



LXDRESEARCH
AT CHARLES RIVER MEDIA



Research Foundation
& Logic Model

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RESEARCH-BASED DESIGN

LXD Research Recognition for



This product has been rigorously evaluated and is hereby acknowledged for meeting the educational impact criteria of the Every Student Succeeds Act (ESSA), warranting a Level 4 for “**Demonstrating a Rationale.**” This recognition is based on its research-based design intended to enhance grade-level learning outcomes.

CERTIFIED BY DIGITAL PROMISE

1



Rachel Schechter, Ph.D.
Founder of LXD Research

July 23, 2023

DATE

Edpuzzle educates

Engagement you can see, results you can measure. Empower students to take an active role in their learning with interactive video lessons that spark creativity and curiosity.

Why Edpuzzle?



It's easy and powerful!

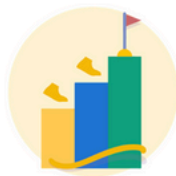
- Increase **student engagement** by transforming videos into **active learning** experiences
- Increase **student autonomy** but also hold students **accountable**
- Save class time for **higher-level learning**

The power of video learning



Visual

Teach students in the way they learn best, using a medium they love.



Self-paced

Gives students the time they need to fully understand each concept.



Flexible

Support learning in any class structure and any grade level.



Bite-sized

Promote deeper understanding and retention with micro-lessons.



Edpuzzle Foundational Research Summary

At Edpuzzle, everything we do is based on our experience in the classroom and our desire to help students learn based on the science of learning. Learning sciences combines data, research, and practices to discover ways instructors can improve their teaching while exploring ways to help students learn more effectively. Read on to find out how Edpuzzle uses videos, visuals, and flipped instruction to create the perfect learning cocktail!

Video Learning

Edpuzzle is a web-based platform that provides easy access to high-quality, subject-specific video lessons and tools and evidence-based suggestions to edit existing videos, all while improving student engagement and motivation (Norton & Hathaway, 2010; Sever et al., 2013). In one place, students and teachers can tap into video-based learning (Sablić et al., 2021; Zhang et al., 2006).

Research shows that video characteristics such as audio and visual cues, subject relevance, narrative speaking style, signaling (explicitly directing the learner's attention to a particular image, vocabulary term, etc.), and video length all have significant impacts on learner attention, engagement, and outcomes (Brame, 2016).

Embedding guided questions, interactive elements, and salient homework assignments also support positive learning outcomes (Vural, 2013; Brame, 2016). Edpuzzle combines several [best practices for video learning](#) to maximize lesson content acquisition.

"We are constantly adjusting the platform based on conversations with students and teachers. We optimize and learn from what the teacher is doing to help students learn efficiently and deeply."

Quim Sabria,
CEO edpuzzle



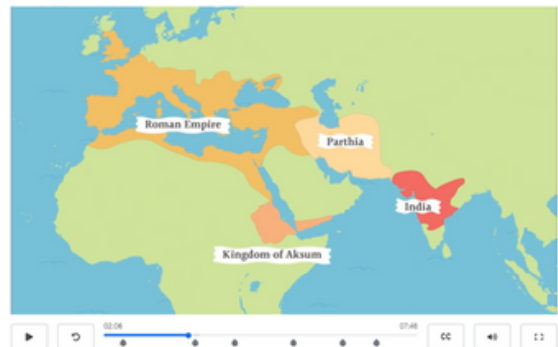
Use of Visuals

Integrating visual aids (images, pictures, text, etc.) into instruction helps to reduce the cognitive load of the learners, which makes the learning process that much more efficient (Mayer & Moreno, 2003; Moreno & Mayer, 1999). Researchers have discovered that the working memory's capacity is maximized when instructional content is delivered concurrently through auditory and visual modalities (Moreno & Mayer, 1999).

For example, the Edpuzzle Original video lesson "[Kingdom of Aksum](#)" begins with visuals of the well-known city of Paris to activate the student's prior knowledge. Upon describing the well-known city of Paris as a large bustling creative and business center, students are visually cued to reflect on what other cities might fit this description.

Paired with upbeat narration, students are then explicitly told that despite its outward appearance, Aksum was once a major city.

Maps and animations help explain the strategic location of Aksum and the neighboring kingdoms that may be more familiar to students. All of these visual aids are designed to help students learn and retain new information more efficiently.



Edpuzzle Foundational Research Summary

Flipped Instruction

The flipped classroom method consists of taking “the lecture” out of the classroom and assigning it for homework, so class time can be used for practical exercises, answering questions, and more individual time with students. Edpuzzle allows teachers to find or create videos that students can complete at their own pace and at home, in the case of the flipped classroom model.

Compared to reading a textbook, research reveals that a video-based lesson (or VBL) increases learner motivation (Sablić et al., 2021; Sever et al., 2013). Edpuzzle leverages the research that shows that the flipped classroom method of instruction yields higher levels of achievement and motivation when compared to traditional methods of instruction (Sezer, 2017).

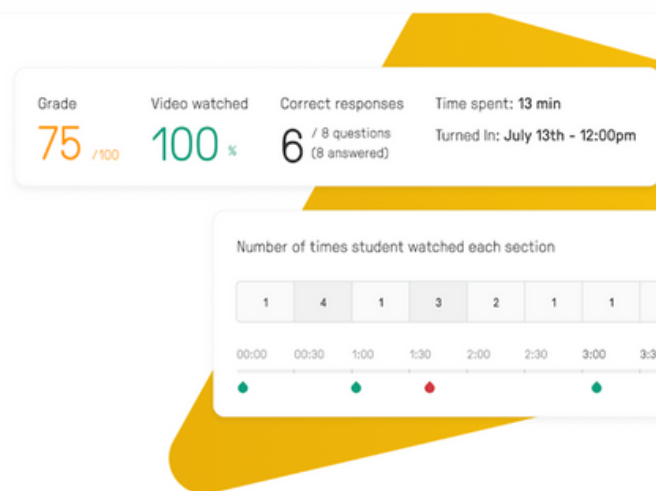
“With Edpuzzle, I get an instant sense of both full class and individual learner needs in a snapshot – before students even walk into the classroom. I am able to connect with my students in new ways and allow them to interact with content in a way that best serves them.”

Stacey Roshan
Educator, Author,
Edtech & Innovative
Teaching
Consultant



To put the research into practice, Edpuzzle allows teachers to find or create the subject-specific video they need and insert guiding questions throughout the video that check for learner comprehension and support active engagement with the lesson content (Vural, 2013).

Teachers can also record and add custom voice-overs to increase understanding while reducing cognitive load and adding to or deleting sections of each video. When assigning videos for homework, it's essential to keep the length of each learning experience optimized for students' attention (Hibbert, 2014). Through the student progress dashboard, teachers can see what students completed in or outside the classroom and follow up with students who struggled with the material or didn't complete the lesson.



Edpuzzle allows educators worldwide to meet their students where they are in terms of their cognitive development and preferences for video content. The latest research in learning science in improving memory, increasing student engagement and motivation, and using video has been carefully woven together to improve the learning experience in the classroom, at home, and beyond.

Logic Model for Edpuzzle

PROBLEM STATEMENT

Educators need help finding ways to ensure students stay engaged with and comprehend the presented content. Educators want to use video content, but it can be difficult to hold students accountable for learning that they cannot track, especially in real time. While many videos are online, many are inappropriate to use. Most educators need video editing equipment, skills, or time to modify them or create their own videos to engage students with effective lessons.

RESOURCES

What resources are or could be available?

- Access to the internet
- Access to a device, such as a laptop, tablet, computer or digital projector (for classroom use) and headphones (for group settings)
- Platform to create, edit, and publish videos, as well as integrate comprehension questions
- Video content on a variety of subjects and topics
- Teacher training materials on how to incorporate Edpuzzle into the curriculum and support student learning
- Dashboard that reports which students have answered each question, how each student answered each, and what content they are struggling with during lessons

STRATEGIES & ACTIVITIES

What will the activities, events, and such be?

- Teachers curate videos aligned with their curriculum and both national and state standards
- Teachers build questions into videos to check for understanding
- Teachers screen record their own videos to meet their needs
- Teachers assign videos to students
- Students interact with video-based learning on a wide range of topics
- Students answer questions to check comprehension and promote critical thinking
- Students receive immediate feedback to aid in learning
- Students create their own video projects to demonstrate learning
- Teachers track student progress
- Teachers see which students are struggling in reports
- Student data is integrated into LMS allowing for efficient documentation
- Teachers provide instant feedback to support student learning

OUTPUTS

What are the initial products of these activities?

- Viewing chunked lessons at their own pace increases students' chances of fully hearing, seeing and demonstrating understanding of all lesson material
- Students spend more time-on-task across all subject matter, grade levels and levels of development
- Students build their time management skills which supports and trains their executive functions.
- When teachers identify and attend to student difficulties, students re-engage with the lesson faster
- Students provide more authentic responses
- Students communicate more comfortably and directly with the teacher
- Teachers provide more meaningful feedback to students in need
- Teachers differentiate lesson content that challenges all students
- Students build their critical thinking skills
- Teachers use data on student strengths and needs to inform lesson planning

SHORT-TERM AND INTERMEDIATE OUTCOMES

- Students complete multi-step assignments and projects independently
- Students improve their ability to maintain focus
- Students are less likely to engage in off-task behavior
- Students are more likely to complete assignments
- Students more rapidly develop and deepen knowledge and skills across all subject curricula
- Students improve their ability to communicate and demonstrate their understanding of concepts and skills authentically
- Student-Teacher relationships improve
- The knowledge gap between students at various levels of development narrows
- Teachers increase their use of research-based instructional strategies
- Teachers reduce their planning time

LONG-TERM OUTCOMES AND IMPACTS

- Students are empowered and motivated to be lifelong learners
- Students achieve their desired goals, live to their full potential, and participate in our democratic governance
- Economic and social benefits of having strong executive function skills, such as increasing self-esteem, lowering stress, reducing drop-out rates and increased employment opportunities appear
- Every teacher and student are a click away from an excellent education online

ASSUMPTIONS

- Administrator(s) allow for the use of video resources
- Administrators provide all students with necessary digital equipment
- Students/teachers have space and time to watch video content (synchronously or asynchronously)
- Students have the requisite knowledge and skills to use digital learning devices

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LXD Research is an independent research firm that evaluates educational programs with ESSA-aligned methods.

Learn more at www.lxdresearch.com

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