

# Lincoln Learning Logic Model

Study Type: ESSA Evidence Level IV

Prepared for:  
Lincoln Learning

Prepared by LearnPlatform:  
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## EXECUTIVE SUMMARY

Lincoln Learning engaged LearnPlatform by Instructure, a third-party edtech research company, to develop a logic model for Lincoln Empowered. 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 Lincoln Learning to develop and revise the logic model.

### Study Design for Lincoln Empowered 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 Lincoln Empowered impacts student outcomes.

### 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

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<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).

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## Introduction

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

There is no one-size-fits-all instructional approach when it comes to students' learning which is why they need flexibility to choose the learning model that best fits them. Lincoln Empowered offers a personalized, standards-based curriculum that seamlessly blends content and best-in-class technology to create a pathway for students to own their learning.

The study had the following objectives:

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

**Previous Research.** Two intersecting realities motivate this review of prior research on K–12 online learning. First, there is a critical recognition that K–12 education in the post-pandemic world must recenter its focus on empowering today's students to become skilled contributors in tomorrow's workforce and society at large (Graham et al. 2019; Hanny et al., 2023; Stephens, Daniels, & Phillips, 2022). Second, research shows a growing need for more flexible and differentiated instruction that places further demands on already burnt out educators and understaffed schools (Robinson et al., 2023; Schaack & Stedron 2020; Steiner & Woo 2021). Furthermore, the rise in homeschooling (Hirsh 2019; National Center for Education Statistics) places the same demands on parents who may not necessarily be certified educators. Taken together, research underscores the need for a solution that can promote student-centered learning (Kaput 2018) and at the same time create an ecosystem of resources, online educators, and curricula that can complement the practices of educators, schools, and parents.

Lincoln Learning is a learning platform aimed at empowering students to own their learning journeys by engaging with multimodal, grade-appropriate, and tailored curricula. It also offers tools, resources, and professional development that can equip districts, schools, educators, and parents/caregivers to better support their students.

**Student-centered Learning.** While the concept of student-centered learning itself is not new (e.g. Brush & Saye 2000; Stiggins, 1994), Kaput's (2018) work offers a set of principles and insights that are most relevant for understanding the primary feature of Lincoln Learning. Simply put, student-centered learning is an approach that incorporates students' interests, learning styles, socio-cultural identities, and lived experiences to drive learning outcomes. By meeting the students where they are, systems that are student-centric promote successful learning and motivate students to become self-directed learners (Hynes, 2018; Kaput, 2018). The research shows that learner agency promotes more engagement and fosters an interest in deeper learning. These positive feedback loops have the potential to produce outcomes that not only enable

academic success in K–12, but also enable students to prepare for successful higher education and professional success.

Additionally, educational research has established the value of multimodal content (i.e., videos, text, interactive guided prompts, audio), experiential learning, and game-based learning in promoting student engagement and self-directed learning (Abdullah, 2001; Huerta-Wong & Schoech, 2010; Raes et al., 2020; Zainuddin et al., 2020). For example, game-based learning scaffolds the development of 21st-century learning skills such as problem-solving, critical thinking, and digital literacy skills (Plass et al., 2015; Qian & Clark, 2016). More broadly, online learning can be leveraged to accomplish the goals of equity and access in education (Watson 2007; Watson et al., 2013).

*Professional Development for Educators.* The need for teacher training and professional development for improving student outcomes is a well-established requirement in education; online blended learning environments are no exception to this requirement (Archambault & Kennedy, 2014; Barbour 2018; Rice & Dawley 2009). The rise of digital learning platforms necessitates educators to reskill themselves to better understand how they might support students in virtual or blended classrooms, yet teacher training programs have been comparatively slower to respond to emerging learning environments (An et al., 2021). The absence of national and state-level standards and a dearth of evidence-based practices (Moore-Adams, Jones, & Cohen, 2016) combined with recent issues of teacher burnout (Robinson et al., 2023; Schaack & Stedron 2020; Steiner & Woo 2021) have only resulted in escalating the burdens on educators and schools. Historically, educators design curricula and activities according to various national and state/district-level standards. However, designing curricula for online platforms involves more than merely translating offline content into digital form. For example, online learning platforms leverage innovative technologies for creating diverse content that can be translated into multiple languages for ESL (English as a second language) learners and adaptive content that can be tailored to support differentiated instruction (Hanny et al., 2023). Even before the global pandemic, studies reported the growing trends in homeschooling particularly in families of color (Hirsh 2019). This trend broadens the landscape of educators to parents/caregivers who may or may not be required to follow standards and regulations depending on U.S state-specific laws. While educators can develop competencies for teaching in online and blended environments with the help of effective training programs, schools and educators alone cannot be expected to address challenges around creating and maintaining technologies and adaptive content (Basham et al., 2013; Wicks 2010). Taken together, the research suggests the need for timely professional development and reliable content, thus enabling educators to focus on more meaningful practices through their teaching.

In summary, the parallel realities that were mentioned earlier in the current climate are fast converging to threaten the future of K–12 education, escalating the problems of inequity, learning loss, and the achievement gap to name a few (Stephens, Daniels, & Phillips, 2022). As the same authors also state, there is perhaps no better time than the present for transforming online learning. The research points to a strong need for a more cohesive online and blended learning

solution that incorporates student-centered learning, promotes equitable access to learning resources, and facilitates professional development for K-12 educators.

Lincoln Learning offers an evidence-based solution that offers students grade-appropriate content in multiple media formats. Students can engage with videos, online manipulatives, games, and simulations designed to inspire, motivate, and prepare students to learn. Experienced and certified educators at Lincoln Learning facilitate online learning while also grading and providing feedback to students. A professional development team at Lincoln Learning also trains classroom educators or individual teachers on implementing the curriculum, while the platform also offers communicative materials, a user-friendly website with blog posts, newsletters, and efficient technical support to its clients. Lincoln Learning can create cohorts of K–12 students who are curious and motivated and in the longer term, prepare tomorrow’s workforce that are empowered to become knowledge-producers, problem-solvers; and innovators in the 21st-century knowledge economy (Hynes 2018; Neary & Winn, 2009). Lincoln Learning can promote academic success in students and foster professional development in educators.

## 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).

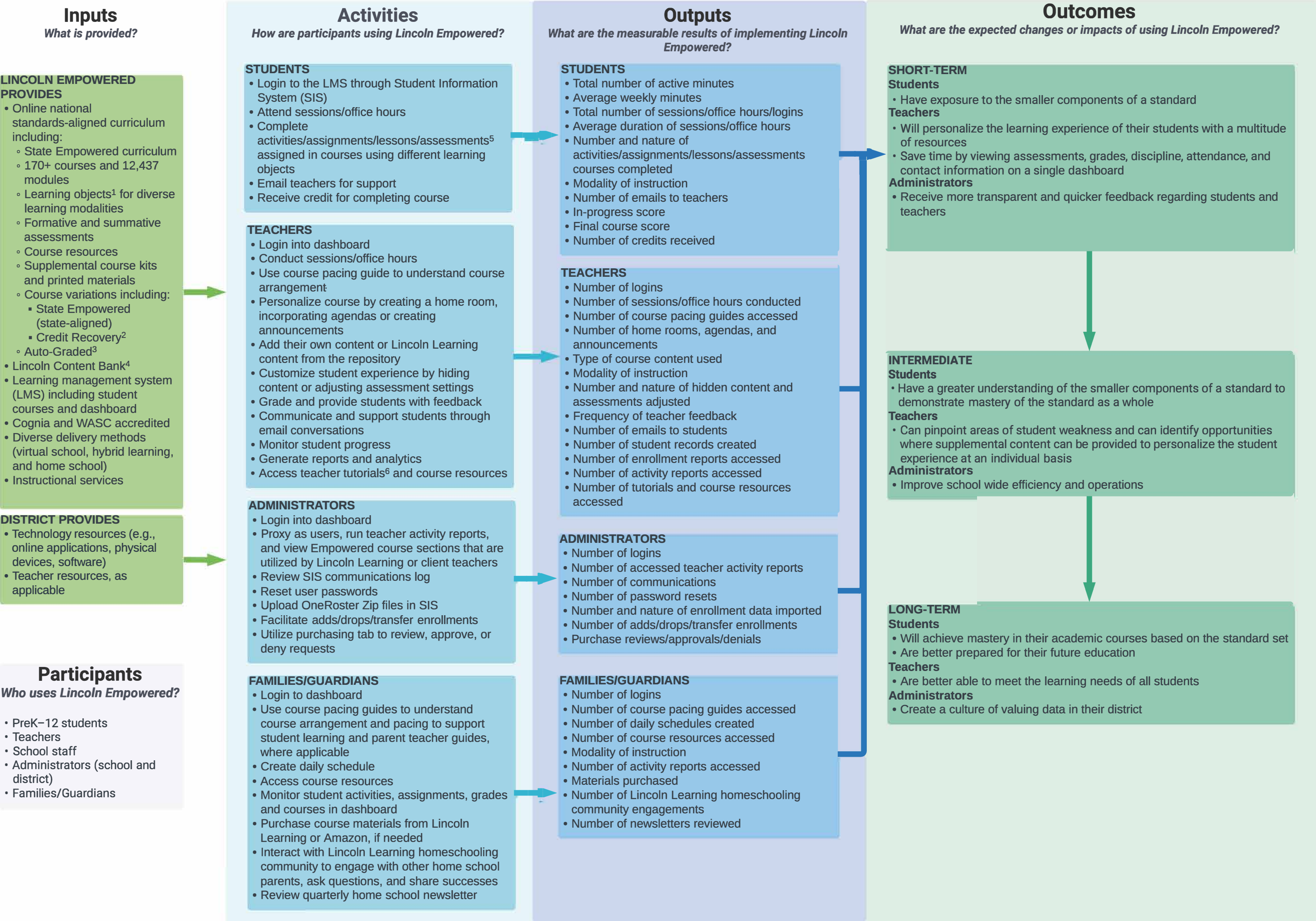
Table 1. Logic model core components

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



**Problem Statement:** There's no one-size-fits-all instructional approach when it comes to students' learning which is why they need flexibility to choose the learning model that best fits them. Lincoln Empowered offers a personalized, standards-based curriculum that seamlessly blends content and best-in-class technology to create a pathway for students to own their learning.



<sup>1</sup> Learning objects are bite-sized pieces of content delivered across various learning modalities (i.e., read it, teach it, watch it, play it, practice it, show it, apply it, assess it, answer key, reinforce it & extend it) to improve student learning.

<sup>2</sup> Credit Recovery courses allow students to focus on content they still need to master.

<sup>3</sup> Auto-Graded courses and assessments allow students to progress through a course at their own pace and includes auto-graded assessments that are scored by the LMS and automatic feedback is delivered to the student through the LMS.

<sup>4</sup> Lincoln Content Bank is an online tool for supplemental learning. Supporting individualized tutoring solutions, blended, hybrid, or virtual learning, remediation and enrichment, homework options, and supplemental materials

<sup>5</sup> For Credit Recovery Courses, students will take a pretest.

<sup>6</sup> Teacher tutorials are available to teachers on how to navigate and optimize Lincoln Learning products and services within LMS.



*Lincoln Empowered Logic Model Components.* Lincoln Learning invests several resources into Lincoln Empowered such as an online national standards-aligned curriculum (including State Empowered curriculum, 170+ courses and 12,437 modules, learning objects<sup>2</sup> for diverse learning modalities, formative and summative assessments, course resources, supplemental course kits and printed materials, course variations (including State Empowered (state-aligned), Credit Recovery<sup>3</sup>, and Auto-Graded<sup>4</sup>), Lincoln Content Bank<sup>5</sup>, learning management system (LMS) including student courses and dashboard, Cognia and WASC accredited, diverse delivery methods (including virtual school, hybrid learning, and home school), and instructional services. The district provides technology resources (including online applications, physical devices, software) and additional teacher resources, as applicable. Ultimately, Lincoln Empowered aims to reach preK–12 students, teachers, school staff, administrators (school and district), and families/guardians.

Using these resources, participants can engage with the Lincoln Empowered in the following activities:

### **Students**

- Login to the LMS through Student Information System (SIS)
- Attend sessions/office hours
- Complete activities/assignments/lessons/assessments<sup>6</sup> assigned in courses using different learning objects
- Email teachers for support
- Receive credit for completing course

### **Teachers**

- Login into dashboard
- Conduct sessions/office hours
- Use course pacing guide to understand course arrangement
- Personalize course by creating a home room, incorporating agendas or creating announcements
- Add their own content or Lincoln Learning content from the repository
- Customize student experience by hiding content or adjusting assessment settings
- Grade and provide students with feedback
- Communicate and support students through email conversations
- Monitor student progress
- Generate reports and analytics
- Access teacher tutorials<sup>7</sup> and course resources

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<sup>3</sup> Credit Recovery courses allow students to focus on content they still need to master.

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<sup>7</sup> Teacher tutorials are available to teachers on how to navigate and optimize Lincoln Learning products and services within LMS.

## **Administrators**

- Login into dashboard
- Proxy as users, run teacher activity reports, and view Empowered course sections that are utilized by Lincoln Learning or client teachers
- Review SIS communications log
- Reset user passwords
- Upload OneRoster Zip files in SIS
- Facilitate adds/drops/transfer enrollments
- Utilize purchasing tab to review, approve, or deny requests

## **Families/Guardians**

- Login to dashboard
- Use course pacing guides to understand course arrangement and pacing to support student learning and parent teacher guides, where applicable
- Create daily schedule
- Access course resources
- Monitor student activities, assignments, grades and courses in dashboard
- Purchase course materials from Lincoln Learning or Amazon, if needed
- Interact with Lincoln Learning homeschooling community to engage with other home school parents, ask questions, and share successes
- Review quarterly home school newsletter

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

## **Students**

- Total number of active minutes
- Average weekly minutes
- Total number of sessions/office hours/logins
- Average duration of sessions/office hours
- Number and nature of activities/assignments/lessons/assessments courses completed
- Modality of instruction
- Number of emails to teachers
- In-progress score
- Final course score
- Number of credits received

## **Teachers**

- Number of logins
- Number of sessions/office hours conducted
- Number of course pacing guides accessed
- Number of home rooms, agendas, and announcements
- Type of course content used
- Modality of instruction
- Number and nature of hidden content and assessments adjusted
- Frequency of teacher feedback

- Number of emails to students
- Number of student records created
- Number of enrollment reports accessed
- Number of activity reports accessed
- Number of tutorials and course resources accessed

#### **Administrators**

- Number of logins
- Number of accessed teacher activity reports
- Number of communications
- Number of password resets
- Number and nature of enrollment data imported
- Number of adds/drops/transfer enrollments
- Purchase reviews/approvals/denials

#### **Families/Guardians**

- Number of logins
- Number of course pacing guides accessed
- Number of daily schedules created
- Number of course resources accessed
- Modality of instruction
- Number of activity reports accessed
- Materials purchased
- Number of Lincoln Learning homeschooling community engagements
- Number of newsletters reviewed

If implementation is successful, based on a review of program outputs, Lincoln Learning can expect the following short-term outcomes. For students, they will have exposure to the smaller components of a standard. In the shorter term, teachers will personalize the learning experience of their students with a multitude of resources and save time by viewing assessments, grades, discipline, attendance, and contact information on a single dashboard. Administrators will receive more transparent and quicker feedback regarding students and teachers.

In the intermediate, students will have a greater understanding of the smaller components of a standard to demonstrate mastery of the standard as a whole. Likewise, teachers will be able to pinpoint areas of student weakness and can identify opportunities where supplemental content can be provided to personalize the student experience on an individual basis. Administrators will improve school wide efficiency and operations.

Lastly, students will achieve mastery in their academic courses based on the standard set and be better prepared for their future education in the longer term. Teachers are better able to meet the learning needs of all students and administrators are able to create a culture of valuing data in their district.

## Study Design for Lincoln Empowered Evaluation

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

### Implementation question

1. How many Lincoln Empowered sessions did students complete during the 2022–23 school year?

### Outcome question

2. Did students who used Lincoln Empowered demonstrate statistically significant gains in content knowledge from the beginning of the school year to the end of the year?

## 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
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### Acknowledgements

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