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EduTales: An Educational Comic to Support Students' Learning Experience at the Centre for Foundation Studies, IIUM

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ABSTRACT

Many students at this level struggle to engage with standard educational resources, emphasizing the need for innovative tools to improve comprehension of course contents. This study introduces EduTales, an education supplemental tool tailored for foundation-level students, aiming to address the challenge of disengagement with traditional course materials. For this, EduTales leverages the inherent appeal of comics to create an engaging learning experience. Through incorporating interesting characters, scenes, and storylines, EduTales's objective is to enhance students' understanding of their course contents while ensuring enjoyable learning experience through appealing pictures, conversational delivery, and interesting storylines. It provides learners with crucial contexts for understanding the essence of the subjects, as well as delivering exciting backgrounds and clear graphics to make the plot easy to understand. To assess the effectiveness of EduTales, two instruments are employed to gather efficacy data, namely Pre-Test and Post-Test, as well as a survey to gauge feedback on the innovation. Then, the scores are consolidated in a bar chart format to show the changes between the pre-test and post-test. The findings indicate a positive response from students, who found EduTales both engaging and helpful for understanding complex topics - even surpassing initial expectations. Additionally, EduTales's availability in both online and flip-book formats proved to be popular among students, suggesting its potential for broader usage and commercial success. By offering EduTales to other universities, educators can provide students with an effective tool to improve comprehension and engagement. In conclusion, EduTales provides major benefits, including improved comprehension, ease of access, and the usage of relatable lexicons for the youth, making it a versatile and valuable resource for enhancing educational outcomes in modern learning environments.

Keywords: education supplemental tool; learning aid; comic-based learning; student engagement; comprehension.

1. INTRODUCTION

For the younger generation, word-dense textbooks and traditional resources are becoming difficult to use. Addressing this looming issue, EduTales introduces an innovative approach to learning for students at the Centre for Foundation Studies (CFS), IIUM, incorporating comics to enhance comprehension of course contents. EduTales does so by transforming complex concepts into visually stimulating narratives and utilizing contents directly sourced from

learning materials at the Centre. In doing so, EduTales aims to captivate students' interest, and foster better understanding of key concepts via an alternative to the traditional learning materials. This is based on Raiyn's (2016) study where incorporating visual stimuli in teaching and learning helped enhance students' learning experience. In fact, Akcanca (2020) highlighted that learning through educational comics is a further footstep as it can help open up learners' imagination, which in turn will facilitate better understanding. All in all, EduTales attempts to enhance students' understanding of their course contents through appealing pictures, conversational style (Wallner & Barajas, 2020), and interesting storylines in the form of comics (Bolton-Gary, 2012).

2. METHODOLOGY

This study employs both quantitative and qualitative modes to assess EduTales's efficacy in enhancing students' comprehension. Initially, a set of pre-test and post-test adapted from Rutta et. al. (2021) is administered to assess changes in students' understanding before and after their exposure to EduTales, which is later quantitatively observed via their test achievements. The comics in EduTales are shared with them as a case-based or topic-based material (Roskosz & Wiorogorska, 2016) between the administration of the tests. Subsequently, a feedback survey is given to the participants to collect qualitative feedback in order to gain insight into their experience with EduTales. Through this approach, it is possible to gauge the efficacy of EduTales as a support tool and find areas of improvement.

2.1. Research questions

The study revolves around the following question:

Does the integration of educational comics, such as EduTales, enhance students' understanding in specific subject(s)?

2.2. Framework, methodology and process

2.2.1 Framework

For this study, the overarching philosophy is constructivism in learning, which involves building up on learners' existing or gained knowledge to enhance further understanding. Roskosz and Wiorogorska (2016) agreed that incorporating comics and its aspects such as designs, characters and storylines does involve building on knowledge of the students, and on the students. Thus, this becomes the basis for the operation of EduTales as a support tool for students in CFS IIUM in their learning of respective course contents. This can be seen from the following diagram:

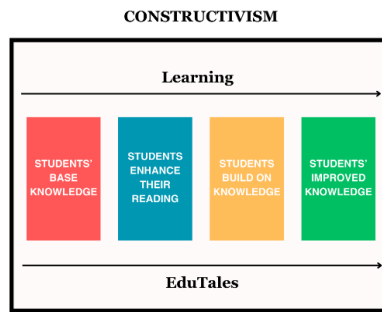


Figure 1. EduTales Framework of Research

2.2.2 Methodology, instrument and process

The framework outlines a strategic approach in creating, using, and measuring EduTales. Its efficacy is measured through a mix of both quantitative and qualitative methods whereby the participants are selected from among students of the Centre for Foundation Studies, IIUM, particularly those who have studied the following subjects: Introduction to English Language, *Pengenalan kepada Bahasa Melayu*, Basic Principles of Tourism, and Civil Law. The participants are then given an instrument of a ten-question pre-test according to their respective subjects, which they answered within 20 minutes. Then, they are provided with their EduTales comics as a revision tool, in which they spent 20 minutes to read through. Afterwards, they are given the exact same instrument as a post-test to measure any improvements in their scores, which they also answered within 20 minutes. A survey followed to gauge their feedback on EduTales and its efficacy in enhancing their understanding. The data are then tabulated and analysed via Microsoft Excel features.

3. RESULTS AND DISCUSSION

This section consists of the findings and the discussion of the data that had been collected during the operation of the EduTales project.

3.1 Changes in understanding of course contents

The participants' understanding of their respective subjects shows an increasing pattern, as demonstrated via their pre-test and post-test results, which are as follows:

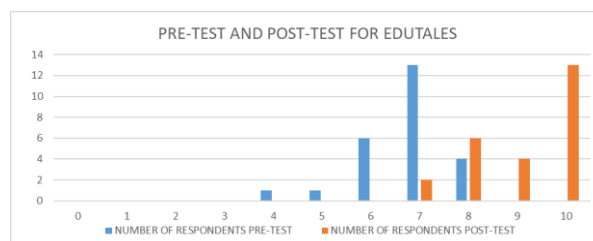


Figure 2. Participants' Pre-Test and Post-Test Results

The bar chart above compares the pre-test and post-test results of EduTales' 25 pilot participants. The horizontal axis represents the score range from 0 to 10 while the vertical axis represents the number of respondents. Pre-test scores (blue bars), peaked at 7 (13 respondents)

with majority scoring around 6 to 8. Post-test scores (orange bars) significantly improved with no scores below 7, This indicates that EduTales can enhance understanding and can be a potent support tool for students to use to tackle specific course contents.

3.2 Participants' perceptions on EduTales

A survey was distributed to obtain the participants' opinions on whether EduTales can help them understand a particular subject better. 98.1% of the participants answered "Yes" indicating that they believe EduTales can help them understand a subject better. Not only that, in the open-ended questions of the survey, all respondents who filled up the sections indicated positive reception towards EduTales as their supplemental educational tool. This data shows that majority of the respondents have a positive perception of EduTales' ability to aid in understanding a subject and is perceived as an effective educational support tool.

4. CONCLUSION

EduTales has proven highly beneficial to supplement learning, seen through positive performances in the tests and the participants' positive feedback. The current data indicate great improvements, thus giving clear evidence of EduTales' positive and potential impact on learning outcomes. Future recommendations include expanding EduTales to science-based courses and publishing it as a manuscript for broader access and commercial potential, making it applicable in other disciplines too. EduTales can also be expanded to other higher education institutions due to its flexible nature that can adopt and adapt to various disciplines. What needs to be done is simply pinpointing targeted content, drafting the storyboard and then adopting the course contents into its comic form via EduTales machinery. This is how EduTales attempt to bridge the learning experience between what is needed and how can the needs be fulfilled when it comes to foundation-level learning.

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