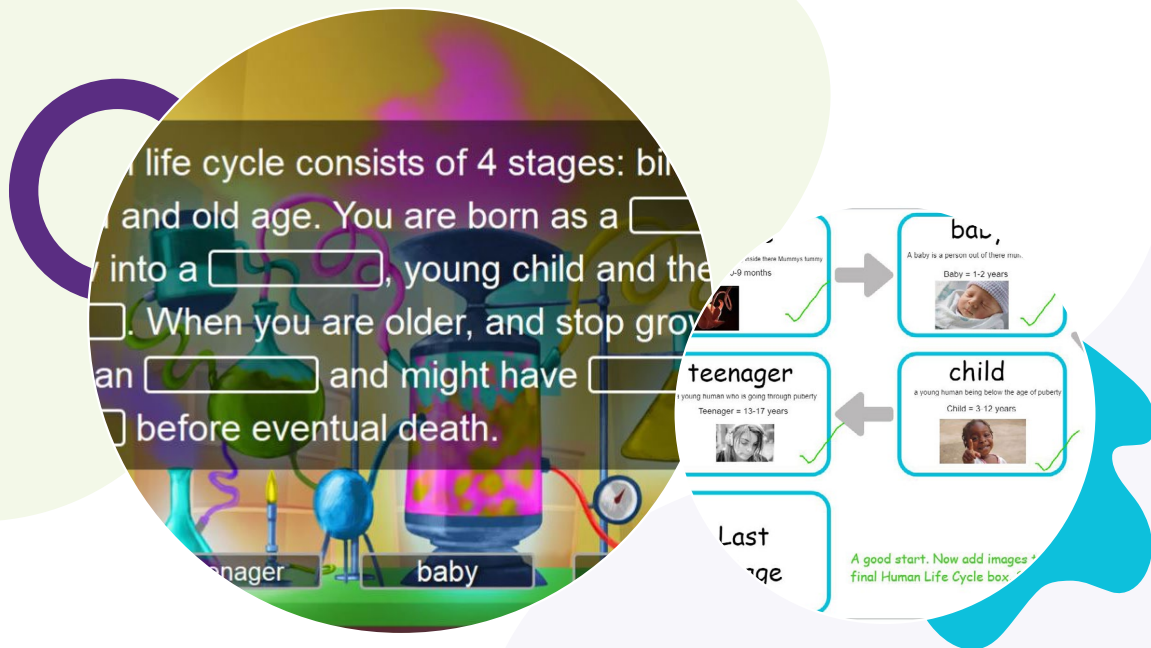


STUDENT SUCCESS STORY

Enhancing science instruction with Lumio



Integrating game-based activities, individual Handouts, and graphic organizers to engage students and improve learning outcomes

CHALLENGE

Going into a Life Cycles unit, Guy Colnbrook sought to increase student engagement using both self-paced and live learning activities. To accomplish this goal, he created lessons using Lumio, SMART's cloud-based lesson software, that students could join live during class time or open later in Google Classroom.

Lessons in the Life Cycles unit included game-based activities such as Super Sort, Fill in the Blanks, Label Reveal, and Rank Order used as starters and plenaries (end-of-lesson tasks to gauge learning progress), scaffolded individual Handouts for students, ad-free YouTube videos, and graphic organizers in lieu of blank canvases so that students could organize their learning; Guy specifically used the 3-Column Notes, Sequence Chart, and Scientific Method graphic organizers. Scaffolded components of individual Handouts included sentence starters, writing prompts, word banks, and more.

SCHOOL

King's Rochester Preparatory School,
Rochester, Kent, United Kingdom
Tom Morgan, Headmaster
Guy Colnbrook, Head of Computing and
Digital Learning

CHALLENGE

To engage students and enhance the science learning experience.

SMART SOLUTION

Lumio by SMART

OUTCOME

Increased student engagement, improved performance on individual Handouts, and a 14% percent improvement in formative assessment scores.

WHY SMART?

Lumio has unique features that helped make Guy’s Life Cycle unit successful. For example, individual Handouts give students active learning experiences, in which they can use tools for typing text, drawing models, searching for images through the built-in Bing Safe Search, uploading their own images, and adding relevant links to outside sources. Within individual Handouts, teachers can also give students direct feedback, either on-the-spot or later, such as during a planning period or after school. Students then have the opportunity to revise their work by correcting mistakes or completely re-setting the activity and starting over.

OUTCOME

To track student progress, Guy graded each student’s individual Handout using a scoring system of Satisfactory, Good, or Excellent. Throughout the unit, students completed four individual Handouts; class score distributions can be seen in the table below, in which a rise in “Excellent” scores is apparent.

	1	2	3	4
	Introduction to Life Cycles	The Life Cycle of a Human	Animal Lifespans and Offspring	Planning an Investigation
Satisfactory	6	4	1	2
Good	4	4	4	4
Excellent	2	4	6	6

An additional measure of student progress was gathered through two administrations of Monster Quiz, Lumio’s game-based formative assessment activity. The class averaged a 66% pre-topic score and an 80% end-of-topic score.

Finally, students completed a survey about their experiences of learning with Lumio; 83% felt that Lumio lessons were more engaging than non-Lumio lessons and 92% felt the lessons were easy to access. Students particularly enjoyed Monster Quiz “because it was fun,” “it means more teamwork,” and “you have a chance to work with friends.” Students were not the only ones to name Monster Quiz as their favorite activity—their teacher did, too! According to Guy, “Racing to the finish with your friends is a great way to formatively assess pupil understanding. The music, the SMART monsters, and the countdown on each question add to the engagement and excitement.”

“

The music, the SMART monsters, and the countdown on each question add to the engagement and excitement.

– Guy Colnbrook

”

ABOUT SMART

SMART Technologies is a world leader in simple and intuitive classroom technology solutions. We are an innovator in software and interactive technologies that enable natural collaboration, helping every student and teacher discover and develop their greatness.

To learn more, visit smarttech.com.
Contact us at smarttech.com/contact.

Do you have a SMART story? Tell us at
ImplementationTeam@smarttech.com

Let’s learn together.
#WeAreSMART

Interested in thought leadership from SMART?

Check out edblog.smarttech.com