



UNIVERSITI
MALAYSIA
KELANTAN



CRI 2021

CARNIVAL OF RESEARCH AND INNOVATION
VIRTUAL INTERNATIONAL EDITION

e-PROCEEDING

CARNIVAL OF
RESEARCH & INNOVATION
(CRI 2021)
VIRTUAL INTERNATIONAL EDITION

In conjunction with



INTELLIGENT 2021
POLITEKNIK KOTA BHARU

I N T E R N A T I O N A L
VIRTUAL INNOVATION CHALLENGE
(INTELLIGENT2021)

&



CREATIVE INNOVATION CARNIVAL
(CIC) 2021

20 – 21 SEPTEMBER 2021
UNIVERSITI MALAYSIA KELANTAN, MALAYSIA

CHIEF EDITOR: NUR HAFEZAH HUSSEIN

The background of the entire page is a light gray circuit board pattern with various nodes and connecting lines. At the bottom of the page, there is a more detailed and colorful circuit diagram featuring purple, orange, and red components.

e-PROCEEDING

CARNIVAL OF

RESEARCH & INNOVATION

(CRI 2021)

VIRTUAL INTERNATIONAL EDITION



CRI 2021

CARNIVAL OF RESEARCH AND INNOVATION
VIRTUAL INTERNATIONAL EDITION

e-PROCEEDING

CARNIVAL OF
RESEARCH & INNOVATION
(CRI 2021)
VIRTUAL INTERNATIONAL EDITION

In conjunction with



INTELLIGENT 2021
POLITEKNIK KOTA BHARU

I N T E R N A T I O N A L
VIRTUAL INNOVATION CHALLENGE
(INTELLIGENT2021)

&



CREATIVE INNOVATION CARNIVAL
(CIC) 2021

© Research Management Innovation Centre, 2021

All right reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or any means, electronics, mechanical, photocopying, recording or otherwise, without prior permission, in writing, from the Research Management Innovation Centre, Deputy Vice Chancellor (Research & Innovation) Office, Universiti Malaysia Kelantan.

eISBN

978-967-2912-89-7

E-PROCEEDING OF CARNIVAL RESEARCH & INNOVATION (CRI2021)
VIRTUAL INTERNATIONAL EDITION

DESIGNER

Muhammad Najibul Muthiie bin Che Ya'acob

CHIEF EDITOR

Nur Hafezah binti Hussein

EDITORS

Tenh Hock Kuan
Anuar bin Mohd Yusof
Mohammad Syukran bin Kamal Ruzzaman
Liyana binti Ahmad Afip
Nor Hazwani Munirah binti Lateh
Noor Izma binti Ab. Ghani
Nik Azida binti Abd Ghani
Wanly a/p Eh Keon
Nor Ashikin binti Mazlan
Nor Abidah binti Abdul Hamid
Tan Tse Guan

PUBLISHED BY

Research Management Innovation Centre (RMIC)
Deputy Vice Chancellor (Research & Innovation) Office,
Universiti Malaysia Kelantan,
16300, Bachok
Kelantan, Malaysia.

ORGANISED BY

Intellectual Property and Commercialisation Division
Research Management and Innovation Centre
Universiti Malaysia Kelantan

CO-ORGANISED BY

Faculty of
Creative Technology and Heritage

Faculty of
Language Studies and Human Development


POLITEKNIK
MALAYSIA
KOTA BHARU
Politeknik Kota Bharu, Malaysia

SUPPORTED BY

NATIONAL
STEM
ASSOCIATION
National STEM Association

DIGITAL STORYTELLING: A HOLISTIC PROJECT BASED LEARNING TO ENHANCE 21st CENTURY SKILLS

Najihah Mahmud

Universiti Malaysia Kelantan, Bachok, Kelantan
najihah.m@umk.edu.my

Siti Amirah Ahmad Tarmizi, Amaal Fadhlini Mohamed, Ariezal Afzan Hassan

Universiti Malaysia Kelantan, Bachok, Malaysia
amirah@umk.edu.my, fadhlini@umk.edu.my, ariezal@umk.edu.my

Highlights: Being recognized as a powerful technological innovation for the 21st century classroom (Robin 2008), DST has caught many practitioners' attention and they have started to utilize DST to aid in the teaching and learning process. This innovation has been widely used in the western context signified by the various established centres related to DST (Centre for Digital Storytelling, United States; Digistories, United Kingdom; Australian Centre for the Moving Image, Australia) and has started to spread to Asia (Digital Storytelling Asia Pte Ltd, Singapore).

Key words: *digital storytelling, CALL, 21st century skills, PBL, technology, language*

Introduction

Today's advanced economies, innovative industries, and high-growth jobs have increased the demands in the job market for more educated workers with 21st century skills which include the ability to respond flexibly to complex problems, communicate effectively, manage information, work in teams and provide new knowledge (P21, 2011). Current pedagogy needs an agenda that infuses 21st century skills into the teaching and learning to meet the demands of the global economy and a dramatically different society in order for students to develop 21st century competencies. Jakes and Brennan (2006) organized 21st century skills into four categories; digital age literacies, inventive thinking, effective communication, and high productivity.

As far as technology integration in education is concerned, digital storytelling (DST) is one of the pedagogical innovations that could be employed to develop 21st century skills and at the same time, enhance English language learning. The term 'digital story' was coined by Dana Atchley in the 1980's (Robin 2008). Many different definitions were given to define "Digital Storytelling" (McLellan, 2006; Hathorn, 2005), but in general, digital storytelling means combining the arts of storytelling with a variety of digital multimedia, such as images, videos, background music, and voice narration.

Content

DST is seen as an ideal alternative as compared to the conventional tasks given to students such as writing research reports, answering reading comprehension questions or memorizing grammar rules in the language classroom. Unlike the conventional tasks listed, DST can assist students to build up their English language skills, ICT skills, and soft skills (Robin, 2008; Hafner & Miller, 2011) which meet the demands in the job market. Recent evidences suggest that this computer-based multimedia task has helped students to improve their research skills, organizational skills, and give students greater interest in the content being taught (Salpeter, 2005).

It has been suggested that the inclusion of digital technologies "can support a more flexible, learner-centred notion of education that facilitates the soft skills vital for the demands of the 21st century global service and information economy" (Livingstone 2012, p.16).

There were four stages that students had to go through in the DST project as depicted in Figure 1.

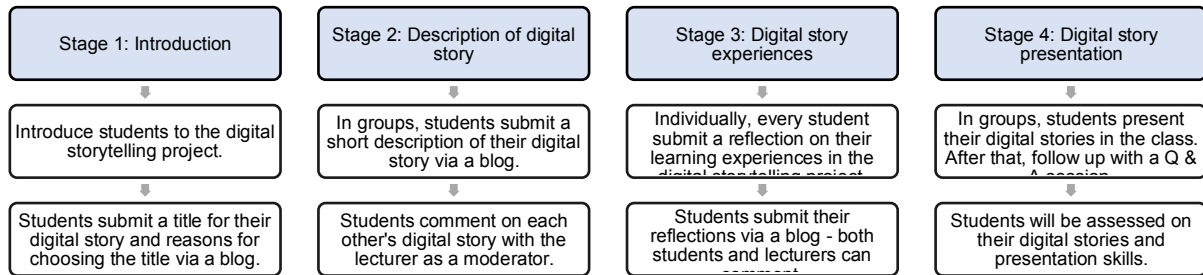


Figure 1 Description of the tasks and assessment involved in the project

The findings suggest that in general, despite the demanding nature of DST, students seemed to be receptive towards the innovation. They had developed their own digital stories in a group with minimal help from the instructors. It had enabled students to exercise their critical thinking skills and expose them to the collaborative working environment. The findings also revealed that the main challenges students faced were related to difficulties in working in group and technical problems such as software incompatibility and slow Internet connectivity.

References

- Hafner, C.A., & Miller, L. (2011). Fostering learner autonomy in English for science: A collaborative digital video project in a technological learning environment. *Language Learning & Technology* 15(3), 68-86.
- Hathorn, P.P. (2005). Using digital storytelling as literacy tool for the inner city middle school youth. *The Charter Schools Resource Journal* 1(1). <http://www.ehhs.cmich.edu/~tcsrj/phathorn.pdf>
- Jakes, D., & Brennan, J. (2006). *Digital Storytelling, visual literacy and 21st century skills*. http://www.techlearning.com/techlearning/pdf/events/techforum/ny05/Vault_article_jakesbrennan.pdf
- Livingstone, S. (2012). Critical reflections on the benefits of ICT in education. *Oxford review of education* 38(1), 9-24.
- McLellan, H. (2006). Digital storytelling in higher education. *Journal of Computing in Higher Education* 19(1), 65-79.
- P21. (2011). *The partnership for 21st century skills: A framework for 21st century learning*. <http://www.p21.org/>
- Robin, B.R. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory Into Practice* 47, 220-228.
- Salpeter, J. (2005). Telling tales with technology. *Technology and Learning* 25(7), 18-24.