INTRODUCTION

All students require some introduction to a subject before instruction begins. The way in which an instructor introduces a subject can influence the students’ enthusiasm and interest in the topic (1). In many classrooms, the introduction of material is cursory; a faculty member might show a slide with the title of the lecture presentation, perhaps accompanied by a few words. This introductory technique is associated with boredom, which itself is negatively correlated with academic success (2). Here I describe a method to develop Hollywood-style movie trailers which introduce a topic for lecture and/or discussion in the classroom. Movie trailers can also be created by students in an active-learning classroom setting. Very little technical knowledge is required to make these trailers, but the finished product is polished. Students who viewed these movie trailer introductions reported that their interest in subsequent course material was increased. Students also expressed a desire to view movie trailer introductions in other science classes, but they did not consider the trailers to be an effective study tool for summative assessments.

PROCEDURE

Photos and videos

Digital photographs and/or video clips are required to make the movie trailers. Digital photographs can be scanned from textbooks or other publications using a flatbed scanner. Photographs and videos can be downloaded from the internet. Images and videos reproduced for use in an educational setting do not infringe on copyright, under the Fair Use Doctrine of The Copyright Act (3).

iMovie trailer

The Apple iMovie app (www.apple.com/imovie) is available for download onto devices which run iOS. These include iPhones, iPads, iPod Touches, and MacBook computers. Most trailers range from 60 to 90 seconds in duration. The movie trailer content is easily edited (Appendix 1). The user places photographs and short video clips into a predetermined sequence, where they are accompanied by a soundtrack. Apple freely permits the use of its software’s audio content on a royalty-free basis for users’ video projects (4).

Distribution

The movie trailers can be integrated into Microsoft PowerPoint lecture slides. They can also be uploaded to video-sharing websites such as Vimeo (Fig. 1) or YouTube.

Assessment

Students were shown five movie trailer introductions over the course of a single semester, then were asked to self-report their attitudes toward the movie trailer introductions using a five-point Likert scale (Fig. 2). Students were also free to make comments. The content and administration of these surveys was approved in advance by the DeSales University Institutional Research Board (IRB).

FIGURE 1. An example screenshot from a movie trailer about DNA damage (https://vimeo.com/244440218).
Safety

No hazardous materials are employed in the creation of these movie trailers.

CONCLUSION

Teaching videos have been shown to increase student learning, in part because they increase student engagement with the material (5, 6). To assess the extent of engagement, students were asked to self-report their attitudes toward the movie trailer introductions (Fig. 2). Students reported that the use of movie trailer introductions was unexpected and that these movie trailers increased interest in the topic about to be covered. Student learning is enhanced by interest in a topic (7). The use of an instructional tool such as the one described in this work can benefit students by piquing their interest and therefore increasing learning. Students’ comments about the movie trailer introductions were generally positive. One student wrote, “They are a great way to spark interest in a topic.” Another said, “They gave a visual prior to learning the material, which helped a lot.” A third judged the movie trailers to be “adorable and informative.” While some students did report using the movie trailers to study for exams, most disagreed with the assertion that the movie trailers could be used as a study tool for summative assessments (Fig. 2). These students commented that the pace of the movie trailers was too fast to use for studying. One wrote, “[S]ometimes the words went too quickly and it was hard to follow.” As the iMovie trailer templates are preset, it is not possible to expand the movie trailers for use in studying.

The creation of these movie trailer teaching tools is not limited to faculty. With the proliferation of smartphones, laptops, and tablet computers in educational settings, there is increased recognition of the utility of having students use their own devices to create learning content (8, 9). Indeed, students report more learning gains during video development (10). Rather than creating movie trailer introductions for students, instructors might choose to assign this work to students, as a way of familiarizing them with the topic before entering the class or as a means to review the material after it has already been covered. In this way, the movie trailers can be integrated into an active-learning classroom, with all the learning benefits that come from this more student-directed approach to instruction (11, 12).

SUPPLEMENTAL MATERIALS

Appendix 1: Instructions for the creation of an iMovie trailer on an iPad

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FIGURE 2. Student responses to questions that measured attitudes toward the movie trailers (n = 83). The x-axis values represent the percentage of student responses.
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