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DEVELOP DIGITAL STORYTELLING INTEGRATES WITH ANIMATION AS AN INNOVATIVE INSTRUCTIONAL TOOL: EFFECTS ON STUDENT'S BEHAVIOURAL ENGAGEMENT IN LEARNING

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Abstract: *From ancient times to today, storytelling has served popular instructional tool. Over the last decade, the emergence and availability of multimedia technologies, therefore upgrading the storytelling to digital storytelling. Today's students are growing up surrounded by digital technology. One form of multimedia that is becoming more popular in the education setting is digital storytelling. It is the best choice for teaching and learning nowadays. In line with this, animation has integrated with digital storytelling for the education system. Animation has notably contributed to provide the visualization system. Consequently, students prefer to learn from visual forms of subject content to engage them in learning more actively. Therefore, this paper discusses the student's behavioural engagement was foster by the digital storytelling integrates with animation.*

Keywords: *Digital Storytelling, Animation, Behavioural Engagement*

Main provisions of the article. Implementing digital storytelling is an appropriate tool for learning and teaching, mainly student learning from multimedia technology to enhance their participation actively. Studies have proven that animation contributes to a positive outcome such as students are actively participating and engage, increase interest, and feel impressed.

Introduction. The innovation and advent of multimedia technology are developing rapidly in the 21st century. It also has driven the evolution of the education system. Properly using information technology enables human development via educational activities [1]; [2]; [3]. Robin [4] stated that one of the most potent tools in multimedia technologies is digital storytelling. It has been suggested that with the use of digital storytelling in education. It is defined as a critical component of 21st-century learning technologies [5]. Digital storytelling can generate interest and attention among "digital generation" students in today's classroom [6]. There is a significant increase in the participation and engagement of the student in a positive way.

Nevertheless, having advanced digital storytelling alone without a proper visualization system does not promise that student can enhance their learning engagement [7]. Learning should be made more visual and interesting to foster student engagement. Nowadays, students are not merely digital generation and become mainly visual learners [8]; [9]. Animation has identified innovative multimedia technology that teachers should use in the classroom. As a multimedia technology, animation is at the forefront of the visualization [10]; [11]. A study by Pekdağ [12] argues that animation is the process of animating graphics in a specific sce-

nario and is defined as an alternative teaching method to visualize knowledge. Therefore, it is essential to develop digital storytelling that integrates with animation to increase students' behavioural engagement.

Literature Review

Digital Storytelling. Constructivism is one of the most pivotal learning theories used and developed to enhance teaching and learning in recent times. Smeda et al. [13] pointed out that digital storytelling can facilitate a constructivist method for teaching and learning. Digital storytelling is a useful pedagogical approach that can improve the students' involvement in the learning process [14]. Digital storytelling is supported by a mixture of graphics, text, recorded audio narration, video, and music to present information on a specific topic through the use of multimedia technology [15]. It can be used to engage students in the content and make abstract or conceptual content more understanding.

Animation. The animation's usage is beneficial to students' learning. In various studies have proven that animation has been effectively delivering content to students. Specifically, animation is an interesting tool makes teaching methods and the classroom environment more engaging and entertaining as a whole. For instance, animation can help teachers to explain and reinforce the contents interestingly and entertainingly, particularly among digital generation [9]. Barak et al. [16] echoed that animation allow students to engage in three learning styles simultaneously, namely visual, auditory and kinesthetic which increases their knowledge comprehension.

Behavioural Engagement. Students engage in numerous different ways in the learning process. Behavioural engagement is active participation of students in learning. Behavioural engagement underpins that a particular set of behaviour such as learning behaviour [17]. Behavioural engagement refers to student's active engagement such as student pays attention, participate, listens and are involved in-class activities. Behaviours such as participation, effort, time on task may indicate the most robust engagement as students learn by performing such active action [18].

Conclusion. With the growing significance in fostering student participation in the educational sphere, behavioural engagement has become of particular interest for its role in persistence in learning and teaching. Hence, implementing digital storytelling is an appropriate tool for learning and teaching, mainly student learning from multimedia technology to enhance their participation actively. Studies have proven that animation contributes to a positive outcome such as students are actively participating and engage, increase interest, and feel impressed.

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ЦИФРЛІК МІНЕЗ-ҚҰЛЫҚТЫ ДАМЫТУ ЖӘНЕ МУЛЬТИФИКАЦИЯ МЕН ИННОВАЦИЯЛЫҚ ОҚЫТУ ҚҰРАЛЫ РЕТІНДЕ ИНТЕГРАЦИЯЛАУ: ОҚУДАҒЫ СТУДЕНТТЕРДІҢ МІНЕЗ-ҚҰЛҚЫНА ӘСЕРІ

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Түйін: *Ерте заманнан күні бүгінге дейін әңгіме халықтық оқу құралы қызметін атқарып келеді. Соңғы онжылдықта мультимедиялық технологияның пайда болуы*

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мен қолжетімділігі хикаяларды сандық әңгімелеуге дейін жаңартуға әкелді. Қазіргі студенттер цифрлық ортада өсіп келеді. Білім беру ортасында танымал болып келе жатқан мультимедианың бір түрі - сандық әңгімелер. Бұл қазіргі уақытта оқыту мен оқу үшін ең жақсы таңдау. Сәйкесінше, анимация білім беру жүйесінде цифрлық әңгімелеумен біріктірілді. Анимация визуализация жүйесін құруға үлкен үлес қосты. Демек, студенттер оқу процесіне белсенді түрде қатыстыру үшін пән мазмұнының көрнекі формаларынан үйренуді жөн көреді. Осылайша, бұл мақалада анимациямен біріктірілген цифрлық әңгімелеу арқылы жеңілдетілген студенттердің мінез-құлық әрекеті талқыланады.

***Түйінді сөздер**: сандық әңгіме, анимация, мінез-құлық өзара әрекеттесу.*

РАЗРАБОТКА ЦИФРОВОГО ПОВЕДЕНИЯ И ИНТЕГРИРОВАНИЕ С МУЛЬТИФИКАЦИЕЙ В КАЧЕСТВЕ ИННОВАЦИОННОГО УЧЕБНОГО СРЕДСТВА: ВЛИЯНИЕ НА ПОВЕДЕНИЕ УЧАЩИХСЯ В ОБУЧЕНИИ

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***Аннотация:** С древних времен и до наших дней повествование служило популярным учебным пособием. За последнее десятилетие появление и доступность мультимедийных технологий привели к обновлению повествования до цифрового повествования. Современные студенты растут в окружении цифровых технологий. Одной из форм мультимедиа, которая становится все более популярной в образовательной среде, является цифровое повествование. Это лучший выбор для преподавания и обучения в настоящее время. В соответствии с этим анимация интегрировалась с цифровым повествованием в системе образования. Анимация внесла значительный вклад в создание системы визуализации. Следовательно, учащиеся предпочитают учиться на визуальных формах предметного содержания, чтобы активнее вовлекать их в процесс обучения. Таким образом, в этой статье обсуждается поведенческая вовлеченность учащихся, которой способствует цифровое повествование, интегрированное с анимацией.*

***Ключевые слова:** цифровое повествование, анимация, поведенческое взаимодействие.*

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