

## USING TIKTOK AS AN EDUCATIONAL TOOL FOR TEACHING SCIENCE

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In an era defined by digital advancements and the proliferation of social media platforms, educators are continuously exploring innovative ways to make learning engaging and relevant for students. Among the various platforms available, TikTok has emerged as an unlikely yet effective tool for teaching, particularly in the sciences. Known for its short, dynamic videos, TikTok provides educators with a creative avenue to simplify complex scientific concepts and foster student interest in science.

TikTok's popularity among younger audiences is one of the primary reasons it has potential as an educational tool. With millions of active users worldwide, many of whom are students, it offers a unique platform for teachers to connect with their learners in a medium they already enjoy and understand. By integrating educational content into a platform that thrives on entertainment, educators can bridge the gap between formal learning and students' digital lives.

One of the strengths of TikTok is its ability to condense complex information into bite-sized, visually appealing content. Science, often perceived as a challenging subject, can benefit greatly from this approach. Educators can use TikTok to create engaging demonstrations, experiments, or explanations that simplify abstract concepts. For example, a teacher might use the platform to showcase a chemical reaction, explain Newton's laws of motion through real-life scenarios, or break down biological processes such as photosynthesis using animations and visual aids.

In addition, TikTok encourages creativity in presenting scientific concepts. Its vast library of music, filters, and video editing tools allows educators to enhance their lessons with captivating visuals and sound effects. This not only captures students' attention but also caters to diverse learning styles. Visual and auditory learners, in particular, can benefit from the multisensory experience that TikTok videos provide.

The platform also promotes active learning and collaboration among students. Teachers can challenge their students to create TikTok videos that explain scientific concepts, conduct experiments, or showcase scientific phenomena. By doing so, students not only deepen their understanding of the subject matter but also develop critical thinking, creativity, and communication skills. For instance, a class project on climate change could involve students producing videos highlighting its causes, effects, and possible solutions, thereby fostering a deeper awareness of environmental issues while enhancing digital literacy.

Furthermore, TikTok can serve as a gateway to foster curiosity and engagement in science outside the classroom. The platform is filled with creators who specialize in educational content, including scientists, science communicators, and educators who share experiments, facts, and discoveries in an accessible format. By exposing students to these resources, teachers can inspire them to explore scientific topics independently and encourage lifelong learning.

Despite its potential, using TikTok in education requires careful planning and implementation. Educators must ensure that the content shared aligns with the curriculum and adheres to ethical and professional standards. Fact-checking is crucial to prevent the spread of misinformation, which is a common concern on social media platforms. Teachers should also provide guidance on appropriate online behavior and responsible use of social media to help students navigate the digital landscape safely.

Additionally, accessibility and inclusivity should be considered. Not all students may have access to smartphones or stable internet connections, which could limit the platform's effectiveness in some contexts. To address this, teachers can integrate TikTok videos into classroom discussions or provide alternative resources for students who cannot access the platform.

While TikTok's use in teaching science is still a relatively new concept, preliminary results are promising. Studies and anecdotal evidence suggest that students are more engaged and retain information better when presented in an interactive, visual format. Teachers who have adopted TikTok as an educational tool report improved student interest in science and a greater willingness to participate in discussions and projects.

In conclusion, TikTok has the potential to revolutionize how science is taught and learned. By leveraging its dynamic features, educators can make science more accessible, engaging, and relatable for students. However, to maximize its benefits, teachers must approach its use thoughtfully, ensuring that the content is accurate, inclusive, and aligned with educational goals. With the right strategies, TikTok can become a powerful tool to inspire a new generation of learners to explore and appreciate the wonders of science.

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