

ETEC523 A1: Analytical Publishing Report Augmented Reality (AR) Filters in Education

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Introduction

Augmented Reality (AR) Filters are computer-generated effects that you can apply to real-life photos or videos. These features are available on many platforms such as Instagram, SnapChat and various other applications, allowing users to mix and match layers of visual effects. AR filters have interactive elements that are intended to elevate photos and videos. Some examples of AR filters that have been very popular include:

- 1) The Color Adjustment Filters which provide the ability to change the colour overlay on the screen (Laine, 2022).
- 2) The Beautifying Face Filters offering various virtual AR makeup options, from virtual lipstick shades, changing the colour of your eyes to providing full makeovers (Laine, 2022).
- 3) The Quiz Filters which provides an interactive experience for the audience with fun trivia (Laine, 2022).
- 4) The Real-World Filters which allows users to place virtual 3D objects in the real world, making them appear as if they are part of the real world (Laine, 2022).



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Assessing AR Filters

I applied Bates' (2014) SECTIONS framework to assist in making an effective decision about the choice and using AR Filters for teaching and learning.

<u>S</u> tudents	Is convenient as it can be accessed via any mobile device and can be designed according to the student group's skill level and support required. However it is not easily accessible for all students as it may require social media accounts.
<u>E</u> ase of Use	AR filters and their design interfaces do not require extensive training and can be used without prior experience
<u>C</u> osts	There may be higher development costs as it requires time to build the unique designs
<u>T</u> eaching Functions	It accommodates many teaching approaches and learning types with the ability to incorporate text, graphics, audio and video.
Interaction	Allows inherent and designed interactivity, which automatically pushes the students to interact with the content but also provides learner-generated interaction if they are given the opportunity to create their own filters.
<u>O</u> rganisational Issues	There may be barriers to providing students access to mobile devices and having resources for providing the necessary support to teachers to develop/find learning materials via AR Filters.
<u>N</u> etworking	There are opportunities to interact with people outside the classroom as the filters are available on social media
<u>S</u> ecurity and Privacy	There is a lack of security as it can be published on public platforms. However, there is the ability to restrict privacy settings and also create a safe environment for the students.

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Assessing AR Filters (continued)



Assessing Filters

Introduction

AR filters have helped increase the attendance in online classes because it engages the learners and increases the element of fun in the online classroom (Arsenova, 2022). It provides tools for immersive learning where augmented reality brings lessons to life to help learners better understand the content (Arsenova, 2022).

Augmented reality captures audiences attention it has the ability to capture and keep the students attention because it is interactive and requires user participation to initiate. This active learning approach better communicates the messages within the lesson or learning moment (AR Education: Augmented reality will change how we learn 2019)

Although, AR filters provide an engaging way to incorporate microlearning in the classroom, there is potential for it to lose its educational nature. It may become an element of distraction or even lack engagement as students may lose interest.

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Potential Uses

In the study by Zhu et al., they investigate the effectiveness of using an augmented reality filter app during pronunciation practice to prove production and articulatory awareness of English and English consonants (2022). The experimental results showed that an AR filter app can offer academic psychological and social support in pronunciation skill learning because the technology promoted the students articulatory awareness, alleviate their anxiety and encouraged daily practice (Zhu et al., 2022).

Other potential uses include face filters for engagement, microlearning quizzes, and review exercises with instant feedback.

With the open source and readily available educational materials on how to create AR Filters, it makes it easy for aspiring augmented reality creators to develop the necessary skills to create basic effects in softwares such as <u>Meta Spark Studio</u>. Thus increasing the horizons for use of AR Filters.



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My Experience

I remember in one of my MET courses my professor provided feedback for an assignment on AI using a robot filter. This feedback caught my attention and became the most interesting and captivating feedback I've ever received.

My experience with designing AR Filters begun with a design project that I had created in a prior MET course using the Meta Spark Studio (formerly called Spark AR Studio).

It was my first time exploring AR Filters and it was a very interesting challenge, I was able to create a basic interactive game using the free software in addition to the tutorials/lessons that were available online at no cost. I had created a mini game that was intended for younger audiences to learn about recycling. It is not perfect, but given a time constraint, I was able to create this in approximately 18 hours



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Digital education formats are here to stay and augmented reality is a growing technology in education, with AR Filters unlimited opportunities it can be applied across wide audiences and is customizable to the learners interest.

In addition to being convenient and accessible from any mobile device AR Filters have the ability for anyone to learn and design creative AR Filters that can accommodate many teaching approaches and learning styles. The opportunities for interactivity and networking increase engagement of students when using AR Filters, on the other hand it is important to keep in mind the potential security and privacy risks.

AR impacts how we learn and how we will continue to grow as technology advances and AR Filters is a viable technology for certain learning situations that will require resources such as time and some creative designing to effectively incorporate into education (AR Education: Augmented reality will change how we learn 2019).



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References



AR Education: Augmented reality will change how we learn. InnovatAR. (2019, April 22). Retrieved February 18, 2023, from

https://innovatar.io/ar-education-augmented-reality-learning/

Arsenova, A. (2022, August 18). How banuba augmented reality immerses students into e-learning. Banuba AR Technologies:

All-In-One AR SDK for Business. Retrieved February 18, 2023, from

https://www.banuba.com/blog/how-banuba-augmented-reality-immerses-students-into-e-learning

Bates, T. (2014). Choosing and using media in education: The SECTIONS model. In Teaching in digital age. Retrieved from https://opentextbc.ca/teachinginadigitalage/part/9-pedagogical-differences-between-media/

Laine, A. *How to make an Instagram filter using augmented reality*. Publer's Blog. (2022, September 2). Retrieved February 18, 2023, from https://publer.io/blog/how-to-make-an-instagram-filter/

Zhu, J., Zhang, X., & Li, J. (2022). Using AR filters in L2 pronunciation training: Practice, perfection, and willingness to share. *Computer Assisted Language Learning*, 1–30. https://doi.org/10.1080/09588221.2022.2080716

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