

# Book Creator Logic Model

Study Type: ESSA Evidence Level IV

Prepared for:  
Book Creator

Prepared by LearnPlatform:  
S. Austin Cavanaugh, M.A., Researcher  
Elizabeth Allen Green, Ph.D., Research Contractor

August 16, 2023



## EXECUTIVE SUMMARY

Book Creator engaged LearnPlatform by Instructure, a third-party edtech research company, to develop a logic model for Book Creator. LearnPlatform designed the logic model to satisfy Level IV requirements (*Demonstrates a Rationale*) according to the Every Student Succeeds Act (ESSA).<sup>1</sup>

### Logic Model

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

### Study Design for Book Creator Evaluation

Informed by the logic model, the next phase will focus on planning for an ESSA Level III study to examine the extent to which Book Creator impacts instruction. The proposed research questions for the upcoming study are as follows:

1. How often were the key features of Book Creator used by students, educators, administrators, and technology and literacy coaches during the school year, as specified in the logic model?
2. To what extent were Book Creator tools and features used to support literacy instruction, as well as instruction in other content areas, as specified in the logic model?
3. Did Book Creator usage and implementation correlate with short-term, intermediate, and long-term outcomes specified in the logic model?

### 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

---

<sup>1</sup> 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).

## TABLE OF CONTENTS

Introduction	3
Logic Model	5
Table 1. Logic model core components	5
Figure 1. Book Creator logic model	6
Study Design for Book Creator Evaluation	9
Conclusions	10
References	11

## Introduction

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

Book Creator is designed for students to create digital books content that incorporate various modes of communication about instructional content, enabling multimodal learning. With Book Creator, students can show what they know across content areas, resulting in students developing their literacy and creativity skills across the curriculum. It is designed with simplicity in mind, enabling inclusive and engaging learning opportunities for all students. Book Creator enables students to create digital books.

The study had the following objectives:

1. Define the Book Creator logic model and foundational research base.
2. Draft an ESSA Level III study design.

*Previous Research.* The design of this logic model was guided by previous research examining relevant concepts associated with Book Creator's implicit theory of action: Book Creator allows for the integration of technology in education as a means of production of digital books by students, which facilitates both enhanced and transformative multimodal learning of reading and writing, across the curriculum, in a way that leverages students' own creativity to achieve more effective instruction. This review of literature situates Book Creator in terms of the SAMR model (Puentadura, 2006) by highlighting the advantages of multimodal learning opportunities (Moreno & Mayer, 2007) provided by Book Creator to develop students' reading and writing skills across the curriculum (Graham et al., 2020) through the leveraging of student creativity to improve learning outcomes (Bolden et al., 2020). Multimodal learning opportunities increase accessibility for all students, particularly students with disabilities and English Language Learners (ELLs). As such, students can demonstrate what they know by creating content in a medium that is most accessible to them (e.g., audio and video). Student access to multimodal learning opportunities increase access to content and engagement in learning (Hall et al., 2015), resulting in improved student outcomes (Fredricks et al., 2004).

The SAMR model is a framework used to assess technology integration in education (Hamilton et al., 2016; Puentadura, 2006). Arranged as a hierarchy, SAMR begins with substitution, whereby a new technology simply replaces an older one without any functional improvements to the associated learning activity. The next level of the model, augmentation, entails integration of a technology in a way that functionally improves the learning activity. These first two levels of the model correspond to enhancements to learning activities enabled via technology. The third level, modification, reflects significant redesign of a given task or learning activity, while the fourth level, redefinition, suggests enabling an altogether new, previously inconceivable learning task that can only be achieved via the new technology. The third and fourth tiers of SAMR correspond to significant transformations of educational practice (Puentadura, 2006). Book Creator allows

educators to move beyond substitution and augmentation stages, reaching modification and redefinition levels, where learning activities are fundamentally transformed (Hamilton et al., 2016; Puentedura, 2006).

Book Creator's flexibility makes it ideal for fostering learning competencies and 21st century skills like those described by Fullan and Scott (2015) as the 6Cs. The first C, critical thinking, refers to how students analyze and synthesize information they find across media types to fit their understanding and support problem solving. The second C, communication, gets at how students learn to make decisions about how best to speak, write, and listen to their audience to achieve effective communication in various contexts. Collaboration refers to the ways students can practice empathy and social networking skills to leverage different sets of knowledge and talents within a group to accomplish goals. The fourth C, creativity, is the capacity to use that knowledge and talents to produce something in a new way, or create something completely novel. The fifth C, citizenship (or culture), refers to students understanding and appreciating where they come from and the societal values they hold. Finally, connectivity goes beyond simply participating in social networks, but refers to students connecting with other people via an intrinsic motivation to be helpful and kind in the interest of building a better world (Anugerahwati, 2019; Fullan & Scott, 2014; Holland, 2019).

Book Creator enables students to create digital books that incorporate various modes of communication about instructional content, thus opening the door for multimodal learning. Multimodal learning refers to an instructional approach that caters to diverse learning styles and preferences by enabling multimodal expression for students to meet learning objectives in more accessible ways (Moreno & Mayer, 2007; Varaporn & Sitthitikul, 2019), and thus creating a more inclusive learning environment (Moreno & Mayer, 2007). By engaging students through different modalities, such as text, images, and audio, Book Creator can help enhance comprehension, memory retention, and overall learning outcomes (Bolden et al., 2020; Graham et al., 2020; Moreno & Mayer, 2007; Varaporn & Sitthitikul, 2019).

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

# Book Creator Logic Model

**Problem Statement:** Access to and engagement in learning is a prerequisite to academic achievement and mental wellbeing in school, but educators and administrators sometimes struggle to provide both to students. Ensuring access and engagement in learning to read and write is even more critical, as literacy opens doors to all other learning. Book Creator is designed for students to create content to show what they know across content areas, resulting in students developing their literacy and creativity skills across the curriculum. Book Creator is designed with simplicity in mind, enabling inclusive and engaging learning opportunities for all students.



# BOOK CREATOR

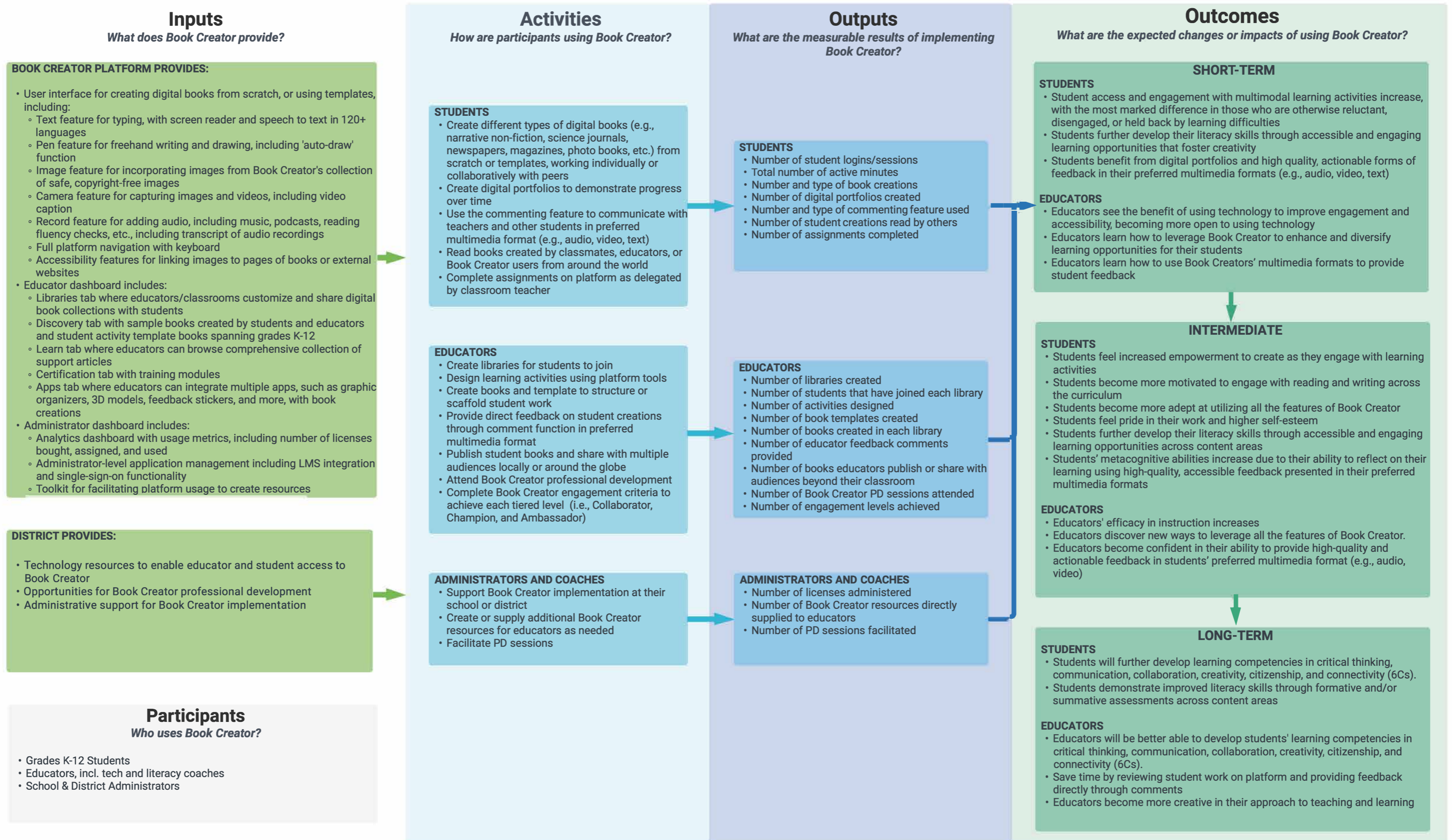


Figure 1. Book Creator logic model

*Book Creator Logic Model Components.* Book Creator invests several resources into their user interface for creating digital books, either from scratch or via templates. These include a text feature for typing, with speech to text in 120+ languages plus screen reader; a pen feature for freehand writing and drawing, including an 'auto-draw' function; an image feature for incorporating images from Book Creator's collection of safe, copyright-free images; a camera feature for capturing images and videos (plus video captioning); a record feature, for adding audio, including music, podcasts, student reading fluency checks, including transcripts for audio recordings; accessibility features for all students, including ELLs and students with disabilities, for linking images to pages of books or external websites, plus full platform navigation with keyboard. The Book Creator platform has a dedicated dashboard for educators. The educator dashboard has multiple tabs, including: the libraries tab where educators customize and share digital book collections with students; the discovery tab with sample books created by students and educators spanning grades K-12; the learn tab where educators can browse comprehensive collections of support articles; the certification tab with training modules; the apps tab where educators can integrate multiple apps, such as graphic organizers, 3D models, feedback stickers, and more, with their book creations. The administrator dashboard includes: an analytics dashboard with usage metrics, including number of licenses bought, assigned, and used; administrator-level application management including LMS integration and single-sign-on functionality; toolkit for facilitating platform usage to create resources. Ultimately, Book Creator aims to reach grades K-12 students, educators, technology and literacy coaches, and school & district administrators.

Using these program resources, students, educators, coaches, and administrators can engage with the Book Creator platform in the following activities:

*Students:*

- Create different types of digital books (e.g., narrative non-fiction, science journals, newspapers, magazines, photo books, etc.) from scratch or templates, working individually or collaboratively with peers
- Create digital portfolios to demonstrate progress over time
- Use the commenting feature to communicate with teachers and other students in preferred multimedia format (e.g., audio, video, text)
- Read books created by classmates, educators, or Book Creator users from around the world
- Complete assignments on platform as delegated by classroom teacher

*Educators:*

- Create libraries for students to join
- Design learning activities using platform tools
- Create books and template book(s) to structure or scaffold student work
- Provide direct feedback on student creations through comment function
- Publish student books and share with multiple audiences locally or around the globe
- Attend Book Creator professional development



- Complete Book Creator engagement criteria to achieve each tiered level (i.e., Collaborator, Champion, and Ambassador)

*Administrators and Coaches:*

- Support Book Creator implementation at their school
- Create or supply additional Book Creator resources for educators as needed
- Facilitate PD sessions

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

*Students:*

- Number of student logins/sessions
- Total number of active minutes
- Number and type of book creations
- Number of digital portfolios created
- Number and type of commenting feature used
- Number of student creations read by others
- Number of assignments completed

*Educators:*

- Number of libraries created
- Number of students that have joined each library
- Number of activities designed
- Number of book templates created
- Number of books created in each library
- Number of educator feedback comments provided
- Number of books educators publish or share with audiences beyond their classroom
- Number of Book Creator PD sessions attended
- Number of engagement levels achieved

*Administrators and Coaches:*

- Number of licenses administered
- Number of Book Creator resources directly supplied to educators
- Number of PD sessions facilitated

If implementation is successful, based on a review of program outputs, Book Creator can expect the following short-term outcomes. Using Book Creator, student access and engagement with multimodal learning activities will increase, with the most marked difference in those who are otherwise reluctant, disengaged, or held back by learning difficulties or language barriers. Students will also further develop their literacy skills through accessible and engaging learning opportunities that foster creativity. Lastly, students benefit from digital portfolios and high quality, actionable forms of feedback in their preferred multimedia formats (e.g., audio, video, text).

Educators will see the benefit of using technology to improve engagement and accessibility, and will become more open to using technology for instruction. This will allow educators to learn how to leverage Book Creator to enhance and diversify learning opportunities for their students. Finally, educators learn how to use Book Creators' multimedia formats to provide student feedback.

As implementation continues, students will feel increased empowerment to create as they engage with learning activities through Book Creator, and they will become more motivated to engage with reading and writing across the curriculum. Through continued use, students become more adept at utilizing all the features of Book Creator, so that they further develop their literacy skills through accessible and engaging learning opportunities across content areas, leading to feelings of pride in their work, and higher self-esteem. Further, students' metacognitive abilities increase due to their ability to reflect on their learning using high-quality, accessible feedback presented in their preferred multimedia formats. During this time, educators' efficacy in instruction increases as they discover new ways to leverage all the features of Book Creator. They also become confident in their ability to provide high-quality and actionable feedback in students' preferred multimedia format (e.g., audio, video).

With long-term implementation of Book Creator, students will further develop learning competencies in critical thinking, communication, collaboration, creativity, citizenship, and connectivity (6Cs). Students will also demonstrate improved literacy skills through formative and summative assessments, across content areas. Over time, educators will begin to save time by reviewing student work on platform and providing feedback directly through comments, empowering educators to become more creative in their approach to teaching and learning. Educators will also be better able to develop students' learning competencies in critical thinking, communication, collaboration, creativity, citizenship, and connectivity (6Cs).

## **Study Design for Book Creator Evaluation**

To continue building evidence of effectiveness and to examine the proposed relationships in the logic model, Book Creator has plans to conduct an evaluation to determine the extent to which its program produces the desired outcomes. Specifically, Book Creator has plans to begin an ESSA Level III study in Spring 2024 to answer the following research questions:

1. How often were the key features of Book Creator used by students, educators, administrators, and technology and literacy coaches during the school year, as specified in the logic model?
2. To what extent were Book Creator tools and features used to support literacy instruction, as well as instruction in other content areas, as specified in the logic model?
3. Did Book Creator usage and implementation correlate with short-term, intermediate, and long-term outcomes specified in the logic model?

## 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 III study

## References

- Anugerahwati, M. (2019). Integrating the 6Cs of the 21st Century Education into the English lesson and the school literacy movement in secondary schools. *KnE Social Sciences International Seminar on Language, Education, and Culture, 2019*, 165–171. DOI 10.18502/kss.v3i10.3898
- Bolden, B., DeLuca, C., Kukkonen, T., Roy, S., & Wearing, J. (2020). Assessment of creativity in K-12 education: A scoping review. *Review of Education, 8*(2), 343-376.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59-109.
- Fullan, M., & Scott, G. (2014). Education PLUS: The world will be led by people you can count on, including you. *Collaborative Impact SPC*.
- Graham, S., Kiuahara, S. A., & MacKay, M. (2020). The effects of writing on learning in science, social studies, and mathematics: A Meta-Analysis. *Review of Educational Research, 90*(2), 179–226.
- Hall, T. E., Cohen, N., Vue, G., & Ganley, P. (2015). Addressing learning disabilities with UDL and technology: Strategic Reader. *Learning Disability Quarterly, 38*(2), 72-83.
- Hamilton, E. R., Rosenberg, J. M., & Akcaoglu, M. (2016). The substitution augmentation modification redefinition (SAMR) model: A critical review and suggestions for its use. *TechTrends, 60*, 433-441.
- Holland, B. (2019). *Book Creator and the 6Cs of education*. Book Creator.  
[https://read.bookcreator.com/library/-LCESe5qTaw-qLZCBqm3/book/l-aN1Ya5QReohud1lPX4nA/rFXfH3hCQt6\\_eUG5kSz92g](https://read.bookcreator.com/library/-LCESe5qTaw-qLZCBqm3/book/l-aN1Ya5QReohud1lPX4nA/rFXfH3hCQt6_eUG5kSz92g)
- Moreno, R., & Mayer, R. (2007). Interactive multimodal learning environments: Special issue on interactive learning environments: Contemporary issues and trends. *Educational Psychology Review, 19*, 309-326.
- Puentedura, R.R. (2006). *As we may teach: educational technology, from theory into practice*. Apple.
- Varaporn, S., & Sitthitikul, P. (2019). Effects of multimodal tasks on students' critical reading ability and perceptions.