Digital Theatre+ Logic Model

Study Type: ESSA Evidence Level IV

Prepared for:
Digital Theatre+

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EXECUTIVE SUMMARY

Digital Theatre+ engaged LearnPlatform by Instructure, a third-party edtech research company, to develop a logic model for the learning platform. 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 Digital Theatre+ to develop and revise the logic model.

Study Design for Digital Theatre+ 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 the learning platform impacts literacy achievement.

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] 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

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

Providing teachers with high quality learning content so they can focus on instruction is increasingly important as their workloads intensify and consequently, negatively impact teacher well-being, attrition, and their ability to support the learning of all students (Creagh et al., 2023). Furthermore, designing engaging theatre and English Language Arts (ELA) lessons is difficult and time-intensive, but is imperative for advancing student learning. DT+ promotes student engagement and achievement by giving students and teachers access to literary and theatre experts and hiqh-quality instructional resources.

The study had the following objectives:

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

Previous Research. The design of this logic model was guided by previous research examining literacy and theatre pedagogy, instructional design, and student motivation. One of the many roles teachers play is that of a curator. Teachers can be thought of as curators because they select, synthesize, and adapt different instructional resources (Sawyer et al., 2020). Too often teachers spend an enormous amount of time searching for high-quality instructional resources (Grossman & Thompson, 2008). Further, teachers sometimes inadvertently use resources that do not provide any value for teaching and learning, which may result in adverse outcomes for student learning (Knake et al., 2021). Time spent searching for effective instructional materials can add to teachers' already heavy workloads (Jerim & Sims, 2021). High workloads are associated with lower self-efficacy and job satisfaction, and in turn, increased burnout and attrition (Bettini et al., 2017; Pogodzinski, 2014). Therefore, providing teachers with high quality, research-based instructional resources including unit plans, lesson plans, and multimedia materials, DT+ aims to positively impact literacy achievement and mitigate the staffing crisis facing schools (U.S. Department of Education, 2023).

The planning resources provided by DT+ enable teachers to implement lessons as part of a cohesive unit that uses any array of content and strategies to teach students literacy skills while engaging with seminal texts. Providing instructional resources that are aligned with a seminal text (e.g., Macbeth) ensures that each learning unit includes conceptually related materials, which increases students' interest in the texts (Hirsch, 2006). In turn, when students are interested in the reading materials they are more likely to deeply engage in reading as they seek to gain a greater understanding of topics they care about (Guthrie et al., 1996; Guthrie & Cox, 2001).

Another way that DT+ supports student learning and engagement is by providing high quality video and written resources for students to use. Students learn when they are motivated (Zhou & Wang, 2023). Therefore, to be effective, online learning content must promote students' motivation by making the content valuable to students and supporting their sense of self-efficacy (Cheng & Xie, 2021; Kigundu, 2014). Multimedia lessons (e.g., video, podcasts) can support students' sense of value by providing experiences that students find enjoyable and useful (Kay, 2012). However, it is not enough to simply ensure students find the content valuable, they must also believe they are able to learn from the content to be motivated to do so (Garris & Fleck, 2022; Landrum 2020). In other words, students must have high self-efficacy beliefs (Wigfield & Eccles, 2000). To support students' self-efficacy, learning activities should include modeling, scaffolding, and/or positive feedback (Usher, 2009). Recognizing this, DT+ online courses include these elements. For example, students can watch videos of experts modeling how to analyze a Shakespearean scene, workbooks and story guides are provided as scaffolding, and knowledge checks completed online may provide positive feedback.

Written resources presented to students in online formats are also found to support student motivation for reading (Picton & Clark, 2015). Specifically, students who used an e-reading platform expressed greater enjoyment and interest for reading, which in turn, resulted in increased reading achievement. Due to this, it is anticipated that students who use the e-reading resources via the DT+ platform will have positive motivational and achievement outcomes.

The specific focus of DT+ on theatre arts makes it stand apart from other literacy programs, which is likely to provide additional benefits to students (Holochwost et al., 2021). Students gain increased empathy from watching and participating in theatre (Greene et al., 2018; Goldstein & Winner, 2012). Participating in theatre is also shown to help students develop more positive peer relationships (DICE Consortium, 2010) and increase social acceptance (Garcia-Arch et al., 2021). Taken together, these findings suggest that theatre education may have implications for students' psychological well-being and social skills (Karkou et al., 2022).

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

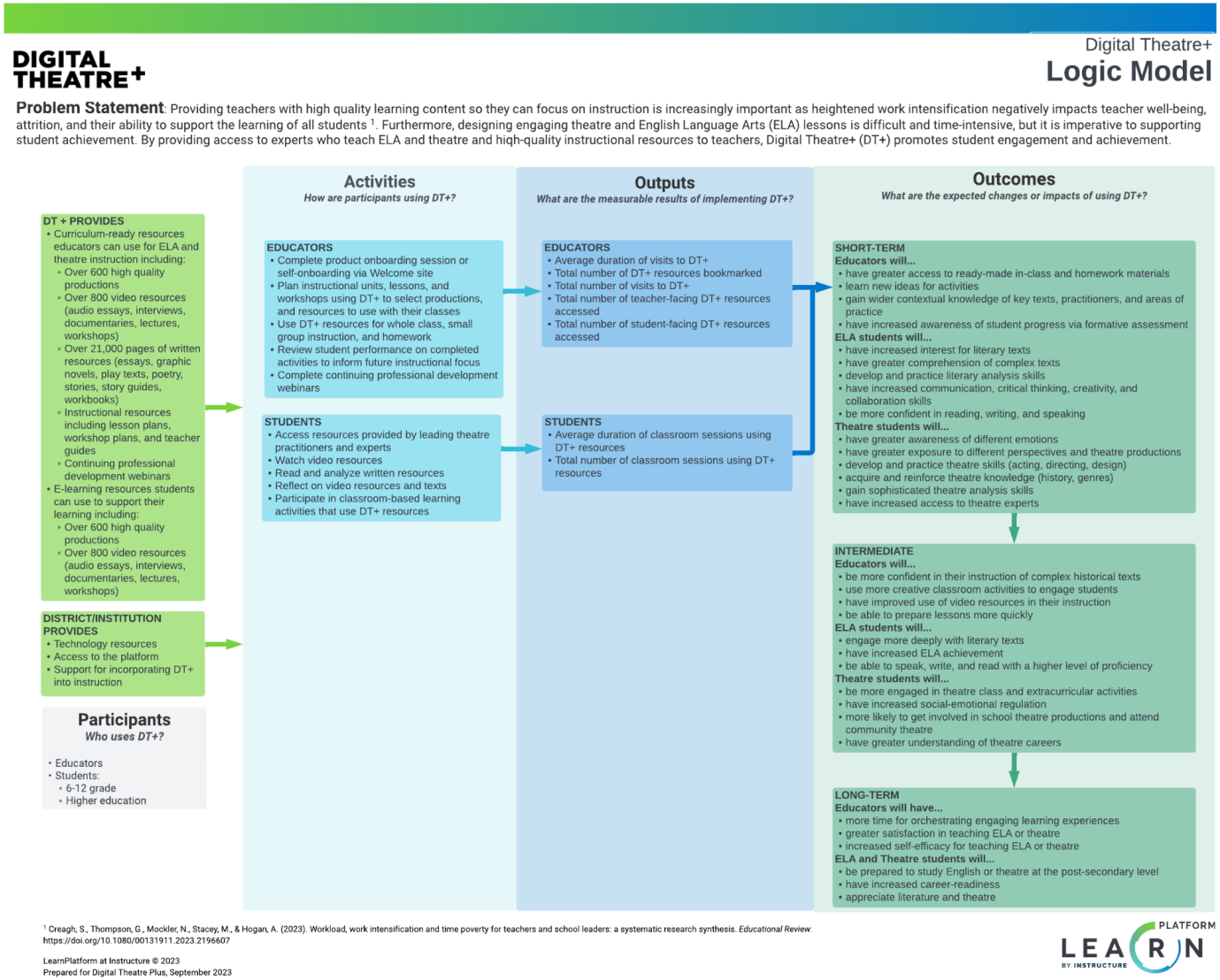

Figure 1. Digital Theatre+ logic model

***Digital Theatre+ Logic Model Components*.** DT+ invests several resources into their program, including curriculum-ready resources educators can use for ELA and theatre instruction including: high quality productions, video resources (audio essays, interviews, documentaries, lectures, workshops), written resources (essays, graphic novels, play texts, poetry, stories, story guides, workbooks), instructional resources (lesson plans, workshop plans, teacher guides), and professional development webinars. DT+ also provides student resources that can be used directly (with teacher permissions) to support their learning including: high quality productions and video resources. Ultimately, the DT+ program aims to reach middle school, secondary, and post-secondary ELA and theatre students and educators.

Educators also use DT+ program resources by:

- completing product onboarding sessions or self-onboarding via the Welcome site;
- planning instructional units, lessons, and workshops using DT+ to select productions, and resources to use with their classes;
- using DT+ resources for whole class, small group instruction, and homework;
- reviewing student performance on completed activities to inform future instructional focus; and,
- completing continuing professional development webinars.

Using these program resources, *students* can engage with the DT+ platform by:

- accessing resources provided by leading theatre practitioners and experts;
- watching video resources;
- reading and analyzing written resources;
- reflecting on video resources and texts; and,
- participating in classroom-based learning activities that use DT+ resources.

DT+ can also use the following quantifiable outputs to examine how *educators* use the program:

- Total number of:
    - number of DT+ resources bookmarked;
    - visits to DT+;
    - number of teacher-facing DT+ resources accessed;
    - number of student-facing DT+ resources accessed; and,
- Average duration of visits to DT+.

DT+ can examine the extent to which core activities were delivered and participants were reached by examining the following quantifiable outputs among *students*:

- Total number of classes attended where teacher used DT+ resources.

If implementation is successful, based on a review of program outputs, Digital Theatre+ can expect the following short-term outcomes. In the short-term, *ELA students* will have increased interest and comprehension of complex literary texts, and be able to develop and practice literary analysis skills, which will lead them to have increased communication, critical thinking, creativity,

and collaboration skills and greater confidence for reading, writing, and speaking. Similarly, as *theatre students* use DT+, it is expected that they will have greater awareness of different emotions and exposure to different perspectives and theatre productions, develop and practice theatre skills (acting, directing, design), acquire and reinforce theatre knowledge (history, genres), gain sophisticated theatre analysis skills, and have increased access to theatre experts in the short-term. Educators who use DT+ are expected to have greater access to ready-made in-class and homework materials, learn new ideas for activities, gain wider contextual knowledge of key texts, practitioners, and areas of practice, and have increased awareness of student progress via formative assessments.

In the intermediate term, ELA students are expected to engage more deeply with literary texts, have increased ELA achievement, and be able to speak, write, and read with a higher level of proficiency. Theatre students will be more engaged in theatre class and extracurricular activities, have increased social-emotional regulation, more likely to get involved in school theatre productions and attend community theatre, and have greater understanding of theatre careers. Educators are also expected to experience positive outcomes from DT+ use in the intermediate term. Specifically, they are expected to be more confident in their instruction of complex historical texts, use more creative classroom activities to engage students, have improved use of video resources in their instruction, and be able to prepare lessons more quickly.

These intermediate outcomes are expected to result in several long-term outcomes. For ELA and theatre students, they are expected to be prepared to study English or theatre at the post-secondary level, have increased career-readiness, and appreciate literature and theatre. Educators are anticipated to have more time for orchestrating engaging learning experiences, greater satisfaction in teaching ELA or theatre, and increased self-efficacy for teaching ELA or theatre.

Study Design for Digital Theatre+ Evaluation

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

Implementation Questions

1. Among educators, what were the usage patterns of DT+ resources during the 2022-2023 school year?
    a. What were the total number of:
        i. visits to DT+?
        ii. visits to DT+ resources?
        iii. resources bookmarked?
        iv. student-facing resources accessed?
        v. teacher-facing resources accessed?

Outcome Questions

2. After controlling for students' prior ELA achievement, was teachers' use of DT+ resources associated with increased student performance on standardized, end-of-year literacy assessments?
    a. Does the strength of this association depend on the type of resource accessed?
3. Was teachers' use of DT+ resources associated with increased student engagement?
    a. Does the strength of this association depend on the type of resource accessed?

Digital Theatre+ plans to begin this study in the winter of 2024.

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

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