studies content for their grade level
- Are more proficient at applying inquiry skills to analyze artifacts that synthesize multiple pieces of information, and to create such artifacts that accurately represent social studies ideas to others
- Can communicate the relationships between current and historical events/perspectives
- Identify how civic decision-making and taking action can affect their lives

Educators

- Encourage cultural relevance and multiple perspectives
- Promote literacy skills and provide student feedback on the document-based performance tasks
- Facilitate and implement inquiry-based lessons to increase student knowledge and skills related to social studies topics
- Feel more engaged in their classroom instruction through lessons that offer engaging content and excite students with multiple paths for learning and demonstrating understanding

Administrators

- Support educator professional growth and prioritize increasing students' social studies outcomes across their school or district
- Direct and allocate resources and supports for social studies instruction for educators and schools most in need

LONG TERM

Students

- Are better able to make informed decisions and take action in their personal, professional, social and civics lives
- Increase ability to recognize and acknowledge multiple perspectives
- Demonstrate a growth mindset related to inquiry skills and practices to make sense of historical and cultural topics

Educators

- Promote the use of evidence-based/skills-based thinking across subject areas
- Feel professionally supported and are more likely to coach others in social studies instruction
- Utilize multiple perspectives when designing lessons for social studies topics
- Are better able to meet the unique learning needs of all students through strategies such as student choice in learning activities and multiple measures in assessment

Administrators

- Promote and foster a culture of research-, inquiry- and application-based social studies learning
- Foster and support teaching and learning that promotes multiple perspectives
- Increase capacity to meet the learning needs of all students in their school or district

¹ The Educator Supports Channel is an online platform that provides school and district leaders with resources on how to share best practices for Discovery Education products/services and empower educators through professional learning.

² Discovery Educator Network (DEN) is a global online community that connects educators to teaching resources, learning opportunities, and professional peer networking.

³ Professional learning communities (PLCs) are groups of educators and administrators that work collaboratively at the school level to improve student outcomes.

Social Studies Techbook Logic Model Components. Discovery Education invests several resources into its program, including:

- A standards-based digital textbook that allows educators and students to experience vetted social studies content through differentiated inquiry-based lessons and activities;
- Professional learning and ongoing support resources including access to Educator Supports Channel³ and Discovery Educator Network (DEN);⁴
- A variety of performance tasks for students to choose how to demonstrate their learning;
- Access to primary and secondary sources for analysis and application to performance tasks;
- Accessibility features (e.g., text to speech, closed captioning, video transcripts and different Lexile levels, authentic Spanish translations, and translation support in more than 180 languages);
- Support via a district communication toolkit, partner success team, and education support teams; and
- Integration with district-wide systems (e.g., LMS, Google, Microsoft, etc.).

Ultimately, *Social Studies Techbook* aims to reach students in Grades 6–8, educators, and administrators. Using these program resources, the aforementioned participants can engage with the program in the following activities:

Students:

- Access the *Social Studies Techbook* platform;
- Access in-person and online content, resources, and activities within each concept (i.e., planned inquiry-based lesson);
- Complete interactive formative and summative performance tasks that allow for synthesis and evaluation of primary and secondary sources;
- Participate in active learning through content and evidence-based classroom discourse on social studies topics; and
- Synthesize and evaluate text to construct evidence based claims, arguments, and recognize multiple perspectives related to social studies topics.

Educators:

- Access platform usage, outcome, and progress data for students;
- Assign concept content, primary and secondary resources, and activities within classroom instruction for whole group, small groups, or individual students;
- Assign formative and summative performance tasks;
- Access support resources including preparation materials and standards alignment information;

³ The Educator Supports Channel is an online platform that provides school and district leaders with resources on how to share best practices for Discovery Education products/ services and empower educators through professional learning.

⁴ Discovery Educator Network (DEN) is a global online community that connects educators to teaching resources, learning opportunities, and professional peer networking.

- Provide opportunities for students to participate in group discussions that promote understanding of historical importance and cultural relevance;
- Participate in site/district-led professional learning webinars and live events;
- Participate in school-based professional learning community (PLC) teams⁵ and
- Observe peers' use of *Social Studies Techbook* to reflect on best practices either directly or through professional learning conversations.

Administrators:

- Access platform usage, outcome, and progress data for students, educators, and schools;
- Participate in site/district-led professional learning webinars and live events;
- Participate in school-based PLC teams;
- Provide relevant resources, updates, and ongoing support to educators through district collaboration and communication channels (LMS, PLCs, email, social media, professional learning);
- Embed *Social Studies Techbook* content within school and/or district policies and curricula;
- Ensure users have access to and awareness of *Social Studies Techbook* and available training supports (Educators Support Channel, professional learning, DEN); and
- Access, monitor, and drive product usage and engagement with the program on a regular basis.

Discovery Education can examine the extent to which core activities were delivered and participants were reached by examining the following quantifiable outputs:

Students

- Number of unique students who accessed the platform and frequency of access
- Number and type of online content, resources, activities, and concepts accessed
- Number and nature of concepts, and formative and summative performance tasks completed
- Formative and summative performance task scores
- Student-reported efficacy for planned inquiry

Educators

- Number of reports downloaded/accessible
- Number of unique educators who accessed the platform and frequency of access
- Number and type of concept content, resources, and activities accessed and assigned by educators
- Number and nature of formative and summative performance tasks assigned
- Number and type of support resources accessed by educators
- Frequency of discussion groups established between students and educators

⁵ Professional learning communities (PLCs) are groups of educators and administrators that work collaboratively at the school level to improve student outcomes.

- Number and type of professional learning hours attended and completed
- Number and nature of PLC teams
- Number and nature of PLC meetings between educators and administrators concerning *Social Studies Techbook* implementation, updates, and professional learning support
- Frequency of educator peer observations

Administrators

- Number of reports downloaded/accessible
- Number of unique administrators who accessed platform and frequency of access
- Number and type of professional learning hours attended and completed
- Number and nature of PLC teams
- Number and nature of PLC meetings between educators and administrators concerning *Social Studies Techbook* implementation, updates, and professional learning support
- The extent to which *Social Studies Techbook* content is embedded within district policies and curricula and its use promoted, supported, and encouraged by administrators, as measured by district-level and school-level professional learning sessions, PLCs created and maintained, and the district communication toolkit

If implementation is successful, based on a review of program outputs, Discovery Education can expect the following outcomes:

Students

Short term, students will have access to differentiated social studies instruction and activities that allow students to access social studies content, reflect on their understanding, and to synthesize and analyze information. Students' interest in social studies learning will increase. They will learn how to evaluate sources and documents, and use evidence to communicate conclusions. Students will be engaged and motivated through lessons and activities that are inclusive and relevant to their daily lives and personal interests. Finally, they will learn about important civic ideals and how they relate to their own lives.

In the intermediate term, students will demonstrate measurable improvement of their understanding of social studies content for their grade level. They will be more proficient at applying inquiry skills to analyze artifacts that synthesize multiple pieces of information, and to create such artifacts that accurately represent social studies ideas to others. Students will be able to communicate evidence-based relationships between current and historical events/perspectives. Additionally, they will be able to identify how civic decision-making and taking action can affect their lives.

Long term, students will be better able to make informed decisions and take action in their personal, professional, social, and civic lives. Their ability to recognize and acknowledge multiple perspectives will improve. Finally, students will make sense of historical and cultural topics by demonstrating a growth mindset related to inquiry skills and practices.

Educators

Short term, educators will have access to rigorous, research-based social studies resources; digital tools that promote an inquiry-based approach to instruction; performance tasks where students demonstrate analysis and synthesis of social studies ideas; and rich data about their students' social studies learning. Educators will be able to provide learning activities for students to choose from based on their interests and strengths, teach the social studies standards for their grade, and use discussion questions to evaluate the proficiency of their students at different points in their learning. They will spend less time on lesson preparation and more time on classroom instruction while providing timely feedback and facilitation to students. Finally, educators will increase their participation in professional learning opportunities and communities.

In the intermediate term, educators will encourage cultural relevance and multiple perspectives while promoting literacy skills and providing student feedback on document-based performance tasks. They will facilitate and implement inquiry-based lessons to increase student knowledge and skills related to social studies topics. Finally, educators will feel more engaged in their classroom instruction through lessons that offer engaging content and excite students with multiple paths for learning and demonstrating understanding.

Long term, educators will promote the use of evidence- and skills-based thinking across subject areas. They will feel professionally supported and be more likely to coach others in social studies instruction. Educators will utilize multiple perspectives when designing lessons for social studies topics. Finally, they will be better able to meet the unique learning needs of all students through strategies such as student choice in learning activities and multiple measures in assessment.

Administrators

Short term, administrators will promote the use of inquiry-based instruction to improve understanding of social studies ideas. They will have more information about students' social studies learning in their school or district.

In the intermediate term, administrators will support educator professional growth and prioritize increasing students' social studies outcomes across their school or district. They will direct and allocate resources and supports for social studies instruction to educators and schools that are most in need.

Long term, administrators will promote and foster a culture of research-, inquiry- and application-based social studies learning. They will foster and support teaching and learning that promotes multiple perspectives. Finally, administrators will be better able to meet the learning needs of all students in their school or district.

Study Design for Social Studies Techbook Evaluation

To continue building evidence of effectiveness and to examine the proposed relationships in the logic model, Discovery Education has plans to conduct an evaluation to determine the extent to which its program produces the desired outcomes. Specifically, Discovery Education has plans to begin an ESSA Level III study to answer the following research questions:

1. To what extent are Grade 6–8 students using *Social Studies Techbook*?
 - a. How much time are students spending on the platform on average?
 - b. How many and what types of activities have students completed on the platform?
2. How does Grade 6–8 student usage of *Social Studies Techbook* relate to student learning of social studies content knowledge, as evidenced by end-of-course standardized assessments?

Conclusions

This study satisfies ESSA evidence requirements for Level IV (*Demonstrates a Rationale*). Specifically, this study met the following criteria for Level IV:

- Detailed logic model informed by previous, high-quality research
- Study planning and design is currently underway for an ESSA Level I, II, or III study

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