Augmented Reality: A Tool for Transforming Education

Do you remember going to a museum and getting those headphones that talked you through the exhibits? You had to type in the number of the exhibit into the audio device and then listen to someone talk about what you saw. That simple device was the start of what we now call Augmented Reality (AR).

What is Augmented Reality?

It may sound to some like the latest sci-fi movie, but Augmented Reality is not just the newest trend in tech--it's a tool that has real potential for engaging students and transforming education.

AR refers to an array of apps and tools that can be used to add to and enrich real-world experiences, from reading a magazine to taking a test to performing a science experiment. Teachers are harnessing some of these tools to add more personalization and engagement to learning. Instead of pulling kids away from their smartphones and Ipads, they're putting them to use to interact with materials and lessons. Teachers and students can use AR to "bring their learning to life," according to one elementary school teacher who uses it.

Augmented Reality usually comes in the form of an apps for mobile device like Quiver, Word Walls and PBS' Fetch Lunch Rush. It can also be found in wearable gadgets which use virtual reality tools like Project Glass.

Here are just a few examples that AR is used to enrich learning:

- Adding videos that illustrate how to solve a problem for a student struggling with a homework assignment
- Turning coloring pages from textbooks into animated images
- Interacting with plants to learn more about them
- Offering games that help teach concepts in physics or practice foreign language skills

- Playing messages from parents for young students, to give them an extra boost during the day
- Providing additional information and resources when looking at objects, 3-D models, artwork and other materials

Teachers are always interested in providing more interactive experiences for kids. In a time when budget, safety and time concerns restrict field trips and other possible hands-on learning experiences, bringing the interactive experience to the classroom by merging digital with the real world can really make a difference in education. Children, particularly younger children, thrive when their senses and imagination are activated. AR is the nexus where digital meets physical, providing an exciting opening for education.

Students as Creators

Perhaps the most exciting element that Augmented Reality provides is the opportunity for students to not only interact, but to actually become creators. As two elementary school teachers point out, "profound learning occurs when *students* create, share, interact and explain."

Aurasma is an open-source tool that enables users to design their own AR, opening up all kinds of possibilities for educators and students willing to dive in and explore this technology. Some suggestions for activities that can engage kids through AR include composing and illustrating animated stories, recording a book review and attaching it to the book digitally, as well as extra-curricular activities like adding enhancements to yearbooks. Teachers can get more ideas for activities from sources like these two teachers who have enthusiastically embraced AR.

Soon, we'll be surrounded by tools for augmenting reality, not to escape, but to learn more about our world, to deepen our knowledge and understanding, and to set our kids on course for passionate lifelong learning.