

## PROBLEM STATEMENT:

Educators strive to create personalized learning experiences that engage students, enhance collaboration, and increase student outcomes.

### INPUTS

What do users do with Lumio?

#### STUDENTS

##### ACTIVELY ENGAGE IN LEARNING

- Explore content through multimodal, hands-on activities
- Choose their own path with student-paced lessons/activities
- Create and collaborate in shared workspaces
- Express ideas confidently with anonymous input and live feedback
- Use accessibility tools to support their learning needs

#### EDUCATORS

##### AMPLIFY BEST TEACHING PRACTICES

- Transform static content into interactive lessons
- Personalize learning with flexible pacing options
- Check understanding with real-time feedback tools
- Promote student voice and collaboration
- Support multimodal learning with diverse activity types
- Gradually release responsibility through scaffolded instruction

### ACTIVITIES

What makes Lumio special?

#### INCREASES STUDENT ENGAGEMENT & COLLABORATION

- Encourages autonomy and elevates all student voices
- Engages students with game-based learning
- Builds visual connections between concepts
- Fosters collaboration

#### MAKES LEARNING MORE ACCESSIBLE

- Enables anonymous participation
- Supports diverse learners with Immersive Reader and audio
- Offers multiple ways to show understanding
- Allows student-paced learning

#### PROVIDES INSIGHT INTO LEARNING

- Monitor progress and encourage self-reflection
- Identify misconceptions with real-time feedback
- Adapt instruction using live formative data

### OUTPUTS

What does the data tell us about integrating Lumio?

#### COLLECTIVELY, USERS AGREE THAT LUMIO

##### PROMOTES ACTIVE LEARNING

- Increases student engagement
- Increases student collaboration
- Makes their lessons interactive

##### SUPPORTS BEST TEACHING PRACTICES

- 87% use Lumio to create lessons connected to real life
- 87% use Lumio to provide feedback to students in real time
- 93% adjust Lumio lessons on-the-go based on student progress
- 96% provide more practice opportunities using Lumio

##### INCREASES ACCESSIBILITY

- 87% use Lumio to gather student voice and provide autonomy
- 80% use asynchronous learning opportunities through Lumio
- 84% regularly use the student pacing feature for lesson delivery

*Survey respondents comprise educators distributed evenly across K-12 grades and all subject areas\**

### OUTCOMES

Potential benefits to using Lumio

#### SHORT-TERM OUTCOMES

##### STUDENT APPLICATION

- Solve problems \*
- Practice skills in multiple formats \*
- Improve communication and collaboration skills \*
- Enhanced student autonomy <sup>4</sup>
- More inclusive participation <sup>4</sup>

##### COMPREHENSION AND PROCESSING

- Demonstrate understanding \*
- Construct knowledge \*
- Think creatively \*
- Master learning objectives \*
- Improved executive functioning skills <sup>4</sup>

##### CHANGE IN ATTITUDE

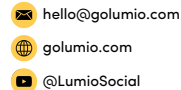
- Improve self-reflection \*
- Student ownership of learning \*
- Engaged in the learning process \*
- Greater social engagement <sup>4</sup>

#### LONG TERM OUTCOMES

- Close achievement gaps <sup>1</sup>
- Increase retention <sup>1,4</sup>
- Decrease K-12 dropout rates <sup>1,2</sup>
- Increase student perception of satisfaction <sup>3,4,5</sup>
- Increase student mastery <sup>3</sup>
- Stronger self-advocacy skills <sup>4</sup>

Lumio™

Logic Model



Facebook.com/groups/LumioEducators

\*Lumio Efficacy Survey- Conducted internally

1. Eshom, R., Passey, D. (2023) Identifying 'best practices' in education: Findings from a literature review. Published internally  
2. Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. PNAS Proceedings of the National Academy of Sciences of the United States of America, 111(23), 8410-8415.

3. Educators and researchers acknowledge increased levels of student engagement have a significant positive influence on student learning and outcomes. Glanville and Wildhagen's (2007) findings suggest student engagement decreases K-12 student dropout rates. - Glanville, J.L., & Wildhagen, T. (2007). The measurement of school engagement: Assessing dimensionality and measurement invariance across race and ethnicity. Educational and Psychological Measurement, 67(6), 1019-1041.

4. Harrison, M., Rowlings, J., White, E., Vallance, M., Potemkin, N., & Woolnough, R. (2024). Neurodiversity and digital inclusion: creating the conditions for inclusive education through universal design for learning (p. 110). The University of Melbourne. <https://doi.org/10.17613/sj8sk-vts95>

5. Measuring levels of student engagement allows instructors to adapt their instructional practices in response to changes in students' motivation, involvement, and attitude about their course and educational pursuits.-Mandernach, B. J., Donnell-Sallee, E., & Dailey-Hebert, A. (2011). Assessing course student engagement. In R. Miller, E. Amsel, B. M. Kowalewski, B.B. Beins, K. D. Keith, & B. F. Peden (Eds.), Promoting Student Engagement: Techniques and Opportunities (pp. 277- 281). Society for the Teaching of Psychology, Division 2, American Psychological Association Mandernach, B. Jean, Emily Donnell-Sallee, and Amber Dailey-Hebert. "Assessing course student engagement." Promoting student engagement 1 (2011): 277-281.

