The Princeton Review SAT® Prep Logic Model

Study Type: ESSA Evidence Level IV

Prepared for:
The Princeton Review

Prepared by LearnPlatform:
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EXECUTIVE SUMMARY

The Princeton Review engaged LearnPlatform by Instructure, a third-party edtech research company, to develop a logic model for The Princeton Review SAT® Prep. 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 The Princeton Review to develop and revise 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
✅ An ESSA Level II study was completed in September 2024.

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[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

The Princeton Review engaged LearnPlatform by Instructure, a third-party edtech research company, to develop a logic model for The Princeton Review SAT Prep. LearnPlatform designed the logic model to satisfy Level IV requirements (*Demonstrates a Rationale*) according to the Every Student Succeeds Act (ESSA).[2]

The Princeton Review recognizes that students often need specific, targeted guidance to understand and perform well on complex standardized tests. The Princeton Review provides test preparation for a wide range of exams, including SAT and ACT®. The company also provides career and education services and skill-building to ensure that students access tools that equip them to succeed in achieving academic, post-secondary, and professional goals. The resources and services provided by The Princeton Review are designed to help all students in a learning community achieve positive learning and assessment outcomes.

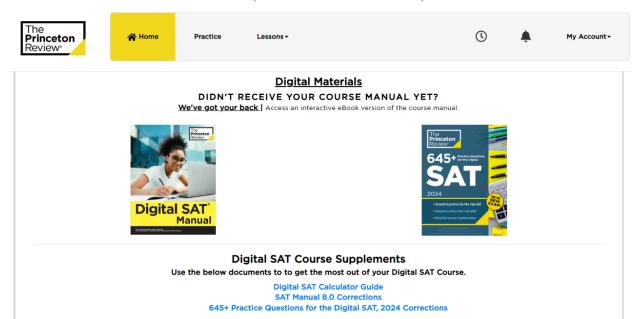The study had the following objectives:
1. Define the The Princeton Review logic model and foundational research base.
2. Devose an ESSA Level II study design.
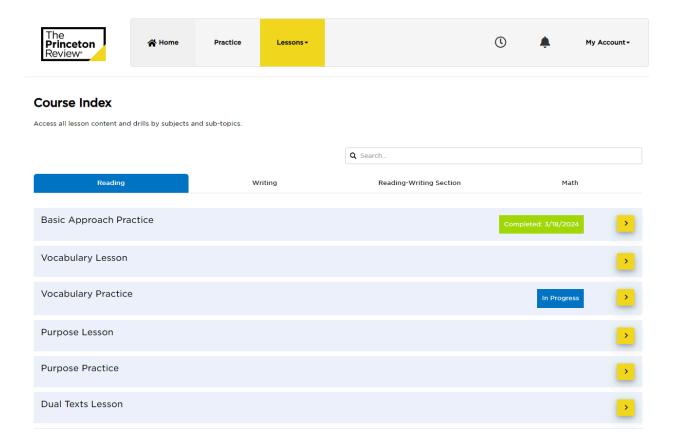
Annotated Bibliography of Previous Research

1. **Citation**: Payne, J. S., San Pedro, S. Z., Moore, R., & Sanchez, E. I. (2020). *Educator Perspectives: Insights on Test Preparation in Schools with State and District Testing. Insights in Education and Work*. ACT, Inc.
   a. *Citation Type:* Empirical study
   b. *Population:* Principals or assistant principals of schools
   c. *Design Decision(s) Driven by the Research:* The role building administrators play in test preparation, types of test preparation activities offered, test preparation strategies taught to students, school culture or context and the influence this has on test preparation.
   d. *How did the team leverage the citation to come to this design decision?* By understanding educators' needs, The Princeton Review SAT Prep program tailors resources to provide effective support. Incorporating proven strategies, such as practice tests and personalized feedback, can improve student outcomes. Customization and flexibility are key, as the diverse experiences of educators in this paper suggest. Adapting the program to different teaching styles and student needs ensures it meets a wide range of requirements. Ultimately, these practices enable data-driven decisions that enhance the learning experience for both educators and students.

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e. If the sample varies significantly from your population of interest, please explain why this research is still relevant to your product: N/A

f. Evidence of the feature (screen shot, video, or URL):

2. **Citation**: Sanchez (2023). *A Compendium of ACT Test Preparation Research 2014–2021.* ACT, Inc.

   a. *Citation Type:* Online article

   b. *Population:* N/A

   c. *Design Decision(s) Driven by the Research:* Best practices for test preparation

   d. *How did the team leverage the citation to come to this design decision?* By identifying the most effective practices highlighted in the report, such as content reinforcement and test familiarization strategies, the program can enhance its prep delivery. Focusing on key areas where students typically need the most help ensures that the program addresses the most critical aspects of test preparation. The report also provides data on the average score gains associated with different test preparation methods, insights that assist in allocating resources to the most effective methods, thereby maximizing student improvement. Additionally, the research discusses the varying impacts of test preparation on different student populations, including those from underserved backgrounds. This information aids in designing inclusive and equitable resources that cater to a diverse student body, as well as engaging and user-friendly resources that improve student motivation and participation.

   e. If the sample varies significantly from your population of interest, please explain why this research is still relevant to your product: N/A

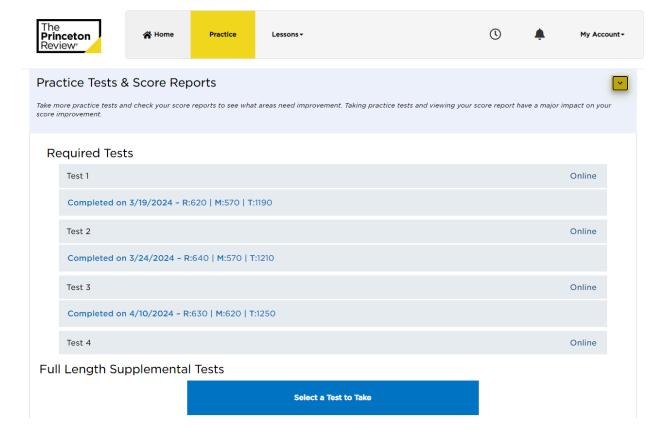   f. Evidence of the feature (screen shot, video, or URL):

Course Index

Access all lesson content and drills by subjects and sub-topics.

🔍 Search...

Reading	Writing	Reading-Writing Section	Math

Basic Approach Practice		Completed: 3/18/2024	>
Vocabulary Lesson			>
Vocabulary Practice		In Progress	>
Purpose Lesson			>
Purpose Practice			>
Dual Texts Lesson			>

3. **Citation**: Naujoks, N., Harder, B. & Händel, M. Testing pays off twice: Potentials of practice tests and feedback regarding exam performance and judgment accuracy. *Metacognition Learning 17,* 479–498 (2022). https://doi.org/10.1007/s11409-022-09295-x
   a. *Citation Type:* Empirical study
   b. *Population:* Undergraduate students enrolled in educational psychology courses
   c. *Design Decision(s) Driven by the Research:* Best practices for test preparation
   d. *How did the team leverage the citation to come to this design decision?* The study found that taking practice tests significantly improves final exam performance due to the "testing effect," where retrieving information during practice tests enhances memory and learning. Additionally, providing feedback on these practice tests further enhances learning outcomes by helping students correct their mistakes and understand their knowledge gaps, leading to better preparation for final exams. The article highlights that practice tests, especially when combined with feedback, improve students' ability to accurately judge their own performance, making them better at predicting their actual exam performance, which is crucial for effective study planning. The combination of practice tests and feedback supports self-regulated learning by encouraging students to set goals, monitor their progress, and adjust their study strategies based on their performance and feedback. It is important to integrate regular practice tests to help students reinforce their learning and improve retention. Providing detailed feedback on these tests is essential to helping students identify and address their weaknesses.

Encouraging metacognitive skills by teaching students to reflect on their performance and use feedback to adjust their study strategies can be done through workshops or guided reflection activities. Finally, the program is designed to promote self-regulated learning by incorporating goal-setting, progress monitoring, and strategy adjustment activities that will further enhance its effectiveness.

e. If the sample varies significantly from your population of interest, please explain why this research is still relevant to your product: N/A

f. Evidence of the feature (screen shot, video, or URL):

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).
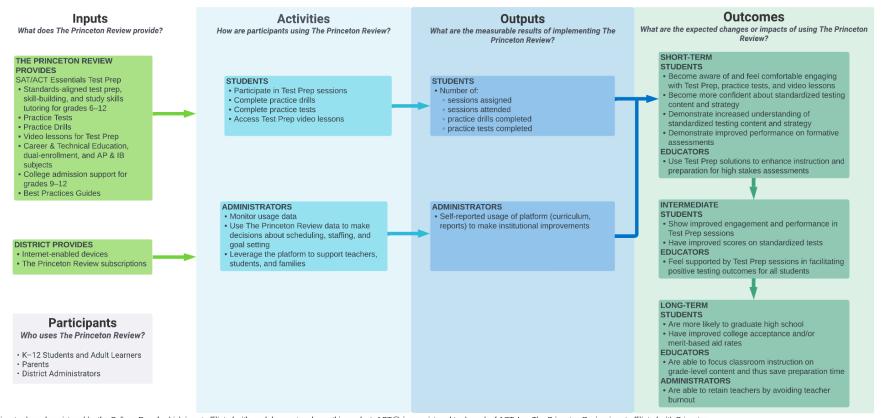
Table 1. Logic model core components

Component	Description	Additional 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 The Princeton Review resources, artifacts, and program materials to develop a draft logic model. The Princeton Review reviewed the draft and provided revisions during virtual meetings. The final logic model depicted below (Figure 1) reflects these conversations and revisions.

Problem Statement: Students often need specific, targeted guidance to understand and perform well on complex standardized tests. The Princeton Review provides test preparation for a wide range of exams, the including SAT® and ACT®. The company also provides career and education services and skill-building to ensure that students access tools that equip them to succeed in achieving academic, post-secondary, and professional goals. The resources and services provided by The Princeton Review are designed to help all students in a learning community achieve positive learning and assessment outcomes.

Inputs
What does The Princeton Review provide?

THE PRINCETON REVIEW PROVIDES
SAT/ACT Essentials Test Prep
- Standards-aligned test prep, skill-building, and study skills tutoring for grades 6–12
- Practice Tests
- Practice Drills
- Video lessons for Test Prep
- Career & Technical Education, dual-enrollment, and AP & IB subjects
- College admission support for grades 9–12
- Best Practices Guides

DISTRICT PROVIDES
- Internet-enabled devices
- The Princeton Review subscriptions

Participants
Who uses The Princeton Review?

- K–12 Students and Adult Learners
- Parents
- District Administrators

Activities
How are participants using The Princeton Review?

STUDENTS
- Participate in Test Prep sessions
- Complete practice drills
- Complete practice tests
- Access Test Prep video lessons

ADMINISTRATORS
- Monitor usage data
- Use The Princeton Review data to make decisions about scheduling, staffing, and goal setting
- Leverage the platform to support teachers, students, and families

Outputs
What are the measurable results of implementing The Princeton Review?

STUDENTS
- Number of:
  - sessions assigned
  - sessions attended
  - practice drills completed
  - practice tests completed

ADMINISTRATORS
- Self-reported usage of platform (curriculum, reports) to make institutional improvements

Outcomes
What are the expected changes or impacts of using The Princeton Review?

SHORT-TERM
STUDENTS
- Become aware of and feel comfortable engaging with Test Prep, practice tests, and video lessons
- Become more confident about standardized testing content and strategy
- Demonstrate increased understanding of standardized testing content and strategy
- Demonstrate improved performance on formative assessments

EDUCATORS
- Use Test Prep solutions to enhance instruction and preparation for high stakes assessments

INTERMEDIATE
STUDENTS
- Show improved engagement and performance in Test Prep sessions
- Have improved scores on standardized tests

EDUCATORS
- Feel supported by Test Prep sessions in facilitating positive testing outcomes for all students

LONG-TERM
STUDENTS
- Are more likely to graduate high school
- Have improved college acceptance and/or merit-based aid rates

EDUCATORS
- Are able to focus classroom instruction on grade-level content and thus save preparation time

ADMINISTRATORS
- Are able to retain teachers by avoiding teacher burnout

Figure 1. The Princeton Review logic model

The Princeton Review Logic Model Components. The Princeton Review includes several resources within its program, including SAT/ACT Test Prep, standards-aligned test prep, skill-building, and study skills tutoring for grades 6–12, practice tests, practice drills, video lessons for test prep, career and technical education, dual-enrollment, and AP & IB subjects, college admission support for grades 9–12, Best Practices Guides. Ultimately, The Princeton Review SAT Prep program aims to improve outcomes for students and district administrators.

Participants can engage with the The Princeton Review SAT Prep platform in the following activities:
- Students
    - participate in Test Prep sessions;
    - complete practice drills;
    - complete practice tests; and
    - access Test Prep video lessons.
- Administrators
    - monitor usage data;
    - use The Princeton Review data to make decisions about scheduling, staffing, and goal-setting; and
    - leverage the platform to support teachers, students, and families.

The Princeton Review can examine the extent to which core activities were delivered and participants were reached by examining the following quantifiable outputs:
- Students
    - Number of:
        - sessions assigned
        - sessions attended
        - practice drills completed
        - practice tests completed
- Administrators
    - Self-reported usage of platform (curriculum, reports) to make institutional improvements

If implementation is successful, based on a review of program outputs, The Princeton Review can expect the following short-term outcomes: students become aware of and feel comfortable engaging with Test Prep, practice tests, and video lessons; become more confident about standardized testing content and strategy; demonstrate increased understanding of standardized testing content and strategy; and demonstrate improved performance on formative assessments. Educators use Test Prep solutions to enhance instruction and preparation for high-stakes assessments. In the intermediate term, students show improved engagement and performance in Test Prep sessions and have improved scores on standardized tests. Meanwhile, educators feel supported by Test Prep sessions in facilitating positive testing outcomes for all students.
In the long term, students are more likely to graduate high school and have improved college acceptance and/or merit-based aid rates; educators are able to focus classroom instruction on

grade-level content and thus save preparation time; and administrators are able to retain teachers by avoiding teacher burnout.

Study Design for The Princeton Review Evaluation

To continue building evidence of effectiveness and to examine the proposed relationships in the logic model, The Princeton Review has already conducted an ESSA Level II study to answer the following research questions:

Implementation Research Questions

1. To what extent did students engage with The Princeton Review SAT Prep?
   a. How many SAT Prep sessions with The Princeton Review did students complete?

Effectiveness Research Questions

2. What was the association between different attendance levels in The Princeton Review SAT Prep program and students' spring 2024 SAT scores?
3. What was the impact of The Princeton Review SAT Prep on spring 2024 SAT scores for students who used the program compared to those who did not?

The study found that:
- ✅ Students who attended more SAT Prep sessions with The Princeton Review had higher spring 2024 SAT scores. This result was statistically significant ($r = .12$; $p = .003$).
- ✅ Students who attended SAT Prep sessions with The Princeton Review had higher spring 2024 SAT scores than non-users. This result was statistically significant (Hedges' $g = 0.16$; $p < .001$).

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
✅ An ESSA Level II study was completed in September 2024.