

Ed Tech Policy Proposal

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EDTC 813-Using Integrated Software Across the Curriculum

Assessment 2

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Synopsis

World Cultures is a special area class in ABC School for students in grades 1-3. In World Cultures, students are introduced to Spanish terminology, learn about various cultures and customs from around the world, and discuss current global events. ABC School needs an instructional platform for World Cultures that aligns to both synchronous and asynchronous modalities for this upcoming school year, specifically for learning Spanish as a second language. Due to the demand of remote learning, and constraints of limited budgeting, ABC School District needs a language program that is compatible for novice learners as well as adaptable.

Research and Rationale

Collins, A., & Halverson, R. (2018) highlight the importance of customization, interaction, and learner control as the imperative fuel for driving the revolution of EdTech. Providing students with the ability to learn with individualized attention, obtain immediate feedback and putting learners in control of their education are all optimum criteria on how schools should rethink instruction in the age of technology. Online learning applications open avenues for student-teacher interactions; teachers can monitor student growth and progression, and position themselves to assist their students according to Collins, A., & Halverson, R. (2018). Adaptive learning functionalities unfold the potential for students to maximize learning at an individualized pace. Since educational facilities have the moral responsibility of connecting scholars with real-world applications, technology becomes an epistemic frame, as characterized by Shaffer, D. (2006). Therefore, a teacher-monitored game-based learning technology is an ideal recommendation for ABC School to consider for foreign language , as it has the capability

of merging the recommendations outlined by Collins, Halverson and Shaffer into a unified platform.

Duolingo is a language learning platform that uses artificial intelligence (AI) algorithms to customize each learner's experience. This gamified technology determines the areas of a new language, ie: speaking, listening, and/or writing, that need to be revisited on an individualized basis. This reinforcement broadens the probability of language acquisition for all users. Duolingo blends visual, audio and text features to provide a multi-sensory approach that is accessible virtually. Duolingo for Schools is an extension to the program that allows teachers to set up online profiles for their students; teachers can track and monitor student growth. Duolingo (2020) prides itself in tailoring an effective educational system that provides every learner with equitable access to learning a new language. In addition, the entire application and Duolingo for School feature is free, making it a cost-effective tech tool for ABC District to consider.

Two studies are noted for their research on Duolingo's effectiveness. Vesselinov and Grego (2012) share that users improved significantly after the course of eight weeks; the researchers noted that the users were highly engaged and motivated as they interacted with Duolingo. Loewen, S. (2019) found that the more students interacted with the app, the more language acquisition was acquired. According to Brown and Green (2020), the attributes of a successful learning environment revolve around the educator, the content, and the students. Since Duolingo provides an online platform that teachers can monitor, the learner's experience is easily manipulated by the user to attain wider gains in a foreign language if warranted. Brown and Green (2020), place emphasis on educators to design a learning environment that is learner-centered, knowledge-based, assessed regularly and connects to community-relevant content.

Duolingo aligns to all four components mentioned by Brown and Green (2020). Duolingo's AI features adapt to personalized needs; its gamified functionality elevates motivation and engagement; its classroom feature allows for ongoing teacher-monitoring and assessment; its relevance in content connects users to real-world scenarios and application.

Luckin, R. (2016) underlines the endless benefits of AI, as it takes the place of one-to-one tutors by adjusting its output to meet the needs of users. To fulfill the mandates of asynchronous learning, Duolingo provides users with the option of accessing a virtual one-to-one tutor on an individualized preference. As a synchronous learning tool, Duolingo can be incorporated within a blended learning environment to maximize its features and heighten learner's experience. Duolingo can be implemented within a station rotation design or as a flipped classed model. Flipped learning is beneficial as it differentiates instruction and allows learners to revise relevant content at their own individualized pace (Winter, 2018).

Recommendation

When combining both in-person and remote learning, Duolingo can be a technology that satisfies the learning requirements of all students in both settings as part of a blended learning model. Horn & Staker, (2014) accredit a blended learning framework for providing the best of teacher instruction, along with computer-based instruction. In a blended-learning setting, student-centered learning is emphasized as one-to-one, group, online and in-person modalities are combined to meet the needs of all learners of various capabilities. Duolingo's virtual accessibility provides concrete foundational blocks for a productive learning infrastructure, whether in-person or online. If Duolingo is integrated into the World Cultures curriculum as a tool to enhance forging language acquisition, its features have promising benefits for all learners. Since ABC School is providing hotspots and laptops for all students, all students will have access

to Duolingo at their disposal. Students can learn as much as they want, when they want, while the teacher monitors progression and provides individual feedback.

Duolingo is a cost-effective learning tech tool that satisfies the requirements of introducing students to the Spanish language. To achieve the goal of equitable access, without compromising quality education, Duolingo for Schools is an extended feature that provides teachers with a monitoring element, as well as includes components that can make learning a new language customizable and personable. Considering Duolingo for Schools to enhance E-Learning has the potential to utilize AI capabilities throughout a hybrid learning setting. Students that attend school in-person and online will have access to a virtual one-to-one language tutor. In turn, the World Cultures teacher can use the tracking feature to better assess what areas need to be revisited in a whole group or individualized setting. Duolingo will not take the place of the teacher in ABC School, but rather be used as a barometer to gauge students' language acquisition in Spanish during synchronous and asynchronous learning while maximizing individual instructional time.

References

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