Wayground Logic Model

Study Type: ESSA Evidence Level IV

Prepared for:
Wayground

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EXECUTIVE SUMMARY

Wayground[1] engaged LearnPlatform by Instructure (LearnPlatform), a third-party edtech research company, to develop a logic model for its product. LearnPlatform designed the logic model to satisfy Level IV requirements (*Demonstrates a Rationale*) according to the Every Student Succeeds Act (ESSA).[2]

Logic Model

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

Study Design for *Wayground* Evaluation

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

Implementation

1. To what extent did schools use *Wayground* during the 2023–24 school year?

Outcomes

2. Did students in schools with more *Wayground* usage perform better on English language arts (ELA) and math outcomes?
    a. Did the relationship between *Wayground* usage and student outcomes differ by school demographic composition?
3. Did average student performance on ELA and math assessments differ between schools that did and did not use *Wayground*?

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] *Wayground* was formerly known as *Quizizz*. This report was updated with its new branding on July 11, 2025.

[2] 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

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

Wayground recognizes that educators often lack the time and capacity to find or adapt instructional resources that meet the diverse needs of all students while ensuring engagement and positive learning outcomes. Many education technology tools also lack appropriate accessibility features that provide equitable learning opportunities to students with different learning requirements. *Wayground* provides an instructional suite where educators can quickly create and deliver accessible curriculum resources that meet every student's needs across all grade levels and subjects.

The study had the following objectives:

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

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

WAYGROUND
formerly Quizizz

Problem Statement: Educators often lack the time and capacity to find or adapt instructional resources that meet the diverse needs of all students while ensuring engagement and positive learning outcomes. Many education technology tools also lack appropriate accessibility features that provide equitable learning opportunities to students with different learning requirements. *Wayground* provides an instructional suite where educators can quickly create and deliver accessible curriculum resources that meet every student's needs across all grade levels and subjects.[1]

Wayground
Logic Model

Inputs
What does Wayground provide?:

WAYGROUND PROVIDES
- *Wayground* Instructional Suite: Allows educators to create assessments, lessons, interactive videos, passages, and flashcards, with 20+ question types. The suite includes:
  - Artificial intelligence (AI) integration: Supports resource creation, content adaptation, and personalized practice recommendations with AI Analyze
  - Accessibility features: 25+ features (e.g., read aloud, dyslexia font, extra time for questions, translation)
  - Chrome extension: Allows educators to generate activities from YouTube videos, PDFs, and educational websites
  - Access to student performance data, including longitudinal growth reports and standards-aligned performance reports at the student, question, class, or standard level

SCHOOLS AND DISTRICTS PROVIDE
- Technology resources (e.g., online applications, physical devices, software)

Participants
Who uses Wayground?

- K–12 students
- Educators (e.g., teachers, school staff)
- Administrators (e.g., district, school)

Activities
How are participants using Wayground?

EDUCATORS
- Adapt pre-existing curriculum resources via Library[2] (e.g., assessments, lessons, interactive videos, passages, and flashcards) or create new ones
- Add gamification elements to curriculum resources, incl. challenge activities (e.g., Power-Ups, Leaderboards, Team Mode), depending on needs
- Assign differentiated curriculum resources using Accommodation Profiles[3]
- Access student performance data
- Access enhanced features with AI Analyze[4]

STUDENTS
- Access and complete curriculum resources assigned by educator (e.g., assessments, lessons, interactive videos, passages, and flashcards)
- Participate in gamified challenge activities

ADMINISTRATORS
- Manage and monitor the implementation of *Wayground* across the district, ensuring alignment with district-wide instructional goals and privacy policies
- Support teachers by organizing professional learning communities (PLCs) and training sessions to promote implementation of *Wayground*

Outputs
What are the measurable results of implementing Wayground?

EDUCATORS
- Total number of logins
- Number of educators accessing and utilizing *Wayground*, and how they do so
- Number and curriculum resources created and assigned by teachers
- Number of longitudinal growth reports accessed and used by teachers
- Time spent on platform
- Modality of instruction (live vs. asynchronous)

STUDENTS
- Total number of logins
- Number of students accessing and completing curriculum content and resources
- Number and type of curriculum resources accessed and completed
- Assessment scores
- Time spent on platform and engaging with curriculum resources

ADMINISTRATORS
- Number of PLCs or training sessions conducted
- Number of schools and educators implementing *Wayground*

Outcomes
What are the expected changes or impacts of using Wayground?

SHORT-TERM
Educators
- Use real-time data to easily adapt curriculum resources and differentiate them based on student needs
- Leverage access to accommodation features that extend learning opportunities to more students in ways that meet students where they are at
- Leverage AI-driven insights for identifying skill gaps
- Can more easily incorporate diverse activities from external content sources (e.g., YouTube, PDFs, etc.)
- Leverage AI to motivate students with gamified elements like Power-Ups and Team Mode

Students
- Have access to more accessible, differentiated curriculum resources that provide accommodations and that meet them where they are at
- Demonstrate higher participation in interactive and team-based learning activities
- Increase engagement and enjoyment in learning due to gamified features
- Have access to practice tests and test preparation resources

Administrators
- Support educators and students have access to high quality, easy-to-use curricular supports

INTERMEDIATE
Educators
- Improve literacy instruction across subjects with diverse and engaging AI generated passages
- Increase efficiency with digitized core curriculum, reducing preparation time
- Improve student learning experiences and outcomes across their class, ensuring that all students meet standards regardless of learning or accessibility needs
- Support higher-order thinking with advanced question types like passages and drawing tools
- Have more capacity to spend more time on personal student support and less time on things like lesson prep and grading

Students
- Improved retention of knowledge and performance on state-standardized tests
- Enhanced reading comprehension due to AI-generated passages tailored to literacy goals

Administrators
- Strengthen instructional consistency across classrooms and schools through PLCs and team collaboration tools

LONG-TERM
Educators
- Improve their ability to provide effective differentiated instruction, mitigating student achievement gaps over time
- Feel more professionally supported and more likely to stay in their role

Students
- Will become less stressed about standardized tests with more test preparation opportunities
- Demonstrate better long-term academic outcomes due to impact of consistent, personalized learning experiences over time

Administrators
- Ensure technology use is consistent and accessible across their school or district
- Strengthen school and district compliance with local and state privacy needs and accessibility standards
- Contribute to long lasting student achievement gains in their district or school over time
- Improve educator retention over time by ensuring they are professionally supported

[1] *Wayground* was formerly known as *Quizizz*.

[2] The *Wayground* Library is a diverse collection of publicly accessible resources created by the *Wayground* teacher community, covering a wide range of subjects and topics. Users can search for pre-made resources, duplicate and customize them, share with others, and apply filters by grade level, subject, and more to find exactly what they need.

[3] Accommodation Profiles allow teachers to provide tailored support to individual students or groups within a class. Using a single join code, students access assignments or tests with customized adjustments to meet their needs. This feature supports districts in ensuring students in special education, MTSS (Multi-Tiered System of Supports), multilingual learner programs, and other interventions receive the necessary accommodations for success.

[4] AI Analyze helps educators understand where their students need support by analyzing and identifying trends in data as well as providing tailored suggestions for subsequent support.

Figure 1. *Wayground* logic model

PLATFORM LEARN BY INSTRUCTURE

Originally prepared for *Wayground* in November, 2024 (updated with new branding in July, 2025)

Wayground Logic Model Components. *Wayground* invests several resources into its platform, including:

- *Wayground* Instructional Suite: Allows educators to create assessments, lessons, interactive videos, passages, and flashcards, with more than 20 question types. The suite includes:
    - Artificial intelligence (AI) integration: Supports resource creation, content adaptation, and personalized practice recommendations with AI Analyze;
    - Accessibility features: More than 25 features (e.g., read aloud, dyslexia font, extra time for questions, translation)
    - Chrome extension: Allows educators to generate activities from YouTube videos, PDFs, and educational websites; and
    - Access to student performance data, including longitudinal growth reports and standards-aligned performance reports at the student, question, class, or standard level.

Schools and districts would be expected to provide technology resources (e.g., online applications, physical devices, software).

Ultimately, *Wayground* aims to reach students in Kindergarten to 12th grade, educators (e.g., teachers, school staff), and administrators (e.g., school and district).

Using these program resources, the aforementioned participants can engage with *Wayground* in the following activities:

Educators:

- Adapt pre-existing curriculum resources via Library[3] (e.g., assessments, lessons, interactive videos, passages, and flashcards) or create new ones;
- Add gamification elements to curriculum resources, including challenge activities (e.g., Power-Ups, Leaderboards, Team Mode), depending on needs;
- Assign differentiated curriculum resources using Accommodation Profiles;[4]
- Access student performance data; and
- Access enhanced features with AI Analyze.[5]

[3] The *Wayground* Library is a diverse collection of publicly accessible resources created by the *Wayground* teacher community, covering a wide range of subjects and topics. Users can search for pre-made resources, duplicate and customize them, share with others, and apply filters by grade level, subject, and more to find exactly what they need.

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[5] AI Analyze helps educators understand where their students need support by analyzing and identifying trends in data as well as providing tailored suggestions for subsequent support.

Students:

- Access and complete curriculum resources assigned by educator (e.g., assessments, lessons, interactive videos, passages, and flashcards); and
- Participate in gamified challenge activities.

Administrators:

- Manage and monitor the implementation of *Wayground* across the district, ensuring alignment with district-wide instructional goals and privacy policies; and
- Support teachers by organizing professional learning communities (PLCs) and training sessions to promote implementation of *Wayground*.

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

Educators

- Total number of logins
- Number of educators accessing and utilizing *Wayground*, and how they do so
- Number and curriculum resources created and assigned by teachers
- Number of longitudinal growth reports accessed and used by teachers
- Time spent on platform
- Modality of instruction (live vs. asynchronous)

Students

- Total number of logins
- Number of students accessing and completing curriculum content and resources
- Number and type of curriculum resources accessed and completed
- Assessment scores
- Time spent on platform and engaging with curriculum resources

Administrators

- Number of PLCs or training sessions conducted
- Number of schools and educators implementing *Wayground*

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

In the short term, educators will use real-time data to easily adapt and differentiate curriculum resources based on student needs. They will leverage access to accommodation features that extend learning opportunities to meet more students where they are. Educators will also leverage AI-driven insights for identifying skill gaps and more easily incorporate diverse activities from external content sources (e.g., YouTube, PDFs, etc.). Finally, they will be able to motivate students with gamified elements like Power-Ups and Team Mode. Students will have access to more

accessible, differentiated curriculum resources that provide accommodations and that meet them where they are. Students will demonstrate higher participation in interactive and team-based learning activities. Students will also experience increased engagement in–and enjoyment with–learning due to gamified features. Finally, they will have access to practice tests and test preparation resources. As usage continues, administrators will support educators and ensure students have access to high quality, easy-to-use curricular supports.

In the intermediate term, educators will improve literacy instruction across subjects with diverse and engaging AI-generated passages. They will increase efficiency with digitized core curriculum, therefore reducing preparation time and improving student learning experiences and outcomes. This will, in turn, ensure that all students meet standards regardless of learning or accessibility needs. Educators will also support higher-order thinking with advanced question types like passages and drawing tools. Finally, increased efficiency will allow them to spend more time on individualized student support and less time on things like lesson preparation and grading. Students will improve retention of knowledge and performance on state-standardized tests. Their reading comprehension will improve due to AI-generated passages tailored to individual literacy goals. Administrators will strengthen instructional consistency across classrooms and schools through PLCs and team collaboration tools.

In the long term, educators will improve their ability to provide effective differentiated instruction, mitigating student achievement gaps over time. They will also feel more professionally supported and more likely to stay in their role. Access to more test preparation opportunities will help students experience less stress about standardized tests. Students will also demonstrate better long-term academic outcomes due to the impact of consistent, personalized learning experiences over time. Administrators will ensure technology use is consistent and accessible across their school or district and strengthen compliance with privacy and accessibility standards. Finally, they will also contribute to long-lasting student achievement gains in their district or school and improve educator retention over time by ensuring they feel professionally supported.

Study Design for *Wayground* Evaluation

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

Implementation

1. To what extent did schools use *Wayground* during the 2023–24 school year?

Outcomes

2. Did students in schools with more *Quizzizz* usage perform better on English language arts (ELA) and math outcomes?
    a. Did the relationship between *Wayground* usage and student outcomes differ by school demographic composition?
3. Did average student performance on ELA and math assessments differ between schools that did and did not use *Quizzizz*?

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

Annotated Bibliography

The following annotated bibliology demonstrates some of the research underlying the *Wayground* platform, including how *Wayground* leveraged this research to come to design decisions about its program.

Citation	Citation Type	Population	Design Decision	How *Wayground* Leveraged the Citation
Agarwal, P. K., Nunes, L. D., & Blunt, J. R. (2021). Retrieval practice consistently benefits student learning: A systematic review of applied research in schools and classrooms. *Educational Psychology Review*, *33*, 1409–1453.	Meta-analysis	A review of 49 studies with 5,374 students in a variety of international education settings.	Teachers can create quizzes with a variety of question types (multiple choice, true/false, fill-in-the-blank, etc.), which require students to actively recall information.	Retrieval practice (i.e., the act of recalling previously learned information) is associated with improved learning for a variety of education levels and content areas. *Wayground* offers features like timed quizzes, leaderboards, and points systems, which add an element of competition and motivation, encouraging students to practice, recall, and retain information.
Bartz, D. E. (2017). Fundamentals of formative assessment for classroom teachers. *National Forum of Teacher Education Journal*, *27*(3), 1–10.	Theoretical research	No sample but the study is relevant to all students in the U.S. context.	*Wayground* provides formative assessments and longitudinal student growth reports.	This study describes how formative assessment is a cyclical process involving data collection, feedback, and instructional adjustment. It can also be enhanced by technology and well-designed benchmark assessments to improve student learning. This aligns with *Wayground's* focus on ongoing assessment and instructional adjustment.
Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. *IEEE Access*, *8*, 75264–75278.	Literature review	A review of more than 40 studies across a variety of international contexts.	*Wayground* incorporates AI-powered features for customization and automation.	This study found that AI has been widely adopted in education, leading to improved administrative efficiency and personalization of student learning experiences. This research aligns with *Wayground's* goal of creating a learner-centered experience, enhanced by AI.

Citation	Citation Type	Population	Design Decision	How *Wayground* Leveraged the Citation
Fernández-Batanero, J. M., Montenegro-Rueda, M., Fernández-Cerero, J., & García-Martínez, I. (2022). Assistive technology for the inclusion of students with disabilities: A systematic review. *Educational Technology Research and Development*, *70*(5), 1911–1930.	Literature review	A review of 31 studies from a variety of international contexts focused on students with disabilities	*Wayground* developed accessibility features to improve access and participation for all learners.	Assistive technologies can increase accessibility and facilitate inclusion of students with disabilities. This research informed *Wayground's* decision to leverage existing assistive technologies to support students with disabilities.
Hamari, J., Shernoff, D. J., Rowe, E., Coller, B., Asbell-Clarke, J., & Edwards, T. (2016). Challenging games help students learn: An empirical study on engagement, flow and immersion in game-based learning. *Computers in Human Behavior*, *54*, 170–179.	Empirical research	173 high school students in physics or engineering classes across the U.S..	*Wayground* incorporates gamification elements to increase student engagement and improve learning outcomes.	The study demonstrated the positive impact of gamification on learning outcomes and engagement, influencing *Wayground's* design decisions.
Hattie, T. (2007). Hattie, J., Timperley H. The power of feedback. *Review of Educational Research*, *77*(1), 81–112.	Meta-analysis	A review of 12 studies assessing the influence of feedback on students across a variety of contexts and settings.	*Wayground* provides data for effective feedback and personalized instruction.	The principles of effective feedback from this study are applied to *Wayground's* features that facilitate timely and personalized feedback.

Citation	Citation Type	Population	Design Decision	How *Wayground* Leveraged the Citation
Marino, M. T., Vasquez, E., Dieker, L., Basham, J., & Blackorby, J. (2023). The future of artificial intelligence in special education technology. *Journal of Special Education Technology*, *38(*3), 404–416.	Theoretical research	Students with disabilities	*Wayground* utilizes AI for content creation, adaptation, and personalized practice recommendations.	The article highlights the potential benefits of AI in special education, informing *Wayground's* use of AI to support students with unique learning needs.