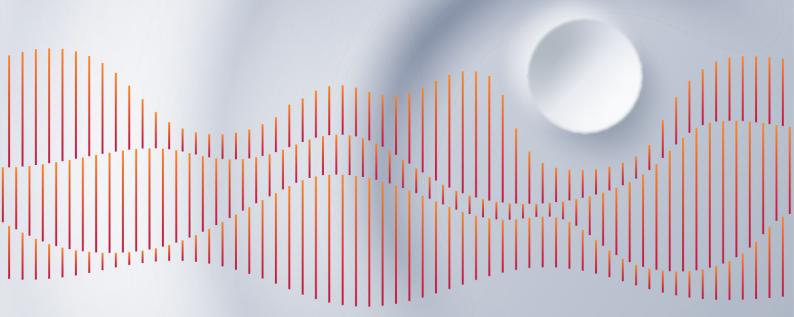


E-PROCEEDINGS



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PREFACE

iTAC or International Teaching Aid Competition 2023 was a venue for academicians, researchers, industries, junior and young inventors to showcase their innovative ideas not only in the teaching and learning sphere but also in other numerous disciplines of study. This competition was organised by the Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch, Malaysia. Its main aim was to promote the production of innovative ideas among academicians, students and also the public at large.

In accordance with the theme "Reconnoitering Innovative Ideas in Post-normal Times", the development of novel ideas from the perspectives of interdisciplinary innovations is more compelling today, especially in the post-covid 19 times. Post-pandemic initiatives are the most relevant in the current world to adapt to new ways of doing things and all these surely require networking and collaboration. Rising to the occasion, iTAC 2023 has managed to attract more than 267 participations for all categories. The staggering number of submissions has proven the relevance of this competition to the academic world and beyond in urging the culture of innovating ideas.

iTAC 2023 committee would like to thank all creative participants for showcasing their innovative ideas with us. As expected in any competition, there will be those who win and those who lose. Congratulations to all the award recipients (Diamond, Gold, Silver and Bronze) for their winning entries. Those who did not make the cut this year can always improve and join us again later.

It is hoped that iTAC 2023 has been a worthy platform for all participating innovators who have shown ingenious efforts in their products and ideas. This compilation of extended abstracts published as iTAC 2023 E-Proceedings contains insights into what current researchers, both experienced and novice, find important and relevant in the post-normal times.

Best regards,

iTAC 2023 Committee Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch Malaysia



E-COMIC: SAVING MONEY MADE FUN

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ABSTRACT

Introducing financial literacy early is crucial, and the digital age provides unique opportunities. The purpose of this e-comic is to act as a guideline that educates and empowers students about saving money in an interactive and visually appealing manner. The e-comic highlights the significance of teaching financial literacy at an early age and emphasizes the lifelong benefits of developing saving habits. It recognizes the need for innovative approaches to captivate the attention of students in the digital era. The e-comic is presented as an effective tool to engage and educate students. Through visually appealing illustrations and relatable characters, the e-comic creates an immersive experience that resonates with young learners. The storyline focuses on relatable scenarios and challenges that children encounter in their daily lives, providing practical examples of how saving money can make a positive impact. The e-comic encourages parental involvement through supplementary materials, sparking interactive conversations about saving money and fostering ongoing financial discussions at home. The accessibility and versatility of e-comics, allowing students to engage at their own pace on different devices. It provides narrative experiences for both beginner readers and language learners, fostering comprehension and sequencing skills without relying heavily on word decoding abilities. Through visually appealing illustrations and interactive features, the e-comic empowers young learners to develop financial literacy skills. With parental support, it cultivates lifelong saving habits, equipping students for financial success.

Keywords: E-comic, Parental, Saving, Storyline



BACKGROUND

In today's world, where financial decisions and responsibilities are becoming increasingly complex, it is essential to teach elementary students the importance of saving money. While financial literacy is a vital life skill for everyone, starting early with elementary students can profoundly impact their financial well-being and future success. Saving money among elementary students goes beyond the simple act of setting aside a portion of their allowance or earnings. It introduces them to fundamental concepts of financial responsibility, goal-setting, and wise decision-making. By developing these habits at a young age, children gain a strong foundation for their financial future. One of the primary reasons for teaching elementary students to save money is to instill financial responsibility. Saving money requires discipline and self-control, teaching children the importance of making deliberate choices about spending, saving, and investing resources. By understanding the value of money and the effort required to earn it, they become more mindful of their financial decisions and develop responsible spending habits. Additionally, saving money teaches elementary students the importance of goal-setting and delayed gratification. By setting savings goals, such as saving for a special toy or a desired experience, children learn to prioritize their wants and needs and work towards achieving their objectives. This process builds patience, perseverance, and the ability to delay immediate gratification for long-term rewards an invaluable skill that will serve them well throughout their lives. This E-comic Saving Money Made Fun will portray more on this matter. The purpose of E-Comic Saving Money Made Fun is to emphasize the significance of saving for students. Students save money to secure their financial future, covering unexpected expenses, investing in education, and achieving personal goals. Developing a habit of saving promotes healthy financial practices such as controlling spending, avoiding impulsive purchases, and creating a budget. Saving money allows students to focus on their studies without feeling overwhelmed by financial pressures. It enables them to seize opportunities like internships, study abroad programs, and research projects. Overall, saving cultivates a sense of security, stability, and financial independence among students.

PROBLEM STATEMENT

Students often lack essential financial literacy skills and fail to grasp the significance of saving money. Conventional teaching approaches for financial concepts are uninteresting and fail to captivate young learners. Consequently, students may face challenges in developing responsible saving habits and making informed financial choices later in life. There is a pressing need for an interactive and captivating tool that can effectively introduce financial literacy to students, making the concept of saving money enjoyable and relatable. Consequently, students may encounter difficulties in cultivating responsible saving habits and may make ill-informed financial choices as they mature. Without a strong grounding in financial literacy, they may encounter obstacles in effectively managing their finances and preparing for the future. To tackle this problem, there is a requirement for an interactive and captivating tool that can successfully introduce financial literacy to students. This tool should



make saving money an enjoyable and relatable concept, applicable to their daily lives. By integrating engaging elements like interactive activities, relatable characters, and visually appealing illustrations, the tool can enhance students' comprehension of financial concepts and inspire them to adopt responsible saving habits. This tool would enable students to make educated financial choices, establish attainable financial objectives, and cultivate the abilities essential for long-term financial prosperity. By rendering financial literacy enjoyable and relatable, this interactive tool can bridge the divide between conventional teaching approaches and the requirements of young learners, empowering them with the knowledge and skills necessary to navigate their financial journey.

OBJECTIVES

The primary objective of the e-comic "Saving Money Made Fun" is to educate and empower students about the importance of saving money while making the learning experience enjoyable and engaging. The e-comic aims to introduce students to fundamental financial concepts, such as saving, budgeting, and making informed spending choices. By presenting these concepts in an accessible and relatable manner, the e-comic promotes financial literacy and equips students with essential money management skills. Through captivating storytelling and relatable characters, the e-comic aims to foster a positive attitude towards saving money. By presenting saving as a fun and rewarding activity, the e-comic encourages students to develop responsible saving habits and understand the long-term benefits of financial planning. The e-comic incorporates interactive features, such as puzzles, quizzes, and decision-making scenarios, to actively engage students in the learning process. By encouraging participation and critical thinking, the e-comic aims to enhance comprehension and retention of financial concepts. The e-comic provides practical guidance on setting financial goals, creating budgets, and making informed spending decisions. By equipping students with the knowledge and tools to make responsible financial choices, the e-comic empowers them to take control of their finances and develop lifelong money management skills. The e-comic recognizes the importance of parental involvement in reinforcing financial literacy skills. It provides supplementary materials and discussion points that parents can use to engage their children in conversations about saving money and financial responsibility, fostering a supportive learning environment both at home and in school. By achieving these objectives, "Saving Money Made Fun" aims to inspire students to embrace saving as a positive and essential aspect of their lives, laying the foundation for a financially secure future.

STORYLINE AND THEMES

The e-comic uses relatable storylines and themes to teach students about saving money. It introduces characters who experience financial situations and teaches important money management lessons. The e-comic combines storytelling, visuals, and relatable scenarios to make learning enjoyable and impactful. In the e-comic, relatable main characters, often children or young individuals, go on financial journeys and discover the significance of saving money. These characters serve as relatable role models for students, enhancing engagement.



The e-comic features different storylines centered around the characters' financial experiences, such as saving for specific purchases, setting long-term savings goals, making spending decisions, and dealing with unexpected financial challenges. Each storyline aims to impart valuable lessons about money management and highlight the advantages of saving. The ecomic delves into different storylines centered around the characters' financial journeys. These storylines cover scenarios like saving for a specific item, setting long-term savings goals, making spending decisions, and dealing with unforeseen financial obstacles. Each storyline aims to impart important lessons to students about money management and the advantages of saving. The e-comic includes themes of financial literacy, including the importance of saving, setting financial goals, differentiating between needs and wants, making informed spending choices, understanding budgeting, and emphasizing long-term financial planning. These themes form the basis of the e-comic's narrative and help students learn and navigate the story's financial concepts. The e-comic portrays relatable situations that students can relate to, such as saving money from an allowance, making decisions about spending on toys or treats, and dealing with the temptation of impulse buying. By depicting these scenarios, the e-comic enables students to recognize the significance of financial literacy in their own lives. The narrative structure of the e-comic is designed to captivate students through engaging and relatable stories, creating an enjoyable and impactful learning experience. By combining storytelling, visuals, and relatable scenarios, the e-comic effectively communicates the concepts of saving money and financial responsibility in an educational and entertaining manner.

INTERACTIVE ACTIVIES

The e-comic "Saving Money Made Fun" incorporates interactive activities such as quizzes and puzzles. Quizzes promote active learning by engaging players in the content and enhancing their retention of information. They also sharpen analytical thinking and problem-solving skills. Additionally, quizzes create emotional immersion, leading to better knowledge recall and reinforcement of learned concepts. Participating in quiz games can increase self-confidence through successful completion and teach the value of learning from mistakes. Overall, these interactive activities foster active engagement, improved retention, and increased self-assurance. Puzzles offer numerous cognitive benefits, including enhancing memory, reasoning, critical thinking, problem-solving, spatial awareness, and environmental perception. They also help reduce stress by diverting attention from daily pressures and promoting relaxation. Puzzles foster creative thinking by encouraging unconventional approaches and exploring various strategies. Moreover, completing a puzzle brings a sense of accomplishment, improving mood and generating feelings of contentment and satisfaction. Overall, puzzles contribute to cognitive development, stress reduction, creative thinking, and positive emotions.

COMMERCIALIZATION POTENTIALS

The e-comic has great potential for commercial success due to its unique and engaging



approach to teaching financial literacy to students. With a growing demand for educational resources that promote financial literacy, the e-comic can be marketed to schools, educational institutions, and parents who are seeking interactive and effective tools to teach money management skills. Collaboration with financial institutions or organizations focused on financial literacy can broaden its reach and offer opportunities for licensing or sponsorship. Moreover, the e-comic's adaptability to digital platforms opens doors for online distribution and mobile applications, expanding its commercialization possibilities.

BENEFIT TO COMMUNITY

The e-comic supports the saving money curriculum by addressing essential financial literacy concepts like saving money, budgeting, and making informed spending decisions. By utilizing an engaging e-comic format, the curriculum becomes relatable and easily understood, enabling students to apply these vital financial concepts to their own lives. The e-comic engages students in interactive activities and scenarios that promote critical thinking, decision-making, and problem-solving skills related to finance. It encourages active participation and the practical application of knowledge. This fosters a deeper understanding of the importance of making wise financial decisions and planning for the future such as creating an emergency fun and achieving their financial goals. This empowers them to establish a financial safety net, like an emergency fund, to handle unexpected expenses without relying on debt or facing financial stress while also working towards both short-term and long-term financial goals. By evaluating options, considering consequences, and analyzing risks, students develop financial literacy and the ability to make informed judgments. The e-comic emphasizes the significance of setting goals, effective budgeting, and saving for short-term and long-term objectives. It illustrates potential outcomes and encourages forward thinking, enabling students to anticipate challenges and take proactive measures for their financial well-being. Overall, the e-comic's interactive approach cultivates critical thinking, decision-making, and problem-solving skills, empowering students with the tools to navigate their financial lives successfully.

CONCLUSION AND REFLECTION

In conclusion, teaching elementary students the importance of saving money is valuable for their future financial well-being. By instilling the habit of saving at an early age, we equip young learners with essential life skills that will benefit them throughout their lives. Saving money among elementary students cultivates financial responsibility and empowers them to make wise spending decisions. They learn the value of budgeting, planning, and prioritizing their needs and wants, setting the stage for responsible financial management as they grow older. Moreover, saving money teaches elementary students the importance of goal-setting and delayed gratification. They develop patience and perseverance as they work towards achieving their savings goals, experiencing the satisfaction of reaching milestones and building self-confidence in their financial capabilities. By saving money, elementary students also learn to be prepared for emergencies and unexpected situations. They understand the importance of



setting aside funds for unforeseen circumstances, developing a sense of security and resilience. The e-comic encourages parental involvement in the learning process. Supplementary materials and discussion points are provided to facilitate meaningful conversations between parents and students about financial literacy topics. Therefore, it is hoped that this e-comic will give better understanding in how saving money benefits us.

REFERENCES

- Caldwell, M. (2022, January 29). *7 reasons to save your money*. The Balance. https://www.thebalancemoney.com/learn-the-most-important-reasons-to-save-money-2386123
- Farah Nadia Azman, Syamsul Bahrin Zaibon, Norshuhada Shiratuddin. (2014). *Exploring Digital Comics as an Edutainment Tool: An Overview* (pp. 12–15). https://repo.uum.edu.my/id/eprint/14695/1/K15.pdf
- İlhan, G. O., Kaba, G., & Sin, M. (2021). Usage of Digital Comics in Distance Learning During COVID-19. *International Journal on Social and Education Sciences*, *3*(1), 161–179. https://doi.org/10.46328/ijonses.106
- Priyangga, B., Sarwi Sarwi, Arif Widiyatmoko, & Woro Sumarni. (2022, December 31). *Development of E-Comic Based on Local Wisdom to Improve Scientific Literacy*. ResearchGate; Iain Batusangkar. https://www.researchgate.net/publication/366733223_Development_of_E-Comic_Based_on_Local_Wisdom_to_Improve_Scientific_Literacy
- Robinzon, D. (2016, June 9). *Creating Comics: Visual and Verbal Thinking in the Ultimate Show and Tell*. Academia.edu. https://www.academia.edu/26025163/Creating_Comics_Visual_and_Verbal_Thinking in the Ultimate Show and Tell
- Sweta. (2023, June 13). *Savings*. Definition, Understanding, and Why Savings is Important? https://cleartax.in/g/terms/savings#:~:text=Savings%20can%20help%20in%20meeting, to%20stand%20against%20unforeseen%20emergencies.



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