

21st Century Skills through Film Production in Tertiary Education: A Transformative Assessment in a Literature and Media Course

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ABSTRACT

The 21st century lifestyle demands that individuals engage different communication modes and intelligences in every domain from learning, employment, communication and recreation and entertainment. In order to produce individuals that are competent and able to function competitively in the 21st century global field, tertiary education and assessments must move beyond traditional methods of essays, quizzes and exams that only test discipline related knowledge and memorization skills. Holistic, transformative assessments that can develop knowledge and skills and maximize an individual's potential is important in creating competent and marketable graduates. This study discusses the development of 21st century skills through a short film production assessment in the Literature and the Media course taught at The National University of Malaysia. The core principles of formative assessments are used to guide the development, design and implementation of the short film production assessment. A distinctive aspect of the assessment is the inclusion of pitching and short film premiere event organization elements which were found to be very beneficial in helping students develop skills such as decision making, problem-solving and public speaking. The tasks involved in all three stages of the short film production assessment were found to be instrumental in developing fourteen 21st skills in students. Students' reflections also provided an insight into the various skills developed through the assessment. This study reinforces the potential of filmmaking as a holistic and transformative assessment tool to equip tertiary students with the necessary skills to meet the demands of 21st century work and life environments.

Keywords: 21st century skills; short film production; transformative; formative assessment; literature

INTRODUCTION

Education has the power to change the lives of individuals and the future of nations and the world. The role of education is to empower individuals by equipping them with knowledge and skills that will allow them to maximize their potentials and become model citizens. Education should be a means to empower children and adults alike to become active participants in the transformation of their societies (The Role of Education, 2017). The 21st century has brought about transformations to almost every aspect of society from politics, economy, education, communication, entertainment to personal and communal relationships. A large part of these transformations is due to the advancements in technology that has changed the way people think, work, communicate and live. As a result, the 21st century environment requires individuals to possess knowledge, skills and attributes that are vastly different than those deemed important and relevant in the past. It is therefore imperative that educational institutions in their role to help individuals be relevant and fruitful, keep up with current trends and developments. It is the responsibility of educational institutions especially at the tertiary level to prepare students adequately so that they can meet the demands and requirements of the 21st century job market.

While a university degree would have been enough to guarantee a lucrative job and career in the past, in the 21st century, graduates would need to possess much more than academic qualification and the technical and discipline competencies from their degrees to succeed in the current job market (Lowden et al. 2011). As noted by Kasriel (2018), “the future of work won't be about degrees. More and more, it'll be about skills”. In the current job

market, “employers expect graduates to have technical and discipline competences from their degrees but require graduates also to demonstrate a range of broader skills and attributes that include team-working, communication, leadership, critical thinking, problem solving and managerial abilities” (Lowden et al. 2011, p. vi).

In a digital, technologically driven global environment, critical thinking, problem solving, creativity and innovative skills, communication skills, multimodal and digital literacy and leadership and entrepreneurial skills are highly valued and sought after by employers and organisations. University students preparing to enter the competitive 21st century job market need to equip themselves with these skills and competencies in order to secure employment upon graduation. These skills are referred to as 21st century skills. Boyles (2012, p. 42) uses the phrase 21st Century Knowledge, Skills and Abilities (KSAs) and identifies capabilities in analytical problem-solving innovation and creativity, self-direction and initiative, flexibility and accountability, critical thinking, and communication and collaboration skills as among the core set of KSAs.

As reported in Boyles (2012, p. 43), in the United States of America, “companies rank Leadership, Critical Thinking and Creativity among the highest rated desired skills of new employees”. Similarly, in Malaysia, employers cite communication, creative/critical thinking and analytical and problem-solving competencies as being important skills required in hiring graduates from Malaysia universities (Talentcorp 2014). Such findings across the globe have challenged educational institutions and educators to rethink and revise tertiary level education so that the courses and programmes develop 21st century skills and competencies in students and effectively prepare them for the demanding job market.

In recognition of the need to produce graduates who possess 21st century skills and competencies, there is a growing trend in institutions of higher education that aims to develop and hone skills that make students employable. Although emphasis should still be given to the foundational skills of reading, writing, mathematics and science, it is imperative that other skills such as digital literacy, collaboration, and self-reflection are inculcated in the education curricula especially in tertiary education. As noted in Lowden et al. (2011, p. 10), introducing new forms of assessments can begin a fundamental change in education. The way courses are taught, and the way students are assessed must consider the current trends and demands of the employment market and learning goals should not be limited to acquisition of knowledge of discipline and subject matter. Unfortunately, in many universities across the globe, both in the arts and science faculties, the use of summative assessments which focus on testing very specific concepts and skills is still the preferred over the more holistic formative assessments which focus on the process of learning. The use of formative assessments can be applied in any field and area of study including literary studies with careful thought put into the assessment design and implementation, learning outcomes of assessments can include discipline related competencies as well as additional skills that will help students become more marketable in the 21st century employment market.

This paper, therefore, aims to explicate how a transformative filmmaking assessment for a literature-based course is able to develop both knowledge of the subject matter and employable skills in students. The paper will discuss the 21st century skills that are developed through a formative short film production assessment completed by the students and aims to demonstrate how this assessment can be instrumental in preparing tertiary students for the 21st century job market. The paper presents findings based on observations and analysis of the short film assessment and students’ reflection on the task. Prior to detailing the methods of the assessment conceptualisation and implementation, it is important to understand what is meant by 21st century skills.

LITERATURE REVIEW

21ST CENTURY SKILLS

Creative, innovative, critical and reflective thinking skills, visual, media and technology literacy, global social and cross cultural awareness and collaboration, problem-solving, risk-taking and decision making are among the many skills identified as 21st century skills vital to ensuring the success of students in the 21st century work and life environment (Lowden 2011, Binkley et al. 2012, Boyles 2012, Griffin & Care 2015).

Various studies, scholars and practitioners have produced different definitions, descriptions and categorisations of what they consider to be 21st century knowledge, skills and abilities. Among these are the categorisations of the 21st century competencies described in Boyles (2012). Boyles (2012)'s descriptions are based on a comprehensive investigation and research on focus groups, business and industry trends report and educators in the USA. Boyles (2012) identifies and describes four major categories of 21st century KSAs. These categories are Information, Media and Technology literacy, Inventive Thinking, Communication and Collaboration and Productivity and Results.

While Boyles' list focused more on employable skills, those in Binkley et al. (2012) and Griffith and Care (2015) were broader and applied to education, employment and living environments in the 21st century. Binkley et al. (2012) and Griffith and Care (2015)'s definitions and categories are derived from a large international research project on The Assessment and Teaching of 21st Century Skills (ATC21S). This project focused on defining and measuring 21st century skills to help transform the teaching and learning of such skills in global education systems and support and improve the workforce (ATC21S 2012). The Assessment and Teaching of 21st Century Skills (ATC21S) identifies four sets of skills, Knowledge, Skills, Attitudes, Values and Ethics (KSAVE) as essential to enabling people to demonstrate "new ways of thinking, ways of working, tools for working and living" in a technology driven world (ATC21S 2012, Binkley et al. 2012, Griffin & Care 2015).

Another study is the P21's Framework for 21st Century Learning which was developed with input from teachers, education experts and business leaders (Framework for 21st Century Learning 2007). The P21 framework has 4 categories of 21st century skills, Learning and Innovation Skills, Information Media and Technology Skills and Life and Career Skills. Although the categorisations and definitions may slightly differ between the different studies on 21st century skills, the underlying concepts are found to be generally similar and universal. A common thread among all the skills and attributes identified in Boyle (2012), ATC21S, P21 and the other studies is that they all highlight the importance of creative and critical thinking skills, collaboration and digital literacy among some of the key skills needed in current graduates. According to Lowden et al. (2011), these skills which will help make tertiary students employable, should be integrated within the curriculum in universities and be developed through teaching and assessments.

However, even with all the research evidence to support the importance curriculum design and assessment in the development of 21st century skills, there isn't enough being done in schools and tertiary institutions to formally develop these skills in students. Although there have been increasing efforts to update teaching and learning methods, in many tertiary institutions around the world, traditional approaches to teaching and assessments such as tests, quizzes, essays and exams continue to remain the only method of assessing students. While such assessments do play a role in mastery of facts and information related to their subjects and discipline, beyond developing rote learning abilities and memorisation skills, they do little to develop skills such as creativity, innovation and collaboration.

ALTERNATIVE AND TRANSFORMATIVE ASSESSEMENTS

Research has shown that 21st century skills can be assessed through the introduction of alternative forms of formative assessment in combination of effective summative assessments (Framework for 21st Century Learning, 2007). Recommended assessments include “incorporating multiple measures to permit triangulation of inferences; designing complex and/or challenging tasks; including open-ended and/or ill structured tasks; using tasks that employ meaningful or authentic, real-world problem contexts; making student thinking and reasoning visible; and exploring innovative approaches that utilize new technology and psychometric models” (Lai & Viering 2012). Therefore, educators in institutions of higher learning have begun to use creative and transformative assessments that are less generic and more personal and impactful such as video presentations, filmmaking, digital essays, documentary making, social experiments, event managements tasks that develop skills for employability and help students get much more out of the learning experience. Such assessments also require students to think more carefully about how they will make use of the available technology in order to present their ideas in a creative and original manner and reflect more deeply on what they are presenting to their lecturers and peers.

As reported in Lowden et al. (2011), at higher education institutions, the implementation of innovative assessments along with current and effective teaching and learning resources will help develop 21st century skills in students and help shape the economic and social development of countries and communities for years to come. In addition to developing much needed employable skills in students, innovative assessments that are practical, heuristic, emphasize learner autonomy and enjoyment and are student focused can create positive learning experiences for students. These memorable and enjoyable learning experiences can potentially have long term benefits in shaping students’ perception on learning and education. It can produce individuals who value good education, take part in active lifelong learning as adults and have a positive effect on society and the nation.

In recognition of the importance of developing skills beyond the area of study, educators in tertiary institutions are changing the approaches to teaching and learning. Increasingly in the area of literary studies, alternative forms of assessments that are more holistic in nature and emphasize the development of 21st century skills including digital technology skills and multimodal literacies. At The National University of Malaysia, a literature course, E-Methods in Literary Production, focuses on the use of digital tools and platforms in its teaching and assessments (Noraini 2008). Another notable example is a literature course on Sherlock Holmes created by Swafford (2016) in the United States of America, where in lieu of taking exams and writing traditional papers, students create digital exhibits, write blog posts, share their work through social media, and collaborate with students and scholars from around the world. In alternative forms of assessment in the teaching and learning of literature, marks are awarded for originality and creativity in assignments and rote learning is never used as a teaching technique (Sullivan 2018). Such transformative approaches for assessing students can maximize learning goals to ensure that both discipline related knowledge and employable skills are developed. The process of formative assessments play an important role in helping students develop various skills and create transformative learning experiences. In the next section, I will discuss formative assessments and its key element which is used to guide the design and implementation of the short film production assessment in this study.

FORMATIVE ASSESSEMENTS

According to Popham (2008, p. 6), formative assessments are planned assessments involving a number of different activities in which teachers or students use assessments-based evidence to adjust their ongoing instructional procedures or their current learning tactics. Formative assessments are conducted at regular intervals of a student's progress with accompanying feedback in order to help to improve the student's performance (Chan & Sidhu 2013, p. 1)

Formative assessments transform the learning experience of students as they are more student-centred and empower students to take charge of their learning goals and outcomes. In a summative assessment, learners are assessed by their teachers at the end of a course to measure students' understanding of a subject and ensure students have met a specified standard set by the teacher or institution. Summative assessments focus on the results at the end of the course while formative assessments focus on the process and the learning that takes place throughout the assessment process. In many cases, summative assessments involve students using methods of rote learning and memorisation which do little to develop 21st century skills such as creativity, critical thinking and reflective thinking. In contrast, formative assessments encourage students to “utilize higher order thinking skills, and to develop reflective techniques by realizing the connection between assigned task and their individual lives” (Chan & Sidhu 2013, p. 3). The focus of formative assessments is to improve students' learning and how this can be done is by improving the teacher's instructional activities (Popham 2008).

Both students and teachers can use evidence elicited from the process of the assessment to further improve their approach and methods in learning and teaching. According to Popham (2008), the evidence used to adjust teaching and learning strategies may not necessarily be formal test results but can also be obtained through informal, less traditional ways. Less traditional ways of obtaining evidence for both teachers and students to adjust their instructional and learning strategies include consultations, pitching and peer observations and discussion, external review, mentoring and feedback (Irons 2008). As noted by Andrade and Heritage (2018), feedback is the core element of formative assessments. The use of current communication technology such as social media and messaging apps is especially useful for obtaining evidence in the formative assessment process as feedback can be quick and immediate. This process of obtaining evidence and adjusting teaching and learning strategies on its own involves the development of various skills and abilities such as reflection, critical thinking and decision making. The ability to alter their learning strategies after identifying strength and weaknesses in current strategies also allow students to gain more confidence and develop greater interest in their learning.

One form of formative assessment that has great potential to develop the various skills needed in the 21st century environment is filmmaking. The process of making a film involves the use of various skills and competencies and this can be harnessed as a pedagogical tool to optimize learning and 21st century skills development in tertiary students. This study adopts the principles of formative assessment discussed above in the design and implementation of a short film production assessment for the literature and the media course at The National University of Malaysia. Prior to discussing the design and implementation of the formative assessment, I will discuss the significance of a film production assessment in developing 21st century skills in students.

FILMMAKING AND 21ST CENTURY COMPETENCIES

Films have over the years played a significant role in education. As a rich cultural text, films contain various themes and elements that make them a great teaching tool at any level or field of study. Teachers and educators worldwide have used films to help student learn various

subjects and skills. Films have been popular material of choice for language teachers to help students learn a language or delve deeper into a literary text (Hu Xiaoqiong & Jiang Xianxing 2008). Films have also been instrumental in helping students learn about culture, psychology, communication and understand subjects such as business, management and organizations (Champoux 1999). Increasingly, educators have recognised the pedagogical potential of not just the film text but also the potential of the filmmaking process in developing skills valuable in the 21st century.

Creating and producing films involve the use of various skills and abilities and thus can be used as a holistic and effective assessment tool in teaching and learning to fulfill various learning goals. The process of filmmaking includes various phases such as preproduction, production, post production and distribution which involve developing ideas, forming plans, filming, editing and presenting (Theodosakis 2009). The whole process thus helps develop personal, social and higher order thinking skills much valued in the 21st century (Theodosakis 2009).

Niemi and Multisilta (2016) note that sharing and collaborative processes involved in the production of films and videos enable students to develop 21st century skills and allow students to become more motivated and engaged in learning. According to Niemi and Multisilta (2016 p.465), the processes involved in a creative task such as film production or digital storytelling allows students to develop skills such as "problem -solving, argumentation, decision-making and cooperation". Robin (2014, p. 432), explains how digital storytelling, which also includes filmmaking provides students with a strong foundation in many types of "Twenty-First Century Literacy" including "information literacy, visual literacy, technological literacy and media literacy " which are also identified as 21st century literacy.

Filmmaking is therefore very much in line with 21st century learning and skill trends that encourage individuals to become creators of content and information and not just mere users and receivers. Instead of merely being passive consumers of movies and cultural texts, making a film allows students to be part of the active, engaging, challenging and extensive creative process of filmmaking. Filmmaking involves skills to do with language and interpersonal communication, visual, spatial and digital literacy, creative and problem-solving abilities and fosters attributes such as diligence, patience, accountability, foresight and determination. Filmmaking also helps student develop passion that fuels their action and awareness of their own ability, strengths and weaknesses and those of others around them (Theodaskis, 2009). The range of skills and knowledge students would develop by making films would be much wider than they would by merely viewing or analysing them. These skills would not only enrich as students resume but also make them more well-rounded individuals.

As noted by Huerta (2015), filmmaking has a transformative effect and helps students of all abilities and levels do better in academics and life in general. Through the creation of original stories, students are taking part in a form of active learning known as metacognition where students create content prior to learning about it (Huerta, 2015). Thus, the process of filmmaking enables metacognition which is among the best possible learning outcome that can be achieved, making it a valuable and effective assessment tool for developing 21st century skills in students.

In the next section, I will describe how filmmaking has been used as a formative assessment in a literature-based course to develop 21st century skills in tertiary students at a university in Malaysia.

METHODOLOGY

This study discusses the conceptualisation, implementation and outcomes of a Short Film Production assessment in developing 21st century skills. The findings in this study are based on a short film production assessment carried out by six different cohorts of Literature and the Media course students over six 14-week semesters from 2015 to 2018 at the Faculty of Social Sciences and Humanities at UKM. The students in each cohort were Year 1, 2 and 3 undergraduates from faculties across the university pursuing various degree programmes such as Psychology, Geography, Geology, Mathematics, Physics, Economy, Education, English Language Studies, Malay Literature, Mass Communication and Engineering.

In the following sections, the Short Film Production assessment design, implementation and evaluation criteria will be described in detail and the findings presented based on the assessment design and students' feedback on the 21st century skills acquired through the task. The description will also include details of the Literature and Media course including the teaching and learning approaches and goals.

SHORT FILM PRODUCTION ASSESSMENT DESIGN

The Short Film production assessment was developed for the Literature and the Media course, also offered as a Citra (liberal) course at The National University of Malaysia (UKM) under the language, communication and literacy domain. The course is open to students from all faculties and years in the university and is designed to provide a comprehensive and holistic approach to critically understanding the relationship between literature and the media. Through its teaching and learning approaches, the course aims to develop students' knowledge and competencies in English Language and literary studies and enhance their critical thinking, creativity and multimodal literacies.

The teaching and learning approach used for the Literature and the Media course is largely influenced by the multimodality and multiple intelligences theory. The input given to students therefore are multimodal in nature and assessments too, are designed in a way that ensure students of different intelligences, strengths and abilities can do well in the course. Students are assessed entirely through course work and all assessments emphasize the development of knowledge of the subject as well as personal, social and employable skills. In line with formative approach, learning occurs throughout the process of the assessment and not purely from the outcome. The Short Film Production assessment is a major assessment in this course that allows students to engage with multiple modalities and develop various skills and attributes that will help them be better prepared for life and employment in the 21st century environment. In the following section, I will explicate the details of the Short Film Production assessment including the Task Description and execution of the different stages of the assessment including the input provided by the lecturer prior to the assigning this assessment to the students.

PRE-ASSESSMENT INPUT

In the weeks preceding the Short Film Assessment, the students learn how to critically analyse a wide range of literary and media texts of various genres. Film analysis is much emphasized, and students are exposed to visual analysis and processes that go into film-making. Students are also introduced to and discuss aspects of characterisation, plot, setting and themes including character, plot and symbols archetypes. Prior to the short film assessment, students work on another film related assessment, Film News Story where they view a newly released film of their choice in the cinemas and analyse and provide

journalistic-style coverage of the film's themes, issues and behind-the-scenes elements. Students also interview movie-goers to get their opinion on the film. Students present their Film News story in a video format. Students also participate in a short-film workshop conducted by the lecturer where they are taken through elements of film-making from scriptwriting, film shooting and editing. Students are introduced to various digital tools available for collaborative scriptwriting, and movie and sound editing. These various film-based activities help prepare students towards their Short Film Production.

TASK DESCRIPTION & EVALUATION

Students are briefed about the Short Film Production assessment and its evaluation criteria in Week 1 of a 14-week semester and start working on the assessment in Week 8 after the completion of two other assessments for the course. The assessment is the final assessment for the course and makes up the largest percentage, 40 percent, in terms of marks, for the course. Students have in total about 5 weeks to work on this task.

For this assessment, students, in groups of 6-7 members are tasked to produce an 8-10 minutes length short film based on a theme selected by the lecturer each semester. Students were asked to produce an adapted or original film based on a selected theme which differs every semester. Some of the themes include Malaysian short stories in English, Diversity and Multiculturalism in Malaysia, Transmedia Storytelling and The National University of Malaysia brand. The students then organize a short film premiere event where they screen their completed short film to friends and peers.

The short film assessment is made up for 3 stages which consist of pre-production, production and post-production. The components of each of these three stages and the tasks and skills involved will be discussed further in the discussion section.

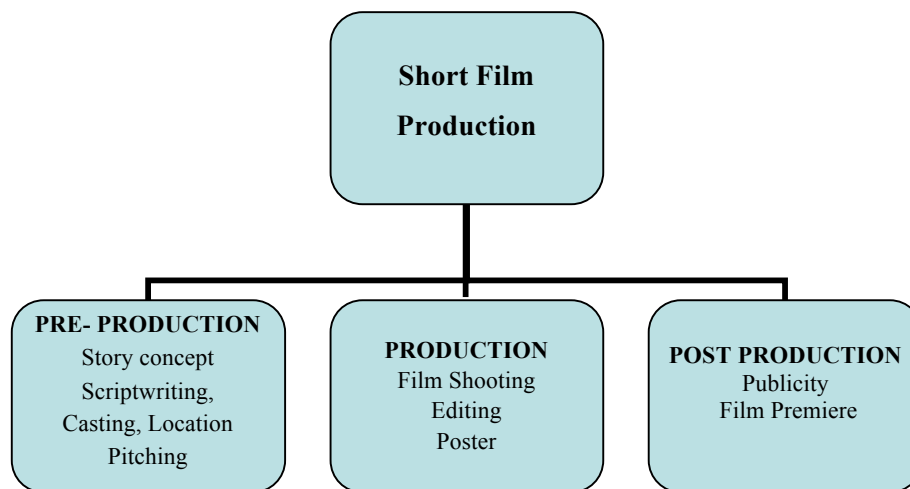


FIGURE 1. Short Film Production Stages

According to Popham (2008), when assigning effective formative assessments, teachers should carefully explain to their students what the curricular expectations are, how the students will be measured and how the students can help themselves and each other meet their learning goals. This allows students to feel empowered and promotes learner autonomy and collaboration. When students have a clear direction and understand the point and goals of an assessment, they will be more motivated to take the appropriate measures to move in the right directions to meet those goals. In line with this believe, the evaluation criteria for the

Short Film Production is presented to the students in Week 1 so that they understand all the tasks for the course and how these tasks will be assessed.

TABLE 1. Short Film assessment marking criteria

Tasks	MARKS	SKILLS
Pitching/Presentation:	10 marks	summary, justification, content, critical thinking, collaboration
Short Film Poster	5 marks	creativity, critical thinking, visibility/ publicity
Movie Premiere	5 marks	Publicity, event management, collaboration
Short Film	20 marks	Script, story, organisation, plot, theme, acting, music and sound, editing, originality, creativity, completeness.

For the assessment of the short film component of the task, worth 20 marks, a film rubric is used. The rubric is adapted from an electronic source, Edublog (2018) and considers elements of Organization - Story Clips / Images, Sound Track /Audio Track Editing, and Props and costumes, Originality Content - Accuracy and Content- Completeness.

DISCUSSION & FINDINGS

SHORT FILM PRE- PRODUCTION

The pre-production stage of the assessment involves the conceptualization of the story for the short film, scriptwriting, and casting, selection of film location, and general planning of the film shoot process and schedules. Students discuss with group members during class hours and outside class hours to develop the concept and script for their short films. They consult with the lecturers in class and during consultation hours to further develop their ideas and short film storyline. Once the story is developed, students start assigning roles for their production crew including those of director, scriptwriter, actors, cameraperson, editor and props and costume manager. The script then is developed, working titles for the film are proposed and students also start the casting process and scouting locations for the film shoot. Throughout this whole process, students develop various skills including creative writing skills when they work on the film script, literary skills as they think about plot and characterisation and leadership and organisational skills. In choosing the different roles for the production, students also learn to recognize their strengths and abilities and contribute to the production based on their abilities. This allows students who are gifted and able in specific areas such as music or digital editing to develop and showcase their abilities in the film production. Others who shine at acting or props design are also able to apply themselves and further develop their interests and talent in these areas. This helps students build their confidence.

PITCHING

The second part is Short Film Pitching. The pitching process is a session where students come together as class, midway through pre- production and pitch their short film production progress, ideas and concepts to their peers and lecturer in a focus group style. The aim of the pitch is to provide students the experience of concept or advertising pitching that is done in the media world. Students also can improve their public speaking skills and gain more confidence in themselves and their communication skills. Most importantly, in line with the formative assessment strategy, students have the opportunity to seek ideas and get feedback on their creative decisions from the lecturer and other groups in the class so that they can further make adjustment to their plans and improve their project. Students present their storyline (with option to not divulge key plots and climax), film working title, film poster

design and even different climax options to their peers and lecturers and use the feedback to change or further improve their short film.



FIGURE 2. Pitching session by Literature and the Media Students

This process has helped some groups which have doubts about their film poster designs and even endings get feedback from their peers. In the pitch sessions, students were able to voice their doubts about their or their friends' short films and help each other. Groups have asked their friends to vote on different working titles to help decide on the short film title and even sought help on which climax to use for their film. In line with Popham (2008)'s ideas on obtaining evidence through the formative assessment to adjust teaching and learning strategies, the pitching process in this task is a form of third level implementation which changes the classroom climate from one of competition among students to one of shared responsibility for learning on the part of all students. The pitching session allows students to have an opportunity to voice any problems and difficulties that they may with their project and seek help from the lecturer or friends to help sort and arising issues that could hinder their progress in the assessment.

Including the pitching session as part of the pre-production stage has also helped students gain outside perspective and feedback on their ideas and plans before executing them. Instead of having their ideas and film assessed at the end, students can discuss their ideas with other group mates and the lecturer through this pitching session and further improve on their concept. Students who have difficulties in progressing with their task also benefit from this pitching session. For example, some groups have trouble with coming up with a suitable ending to their film or are unable to decide on the appropriate title for the short film and get help with this through the pitching sessions after suggestions from their peers and lecturer. The pitching session also provides students to get affirmation from their friends on their ideas and be more confident in executing their task thereafter knowing that they are on the right track. Those who aren't, get a chance to go back to the drawing board and revise their plans and make it better.

In line with the formative assessment approach, the pitching session and the feedback they receive after the session allows students to adjust their learning tactics (Popham 2008) and ensure they maximize their potential through the assessment. Marks are awarded for the pitching process as students demonstrate the progress in the assessment and their collaboration in conceptualization of the story and decision making. The pitching session has

helped students be more organized in the completion of the assessment as students need to discuss their progress in all areas of the task to their lecturer and peers.

PRODUCTION

The production stage of the assessment involves the actual shooting of the short film. At this stage, students gather all the needed equipment, props and people and shoot their short film. This process involves students to have clear understanding of each scene in the film. Students need to have identified a suitable location for the scene and the props and costumes needed. This involves good planning and organisation skills. Time management is also vital at this point to ensure time isn't wasted on location while shooting.

Leadership and teamwork are important at this point as the director must lead the crew well and ensure the story is visualised effectively by actors and cameraperson. Actors need to demonstrate in depth understanding of the characters, story and script and the director's vision. The cameraperson must have visual and spatial intelligence so that the story is presented beautifully. The entire crew must work together to ensure the shooting progresses well and time and energy is spent optimally.

The images below show students on location for their short film shoot.



FIGURE 3. Short Film on- Location Film Shoot

POST PRODUCTION: EDITING AND FILM PREMIERE

The final part of the assessment is the Short Film Premiere which is when students organise an event to premiere their short films. Students are responsible for all aspects of the event organisation from invitations, theme, guests and event promotion and agenda. Leading to the short film premiere, students display and distribute their short film posters to publicize their short film and the Premier Event. The images below showcase the different short film posters created by the students for their short films. These posters have been also used as publicity material prior to the Short Film premiere.

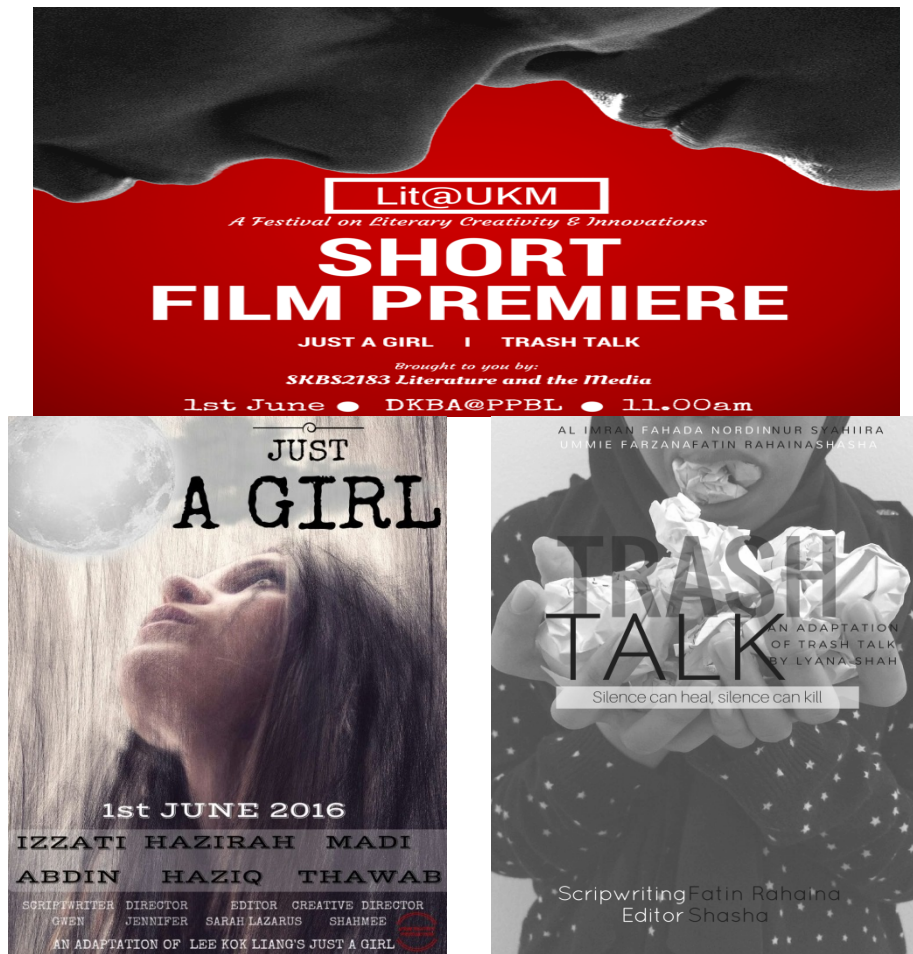


FIGURE 4. Short Film Premiere Publicity Posters

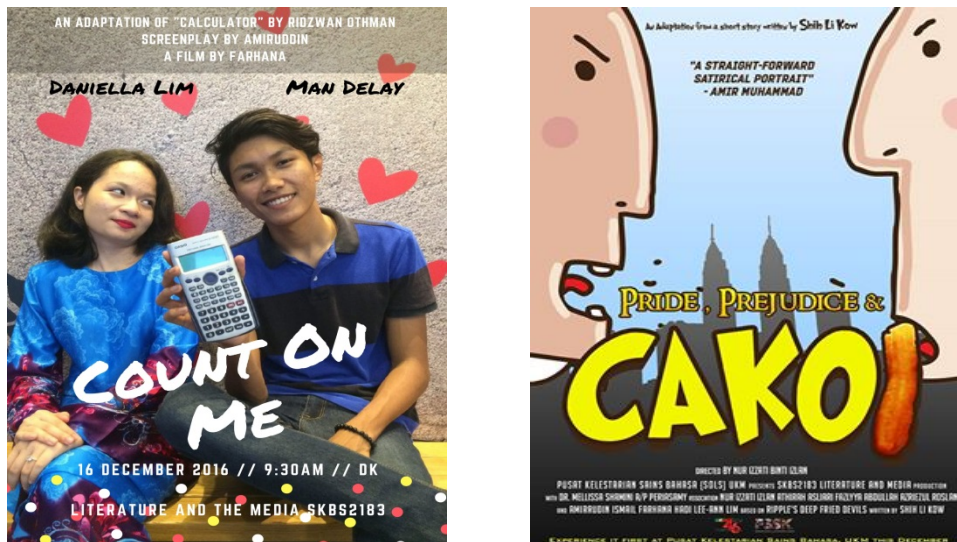


FIGURE 5. Short Films Posters

The images above show the posters produced by the students to publicize their short films. Drafts of the posters were earlier presented to their peers at the pitching session and selected as final version for the premiere. At the Short Film Premiere, groups introduce their films and screen their short film to an invited audience comprising of their friends, parents,

lecturers and members of the university. Students also answer any questions audiences may have on their short films. Once the films are screened, students also upload their short films on YouTube and share their short films with their friends through various digital social network platforms. The short film premiere aspect of the assessment is a highlight for the students and they take great pride in sharing their completed work with peers and friends and it also becomes a day of celebration filled with positivity that the students remember long after the course is completed.

SUMMARY OF TASKS FOR EACH STAGE OF SHORT FILM PRODUCTION

In the table below, I have summarized the various tasks that students do at each stage of the short film production assessment as described above. Table 2 below provides a clear understanding of all the work that is involved for each part of the task. In the next section, I will outline the different skills that are developed through each task that will serve to reinforce this study on the potential of filmmaking in developing 21st century skills and competencies.

TABLE 2. Tasks involved for each stage of the Short Film Production

STAGES OF SHORT FILM PRODUCTION TASK COMPONENTS	PRE-PRODUCTION			PRODUCTION		POST PRODUCTION
	Conceptualisation of Story & Scriptwriting	Production Crew	Pitching	Film Shooting	Film Editing & Poster	Film Premiere
	Group Discussion & Brainstorming	Selection of Director & crew members	Presentation of story concept	Location	Selection of Music & Sound	Publicity
	Scriptwriting	Casting of Actors	Progress report	Direction	Editing of scenes	Invitations
	Proposal of Film Title	Identify film shoot locations	Discussion of challenges and difficulties	Acting	Inserting narration and subtitles and credits.	Logistics
		Planning of film shoot schedule and logistics		Costume	Converting film to shareable digital format	Organisation
				Props	Poster Design	Introduction of Film & Crew
				Logistics	Poster Printing	Answering Questions on Film from Audience.
				Camera-work		

REFLECTIONS ON DEVELOPMENT OF 21ST CENTURY SKILLS

In this section, I will discuss the 21st century skills that the short film production assessment develops in students based on my observation and evaluation as the lecturer and reflections provide by students at the end of the course. The reflections include students' thoughts on the short film production assessment and the skills that they have developed through the assessment.

Based on my observation and evaluation of the students in this assessment, through their successful and impressive completion of the Short Film Production assessment, the

students demonstrated various 21st century skills. Through close analysis of the different tasks involved in the three stages of the assessment and students' output, I have identified that the short film production assessment has been instrumental in developing 14 skills and competencies that would be considered as valuable and relevant in the 21st century environment based on the multimodal approach employed in the teaching and learning of the course and the works of Lowden (2011), Binkley et al. (2012), Boyles (2012) and Griffin & Care (2015) on 21st century skills. These skills include multimodal literacy creativity, critical thinking, communication skills, collaboration, technological skills, cultural awareness and reflection.

The matrix below displays the various tasks involved in the short film production assessment and the 14 skills that the short film production task develops in the students based on the observation and analysis by the lecturer.

TABLE 3. Matrix for 21st Century Skills & Competencies Developed through Short Film Pre- Production, Production and Post-Production

ASSESSMENT TASKS	PRE- PRODUCTION		PRODUCTION		POST - PRODUCTION
	STORY & SCRIPTWRITING	PITCHING	FILM SHOOTING	FILM EDITING & POSTER	FILM PREMIERE
21ST CENTURY SKILLS DEVELOPED					
Multimodal Literacy	X	X	X	X	X
Creativity	X	X	X	X	X
Critical Thinking	X	X	X	X	X
Technology Literacy		X	X	X	X
Collaboration	X	X	X	X	X
Decision Making	X	X	X	X	X
Problem Solving	X	X	X	X	X
Financial Literacy			X		X
Communication Skills	X	X	X	X	X
Leadership	X	X	X	X	X
Socio-Cultural Awareness	X	X	X	X	X
Confidence	X	X	X	X	X
Emotional Intelligence	X	X	X	X	X
Reflection	X	X	X	X	X

The matrix above demonstrates how the various tasks at each stage of the assessment is instrumental in developing various skills in students. The range of tasks that students can potentially develop in successfully completing the short film assessment vouches for the holistic nature of the assessment. Students not only develop their linguistics and communication skills, they also learn to manage emotions and interact with others in solving problems together. The various skills that students learn through the assessment are further evident in the reflections that they shared at the end of the course which is discussed below.

STUDENT REFLECTION ON SKILLS AND KNOWLEDGE DEVELOPED THROUGH SHORT FILM ASSESSMENT

At the end of the completion of the Short Film assessment, students were asked to reflect on the knowledge, skills and abilities that they felt the assessment had helped them develop.

Students' reflections revealed that the assessment had developed a wide range of 21st century skills including teamwork, creativity, innovation, communication, problem-solving, leadership and people and time management. In the following section, I will discuss some of the many reflections of the students.

CREATIVITY

As highlighted in Boyles (2012), creativity is among the key 21st century skills sought after in graduates by current employers. In the design of the assessment, the inculcation of creativity was a top priority and goal and the films produced by the students reflected the achievement of this goal. Students too, recognized how this task helped them develop creativity which they were then able to transfer to other courses in their studies. A Geography major shared that, "the lesson that I've got from the class was helping me to generate idea on presenting more creative in the other class". Another student from the Faculty of Economy and Business added the short film assessment, gave her and her team "the opportunity to discover our own creativeness".

COMMUNICATION

With regards to communication, an English Language studies student stressed how the assessment helped develop communication and problem-solving skills and time management, "this project helped me realize the importance of good communication. It is important to clear up misunderstandings or confusion in order for the project to run smoothly and without delay". Another student, also an English major, commented how organising the short film premiere helped her develop communication and organisational skills, "for the movie premier, I volunteered to be in charge of inviting the guest and from there I learn how to write an invitation card and talk to individuals that are involved. Also, I learn how to talk to the printing shop upon requesting what type of card and paper material that I need for this project". The students' reflection shows how the assessment has been able to provide real world experiences that would be valuable for the student to apply in carrying out various projects and tasks in their university and work life.

CULTURAL UNDERSTANDING

Students also shared that the assessment helped them develop an understanding of culture, "I love how this project has a theme that relates to our culture because in these modern era, sometimes we need to look back in time and see the similarity that we have between cultures and the beauty of our local literature promotes appreciation towards the country. In order to create a story that would appeal to an audience of their peers, the students had to think a lot about local cultural values and norms, enhancing their own understanding of the culture. Boyles (2012) identified cultural and global awareness as an important 21st century skill and the creation of a cultural artefact such as a film fosters the development of cultural understanding and awareness.

COLLABORATION

Collaboration and teamwork were among the key aspects highlighted by all students in their reflections of the short film assessment. Every student remarked how the assessment developed their ability to work in teams and commented that the assessment helped them gain new friends. A psychology major commented that, "None of the courses I am taking this semester requires such teamwork and synergy as this course does. One of the main soft

skills gained is the ability to work in a group. Needless to say, the group consisted of students from various courses and faculties. Therefore, it is important for students to learn to organise and execute projects with people of different background”. The students also felt that, “the project inculcates creativity, management, performance and unity”. “The most interesting part of the course is the process of short film making and the movie premiere day. I've learned a lot of things about shooting, producing a script and having cooperation with my team which comes from different courses and faculties”

The collaboration that the assessment required was also the source of a lot of fun and enjoyment for the students which enhanced their learning experiences. This English major explained that, “we had to move to several places to shoot for the scenes. With that, my group members and I had a lot of fun shooting the short film. It was very tiring but worthwhile and not stressful at all because we were doing it together as a team. Everyone did their parts and helped each other along the way. We also get to know each other while working and it meant a lot to share experiences with them in different aspects and area of expertise. We all gained new knowledge with the information sharing among us.” This student’s reflection demonstrates how working as a group in this project helped reduce the stress and burden of the task. The reflections of the students show that they were able to develop their emotional intelligence by working with others especially when there was a lot of diversity in the group.

CONFIDENCE

Analysis of the reflections of students who have completed the short film assessment over the years have revealed that students felt the assessment helped increase their confidence in using the English language and in delivering an oral presentation which they felt would be helpful in the future. As shared by a student, “The project also helped to build confidence and good teamwork skills that are crucial in the working environment in the future” Another student, a psychology major, credits the short film assessment for helping him become more confident, “The benefits this project has given me are tremendous. For an introvert, it might be a bit uncomfortable and difficult to act in front of a camera, despite the scenes being exceptionally short. It had taught me to face my fear of being overly self-conscious in a situation”.

The pitching and the planning of the short film premiere component of the assessment was found to be beneficial for students as shared by this student who said, “I can now overcome my nervousness which I have to talk to people or strangers. I know how to handle an event or movie premiere and how to propose our idea to the crowd and how we are going to present it. This can really come in handy when students need to do a presentation either in the class or in front of a crowd”. Other than helping them further refine their ideas for the assessment, the pitching element is also instrumental in developing students’ confidence in public speaking as seen from students’ reflections.

LEADERSHIP

Many students have shared how the assessment has helped them develop leadership skills. Although the tasks require a lot of team work, it is evident from the students’ responses that they different roles that had to take on for the tasks helped them develop leadership skills. As mentioned by this student, “I have learned a lot of new things, given the role I had which is the director for the short film that I have produced, I learn how to fulfil my role as the leader, assigning tasks to my fellow group members and making sure everything goes smoothly during the shoot”. The production aspect of the task where different students had to take charge of different components of the shooting has been instrumental to this. Another student

studying English Language studies expressed that “the short film project has helped me conquer my fear of leading and I benefited with a leadership skill that will undoubtedly benefit me in the long run.

PROBLEM- SOLVING

Students also shared their experience in having to come up with solutions to problems during the task which demonstrates their problem-solving abilities. As shared by this student, “another skill I gained though this project is problem-solving. Initially my group was supposed to film in a village in Negeri Sembilan. However, several health issues arose in that area. We as a group had to scramble to find a new location in a short period of time”. Another student shared how they had to find ways to agree and sort out issues when there were too many ideas for the assessment.

TIME MANAGEMENT

As the assessment involved various tasks to be completed in a short amount of time, students learned how to manage time well. As shared by this student, “this project definitely helps in teaching us the time managing skills we need as undergraduates. We had to complete the short film and organise the event not only with time restraints but also with assignments from other courses”. Another student mentioned that “the soft skills that I gained during this project would be, managing time between shooting a short film and studying. This project also helped me in improving my stress management”. The last sentence shows how the assessment also helps students develop emotional intelligence and manage mental health.

TECHNOLOGICAL COMPETENCE

Students also commented on how their technical knowledge and skills increased tremendously due to the assessment. One student noted that through the short film assessment, “I’ve learned the skill of dealing with people, making compromises and trying my best to give the best while making everyone happy. I’ve also learnt skills that would make me a valuable employee one day which are leadership, script writing, and I’ve also helped with video editing and shooting thus gaining basic knowledge in those areas”. The production stage of the assessment specifically, was instrumental in helping students gain technological competence. As shared by one student, “my experience from this project is that I get to learn how to use the camera better when making the short film and explore new things regarding the camera. Throughout the making of our short film, we learn what it feels like to be a production crew working on a film and undergo the steps of making a short film from scriptwriting to filming and finally editing the whole thing”. The editing process was also helpful in giving students exposure to digital tool as shared by this Geography student, “a few soft skills that had helped me gain great experience from the project, among them are skills of handling camera of recording video in different angles, video editing in cutting & trimming the video, combining the video with narration audio, music background and the video effects. Even students who had no prior experience with digital technology were happy that the assessment provided them with a learning opportunity as shared by this English student, “I got a chance to update myself on the current technological ways students can present and creatively express themselves whereas before this I was under a rock regarding some of the software and tools used to create this short film. It was an ‘eye-opening’ experience for me. I had a chance to learn and make use of the technological advancements we have that can help us communicate better and deliver or present something well”. The

assessment therefore helps students to learn and explore new technological tools that can help them in both their studies at present and in their employment in the future.

CONCLUSION

This study has demonstrated how 21st century skills are developed through a transformative filmmaking assessment in a literature-based course at The National University of Malaysia. As a formative assessment, the short film production assessment focused on the learning achieved throughout the process of the assessment and not just the outcome. A distinctive characteristic of the short film production assessment is that the focus was not only on the end-product of the assessment which was the short film. Instead, equal importance was given to the pitching and the organisation of the premiere which were all processes involved in filmmaking. The various components and stages involved in filmmaking allow the development of various skills that was harnessed as a holistic pedagogical tool in this study. The pitching element of the task allowed both the lecturer and the students to obtain feedback to allow for further improvements be made to the execution of the assessment which is an integral part of formative assessments. The short film premiere component in the short film production task should especially be noted as a creative and innovative aspect in this assessment. This component of the task sets this assessment apart from other creative or film production tasks as it provided the student the opportunity to develop skills related to event management which would be useful to them in the future. The short film production combined with the pitching session and short film premiere organisation forms an assessment that is holistic and transformative. In addition to gaining knowledge on literature and the media, the assessment also helps students develop various 21st century skills related to technology and people. The assessment was found to have helped students develop communication skills and develop their skills in working with digital tools which will be beneficial to them in their future careers no matter which field it is in.

In their reflections after completing the assessment, students revealed that although they found the assessments challenging and time consuming, they enjoyed collaborating on a creative project and took pride in their creations and most importantly, enjoyed and appreciated the learning process. This study therefore demonstrates that filmmaking can be an extremely effective form of formative assessment with the right design, implementation and execution. Finally, this study also shows that through updated content and methods that are more inclusive and current, literary studies can remain relevant in the 21st century and play a part in producing students who are holistic, balanced and equipped with skills necessary in the current and emerging job markets.

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