A CONCEPTUAL MODEL FOR DEVELOPMENT OF FUNCTIONAL VIDEOS

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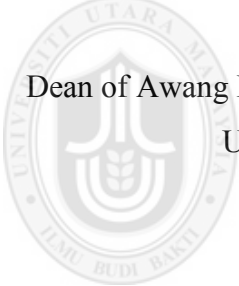*(Name of Supervisor/Supervisors)*   *(Signature)*

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Abstrak

Salah satu masalah utama dalam kalangan murid sekolah di Malaysia ialah peningkatan masalah sosial dan ketidakupayaan sistem pendidikan di Malaysia untuk membendung masalah ini. Pelan Pembangunan Pendidikan Malaysia (2013-2025) menekankan penggunaan media dalam proses pengajaran dan pembelajaran supaya proses pembelajaran di sekolah menjadi lebih kontekstual, autentik dan bermakna. Dalam menyahut cabaran ini, kajian ini menerajui langkah untuk menangani masalah tersebut melalui penggunaan rancangan video pendidikan. Satu model konseptual untuk penerbitan rancangan video pendidikan yang menekankan nilai-nilai sosial dibangunkan. Melalui kaedah validasi pakar, model konseptual yang dibangunkan didapati menepati keperluan isi kandungan, teknologi pengajaran dan pembelajaran, teknikal penerbitan dan nilai-nilai sosial. Model konseptual ini juga mudah difahami, mempunyai perkembangan proses pengajaran dan pembelajaran yang terancang, relevan, fleksibel dan konsisten. Seterusnya, model konseptual ini telah digunakan untuk penghasilan satu video prototaip yang mengutamakan penyerapan nilai-nilai sosial. Video prototaip yang dihasilkan telah merekodkan nilai yang tinggi dalam kajian penerimaan pengguna yang direkabentuk khas untuk kajian ini. Hasil dapatan kajian ini, terutamanya model konseptual telah menyumbang kepada penganalisisan dan penerbitan video pendidikan murid sekolah di Malaysia. Model ini boleh digunakan sebagai panduan oleh penerbit rancangan video pendidikan. Selain itu, video prototaip yang diterbitkan boleh dijadikan sumber rujukan berkualiti untuk penerbitan video pendidikan oleh Kementerian Pendidikan Malaysia.

Kata Kunci: Rancangan video pendidikan, Model konseptual, Nilai-nilai sosial, Masalah sosial, Murid sekolah di Malaysia.

Abstract

One of the main problems among Malaysian school children is the rapid rising of social problems and the lack of ability of the education system to curb this problem. The Malaysian Education Reform Plan (2013 – 2015) emphasizes the use of media in the teaching and learning process to make the learning process in schools more contextual, authentic and meaningful. In respond to the problem, this research undertakes the task of curbing the social problem among Malaysian school children via educational video programs. In order to achieve this task, a conceptual model of educational video program production which emphasizes on ingestion and intervention of social consideration values was developed. Through expert validation method, the proposed conceptual model that was developed by means of design science research approach, was found to satisfy constructs of content, instructional design, technical design and social consideration, which are, easy to understand, covers clear steps, is relevant, demonstrates flexibility, scalability, accuracy, completeness and consistency. This conceptual model was used to produce a prototype educational video program focusing on social consideration values. The prototype that was produced recorded a high acceptance rate in the user acceptance study using the instruments developed for this research. The outcomes of this research, particularly the developed conceptual model, contribute to the analysis and production of educational video programs for Malaysian school children. The model can be referred as a guideline by educational video programs producers. Furthermore, the prototype that was developed for the user acceptance study can assist the Malaysian Ministry of Education in using quality information for the development of educational video programs.

Keywords: Educational video programs, Conceptual model, Social consideration values, Social problems, Malaysian school children.

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2. Suras Kanagasabai, Norsiah Abdul Hamid & Sobihatun Nur Abdul Salam (2016), Content Specifications and Elements of Instructional Design for the Development of Educational Media Materials.   International Journal of Innovative Research and Development, Volume 5, Issue 10, June 2016-Articles.

3. Suras Kanagasabai, Fauziah Abdul Rahim & Sobihatun Nur Abdul Salam (2015), Literacy For Life, Guidelines and Rubrics on Designing and Developing Resources for Educational Television Programmes Through Affective Mediation. School of Education and Modern Languages: UUM college of Arts and Sciences.

4. Presenter, International Conference on Knowledge Transfer, December 1-3 2015, Putrajaya, Malaysia.

5. Presenter, International Malaysian Educational Technology Convention 2017 October 1-3 2017, Terengganu, Malaysia

CHAPTER ONE
INTRODUCTION

1.1 Background of Study

One of the important criteria of an educational system is to equip and authorize the children with the intellectual tool of social consideration and enhance pro-social behaviour. Educationalists are increasingly applying the social consideration approaches in the learning process. Sociocultural theorists strongly insist that children cannot be considered in isolation from their historic and social context (Davis, 2015). Children's learning experiences are shaped by two principal agencies; the family and the school and both of these agencies depend strongly on social consideration values to mould and shape the children's learning experiences. The influence of social consideration values will help these two agencies to embed the social and cultural systems where the children are growing up. Since, there is a great diversity in Malaysian social conditions, the social consideration values have been going through constant modifications to align with the major paradigm shifts in Malaysian society (Azizah, 2015).

Due to this, the social consideration values should be given serious consideration in moulding and shaping Malaysia's young generation. The World Summit on Media for Children held in Kuala Lumpur (2014) pledged to reframe children's media and take it to a new paradigm to promote pro-social behaviour by generating a declaration consisting seven main values and thirteen elements as shown in Table 1.1. These values and elements are validated by Assured Social Value Reports – Social Value UK (2017), an organization that gives academic work and calculations, assumptions and findings a mark of quality and credibility.

Table 1.1

Core Elements of Social Consideration Values

Values	Elements
Decency	Gender and Sexual roles
	Sexual orientation
Kindness	Language
	Violence
Duty	Political Bias and Regional Bias
	Safety Standards Compliance
Tolerance	Belief system
	Multiculturalism (and anti-racism)
	Native and Culture roles
Courage	Affective Mediation
Self-discipline	Age
Respect for law	Ethical and Legal issues
	Socio-economic status

Source: World Summit on Media for Children Foundation – WSMCF (2014)

The concept that video programs are basically a medium of entertainment is long gone. Video programs are being successfully used for education in many countries. For instance, Finland, whose education standards have been rated as the best in the world, depends highly on educational video programs both in school and at home to deliver the syllabus content (Siemens, 2015; UNESCO Annual Report, 2015). The ability to adapt and follow different approaches when used in different educational situations is the strength of these programs in this changing paradigm. This cognitive style will ultimately affect how information is processed in the students' memory structure. Students will also easily process the given information, if it is performed in accordance with their dominant learning style (Ahmad Zamzuri, 2016). Educational video programs can be aligned with school time tables and curriculum, and will take

the form of school broadcast when systematically organized. The primary purpose of educational video programs is to disseminate learning content in the form of educational packages and if executed and accomplished wide enough, will influence the target audience and the educational program itself (Pawlik, 2014). It can also easily translate the four elements of educational acts (teaching, cultural skills, imparting knowledge and creating an atmosphere) into communication terms that will benefit the country.

'Social Consideration' in educational video programs shows the daily character of day-to-day life. The important structure of an educational video program, for example, is the outcome of these daily routines. Social consideration values in educational video programs thus demands familiarising one self with the existing rules and norms while also making use of one's personal expertise and experiences that includes the capability to reflexively monitor the flow of social life.

An educational video program with good social consideration values is like a roller. There is the set-up in the form of an eye-catching theme, the anticipation in the form of the climb, and the payoff in the form of the drop. Besides this, the video program should also have a great pacing, a believable plot and a general helping of thrills, anxiety and curiosity.

The word "transformation" has always been and still remains a buzzword in Malaysia since the unveiling of the National Transformation Programme (NTP) on January 28, 2012. One of the aims of NTP is to "create a society whose *akhlak* and moral values are of a high standard". Naturally, transformation entails changes in the education

system. Hence, the Ministry of Education (MOE) has addressed this need via the Malaysia Education Reform Plan 2013-2025, 2012). Aligned with the National Education Philosophy (NTP) and its aim to create a moral society, the Blueprint aspires to create: "An education system that gives children shared values and experiences by embracing diversity" and an environment where, "Every student will have ethics and spirituality" (Malaysia Education Reform Plan 2013 -2025, 2012).

In December 2018, Dr. Maszlee Malik, the Minister of Education has announced that Civics Education will be re-introduced in schools as a core subject in order to mould students into world-class citizen. However, the minister has promised that the new version would not be as unexciting as its predecessor because there will be a lot of media interference in the learning of Civics. One of the main media to play the role is the educational video programs (MOE Press Release, 5th December 2018).

The present generation that we are facing is fully a media generation. They demote almost one quarter of their day to media. Everyone should realise that anything that attracts young people to this extent, should be given serious attention. As media devices spread further into young people's environments with more and more portability, media messages will be more ubiquitously present in this media saturated-world.

In accordance to this, children and television cannot be separated. When a child reaches the age of 18, he or she would have watched 250 to 500 hours of video programs in 18 years (Lyle & Hoffman, 2016). This means that most children would have spent the biggest part of their lifetime viewing television than any other activity

except for sleeping (Huston & Wright, 1985). A very worrying fact that needs to be mentioned here is that the influence of electronic media and peers on children has risen but the influence of parents and teachers on their children has declined tremendously (Frady, 2015). Due to this, children's cognitive development and media use in the future can be effected by their exposure to media during the young age.

Over the past 20 to 30 years, use of video programs has risen steadily (Corporation for Public Broadcasting - CPB, 2014). Teacher activities, patterns of use and expectations for outcomes were measured in these surveys. According to a recent study, this technology is not only widely used, but they are also valued very highly as a means of teaching more creatively and effectively (CPB, 2014).

The direct relationship between frequency of use and perceived student achievement and motivation is one of the most significant survey findings that support the value of these tools of media (Kop & Hill, 2008). They find that students learn better and more elaborately when video is used. To add to this, the survey also finds that almost 70% of these students have their motivation increased and more than 50% of these frequent users also use new vocabulary.

One of the important targets of educational video programs is to transform children as learners who are cognitively and meta-cognitively involved in experiencing their own learning. To achieve this end of the target, educational video programs should come with clear objectives, synopsis, and appropriate usage including instances such as for discussions, stimulating thinking and interest. Programs should be properly integrated so that they will engage the student's mental process to facilitate learning. As one of

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the foundation of pedagogical approaches of modern learning theory is active learning, students should be actively (intellectually) challenged and engaged in the learning activities (Callow, 2010; Denning, 2013).

1.2 Overview of Malaysian Education Television

In the Malaysian context, the history of Education TV started with broadcasting. Education TV which is also known as 'TV Pendidikan' was a TV channel which airs educational video programmes via terrestrial channel. The programmes aired via this channel are solely produced by the Educational Technology Division, Ministry of Education, Malaysia. Programmes of all subjects are produced and aired through this channel. TV Pendidikan started its operation on 19 June 1972 when it was officially launched by Tun Abdul Razak, Malaysia's second Prime Minister. On 30 August 1976, TV Pendidikan expanded its wings to East Malaysia (Sabah and Sarawak). The broadcasting channels were RTM TV1 and RTM TV2 from 1972 to 1999; Astro Channel 28 from 2000 to 2002; Astro Channel 13 from 2003 to 2006 and TV9 from 2007 to 2009. TV Pendidikan ceased broadcasting on 31 December 2008. It was later replaced by EduwebTV portal (http://www.eduwebtv.com) (Journal BTP, 2015).

EduwebTV is the official education portal of the Ministry of Education, Malaysia. EduwebTV, launched in March 2008, is the core of the ministry's effort in enhancing the teaching and learning process in school using the latest technologies in ICT to ensure the nation's excellence in education. It is also part of the government's comprehensive plan to use ICT infrastructure in schools and to create an ICT- savvy generation.

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EduwebTV is home to videos that are available on demand anywhere, anytime and by anyone who is connected to the World Wide Web. Production genres include educational news bulletins, dramas, documentaries, game shows, forums and teacher-hosted e-tuition programmes, special reports and video clips. EduwebTV also broadcasts a limited number of live programmes on educational issues. The URL to access EduwebTV is www.eduwebtv.com.

Bearing the tagline, 'Digital Education for All', EduwebTV aims to provide educational news and learning videos to students, parents and teachers in both urban and rural areas besides empowering the education system through the use of the Internet. The scope of EduwebTV encompasses the setting up, operations, maintenance and management of a virtual TV station and the hosting and delivery infrastructure of its contents to the digital front through the Internet (Journal BTP, 2015).

EduwebTV is presented to the target population as a flexible and customizable multimedia platform providing educational videos which can be assessed at anytime and anyplace by anyone connected to the Internet. The management of information on EduwebTV divides its collection of news and learning materials, and places them into various channels providing resourceful information on different aspects of education. At the background of this well-presented front is an organized team working around the clock bringing educational news and learning videos from a conceptual 'theme' into completion on a day to day basis (Journal BTP, 2015).

It should be notified here that the production of the learning videos of EduwebTV are strictly based on the Malaysian school syllabus, where else the educational news gathering is done to update school children with the latest happenings in the education world. None of these programs are specially produced to tackle social problems among school children. Even worst, there are no guidelines or conceptual model for production of educational videos programs that would contribute in reducing the alarming rate of social and discipline problems among school children.

1.3 Motivation of Study

The Journal of Media Awareness Network (2015) explains in its article that video programs can help young people develop better relationship with family and peers. Due to this, video programs were given a lot of importance in many countries as a teaching tool and source. The success stories of using video programs for education in many countries prove that video programs are not basically a medium of entertainment only. This is because video programs are adaptable for different educational scenarios.

The importance of video programs in communicating idea, information, attitudes and skills have been affirmed by researches who attempt to study various reports published on educational video programs in different countries in different situations. According to British Broadcasting Director, (Tony Hall, Baron Hall of Birkenhead, April 2013 – present-Incumbent) "next to home and school, I believe video programs has a more profound influence on human race than any other medium of communication". Based on this, a study was conducted on 30 Malaysian school students (Appendix A) to get an insight of their views of educational video programs.

1.3.1 Current State of Social Problems among School Children

Statistics of disciplinary problems in schools recorded by the Ministry of Education from 2012 to 2016 shows a trend that is very disturbing (BPSH, 2016). Table 1.2 shows the comparison of cases for the past years in the 16 states in Malaysia.

Table 1.2

Comparison of Discipline Cases from 2012 -2016

No.	State	Number of Students Involved in Disciplinary Cases Year					Total
		2012	2013	2014	2015	2016	
1.	Selangor	18,188	20,314	21,952	23,011	24,562	108,027
2.	Johor	12,219	12,922	13,472	13,913	14,389	66,915
3.	Sabah	12,088	12,951	13,407	14208	14,816	67,470
4.	Perak	11,752	12,012	12,596	12,994	13,622	62,976
5.	Sarawak	11,412	11,610	12,002	13,022	13,551	61,597
6.	Kedah	10,054	10,725	11,016	12,115	12,918	56,828
7.	WP KL	6,058	7,126	7,174	8,756	9,028	38,142
8.	Melaka	5,356	5,669	6,013	6,813	7,173	31,024
9.	N. Sembilan	4,339	5,101	5,827	6,418	6,998	28,683
10.	Pahang	4,133	4,725	5,208	5,972	6,482	26,520
11.	Terengganu	3,859	4,012	4,816	5,181	5,885	23,753
12.	P. Pinang	3,777	4,001	4,987	5,627	5,921	24,313
13.	Kelantan	2,669	3,192	4,028	5,087	5,712	20,688
14.	Perlis	747	908	1,024	1,778	1,927	6,384
15.	WP Labuan	475	486	501	584	602	2,648
16.	WP Putrajaya	65	72	95	118	147	497
	TOTAL	**107,191**	**115,826**	**126,778**	**135,597**	**143,733**	**629,125**

Source: Bahagian Pengurusan Sekolah Harian, Kementerian Pendidikan Malaysia (2016)

In relation to Table 1.1, *Figure* 1 .1 below shows the most common social problems involving Malaysian school children from 2012 to 2106.
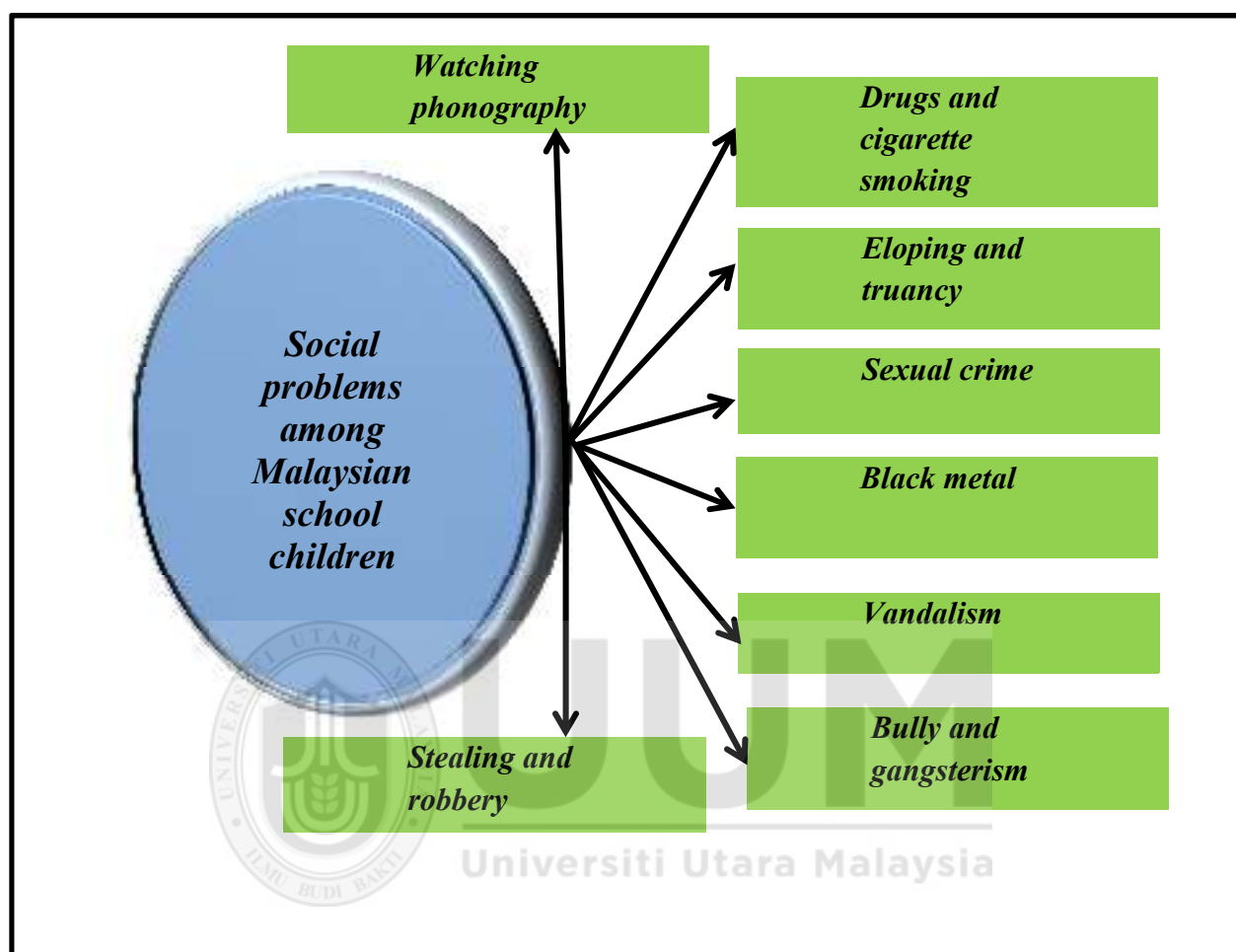
Figure 1.1. Most common social problems involving Malaysian school children from 2012 – 2016.
Source: Bahagian Pengurusan Sekolah Harian, Kementerian Pendidikan Malaysia (2016).

Based on this statistics, it is obvious that the number of cases never declined but in fact gathered momentum in increasing the number of students involved in disciplinary cases. The Ministry of Education has admitted that it is not solely their responsible to curb the disciplinary problems among school children but also needs the involvement and commitment of various organization that are directly or indirectly involved with the school children. Among the reasons outlined for this increase of disciplinary

problems are the student themselves, family, peer friends, teacher's attitude, school environment, social background and media (BPSH, KPM, 2016). Even though, the Ministry of Education has admitted that it is not solely their responsibility to curb these disciplinary problems, the educational video programs producers (Educational Technology Division, MOE), have the responsibility to use the media at its best and produce video programs ingested and intervened with social consideration values to help curb these disciplinary problems.

1.3.2   Support from Existing Television Stations

Malaysia's networked content industry objectives by Malaysia's Communication and Multimedia Corporation (MCMC, 2016) clearly states that given Malaysia's vibrant and diverse culture, it is unlikely that any definition will be comprehensive or be up-to-date with Malaysia's national identity and social values. It is therefore prudent not to define these terms, but rather, to ensure that the strategic plan instils a process of continual public discussion concerning these values; and actively supports different and innovative local content creators with a view of broadening and deepening Malaysia's own understanding of its national identity and values.

As stated in Table 1.3, if the existing video programs aired via television are able to ingest these three criteria successfully and effectively, we should not be having so many social problems among school children. Table 1.3 shows the percentage of airtime allocated for programs that are specially produced to tackle social problems among its viewers.

Table 1.3

TV Channels and Their Airtime Percentage to Tackle Social Problems

TV Channels	% of Airtime
Al Hijrah	22.6
ASTRO	14.6
TV1	13.8
TV2	9.6
TV3	8.1
NTV7	6.9
8TV	6.3
TV9	6.1

Source: Malaysia's Communication and Multimedia Corporation (MCMC, 2016)

Even though these channels do carry out their corporate social responsibilities (CSR) to the Malaysian citizens by advocating certain percentages of their airtime specifically to tackle social problems besides having elements of social consideration in other programs, but the problem here is how effective are these programs to curb the social problems.

This question arises because what the TV stations are actually doing is to bombard their viewers with sumptuous diet of mega budget serials, soaps, family sections and short films on a variety of issues. These programs are ranging from good family values to adultery and extra-marital affairs. From comedy to horror shows, world of mystery and suspense to extreme violence; science and wild life to ghosts and unnatural, racy crime thrillers to court, suave to funny talk shows uninterrupted sports

from all over the world. The news and current affairs, film-based music, modern music and international music, cartoons and movies, classified as classic and block busters. The list of programmes in the 'infotainment fold' never seems to end, on the contrary it goes on increasing with private satellite channels all vying for better television rating points (TRPs) - the yardstick of measurement of viewership and thereby contributing to a bigger slice of advertising revenue. With such 'infotainment fold' and the information from Table 1.2, definitely there is a need for further investigation and to improvise these video programs.

1.3.3 Initiatives of Ministry of Education, Malaysia

The four posters (Figure 1.2) show initiatives taken by the Ministry of Education (MOE) to curb social problems in schools. In an effort to curb disciplinary problems, the MOE established a comprehensive set of school rules and also introduced the punish-based disciplinary practice (Tie, 2016). Enforcement of school rules are carried out by a surveillance system, punishments and penalties, which include corporal punishments, demerit points, suspension, expulsion and alternate school placement (Tie, 2016). Currently, the procedures for curbing school discipline issues are outlined in the 'School Disciplinary Procedure Handbook for Headmasters and Teachers, produced by the Ministry of Education, Malaysia (KPM, 2016). Schools are ordered to follow the guidelines outlined in this Disciplinary Procedure Handbook, especially in handing out punishments to misbehaving students. Teachers are not allowed to conduct punishments or act beyond the permitted disciplinary methods prescribed. Should punitive measures remain for the more misbehaving students? Some say, "spare the rod and spoil the child" and some say "Punitive measures have no place in school" (Tie, 2016).

Figure 1.2. Posters Showing Initiatives of Ministry of Education since 2015

MOE has also roped in ten ministries to form a special body named 'Main Committee

in Handling Student Discipline Symptoms *'(Jawatankuasa Induk Menangani Aspek*

Disiplin)' to help plan and strategize reduction of disciplinary problems in schools (KPM, 2016). This collaboration among the ten ministries sends an alarming warning about the serious state of discipline problems among school children in Malaysia. Besides that, as can be seen in the posters above (Figure 1.1) there is also collaboration between the police force and MOE in tackling these discipline problems.

Furthermore, the Ministry of Health and the MOE cooperated to implement 'Healthy Mind Program' *(Program Minda Sihat)* to determine the mental health state of secondary school students by conducting screening of mental health on symptoms of anxiety, stress and depression. Detected students were given interventions to help them overcome their problem and reduce disciplinary issues.

Another strategy by the MOE is to integrate emotional and social elements into the curriculum through Moral Education and Health Education subjects. Emphasize is on school counsellors to play an important role to help students with disciplinary problems. This is done through mental and psychological welfare programs such as 'Healthy Mind Program', hysteria case program and sexual symptoms program. At the same time, personal counselling sessions are also carried out with these students (KPM, 2016).

Finally, intervention through single educational programs such as exhibitions, anti-drug campaigns and seminars are carried out by schools with the blessing and guidance of MOE. All these programs are actually interrelated but there seems to be an important link or gap that is missing to put these programs into a systematic

approach in implementation. Apparently, what the schools need is an inclusive approach, proactive, systematic, educative prevention and an early intervention educational video program through reliable and effective medium that will target all students to reduce and prevent behavioural problems while enhancing students socio-emotional functioning. The possible solution at this juncture is by using the educational video programs produced by the Educational Technology Division, MOE. These educational video programs can be tailored to tackle the social problems among school children.

1.3.4   Advancement of Video Programs in Academia

Formerly, video programs have once received general prejudice where they were stereotypically pondered as inferior sorts of entertainment with no inherent pedagogic merit (Sabeti, 2011). Now on the contrary, video programs are merely dismissed as a form of low culture (Czerwiec & Huang, 2014). The academic community has extended the studies on video programs beyond the entertainment field such as education, cognitive science, sociology, multimedia, and computer science. Due to educational video programs' presentation and development complexity, this medium deserves critical and scholarly attention as much as curriculum books and feature films (Crutcher, 2015). Being one of the oldest form of visual presentation (Chun, Ryu, Hwang & Cho, 2006), analysing the multimodality of this medium is as important as understanding the books and internet (Jacobs, 2007; Dallacqua, 2012). Successively, as illustrated in Table 1.4, the increasing number of video program's MA thesis and doctoral dissertation submitted to ProQuest demonstrates the growth of video program studies as an actual field (Steirer, 2011; Humphrey, 2014).

Table 1.4

Number and Percentage of video programs related dissertations published in ProQuest from 2010 to 2016 (Steirer, 2016)

Year	Number	Percentage
2010	25	0.055
2011	22	0.057
2012	27	0.062
2013	27	0.066
2014	31	0.067
2015	33	0.071
2016	38	0.078

The rising number of articles published in practitioner journals which accentuated video programs literary potential (Connors, 2013) had stirred university programs in the United Kingdom to officially incorporate video programs as part of their curricula (Williams, Murray, Green, & Chan, 2014). Further serious recognition towards video productions is exhibited when more institutions offer the avenue to do research on video programs at postgraduate level (Mcnicol, 2015).

Moreover, in the year 2013 only, more than 20 academic conferences focusing on video programs were held around the globe (Humphrey, 2014). Video programs are a worthy of academic study because prestige journals are already accepting articles based on video programs in the field of education (Caldwell, 2016), as depicted in Table 1.5.

Table 1.5

Number and Percentage of academic journals related to video programs in International Journal of Innovative Research and Development from 2010 to 2016 (www.ijird.com. 2016)

Year	Number	Percentage
2010	04	10.2
2011	09	12.1
2012	11	12.8
2013	15	15.6
2014	18	15.9
2015	20	16.1
2016	24	16.8

Witnessing scholars growing direction to a deeper understanding of video programs as a literary, artistic, cultural and cognitive phenomenon (Cohn, 2015), the prominence of multi-disciplinary study on video programs and at the form as used in various media should not be overlooked. The Ministry of Education, Malaysia need to extend its research on the process of ingesting and intervening social consideration values into educational video programs to be a part of the problem solvers in tackling the social problems among school children.

1.3.5 Widespread of Educational Video Programs as an Instruction Tool

Theoretical advances in cognitive science are shaped by multimedia instruction of how visuals and sound facilitate teaching (Mayer & Moreno, 2003). Comparably, educational video programs narrate a story through a combination of sound and visuals in the form of motion pictures in sequence (Fischband, 2016). These characteristics clearly signify the capability of video programs as instruction tools.

Thus, it was not surprising that empirical research of video programs in complementing the traditional method of teaching and learning have begun since the 1940s (Hutchinson, 2006, 2012; Evangelia, 2016). Since then, besides being undoubtedly entertaining, educational video programs have instantaneously generated students' interest to become more intellectually and aesthetically engaged (Schendel, 2013; Guzzetti & Mardis, 2017).

Educational video programs not only proved to have an upper hand to both curriculum and entertainment programs (Jennings, Rule, & Zanden, 2015), in fact some convention tools like books and magazines are unable to present certain themes as effective as educational video programs (Juneau & Sucharov, 2010). Furthermore, these programs are capable to address almost any subject, curriculum or non-curriculum to all range of audiences' age (Gibson, 2010). As a result, educational video programs have been embraced in massive areas from language, literary, history (Norton, 2015), science (Cooper, 2011; Cheesman, 2006), mathematics (Reilly, 2015), engineering (Metraglia & Villa, 2014), computer science (Cervesato, 2015), medicine (Park, Kim & Chung, 2011), economy (Wyk, 2016) to ethics, social and cultural (Fischbach, 2016). Eventually, some television stations like the world known British Broadcasting (BBC), continue to provide video programs as useful teaching and learning resources (O'English, Matthews, & Lindsay, 2016).

Meanwhile in Malaysia, an analysis by Institut Aminudin Baki (IAB, 2016) towards students' educational video program viewing habits revealed that these programs that can help them acquire knowledge (curriculum based) for exam purpose is the most preferred viewing material compared to other genres of production, as shown in

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Figure 1.3 (IAB, 2014). Besides that, video programs produced in genres like documentaries, public service announcements and reality shows are also highly preferred by these viewers. Nurtured by numerous Malaysian viewing behaviour which utterly associate television viewing with academic tasks (Inderjit, 2014), IAB's findings indicated that there is a substantial potential of utilizing educational video programs in Malaysian schools for specific purposes. This is because, as a form of edutainment, factors such as information recall and learning engagement content in video programs can be used as a more engaging rather than a passive curriculum for specific purposes for students (Cirigliano, 2012). Hence, educational video programs grant learners to communicate information in an understandable, memorable and enjoyable way (Negrete, 2013).
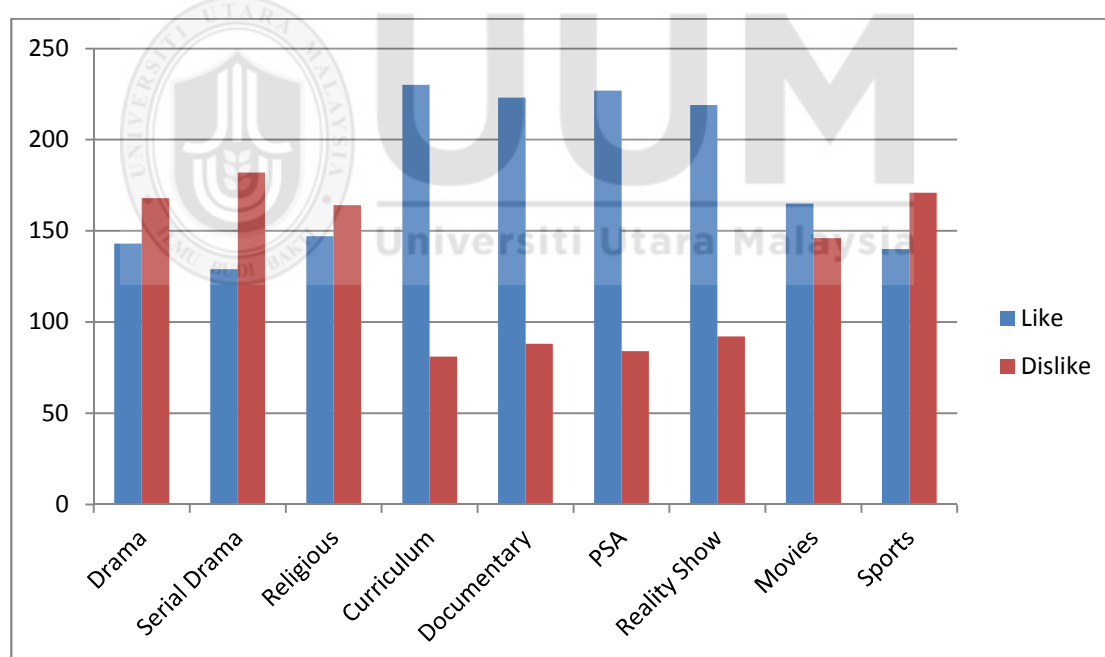
Figure 1.3. A Survey of Malaysian Student's Preferred Genres of Television Programs (IAB, 2016).

Accordingly, the Ministry of Education, through its www.eduwebtv.com platform have also attempted to use educational video programs in teaching various subjects (KPM, 2016). Overall, positive educational impact was demonstrated by the

Malaysian students who participated in the mentioned studies. The findings by IAB (2016) also stated that future educational video programs integrated classroom activities should focus on applying constructivism methods. Hence, it is implied that educational video programs embodies the transformation of local education landscape as a flexible approach to learn critical subjects and matters and at the same time nurture critical thinking skills (Rashiqah Ilmi, 2017). With the widespread of educational video programs as an instruction tool, constructive learning can be mobilized and implied to ingest social consideration values into educational video programs to manage the social problems among school children.

1.3.6 Ability of Local Television Stations to Ingest and Intervene Social Consideration Values into Video Programs

To check on the ability of television programs to communicate with viewers especially children on an emotional, affective and cognitive level, a study was conducted by Institut Aminudin Baki, Ministry of Education, Malaysia (IAB, 2016) on four local television stations. Altogether 18 criteria (criteria 3 to 20) of social considerations for video programs aired via television as out lined by World Summit on Media for Children Foundation, 2014 were scrutinized and the results are shown in Table 1.6.

Table 1.6

Percentages of Specific Criteria in Content of Social Considerations of Local TV Stations in Malaysia (Video Programs)

No.	Criteria	Percentage			
		RTM	ASTRO	MEDIA PRIMA	AL HIJRAH
1	Commercial profit	63	90	78	59
2	Entertainment Value	52	87	81	61
3	Pro-social content	65	49	52	67
4	Pro-religion content	28	16	22	69
5	Children in key roles	18	09	11	08
6	Curriculum based programs	02	07	02	04
7	Promote positive messages	85	62	69	86
8	Promote negative messages	15	38	31	06
9	Promote violence	11	41	29	03
10	Promote stereotype views	17	39	28	14
11	Familiar for children	09	19	13	10
12	Explain emotions	11	08	05	09
13	Focus on children development	07	06	04	08
14	Use violence to solve problems	33	48	39	01
15	Enhance children's experience	11	32	08	05
16	Appropriate for Malaysian children	15	06	11	42
17	Appeal to children aesthetically	13	05	10	18
18	Motivate and mobilize children	14	05	10	09
19	Social and cultural benefit	42	24	22	52
20	Production based on children books	02	12	01	09

Source: Bahagian Pengurusan Sekolah Harian, KPM (2016)

The recorded percentages of social consideration elements (criteria 3 to 20) shows clearly that Malaysian local TV channels' contribution is very limited in enhancing values of social considerations in their programs. Besides that, a study by Malaysia's Communication and Multimedia Corporation (MCMC, 2016) also shows that there are no advisory panels and boards on elements of social considerations, no research that brings children into the decision making process and the most disturbing and worrying is there is no report card for whether these channels are educating children or not. Ironically, every month, a study has been conducted by these channels on their ratings and standings which are more profit driven and entertainment value based. Such a gap as shown in Table 1.7 ought to be investigated to help contribute to the intervention and ingestion of social consideration values into educational video programs.

Table 1.7

Average Element of Social Consideration Values in Video Programs aired via Local Television Stations

No.	Channel	Average Element of Values
1.	AL-HIJRAH	28.3%
2.	RTM	23.0%
3.	ASTRO	18.6%
4.	MEDIA PRIMA	17.1%
5.	EDUWEBTV (MOE)	12.0%
6.	**Targeted by MOE**	**45.0%**

Adapted and Translated from Bahagian Pengurusan Sekolah Harian, KPM (2016)

The MOE has set a target of at least 45% of elements of social considerations values in video programs aired through Malaysian Television Stations (Education Reform Plan 2013-2025, 2012). Table 1.7 clearly shows the lacking of elements of social considerations in Malaysian local TV channels with the highest percentage achieved is only 28.3% (ALHIJRAH). Even the Educational Technology Division who has been given the mandate to produce educational video program has only achieved an average of 12% in contribution to social consideration values in its programs. Therefore, this study will focus on the need of MOE to effectively carry out more intervention and ingestion of social consideration elements into Malaysian educational video programs.

1.3.7 Summary of Research Motivation

With such serious state of social problems among school children in Malaysia and the ignorance of local television stations in helping to provide a solution, there needs to be more carefully planned intervention by the Ministry of Education, Malaysia. In addition, it has to be realized that the values of social consideration play an important role in efforts to make educational video programs more useful to consumers. Hence, the reason for this should be further addressed. In summary, the emerging of educational video programs as a solid research field, instructional tool, and local support have motivated the initiation of this research. To achieve this end of the focus, a conceptual model for development of social consideration values in educational video programs is direly needed. Affiliating these potentials, a preliminary study was carried out, as explained in the next section

1.4 Preliminary Study

In support of the background and motivation of study, a preliminary study was carried out to gather information regarding Malaysians awareness of the social problems among school children, their causes and willingness to discuss these problems of their children. Besides that, Malaysian television stations' priority to air video programs with elements of social consideration, their ability to follow any guidelines or workflow in producing video programs with elements of social consideration and the capability of these video programs that are perceived to be ingested with elements of social consideration values to tackle the social problems among school children are also scrutinized in the preliminary study. Finally, the effort of the Ministry of Education, Malaysia to tackle the social problems among school children via educational video programs and the existence of a standard workflow, guideline or particular format to tackle the social problems among school children is checked via this preliminary study.

1.4.1 Method

To achieve this end of the study, a series of interviews involving six respondents were conducted. The respondents were all employed based on their vast experience in dealing with media, school children and social problems among Malaysians. The analysis of this study strengthened the needs of this research.

They are Deputy Director of Daily School Management Division (BPSH), Deputy Director of Educational Planning and Research Division (EPRD), Director of Educational Technology Division (BTP), Principal Assistant Director of Educational Television Sector (ETV), Head of Interactive Media from Astro Tutor (ASTRO) and

Chief Executive Officer of Asian Broadcasting Union, Malaysia (ABU). Before carrying out the interview, the interview questions were developed according to the 5 phases mentioned in Figure 1.4.
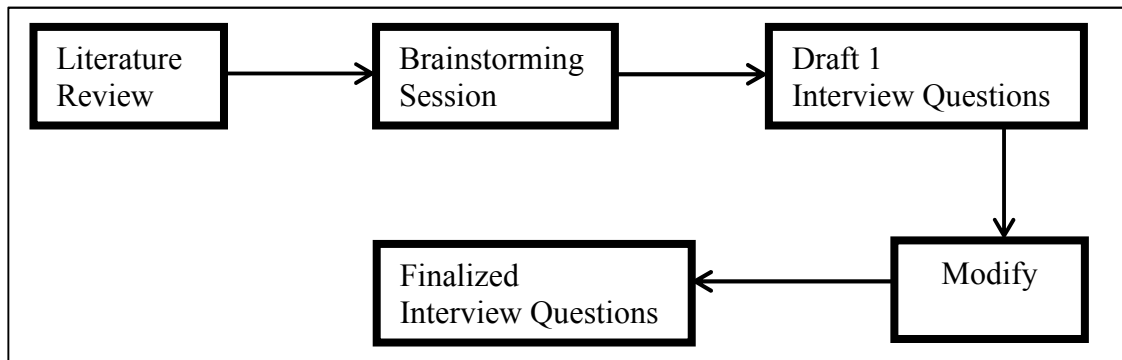
Figure 1.4. Preliminary Interview Question Design

Based on the literature review that was carried out, a brainstorming session was held to generate the first draft of the interview questions. The questions were modified based on the brainstorming session and a set of finalized interview questions was ready to be used. The final set of interview questions consisting 8 questions are listed in Table 1.8. The interview was carried out in a semi-structured format and the respondents are instructed to answer the questions with a 'YES' or 'NO' answer only.

Table 1.8

List of Interview Questions for experts (Preliminary Studies)

No.	Items
Q1	Are Malaysians aware of the social problems among school children?
Q2	Are Malaysians aware of the cause of the social problems among school children?
Q3	Do Malaysians discuss social problems among school children?

Q4　　Do Malaysian television stations give priority to air video programs with elements of social consideration?

Q5　　Do Malaysian television stations follow any guidelines or workflow in producing video programs with elements of social consideration?

Q6　　Are the video programs that are perceived to be ingested with elements of social consideration values able to tackle the social problems among school children?

Q7　　Is the Ministry of Education, Malaysia making enough effort to tackle the social problems among school children via video programs?

Q8　　Is there a standard workflow, guideline or particular format in your department to tackle the social problems among school children?

1.4.2 Analysis of Preliminary Study Findings

Referring to Table 1.9, all respondents agreed that Malaysians are aware of the social problems among school children (Q1). However, it is also noticed that all respondents from Ministry of Education, do not agree that Malaysians are aware of the cause of the social problems among school children (Q2) and only ASTRO does not agree that Malaysians discuss social problems among school children (Q3). In addition, the respondents agreed that TV stations are not giving priority to air programs with elements of social consideration or even have guidelines or workflow in producing programs with elements of social consideration and due to that, the ability to tackle social problems among school children is lacking (Q4, Q5 and Q6). Only BPSH agreed that the Ministry of Education, Malaysia is making enough effort to tackle the social problems among school children (Q7). Finally, all respondents from Ministry of Education agreed that there is a standard workflow, guideline or particular format

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to tackle the social problems among school children in their respective departments (Q8).

Recommendations made by the respondents from Ministry of Education (BPSH, EPRD, BTP and ETV) clearly suggest that a serious intervention is needed for a standard workflow, guideline or particular format to ingest values of social consideration into educational video programs in Malaysia. It will be difficult for the Ministry of Education to intervene into the production planning of other TV stations, which means that the best way to execute this intervention is by the Ministry of Education producing its own educational video programs that concentrate more on values of social considerations. This will help to increase the average percentage of social consideration values to the marked 45% by the ministry itself (Figure 1.4).

Table 1.9

Respondents' Opinion on TV Stations' Influence on the Behaviour and Social Problems of Malaysian School Children.

Q	Respondent 1 BPSH	Respondent 2 EPRD	Respondent 3 BTP	Respondent 4 ETV	Respondent 5 ASTRO	Respondent 6 ABU
1	/	/	/	/	/	/
2	x	x	x	x	/	/
3	/	/	/	/	x	/
4	x	x	x	x	x	x
5	x	x	x	x	x	x
6	x	x	x	x	x	x
7	/	x	x	x	x	x
8	/	/	/	/	x	x

Description of symbols: / - Yes   X - No

In addition, this intervention that is perceived could influence the social behaviour of Malaysian school children is needed to have relative advantage to all parties especially students, teachers and parents to understand more on the need of educational video programs regarding social behaviour in order to create a good society in the Malaysian context.

1.5 Background of Problem

To articulate the systematic method of social consideration values' intervention into educational video programs, several important issues arise. This section explores the current state of research in area of social consideration values' intervention into educational video programs that led to statement of problem in this research.

1.5.1 Challenges of Social Consideration Values Intervention into Educational Video Programs

In general, pedagogical discussions about educational video programs usage in schools have focused primarily on educating, with less attention paid to the correlating prospective of intervening social consideration values into production (March & Smith, 2016). Accordingly, results from the previously conducted preliminary study have exhibited that there is evidence that social consideration values are not given priority in educational video programs. In line with these findings, Allen and Smith AR (2012) affirmed that the intervention of social consideration values through production of educational video programs in authentic conditions of communication, has demonstrated several difficulties encountered by the learners. In concise, the obstacles majorly associate with structure of narrative, collaborative production and effective connection between content and instructional

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design of educational video programs. Bernacki, Byrnes, & Cromley, (2012) reported that; defining the subject to treat in with the social consideration values and the production of educational video programs itself were the difficult processes in the intervention. As a result, teaching social consideration values via educational video programs in classroom session is viewed to be impractical and onerous (Melor, Hadi, & Mohamed Amin, 2015).

Despite being easily produced with up to date production techniques (Boeglin-Quintana, & Donovan, 2013), intervening social consideration values into educational video programs means more than just writing the script and going through the production process. Additionally, there are reluctances of using educational video programs as a social activity due to lack of knowledge about its genre, process and terms. Plus, educators cannot assume that all learners have knowledge of educational video programs and how the intervention process works (Wallner, 2016). Therefore, to undermine the challenges confronted in production of educational video programs with social consideration values intervention, it is crucial for educational video programs producers to understand the key features of social consideration. As learners must be guided in aligning video programs as an effective problem solving method (Borko & Putnam, 2017), a solid, holistic method of educational video programs production should be established based on the core values of social consideration.

1.5.2   Core Values of Social Consideration Values

Producers of video programs should be careful when they are dealing with social issues which are loaded with offensive elements or potentially controversial. This issue could exist in the presentation of content. They highlight content where the

resources' support pro-social attitudes and promote human rights and diversity. Removing the controversy is not the intention of this screening process but rather to ensure that opinions and views that are controversial are presented within the framework besides checking that views of alternate points are presented appropriately (Daniels, 2016).

Role models and positive traits should be emphasized by material. Educational video program producers can do this by considering the suitability of these programs that depends on the target audience (including level of maturity), teaching and learning context (e.g. whether a video on sensitive topics like reproduction is designed for self-directed student use or teacher-directed learning) and subject area. In the case of students being exposed to controversial view point, it will be better to consider these views in the context of total resource (Donald, 2016).

Physical setting, geographic location, political and social context and time period all help in determining whether a particular matter should be of concern or not. The work should actually be discussed in context as a 'period peace' and the differences between today's values and values of the time today should be understood clearly (Cross, 2015). All aspects of the resource will be influenced by the author's tone on the subject matter and audience. Something that might be perceived as an omission error might actually be an omission deliberately made and as such might be identified and justified by the author (Donald, 2016).

1.5.3 Production Methods of Video Programs with Social Consideration Values

Prominence on both process and end product emphasises the efficacy of learner-generated content pedagogical strategy (Perez-Mateo, Maina & Romero, 2015). Although Kane's model (2013) provides a dynamic paradigm of educational video program, it does not explicate video programs' production process comprehensively. Plus, his framework is intended for educational material development with the collaboration between television stations and video program producers instead of educators. Conversely, educators need instructions about features, organizational formats, and conventions of social consideration values (Pantaleo, 2015), since production of educational video program with social consideration values is a complicated task that involves a wide range of personnel, skills and theories (Crutcher, 2015). Carefully designed composition of subjects and values of social consideration to provide a continuous learning experience is hard to produce for people without the required experience and knowledge (Cao, Lau & Chan, 2014). Equally, despite sharing similar attributes with values of social consideration, existing video programs models and frameworks exclude elements of social consideration in their programs (refer to Chapter 2 for further discussions).

Although several educational video program production studies have thoroughly discussed the methods of these video productions (Morrison, Bryan & Chilcoat, 2002; Pantaleo, 2017), but they do not tailor a benchmark for assessing the produced video programs. Contradictorily, a digital media production should permit students to self-assess their academic achievement by relating concepts to activities (Semary, 2014). Apart from that, the produced learner-generated content should be measured based on its value to others besides the creators themselves (Sener, 2017). Some learners saw

value in the technical aspects of educational video programs, while others enjoyed being both educated and entertained (Cirigliano, 2012). This is not surprising as entertaining educational video programs can improve the mood and attitude of learners and ability to learn (Recine, 2018). Challengingly, it can be difficult to strike a balance between the learning and entertaining aspects of educational video programs. This is because when video programs are overly stuffed with entertainment elements, they may easily lose connection with the story that is being told resulting in a less interesting viewing pattern (Tatalovic, 2009).

These issues denote that a method of educational video production programs' production should not only guide learners to grasp the gist of social consideration values, but also transfer their knowledge into an assessable educational video program which is both educating and entertaining. Nevertheless, despite its importance, research on theoretical guidance on a quality, systematic, developmental approach for designing, developing, producing and assessing values of social consideration values in video programs have been ignored (Semary, 2014).

1.5.4 Invasion of Cable and Satellite Television into Malaysian Homes

The debate on the invasion of cable and satellite television has been ongoing since its inception in Malaysia but what is not really clear is the kind of impact it has on Malaysians. Therefore, it is essential to understand audience perception of the values promoted by cable television network and how are these values different from Malaysian values? The term Malaysian values need to be defined well. The underlying assumption is that there are an identifiable bunch of precepts, largely positive, that generations of Malaysians have adhered to. The Malaysian culture

dictates respects for elders, the preservation of marriage as an institution, devotion to husbands and family, devotion to the family, devotion to children, self-sacrifice, need to dress demurely and not to be amorous in the public, and general disapproval of sexual promiscuity, extra-marital and pre-marital sex: Malaysian cultural values do not entertain open depiction of sexuality in films or television screen. When people talk of television programs endangering Malaysian values, these are the values they mean (Fauziah, 2013).

Moreover the dysfunctional familial values which are predominantly shown in the various television serials and soap operas can equally have a detrimental effect on society. Many of the popular drama serials are shown in all three languages (Malays, Chinese and Tamil) have liberal doses of pre-marital and extra-marital affairs. In fact so rampant are these themes that its associations with serials evoke a sense of dejection. It is interesting that not all sections of viewers are inclined to write off these problems as mere drama. Does this signify that television is exploiting the dysfunctional unhappy family syndrome at the cost of the viewers? Do directors take into account the impact of these serials? Can such serials about extra-marital relations be made without understanding their impact on young audience and family as a whole? (Bastian, Jetten & Radke, 2015)

1.5.5 The Impact of Video Programs via Television on Children

Children are the most regular dedicated and enthusiastic viewers of video programs. Research indicates that this attraction is equally valid for both rural and urban children. Children are not only the main viewers but also watch video programs for longer duration than adults (Human Rights and Equal Opportunity Commission,

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(2018). With the phenomenal growth recently, certain apprehensions are also coming to the fore about the programme contents and their impact implications, particularly in the context of children. Children prefer cartoon shows and comedies. It is seldom realised that cartoons and animation programmes can have a profound effect on the young minds. Programmes like Batman, Spiderman, Superman, He-man, Aladdin, Flash Gordon, Defenders of the Earth and even Tom & Jerry are all violent serials which are bound to effect the psyche of any child exposed to the programmes day after day (McCallum, 2017). Parents and teachers feel that, as a result of watching video programs, children have started using abusive language and have become more aggressive and violent.

The multiplicity of channels on satellite television and round the clock programming has got children so glued to video programs aired by television stations that they have very less time for serious study and sports. But can we blame the children when parents are themselves glued to crime thrillers and other kind of the programmes? The image of a child that beamed from television sets are that of a bristling human-audacious and arrogant and who loves to shock and could not care less about what others think of him or her. Today, the brave new world of television demands some outrageous acts like stripping oneself down to their briefs for the interactive show (Oates, Blades, Gunter, & Don 2013).

At the other end of the spectrum there are many educational video programs in channels like Discovery and National Geographic channel that help in broadening our children's horizons. We cannot blame television for everything. If parents feel that children are not imbibing the right values, the parents are also to be blamed. While

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there is clearly great concern about the effect on children and youth, of many feels that adult themselves' often contribute to indirect negative effects. Channel managers say they are aware that most children do not get to see the programmes aimed specifically at them, because the elders are controlling the viewership pattern. Parents have a great influence in controlling what content is seen and also the way in which children watch. The family has to regulate children's viewing habits (Gunter, 2017).

The question then arises as to what extent television programmes like these have really influenced the younger generation. According to a survey by Ogilvy & Mather (O&M) Uncorking the Genie (2013), 79 per cent of the metropolitan young people in the age group of 18-25 said they shared most of their parent's views; 86 per cent believe "young people should never dare challenge their parents" authority. The generation according to the survey desires "controlled freedom", there is a strong individualism and desire to maximise opportunity but tempered by a strong sense of family engagement. Fifty five percent, according to the survey, also believe that eastern values can co-exist with western values. Thus, life for this generation is a tough balancing act. These findings may carry the elements of truth but reality is far more complex.

Well used, video programs have proved to be child's best friend depending upon how it is used. It is just one of the many entertainment and education medium options that the child exercises in a day, which includes school, play and homework. Video programs does not spoil the child; neglect does. The responsibility of helping children to view the programmes falls in the families, particularly parents. As children are influenced by television the adult members of the society, the parents and programme producers should use the media effectively to produce positive results and thereby

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enrich society in process. It is surprising that despite forty five percent (45%) of Malaysia's population are below eighteen years and total video program viewers constituting over half of this age group, the government of Malaysia has not really outlined a strict regulation on children vis-a-vis educational video programs. One major reason for this is that the government is probably not particularly child-centred.

1.6 Problem Statement

From the preliminary study, it can be concluded that a serious intervention is needed to generate a standard workflow and guideline in the form of a conceptual model to ingest social consideration values into educational video programs in Malaysia. To add to this, Table 1.6 clearly shows the average low percentage of social consideration values in Malaysian television programs. Even the programs produced by the Ministry of Education (MOE) with average percentage of 12% of social consideration values, cannot match up with the other local television station's programs. Intervening into the production of local television stations is not possible because of stakeholder's policy.

In addition to that, the Education Technology Division (ETD), MOE, who is responsible of producing educational video programs, produces programs strictly based on the Malaysian school curriculum to help students pass examinations. Values of social consideration are inserted at random into these programs where appropriate or necessary without having any specific learning outcome for the social values inserted. However, as emphasised by the Ministry of Education Malaysia, in its circular (KP/KPP M6 Jld 2 (23)) dated 02 November 2016, all schools will start civic education as a core subject beginning 2019 as required by the Secondary School

Standard Curriculum based on what had been outlined in the Malaysian Education Reform Plan (2013-2015). This strategic plan has been confirmed by the present Minister of Education (refer page 5, para 1).

On the contrary, the Ministry of Education does not have a conceptual model for social consideration values intervention in its production of educational videos which are uploaded to its official learning website, www.eduwebtv.com. As of September 2016, there are 6609 educational video programs uploaded to the www.eduwebtv website, but they all deal with subject matter of the curriculum and learning outcomes according to their respective subject (Journal BTP, 2016) and do not give priority in the intervention of social consideration values. Worse still, subjects like Moral Education which will instil values of social consideration are totally missing in this learning website.

A solution is needed to produce educational video programs intervened and ingested with social consideration values at an average rate of 45% (as mentioned in Table 1.7) that carries a specific and vivid learning outcome to improve discipline in schools, and curb social problems among school children as explained in Malaysian Education Reform Plan (2013-2025). Therefore, a conceptual model for educational video program production that will incorporate the content and instructional design with social consideration values needs to be built and validated to function as a systematic method which includes the fundamental components for producers in ETD (MOE), to design and produce educational video programs intervened and ingested with social consideration values.

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1.7 Research Gaps

Social consideration is well established in many fields such as business (Europe SME Foundations, 1999), health programs (Inova Health Foundation, 2001), environment projects (NEXI International Service and Research Charter, 2000), urban development (Finance, Economics and Urban Department, World Bank, 1998), war (Geneva Conventions, United Nations Institute of Training and Research, UNITAR, 1949), politics (Commonwealth Department of Administrative Services, 1959), economics (Commonwealth Department of Administrative Services, 2002), education (United Nations Research Institute for Social Development, UNRISD, 2010), entertainment (McKinsey Research and Analysis, 2014), insurance (Bain & Company, 1987) and food industry (Neff, Palmer, McKenzie & Lawrence ,2009).

Basically, the values of social consideration is incorporated in these fields to reduce unemployment, prevent the use of child labour, encourage good employment practice, prevent discrimination, reduce social exclusion and producing value for money products (Andrew, 2017). Values of social consideration are meant to be used as society's standards of what constitutes to be wrong or right behaviour as the basis of the business' plans and policies. These elements also shape the action and decisions of individuals in all the fields mentioned above, from the owner down. The owner's behaviour toward customers, employees, the company's investors, vendors and the community affect the behaviour of his employees and customers, who look to the owner to set the standard (Parsons, 2013). Individuals in all the fields mentioned above observe high social consideration standards as a sound business strategy resulting in customer loyalty and a positive image in the industry and within the community.

One important point to be noticed in intervention of social consideration values in the many fields mentioned above is that they don't deal with the shaping of school children's attitudes and behaviour. Even the education industry is more concerned in departing and transferring knowledge rather than shaping good social behaviour among the school children. The television (video) program industry is more concern on its station's ratings and standings which is more profit driven and entertainment value based (*Figure 1.4* and Table 1.7) (Hansen, 2017). To make things worse, the local television stations do not even have advisory panels and boards, research and achievement report on elements of social consideration in their video programs (MCMC, 2016).

Due to this, and in an effort to curb social problems among school children via educational video programs, intervention and ingestion of social consideration values into video programs is required and based on this, the following research gap is identified:

i) Intervention and ingestion of social consideration elements is required in Malaysian educational video programs.

ii) Currently, video programs aired by local TV stations lack elements of social consideration.

iii) Advisory panels and boards, research and achievement report on elements of social consideration in educational video programs are not given priority by the local TV stations.

iv) The Ministry of Education is not making enough effort to tackle the social problems among school children via educational video programs.

v) A serious intervention by the Ministry of Education is needed to ingest elements of social consideration into educational video programs in Malaysia.

1.8 Research Questions

This research seeks to answer the following questions:

i)   What are the core elements of social consideration values for Malaysian educational video programs?

ii) What has been the role of the Ministry of Education in improving the social problems among Malaysian school children?

iii) How to develop a conceptual model for ingestion and intervention of social consideration values into educational video programs?

iv) Is the developed conceptual model suitable for production of educational video programs ingested with social consideration values (prototype)?

v)   Is there a significant difference between the control group and experimental group that took part in the user acceptance test of the produced prototype?

vi) Is the produced prototype educational video program ingested with social consideration values suitable to curb social problems among school children?

1.9 Research Objectives

The main objective of this research is to develop a conceptual model for social considerations values (SCV) in Malaysian educational video programs. Thus, to accomplish the main aim, the following objectives are formed:

i)   To identify core elements of SCV;

ii)   To develop a conceptual model focusing on ingestion of SCV into educational video program;

iii)	To validate the conceptual model for suitability through expert review;

iv)	To produce a prototype educational video program that applies the conceptual model;

v)	To evaluate the produced prototype for suitability in curbing social problems among Malaysian school children through user acceptance test.

1.10 Research Scope

This research focused on the intervention to ingest elements of social consideration values into educational video programs within such limitations:

i) The domain area is narrowed down to the Malaysian scenario. All the respondents involved, the places of study and the consultation experts are located within Malaysia.

ii) This research concerns on evaluating the ability of the prototype to curb social problems among school children aged 13 to 17 years old rather than identify ways to curb social problems among school children.

iii) The evaluation of the prototype involved only school children aged 13 to 17 years old , rather than the overall public community.

iv) This research compared programs aired by local TV stations in Malaysia and the www.eduwebtv.com learning website, but does not involve other media avenues that are available in Malaysia.

v)	This research carried out comparative studies on educational video programs in scholarly literatures within formal education context only. In defining the problem statement of this research, video program production methodologies by feature film producers were excluded. However, during expert consultation and review phases, development of video program production model, principally

involved participation of broadcasting and webcasting media industry personnel.

vi) Data collection was obtained from schools limited to peninsular Malaysia. The target users of the prototype educational video program were school students.

vii) This study concerned on evaluating the ability of the prototype educational video program as a program intervened with social consideration values to curb social problems among school children, rather than the curriculum based educational video program produced for achieving the intended learning outcome of the lesson.

1.11 Significance of the Research

This research is significant to the knowledge and practice of curbing social problems in Malaysia using educational video programs. This significance is summarized in the following subsections.

1.11.1 Guidelines to Effectively Intervene Values of Social Consideration into Educational Video Program Production

This research proposes the effective ways to ingest values of social consideration into educational video programs. The production designers of educational video programs who intend to contribute in curbing the social problems among school children will benefit from the developed conceptual model. They can plan their treatment of educational video programs towards embedding elements that are perceived could influence the behaviour of school children. Comprehensive guidelines are provided in the proposed production design which consist the 16 specific social considerations values in content as outlined in Table 1.1.

1.11.2 Motive for Intervention of Social Consideration Values into Educational
   Video Programs Production

In finding out the percentages of local TV channels specific criteria in content for social consideration values and their influence on the behaviour of school children, a clear gap of the reason that caused the continuously increasing social problems among school children is identified. Consequently, significant efforts should be taken by the Ministry of Education to close this gap and curb the social problems among school children.

This analysis also suggests that intervention and ingestion of social consideration values requires a specific time slot dedicated to it. It cannot be treated just as a slip through into the educational video programs where the main motive is to entertain and seek high rating for the program or to deliver the content of the curriculum syllabus to school children. This specific element of social consideration is mainly to ingest good values education, that is, where the 'reasoning' takes place as the cognitive aspect of values education that leads the students to philosophically and intellectually accept and explore the worthy values.

1.11.3 Prototype of Educational Video Programs for Effective Ways to
   Ingest Social Consideration Values

This research developed a prototype educational video program that had values of social consideration embedded into it. As this educational video program was validated and the analysis of its effectiveness in curbing social problems was discussed at length, it will be a guide for the Ministry of Education to design and

develop educational video programs that are perceived could influence the behaviour of school children.

1.11.4 Instrument for Validating the Influence of the Conceptual Model and the Prototype Educational Video Program

The instrument for validating the conceptual model and the prototype educational video program was developed with the dimensions that evaluated the overall perceived influence, namely: pro-social content, pro-religion content, children in key roles, curriculum based, positive and negative messages, violence, stereotyping, children familiar and emotional, children development, children's experiences, children appropriate, appealing to children, motivate and mobilize children, social and cultural benefit and base on children's books.

These dimensions were outlined by World Summit on Media for Children Foundation (2014), which considers the criteria of good social behaviour development. The instrument was found highly reliable in the pilot study with Cronbach's Alpha for each dimension is greater than 0.7. This instrument can also be used by future research on validation of other educational video programs made specifically for intervention and ingestion of social consideration values.

1.12 Research Framework

The research framework covered in this study has five phases which include problem awareness, suggestion, development, evaluation and conclusion. In the first phase, preliminary investigations, elicitation from literature and comparative analysis are

concluded in identifying the research problem and scope. Besides that, theories in the area of production design of educational video programs were also analysed.

In the suggestion phase, based on comparative analysis and expert consultation, the reviewed theories were used as the basis in determining the production design to the intervention and ingestion of social consideration values into educational video programs.

In the development phase, a conceptual model focusing on social consideration values was developed and validated. A prototype video was produced based on the proposed conceptual model. Then the prototype was validated to evaluate its effectiveness and learning aspects. Finally, in the conclusion stage, the results were analysed. Figure 1.5 illustrates the research framework.

PROBLEM AWARENESS	SUGGESTION	DEVELOPMENT	EVALUATION	CONCLUSION

Preliminary Investigations:
-Survey with students and SME
-Experts Consultations-Practioners

Concepts
-Usability Goals and Evaluation
-Contents Organization
-Children Discipline Problem
-Social Consideration Values

Theories and Principles
- Social Learning Theory

Systematic Literature Review

Compare Existing Models
-12 Existing Social Considerations Conceptual Model

Initiatives of MOE Malaysia
-School Disciplinary Procedure
-Exhibitions, Anti-Drug Campaigns and Seminars

Contribution of Local TV Channels
-Airtime for Programs with Social Consideration Values: ASTRO, Media Prima, RTM and TV Al-Hijrah

Research Problems and Key Issues

Research Gap and Scope

Core Elements of Social Consideration Values (SCV)

OBJ 1

Core Components of Conceptual Model

Expert Consultation and Discussion of Contents

Develop Conceptual Model

OBJ 2

Validated Conceptual Model of Social Consideration Values Ingestion

OBJ 3

Prototype Production

OBJ 4

Verified Prototype

Instrument Development for User Acceptance Testing

Expert Consultation and Validation of Conceptual Model

Expert Consultation and Validation of Prototype Development

Evaluate the prototype through the user acceptance test

OBJ 5

Analysis of Findings in Terms of User Acceptance Testing of the Conceptual Model

Answering the Research Questions and Achieving the Research Objectives

Figure 1.5. Research Framework

1.13 Operational Definition and Terminologies

This section describes the terminologies related to this research which lead to the operational terminologies that are used commonly throughout this thesis. Within the literature, a variety of words have been used to describe the production of educational video programs. Developed by educational psychologists, learning using educational video programs emerged from theories about information processing, which uses psychological constructs and cognitive theories to explain how students learn. It expands on the information processing model and is defined as the cognitive, motivational, affective, and contextual factors associated with learning (Feeney, 2010).

1.13.1 Social Problem

A social problem is any behaviour or condition that implies negative consequences for a group of people or an individual and it is also accepetd as attitude that should change. Social problems are the general factors that affect and damage a particular society and are normally a term used to describe problems with a particular area or group of people anywhere in the world. Social problems involve problems that affect real life and consequently affect how people react to the situation.

1.13.2 Social Consideration Values (SCV)

Values that shape individuals and society to have conventionally accepted behaviour or attitude. The focus is on considering the principles of goodness, moral, wrong or right action and conducts or practices especially the standards of a profession. Values of social consideration will come to terms with society and individuals from which every person emerges and to which they return.

1.13.3 Video Production Design

The overall look of a video program that illustrates the setting, genre and visual style and also the kind of story it embarks on. It also includes the designing of the sets, location choices, choice and supervision of props and talent.

1.13.4 Learning Strategies

Social learning theory as one of the learning strategies in knowledge acquisition emphasizes on construction of knowledge by learner (Hubbard, 2012). Every learner has their own systematic technique in transforming information into knowledge. The difference is some do it perfectly but some fare very poorly. Addressing this issue will take the learners back to their learning strategies. To enhance their academic success and ability to transform information into knowledge, these learners are thought learning strategies (Gibbs, 2016). Using learning strategies can increase student understanding and achievement. A few most common strategies are test practice, distributed practice, practice with interleave, questioning elaborately, self-explanation, reading and re-reading, highlight and underline, analyse and summarizing using keywords and paraphrasing.

1.13.5 Video Programs

A video program is a segment of content that is intended for broadcasting or webcasting on cable television, over-the-air channels or social media, other than a commercial, trailer, or any other segment of content not serving as attraction for viewership (Nash, 2018). Using video programs is one of the 21st century approaches to transform education. It allows learners the opportunity to access, analyse, evaluate and create messages using different platforms. The role of video programs in society and the necessary skills to practice inquiry and self-

expression can be seen and acquired if the learners build an understanding of media literacy (medialiteracyproject.org).

1.13.6 Model

As described in Meriam Webster dictionary, a model is a descriptive concept used to envision something that cannot be observed straightforwardly. According to Vaishnavi and Kuechler (2007), a model is a set of propositions or statement expressing relationships among conceptual vocabulary of a problem or solution domain. Therefore, this research referred model as an abstraction and representation of how things are and is used to describe tasks, situations, or artefacts (March & Smith, 1995; Hevner, March, Park & Ram, 2004).

1.13.7 Conceptual Model

Creative production refers to youths' designs and implementations of digital media (Peppler & Kafai, 2017). Relatedly, design is a specification of an object using a set of components (Paper & Wand, 2019). While, a tentative definition of a 'methodology' might be a generalized set of methods and procedures used on projects (Veryard, 2018). The term 'method' is defined as a set of steps or guideline used to, perform a task (Vaishnavi & Kuechler, 2007); while a 'guideline' provides a general proposition about system development (Offermann, Blom & Bub, 2010).

1.13.8 Functional Videos

Functional videos are videos prepared for specic use according to their terms and functions. In the case of this study, the videos are meant for insertion of social values to be used in the teaching and learning process (Nash, 2018). These videos allow learners to gain knowledge

regarding social values, understand the knowledge and apply the knowledge. To strengthen the process of learning, the videos also also create the avenue to analyse, synthesize and evaluate the knowledge obtained regarding social values..

1.14 Thesis Organization

This thesis consists of seven chapters. The content of each chapter are described as follows:

Chapter 1: Introduction – As an introductory, Chapter 1 provides some background of the research, elaboration of issues that underline the foundation of the research, motivation of study, and the research problem. In addition, the result of preliminary studies are also discussed which then leads to the formulation of the research gap, research questions, research objective, research scope and finally discuss the operational definition that are used in this research.

Chapter 2: Literature Review – Before designing the prototypes, it requires to review in-depth on the concepts and theories that relate to this research. It is important to make sure that the designed conceptual model and produced prototype are corresponding to the elements needed and complying with the entire research objective. Thus, this chapter reviews on concepts and theories underlying this research, as well as the comparative analysis from previous studies to get the component involved

Chapter 3: Research Methodology – This chapter elaborates the process involved in this research from the beginning to the end to achieve all the research objectives. The process was

based on design science approach which consists of five phases. The detail discussion for each phase is also discussed in this chapter.

Chapter 4: Construction of Conceptual Model for SC Values Ingestion − This chapter discusses the process involved in developing the conceptual model. It involves model selection, construction of the conceptual model and validating the conceptual model via expert review process. An initial conceptual framework was first proposed and after justification on exper's comment, a revised conceptual model was produced..

Chapter 5: Prototype Design, Development and Production − This chapter discusses the process of developing and producing of the prototype educational video program. Four stages of educational video production were discussed in this chapter; development, pre-production, production and post-production.

Chapter 6: Validation and User Acceptance Test of Prototype – After the production of the prototype educational video program, validation by expert's review process and user acceptance test for school children on the prototype was conducted. Analysis and findings of experimental group compared to control group was carried out for hypothesis testing.

Chapter 7: Discussion and Conclusion – In this chapter, research questions were answered, objectives of the research were revisited, findings and contributions and limitations were discussed, significance of the research were made clear and finally recommendations for future works were proposed.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This literature review will identify and review researches which are analysed with the idea that video program is a medium that is potentially beneficial with the ability to inspire and ingest social values into school children to promote pro-social behaviour among school children.

Video programs have remained the dominant media of choice for delivery of information since the 19th century (Denning, 2009). The process of harnessing the power of video programs for teaching and learning social values to encourage pro-social behaviour will require full attention as educators. In order to achieve this requirement, this chapter will begin with the introduction of video programs. To understand educational video programs, the theory that applies to the production of these programs will be discussed. This will be followed by the explanation of the existing conceptual models of social values intervention. Elements, set of rules, intervention models and steps and strategies of the existing models will be identified and discussed. Finally, before summarizing, a strategy to intervene and ingest social values into video programs to suit the needs of this research will be discussed.

There is nothing new about the arising use of video programs in the classroom. Educators have realized the power of video programs since film strips were used in World War II as a training tool for soldiers (Hovland, Lumsdaine & Sheffield, 1949). These programs were used to increase learners' motivation, enhance their learning experience and at the same time

capture the attention of learners. The technology and content have developed rapidly since that time. Consequently, it increases the value and availability of the video programs. Content have developed from just competing with instruction to complementing classroom instruction and also supplementing classroom tools via specifically designed educational standard-based videos (Corporation for Public Broadcasting, 2004). From filmstrips, delivery technologies have also advanced from just television, proceeding to the versatility of computers, smart phone or any other device connected to the internet. The field is ever evolving with newer and ever-greater potentials of adaptability in dealing with the advent of 21st century technology applications and web based platforms using video programs.

An important point to be noted here is that video programs consumption of children is taking place in a much more complex media environment. When British academic Maire Messengger Davies' book, 'Television is Good for Your Kids' was published in 2009, it challenged the view that television is the reason for its young viewers to be 'layouts' and 'morons'. At this time, most British children only watched terrestrial channels of the BBC, ITV and Channel 4 (Livingston, 2012). For the record, in 2017, BBC offers 8 channels specially dedicated for children via terrestrial television (broadcasting) and also web based platform (webcasting). This is already a strong outcome of the childrens' increased video viewing habits.

Even though children regard video programs as primarily a source of entertainment, many parents often see these programs as only an important educational tool that will support children's intellectual development (Livingston, 2012). In an American study, only 38% of parents believed that video programs helped children's learning, but surprisingly, they still

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made use of these video programs, because they realise the educational quality of video programs' content (Kaiser Foundation, 2016). In focus groups almost all parents agree that 'learning' is one of the biggest advantages of video programs when they are produced in the form of functional video specifically for education. Children can learn social values from popular programs like 'Pokemon' such as what to want, to feel and how to respond and how to behave (Buckingham and Sefton-Green, 2018). This type of learning is distinguished from 'official' educational knowledge. Viewed from this perspective the 'learning' that takes place via video programs makes it one of the major players in the socialization process alongside more traditional socializing agents such as the family, school and peer groups (Signorielli & Morgan, 2011), reflecting society's values and culture (Takanishi, 2012).

Supervising the video programs viewing habits of children should be the priority of their parents as most of this watching takes place at home. Obviously, parents must be involved in deciding the suitable program for their children and in certain homes it is definitely the authority of the parents.

This being the case, the problem here is that the viewing habits of parents and children are different. Allen and Smith (2015) did a study on relationship between children's and parents' perception of wrong or bad behaviour portrayed in video programs. Surprisingly, they found that children and adults differ a lot in the way they perceive wrong or bad behaviours that is being portrayed in video programs. What parents see when they watch these programs, compared to what children perceive when they watch the same programs are not the same.

Social sciences researches only had one implicit theory on how video programs were watched until the 1980s. This viewing, particularly by young children was regarded by analysts as being under the control of salient attention and cognitively passive. This elicits features of the medium such as sound effects and fast movement (Haber, 2013). This theory was formalized by Jerome (1980). He proposed the sensory bombardment from the 'busyness' of video programs, produces a series of responses that interferes with reflection and cognition and therefore cannot learn from it. Other similar views proposed were that programs such as Sesame Street do not provide anything that has the element of good behavioural values (Seaton, Bergner, Chuang, Mitros, & Pritchard, 2013).

Aletha and John (2014) had a different idea on the video programs that were broadcasted and webcasted. They believed that as a child ages, the features of these video programs that attracts the children will change. They also claimed that perceptually salient features such as sound effects and movement will drive attention in infancy. But as these children age and gain experience, they will be less influenced by perceptual salience and will pay more attention to features that are informative such as narrative and dialogue.

Daniel and Elizabeth (2018) argued that viewing of video program is based on active cognition. They created a complementary model of children's attention to video programs. According to them, children beginning from two years old will have their attention guided in large part by the content of the program. For example, normal video programs will attract more attention from preschool children compared to those that have been edited because these programs are incomprehensible. The edited elements discussed here are like foreign dubbing or the order of shots is randomized within the programs. Furthermore, preschool-age children

pay less attention to commercials compared to children's programs even though these commercials are usually more densely loaded with formal features. By using their knowledge of formal features, children will learn strategies for watching these programs (Corporation for Public Broadcasting, 2014). Finally, children engage in a variety of inferential activities to understand typical programs that use standard video montage such as zooms, pans and cuts, while viewing.

2.2 Understanding How Children Develop Television Literary

Children perceive video programs in a different way compared to adults because linguistic maturity and age determine how a child will engage and respond to video programs. Altogether, four categories of development are experienced by children (Piaget, 1969; Larnish, 2007). In the first category, children below two years old experience a 'sensory-motor stage' where their actions and senses make them feel that characters on video programs are different compared to real life characters. In the next category, between two and seven years old (pre-operational stage), children acquire their language and during this period they develop representational thinking skills. This will allow them to discuss and talk about the characters in the video program. In the third category, children will grow into the 'concrete-operational stage' (between 7 and 12 years old). They will start engaging in abstract thought which projects the understanding of video program codes and conventions and be able to follow storylines. They will also be able to link the segments and chunks that constitute a video program (Signorielli, 1991). Finally, when the children are above twelve years old (fourth category), they are assumed to understand video program in a similar way to adults and develop levels of perception (television literacy).

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Children start understanding video programs from an early age. As they grow up, they learn to draw distinctions between their own world, what is shown on video programs and whether it is practical in their life. In a three-year British study of five year olds in a large urban school, Gosling and Richards (2013) established that children could talk about what was real and what was not a reality in the video programs they watched. These studies illustrate the extent to which children gradually develop their visual literacy.

In a study of how children's taste for video programs development, Davies (2015) conducted interviews with children and found that the act of classifying programmes served as a means of social self-definition. This means that the children can clearly distance themselves from acts and scenes that are not approved or accepted by them. This shows how children are able to categorise programs through their own distinctive tastes. In a similar vein, Buckingham (2018) points out that older children's ability to exercise critical judgements on programmes serves particular social purposes connected with their developing media literacy:

'They enable children to present themselves as sophisticated viewers, who are able to 'see through' the medium, and hence to differentiate themselves from those who (by implication) cannot. Critical discussions of the media therefore provide important opportunities for 'identity work'- for laying claim to more prestigious or powerful social identities' (Buckingham, 2018).

In conclusion, it is obvious that children gradually develop different types of skills through watching video programs. Given time they do learn how to understand video programs, but at the same time, may not perceive it as adults do. Understanding what children can and cannot do with video programs and how they perceive it can help to understand how it impacts their

lives. As children acquire more understanding of video programs, their ability to comprehend its content and translate those meanings into learning experience, will increase.

2.3 Educational Video Programs

Educational video programs are able to teach their intended lessons because they are designed as functional videos with a specific goal to communicate skills. To help prepare children for entering schools, some educational video programs are designed with focus for young children on a variety of academic and social skills. 'Sesame Street' is one such program that can be identified. A positive association between early experience to these educational video programs and school and readiness is demonstrated by correctional research. However, the most common criticisms of children being engaged in these educational video program is that it shuts down other activities deemed to be more beneficial such as homework, leisure reading and outdoor play (Morgan, 2014).

It cannot be denied that other entertainment programs have been largely displaced by video programs viewing. Except, perhaps in the case of children and youth, (with extraordinary high media exposure) video program viewing has not appeared to displace more educationally valuable activities. Nevertheless, compared to watching other types of content can have drastically different status, watching specifically designed educational video programs can have academic and social benefits (Fisch, 2016).

Maximizing comprehensibility of the educational video programs' content is one of the ways to increase attention to the programs. This can be done by characteristics that will seek attention from the children. Voices are also likely to associate a program with its relevant

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targeted audience. Children often associate child voices and characters with them and adult characters and voices to content for adults. Due to this effect of attention-directing of formal features that changes with experience and age, it is possible to keep the children from swaying away from the track and it will also easily allow the intervention of social values into these programs.

2.4 Social Learning Theory

Social learning theory (Bandura, 1977), explains how social learning leads to change in behaviour and this change of behaviour can occur from video programs viewing. According to Bandura, the main reason a child learns from seeing or hearing a model is that the information he or she thereby acquires, helps him or her decide how the observed behaviour might help or hinder him or her in fulfilling his or her needs on some future occasion. This information is stored in the memory in symbolic form, as images or as verbal symbols, for future reference (Thomas, 2015). Social learning theorists believe that behaviour of human can be moulded either by direct experience or by observation (modelling). Raffa (2016) states that "most human behaviour is learned through modelling, that is by observing others, one forms an idea of how new behaviours are performed, and later this coded information becomes as a guide for action."

"Modelling can influence a child's behaviour in two ways: (a) engaging in new patterns of behaviour, and (b) engaging in this particular behaviour rather than some other activity". Brofenbrenner (2011), proposed the idea that several models, exhibiting similar behaviour, are more powerful inducers of change than a single model" As pertains to video peograms, this means that repeated exposure to similar types of behaviour by several different characters can

be more effective in eliciting change than can the influence of one or two adults or peers whose similar (or opposing) behaviour is observed only occasionally (Raffa, 2016).

This theory allows the construction of socio-cultural elements in the learning process, and the outcome will be positive in reflecting sexual orientation and gender sensitivity, ethnic heritage and also the perspective of every ethnic group (Raffa, 20126. The concern in the Malaysian context is to make an effort of promoting equality by making students understand the multicultural and diverse society.

Nehme (2018) describes how a social learning theory environment would work in a synchronous online community of learners. She states that, 'the synchronous online tool is the mediator and the social area is achieved through the different types of communication, collaboration, cooperation and interaction that happen among the model and the learners.' We cannot deny that this method will promote critical thinking, encourage student self-expression and interaction and encourage students to process information. Conversely, social values for the Malaysian context should also be given due emphasize in the production of video programs. The production should blend the synchronous tool with designation of motivating students to examine their behaviours and attitudes and to comprehend their responsibilities, duties, privileges and rights as participating citizens parallel to the requirements of the national education philosophy.

2.5 Positive and Long Term Effects of Video Programs

Positive effects on children's development projected by age-appropriated video programs are backed by strong evidences. Most of the research in this area is related to 'Sesame Street', a

program by Children's Television Workshop (CTW). Writers, producers, child psychologists and educators worked together to create this entertaining program based on detailed research and curricular goals (Marrow, 2016). The program proved to increase the skills relating to numbers, alphabet, shapes, body parts, sorting and relational terms (Bogartz, 2012). In a re-contact study, it was established that high school students who have been watching 'Sesame Street' since young, achieved higher grades, particularly among boys (Anderson, 2011).

In a study of 'Barney & Friends', by Jerome and Dorothy (2008), the evaluation of effectiveness of this program was carried out. Criteria of study were physical health, cognitive, emotional and social values. The outcome of this study suggests that a combination of video program viewing and follow-up teaching session is a more efficient way of teaching knowledge and values to children, compared to just watching the video program without any follow up. The same study also revealed that the presence of a teacher watching the video program with the students and able to stimulate and share in the discussion had a very high impact on the children.

2.6 Video Programs and Pro Social Behaviour

There have been many studies that proved watching pro-social video programs can bring upon positive changes in children's social behaviour including increases in helpfulness, altruism, generosity and other social skills (Gauntlett, 2015). Other skills associated with pro-social behaviour include delay of gratification, self-control, empathy and sympathy for others, reduction of stereotypes and learning to persist in a task. As Gunter and McAleer (2017) pointed out, 'Video programs consists many examples of people acting kindly and with

generosity and good behaviour'. It is logic to assume that these portrayals provide models for children to copy.

Early studies in the 1990s showed that programs like 'Sesame Street' not only taught intellectual skills, but also promoted friendship, respectful behaviour, non-violence and other pro-social behaviour including positive attitudes in a multi cultured ethnicity (Bogartz & Bull, 1992). A study by Lesser, (2015), showed that children who watched this program regularly were given high rating by their teachers in connection of their relationships with other children and also their readiness for school. This pro-social tradition is continued in more recent video programs like 'Dora the Explorer' which introduces children to different cultures.

In the Malaysian scenario, a report on children's popular culture use, identified that pro-social behaviours like consideration of others, dealing with situations and social interaction have been detected among children watching programs like 'Sesame Street', 'Pokemon', 'Keluang Man', 'Power Rangers', 'Upin and Ipin' and 'Dora the Explorer' (Fuziah & Abdul Latif, 2011). Parents admit that examples of pro-social behaviour learned from these programs have created awareness of the following social values among their children:

- maintaining attention and be sensitive to the views and needs of others

- respect other cultures including their own

- contribute to and value their self-control and own well-being

- understand codes of behaviour, how to behave and agreed values

- have an awareness of behavioural expectations and

- understand what is wrong, what is right and   manage self-cleanliness independently

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- understand that people have different views, needs, beliefs and cultures that must to be given due respect (Fuziah & Abdul Latif, 2011)

Contrastingly, children who watched anti-social behaviour in video programs also learnt pro-social behaviour (Davies, 2015). According to Davies, 'if you see bullying and protection rackets on video programs (particularly when you see the culprits being punished or ostracised) you may not be so keen to follow their example, because bullying other children is not such a pleasurable activity as having a good time with your mates at some activity or other.

We cannot deny that the ability of video programs to ingest social values into children is also affected by the interference of other complex social influences. The effect of pro-social behaviour seems to be less strong than the academic effects of these video programs (Fisch, 2016). This may be due to emotions and attitudes are more difficult to measure and define compared to academic achievements. Even though video programs can develop good social values, but the cultural environment where the child lives have a very strong influence on the way the child interprets the social values.

2.7 Why Do Children Watch Video Programs and How Do They Watch?

According to Gunter and McAleer (2017), children watch video programs for time passing, companionship, learning, relaxation, escape and arousal. They also watch these programs when they are bored and expect some excitement with pleasure (Livingston, 2012). In this situation, the video programs need to be action packed, engaging and funny and the most important, entertaining. In contrast to this, Master and Ford (2015), suggest that children

watch television to deal with hostile social environments. The Independent Television Commission (ITC, 2015), reports that:

'Video programs are something which helps children to unwind and relax. It keeps them entertained without much effort. On weekend mornings, video programs keep them company while mum and dad are still in bed. Cartoons have a particular role within children's (5-9 years) viewing. They are easy to dip in and out of, short, funny, fun and exciting. Children find cartoons stimulating and relaxing.'

According to Huntemann and Morgan (2015), video programs play an important role in developing the children's identity, through the establishment of role models, and this shapes what children think about the world and how they perceive themselves in it. They develop a sense of themselves through video programs, which offers an opportunity of forging relationships with family members and peers.

Older children develop critical thinking by watching video programs, about what they like and do not like (Buckingham, 2018). This process of engaging in critical viewing practices is part of the process in which they construct their own identities. Children become aware of critical perspectives in video programs as part of their everyday experience. To some extent, it is a general cognitive development of the child. Critical discussions of video programs therefore provide opportunities to more prestigious or powerful social identities (Benjamin, 2014).

Apparently, functional video programs which are not specifically produced for 'educational' purposes can teach these children about society and its social values. By evaluating these video programs, they are actually developing their own identities and critical thinking skills.

2.8 Children Perception of Video Programs and Characters

Children can perceive values that are conveyed through video programs. Research has shown that video programs do have an effect on children's behaviours, attitudes and values (Bandura & Ross, 1977; Bruyn, 1991; Carter & Adler 1999; Chaffee, 2001; Collins, 2015; Donohue, 2015; Ellis & Sekyra, 2010; Greenberg & Reeves, 2011; Himmelweit, Oppenheim & Vince, 2012; Liebert, 2013; Novak, 2014; Postman, 2014; Schramm 2015).

Children will model their perceptions of character portrayals through imitation. The way they judge a character's actions will decide how they perceive the model. Social values that are conveyed by characters in video programs will enhance the child's existing value system if the child imitates the character. Research shows that children easily idolize with children characters (Halloran & Eyre-Brook, 2017). Wishful identification happens when the child desires to be the 'hero' or 'heroine' of a program. Similarity identification is more characteristic of realistic programming, mean while wishful identification is encouraged by fictional or fantasy programs (Almers. 2011). Studies show that children who prefer to attend movies and watch videos comprising violent films and programs often lack positive relationship with the people around them. These are the children that are most influenced by what they have watched (Stockholm; Sveriges Radio, 2009).

Eron (2002) stated that children with lower level of achievement watch videos more often, idolize aggressive characters and also believe that aggressive video programs content and characters are real. Due to this, they are more likely to be influenced by the behaviours they observe in the video programs. They are also likely to be frustrated more often if their idols in the video programs are punished, loses or dies at the end of the program. Now, this is a very

dangerous situation that needs to be checked because this frustration is the main reason for the children to behave violently and retaliate in order to compromise, justify or even rectify the punishing, losing or dying of the idolized character.

There is no doubt that social values conveyed via video programs and characters are being followed by children. Therefore, there is a dire need to investigate how they perceive these values that are being modelled by their favourite characters in the video programs.

2.9 Monopoly in Malaysian Television Market

Television broadcasting is one of the conventional ways of watching video programs especially in rural areas and outskirts of town in Malaysia. According to the president of the Malaysia TV Producers Association (PTVM), Jurey Latif Rosli, there are 752 production companies competing to get broadcasting slots in local television stations (Mohd Ifqdar Abdul Rahman, 2012). Even in the open market, two existing companies (duopoly) or a few companies (oligopoly) can cause a monopoly. According to Friedman (2015), monopoly happens when a specific company or individual takes control on a particular service or product to dictate conditions. Bowles and Edwards (2015) also pointed out that if a firm or several firms can push aside the other parties, then monopoly power has definitely existed.

The emergence of HVD Management Resources who merged with Solid Gold in 1992 is one of the best examples of how a monopoly can be formed. Another example of monopoly is Kurnia Padu Sdn Bhd with government shares, which is Ministry of Finance (Incorporated) amounted 30% and another 70% by individual shareholders. These monopoly firms were given the privilege to monopolize RTM slots (Parliament Official Statement, 1994). Due to

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these companies monopolising television market in RTM, a few local companies retaliated and formed their own consortiums, such as Consortium of Malay Film and Video Producers (Keris Motion - 1995). The forming of the consortium had reduced the monopoly of HVD. RTM had to allocate slot hours to Keris Motion (Amirah Amaly Syafaat, 2012).

RTM's principle to allocate slots according to hours via consortium caused some artists to also open up their own production companies. Among them were Siti Nurhaliza, Erra Fazira and KRU who came into the wing of Consortium of Gagasan Perdana which had also obtained production slots allocated by RTM (Utusan Malaysia, 2003). RTM's allocation system which led to the fear of monopoly had always been an issue hence causing the supply allocation system of RTM to be changed many times and Education TV slots were wiped out.

The issue of purchase and slot allocation which causes a monopoly issue is not only happening in RTM. It also happens in the free private television network which is being dominated by Media Prima. As an example, Grand Brilliance, a branch company of Media Prima was also given a priority to produce their own television programs. It was more obvious with the establishment of Primeworks Studios Sdn. Bhd. (Primeworks) launched in August 2008. Through Primeworks, the monopoly became more obvious because the name Primeworks blanketed every other TV3 production. With opportunities to broadcast every television program they produced through their networks of TV3, NTV7, 8TV and TV9 which was owned by its' own main company (Media Prima Group), a monopoly system was created in free private television market where full control of making, distributing and broadcasting has been capitalize (Malaysia Competition Act, 2010).

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In a television program production, monopoly will cause a program broadcasted to be low in quality and without innovative or social values. Audience will be presented with similar and typical dramas. This is due to the ideas presented at pitching session being determined and controlled by the company which monopolizes the market (Zairul Anuar, 2012). Repetition of introduction montage and theme for the broadcasted program are also worried to be a redundancy. This could be due to the fact that the production company has failed to generate new ideas in the production process or monopoly has actually taken its toll on innovation and jeopardized creativity (Rajina Dhillon, 2017). In this case, the companies involved in monopolizing the television market will have the least interest in producing programs with social values targeted for children. As far as they are concern, it is not the corporate social responsibility that brings in the money but the fact of tapping the market and producing programs that will hike up the rating and generate money is their main concern. Furthermore, there is no need to worry because they control the whole market with their monopoly status.

The cost-reduction strategy by monopoly companies will cause a few consequences to emerge. Besides reducing the purchase of local programme, monopolizing companies will also have to seek outsourcing for cheaper products from foreign countries. These foreign produced programs are based on rating and value for money. Their concern on social values will be at the minimum level or none. Whatever the value these programs project, if it is accepted by the audience, then they will continue producing these programs without any concern for the kind of community they are creating through these television programs.

It is a common factor that in a monopoly market, the particular company will plan for a cost reduction strategy while maximising the profit without giving a thought on the effects on

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consumers. Thus every decision made will definitely refer to company benefits. Paid television network, ASTRO for example, has raised the subscription fee without taking into account the protest from existing consumers (Yulpisman & Arshad Khan, 2017, Sinar Harian, 2014). The policy and dependency of other television networks in making ASTRO as their broadcasting pathway has left the consumers with no other options. Furthermore ASTRO is the only satellite television network that has been in operation since 1996 with 62% of Malaysian population as subscribers. To date, ASTRO has a total of 4.3 Million subscribers. (Harian Metro, June 2017).

There is also pressure to the television station in Malaysia that comes in the form of government, political parties and religious groups. In 2006, the then Minister of Information had directed that there must be an allocation of 30% for foreign English programs to enhance the usage of English language as an international and second language in Malaysia (*Utusan Malaysia,* 01 August, 2006). The youth wing of the ruling political party, the United Malay National Organization, has reminded all television stations and channels to be responsive to the sensitivities of Islam and Muslims. This should be manifested in the selection of more imported popular series from the Middle East (Star, 25 June, 2015). The Malaysian Indian Congress, a component of the ruling coalition party, National Front, complained there were very few Tamil movies and serial dramas being aired (Star, 08 October, 2012). The Catholic Bishop Conference pressed for more foreign English programs that promoted multi-religious nature (Star, 17 November, 2014).

It can be concluded that the local television stations, to a certain extent, have neglected the ingestion and intervention of social values due to their profit making attitude. It becomes worst when these stations are more dependable on cheap foreign programs that will generate money because of their market tapping policy and totally not bothered of all the guidelines given by the Malaysian Communication and Multimedia Corporation.

2.10 Malaysian Web-Based Video Programming (Webcasting)

The behaviour of commercial webcasting is portrayed by the incredible implications of media concentration, which is called 'commercial perspective'. In fulfilling the audience's demand, the 'commercial perspective' lacks in social consideration values and moral aspects, but worships profit-making (Croteau & Hoynes, 2016). Beside the profit-making policy, the 'commercial perspective' also encourages 'joint ventures' which reduces the number of product (video program) producers or suppliers and lack of competition. Due to the lack of competition, efforts to create innovative programs are limited and a comfort zone is created for this 'joint ventured' companies to monopolize the market and the webcasting industry.

Also, due to the shortage of product suppliers, local content identity and local market control is delivered into the hands of conglomerates'. These conglomerates cater to the local audience by just 'dubbing' and 'subtitling' foreign programs that contain some local elements and identities (Thussu, 2016). The fact remains that dubbing actually does not change the content, it merely reproduces the same program in a new language and there is nothing local about it except for the language. Anyway, the 'joint-ventured' suppliers still continue to localise famous and best-selling programs (in foreign countries), because these programs will generate higher rating and profitability as a result of the economical scale.

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Croteau and Hoynes (2016), argue that the video program's content problem is not created by their producers, but actually it is more decided by the audience and their demands. Audiences tend to avoid informative programs because they remind them about problems in the society, which the audiences are so familiar with. What the audiences want is video programs for leisure and not problem to think of during their leisure time. Due to this demand from audiences and as a result of commercialization, entertainment programs dominate the Malaysian local webcasting programming (MCMC, 2016). With the liberalization of the local media corporations, the proliferation of cheap and impactful genres such as popular talk shows, reality shows and variety shows has taken place widely.

Technically, talk shows are information-based content program (Hansen, 2014), but globally, including in Malaysia, the talk show format has been commercialized by employing hosts who are popular, trendy and willing to keep up to the audience's demand in their style, dressing, language and showmanship. All these are done in the name of triggering amusement and reality features.

According to Latifah (2009), Malaysian webcasters do bring in programs that are marketable but 'non-controversial' from the western experts. Due to this, the local content also mainly imitates popular western programs or genres. Thus, it is not surprising that media consumption studies in Malaysia have confirmed a higher volume of western-oriented video programs that are either adapted locally or imported wholly. The 'non-controversial' stand is actually a 'safe-shot' situation created by these local webcasters. Whenever there is a controversial scene or language or idea in the imported western programs, the stakeholders merely proposes that part to be deleted or censored. The question is, does 'censoring' actually

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helps to avoid any controversial situation. The truth is, the audience can still make out or figure out what happened or what was said in the censored part and they will be able to inevitably 'see', 'hear' and 'understand' the particular part. Thus, whatever negative values that the webcasters were trying to avoid, would have actually been digested by the audiences and be a great provider for the detreating level of social values in Malaysia.

Advertising has a direct impact and influence on Malaysians. Advertisements stimulate demands for non-essential productions and they also pressure the webcasters directly and the government indirectly into giving them the priority of their investments and return of investments. Due to this, the expansion of production and advertising budgets surpassed the available time and space in media (Malaysian Journal of Communication, 2016). Consequently, the webcasters would neglect its primary duties which are to develop principles, explain in depth the government policies, ensuring maximum public understanding, promoting unity and the propagation of a Malaysian culture and identity (MCMC, 2016).

If the webcasters could discard the profit-motive image, shrug-off all the pressures from government, political parties and religious groups and prove to the nation that it is working for the good of the society, to educate, to inform and to entertain, then the process of ingesting and intervening social values into video programs would be more viable and will no doubt have the support of the community.

2.11 Existing Conceptual Models of Social Consideration Values Intervention

As discussed in the Research Gaps, social consideration is well establish in many fields. In this section, the intervention of social consideration in different fields will be discussed.

2.11.1 Business

The model of social consideration intervention in business is divided into two main components; stakeholders and capitals. The stakeholders are made of customers, employers, suppliers, community, environment and others. The three main elements of social consideration are; the value created by the business, the value destroyed and the value missed. The next component is the capital which is made of natural capital, human capital, social and relationship capital, intellectual capital, financial capital and manufactured capital. These two main components work in a rotation to create the values. The value creation rotation works around the business infrastructure, customer value proposition, customer interface and financial model.
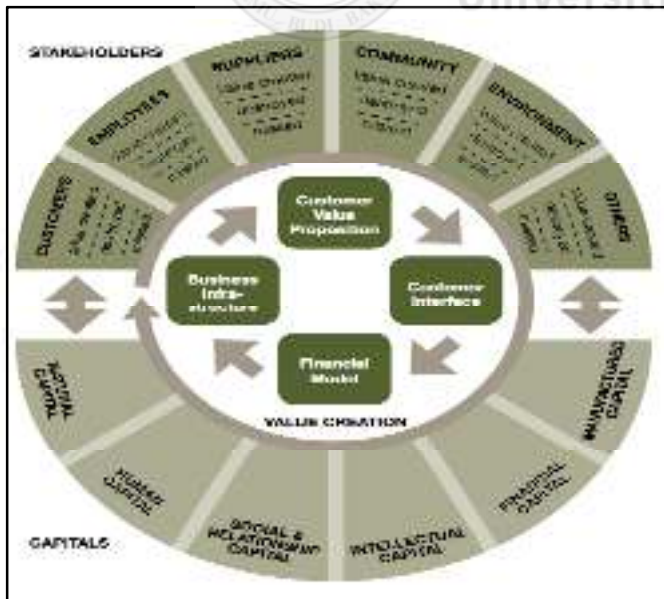
Figure 2.1. Model of Social Consideration Intervention in Business
Source: Europe SME Foundations, Universitat Heidelberg, German (1999)

2.11.2 Health Programs

The model of social consideration intervention in health programs start with a healthcare system which organises the distribution of health and well-being. This distribution is divided into two main components; socioeconomic and political context, and social position. The socioeconomic and political context has three element, namely, governance, policy (macroeconomic, social and health) and cultural and societal norms and values. The social position context is made of more concrete elements as education, occupation, income, gender and ethnicity or race. The elements of these two main components can be interchanged to suit the necessity of the healthcare system. They create material circumstances, social cohesion, psychosocial factors, behaviours and biological factors that will support the healthcare system and strengthen the distribution of health and well-being.
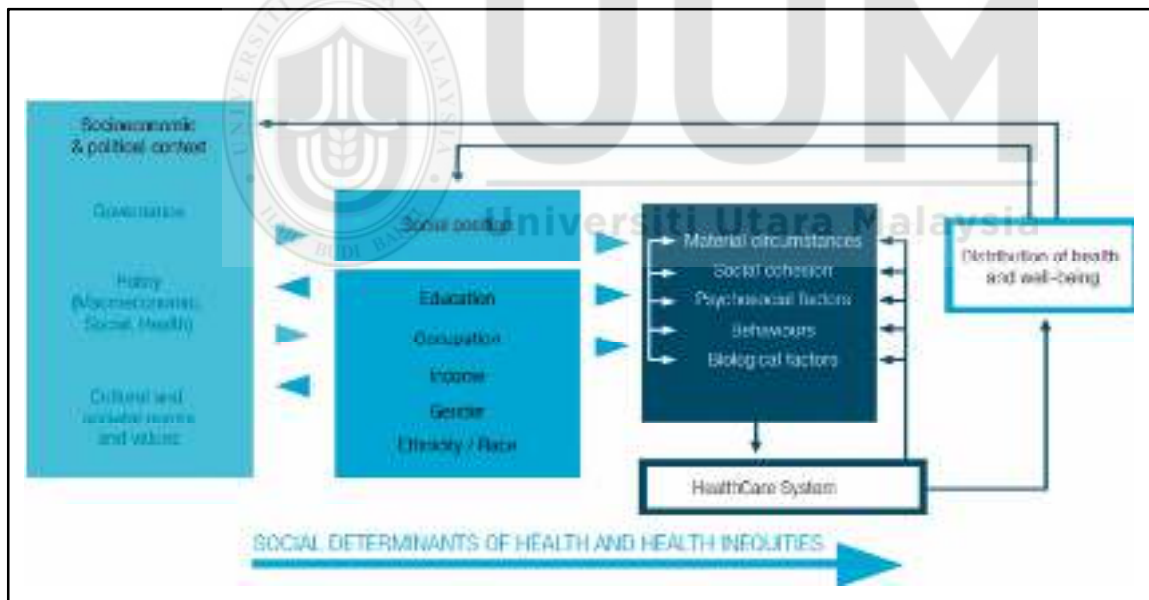
Figure 2.2. Model of Social Consideration Intervention in Health Programs
Source: Inova Health Foundation, UNICEF Office of Research-Innocenti (2001)

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2.11.3 Environment Projects

The main idea of social consideration intervention in environment projects is to create product environmental impact assessment check sheet. The first step is to come up with a product environmental improvement plan that will be used to propose a strategy for product planning. A research prototyping will follow up and will lead to product prototyping. The successful product prototyping will be the avenue for mass-production prototyping and production. There will be discussions in every stage that will generate the evaluation reporting until the final evaluation or judgement reporting is produced at mass-production prototyping stage. This final reporting will be applied to the next model.
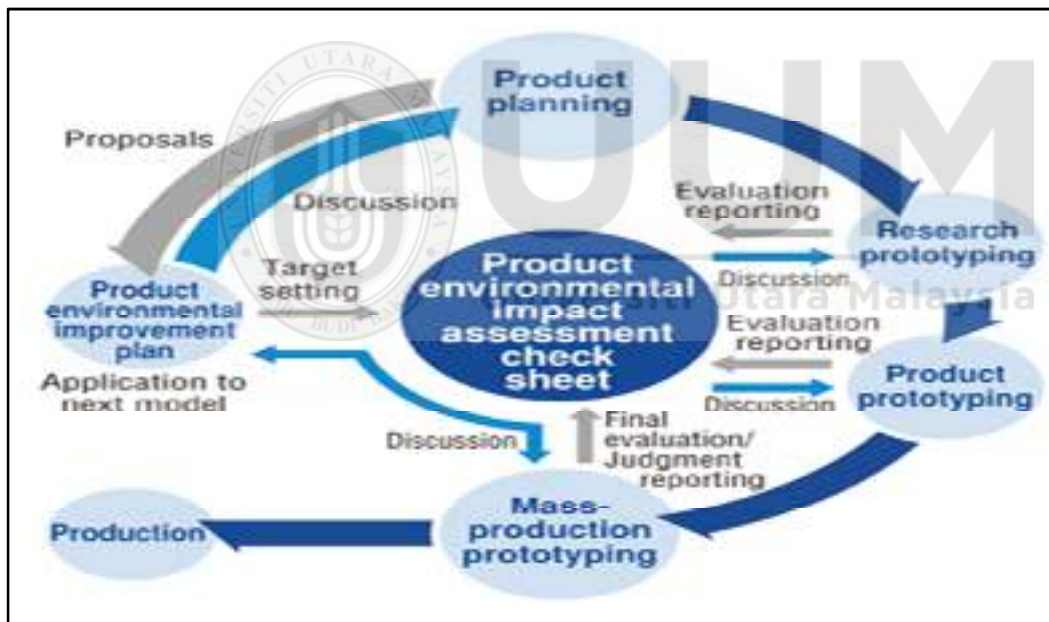
Figure 2.3. Model of Social Consideration Intervention in Environment Projects
Source: NEXI International Service and Research Charter, New York (2000)

2.11.4 Urban Development Projects

The social consideration intervention in urban development projects is institutional, social, economic, environment management, physical planning, finance and culture. Urban planning should be understood as a multi-faceted and dynamic process that, to achieve the perfect planning solution, requires a combination and robust mixture of social considerations such as striking a balance between multiple stakeholders needs, political considerations and spatial planning objectives and goals. As planning affects society as a whole, an iterative process which actively involves a full range of stakeholders taking the various fields into consideration and incorporating feedback is often the most promising approach.
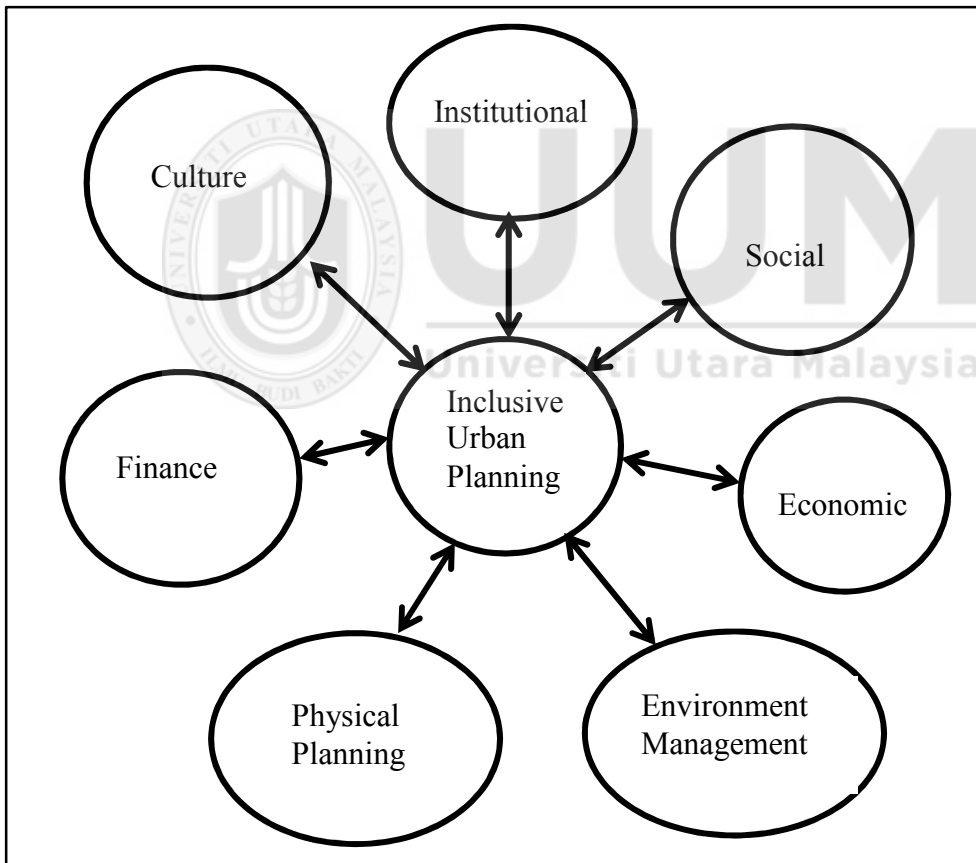
Figure 2.4. Model of Social Consideration Intervention in Urban Development Projects
Source: Finance, Economics and Urban Department, World Bank (1998)

2.11.5 War

The social consideration intervention in war is a set of rules which seek to limit the effects of armed conflicts, protects the people who are not involved in hostilities and strictly restricts the means and methods of warfare. These set of rules are executed through the four Geneva Conventions, which emphasizes that the wounded and sick in a war and shipwreck be treated and cared, prisoners of war should be treated to standard human care and civilians must always be protected in a war. These conventions are implemented with the mandate of the International Committee of Red Cross (ICRC).

Figure 2.5. Model of Social Consideration Intervention in War
Source: Geneva Conventions, United Nations Institute of Training and Research, UNITAR, (1949)

2.11.6 Politics

The social considerations or influences in politics start with human personality. A rare aspect of social consideration intervention in politics is; it has a hierarchical direction and anti-hierarchical direction. These two directions can work vice-versa and their elements are society, educational politics, school system, educational objectives and teaching-learning process. Immaterial of which direction it moves, this model will end at the society that will create the influence of political powers.
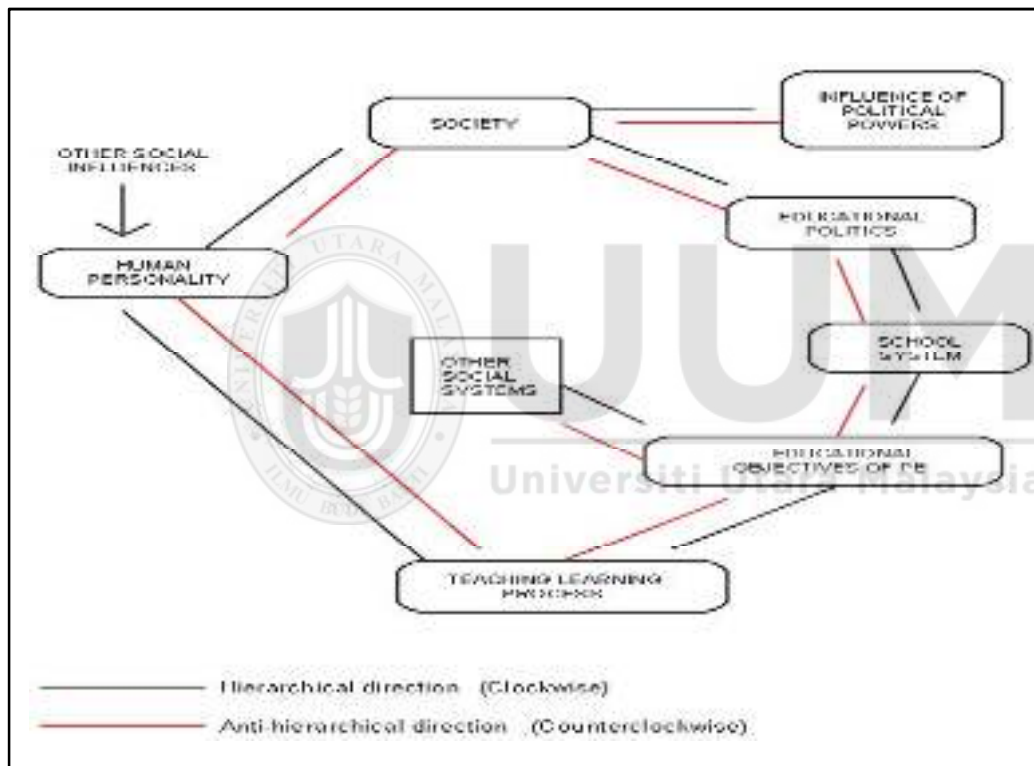
Figure 2.6. Model of Social Consideration Intervention in Politics
Source: Commonwealth Department of Administrative Services (1959)

2.11.7 Economics

The social consideration intervention in economics is the business in society which consist the elements of shareholders, customers, financial analysts, unions, employees, local communities, government and non-government organizations. The target of these elements is market place, work place, community and environment. The management quality of all these social interventions will dictate the power of the economy.

Figure 2.7. Model of Social Consideration Intervention in Economics
Source: Commonwealth Department of Administrative Services (2002)

2.11.8 Education

The social consideration intervention in education forms a pillar that consist 3 elements; specific skills, standards and instruction. Specific skills deal with emotional competence comprising the emotional expressiveness, emotion regulations and emotion knowledge. The specific skills create the standards of education and the need for instruction. Curriculum planning and professional development will strengthen the instruction to be carried out. This will be followed by assessment by screening, formative and summative methods. If the need arises, there will be a change in skills to suit the present education demands and needs.
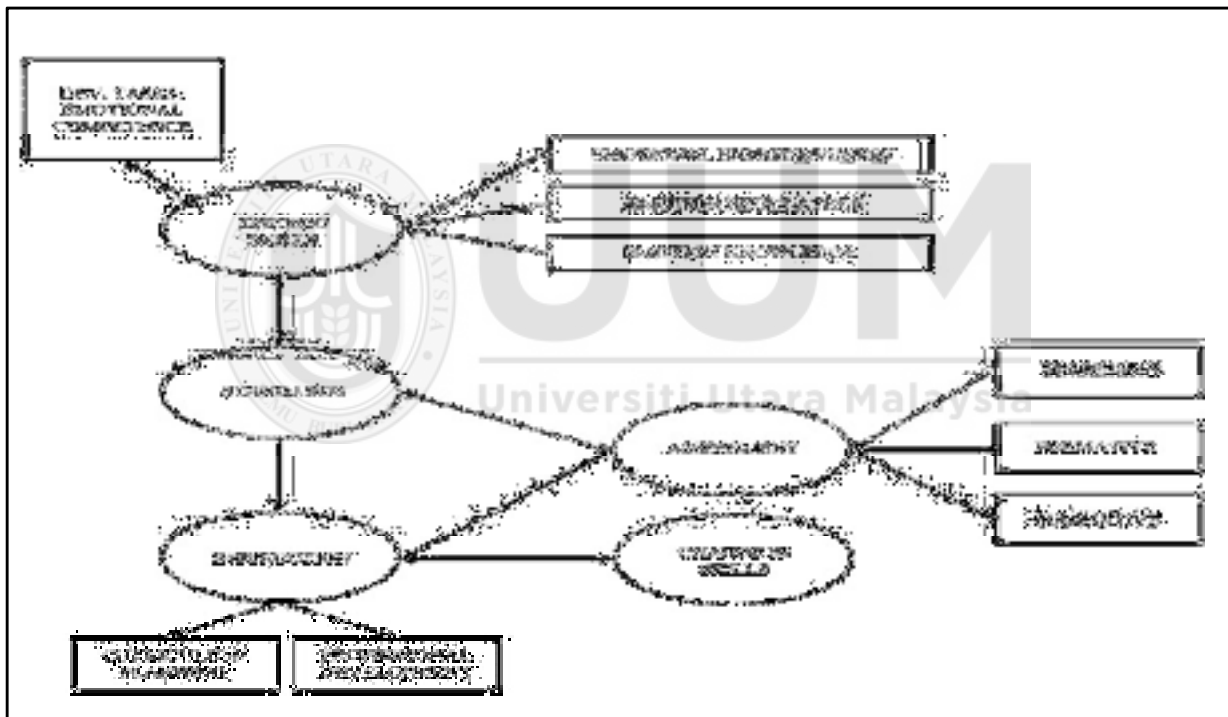
Figure 2.8. Model of Social Consideration Intervention in Education
Source: United Nations Research Institute for Social Development, UNRISD (2010)

2.11.9 Entertainment

Social consideration intervention in entertainment industry has six steps in the consumer decision journey. The six steps are; consider, evaluate, buy, experience, advocate and bond. Brand monitoring of social channels for trends and insights is the first level that six steps must experience. This is followed by responding to consumers' comments (crisis management and customer service). The third level amplifies current positive activity or tone by making referrals and recommendations, fostering communities and brand advocacy. Finally, lead changes in sentiment or behaviour create the brand content awareness which deals with product launches, targeted deals and offers and customer input.
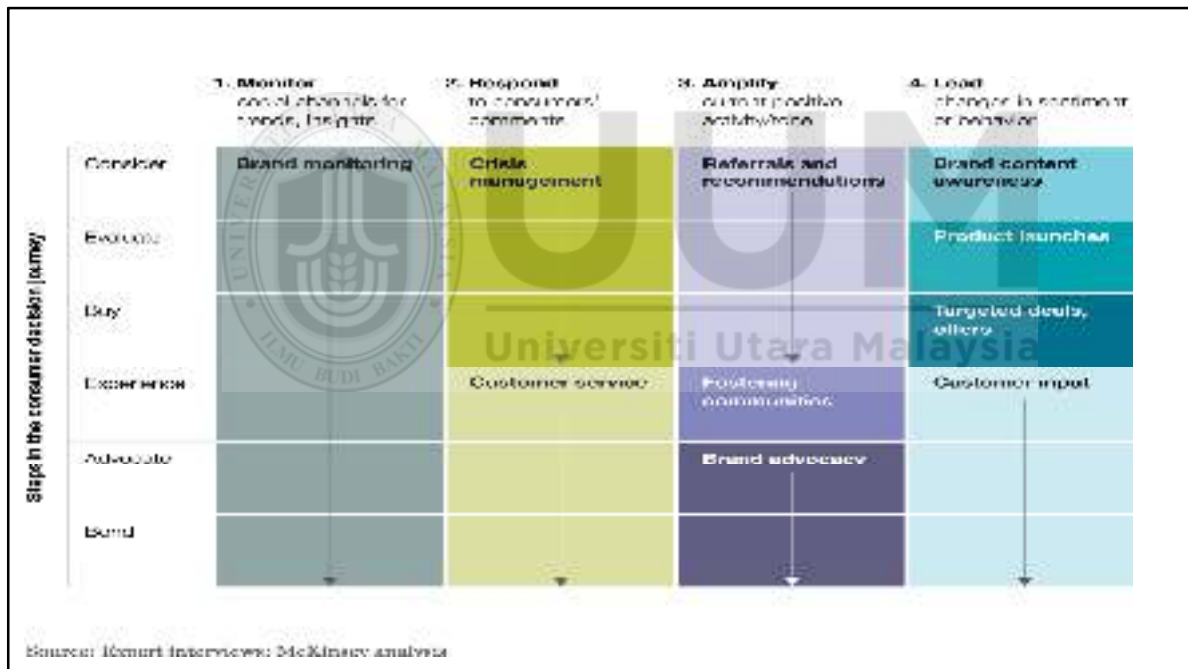
Figure 2.9. Model of Social Consideration Intervention in Entertainment
Source: McKinsey Research and Analysis (2014)

2.11.10 Insurance

Social consideration intervention in the insurance industry has seven strategies that comprise ambition, playing and winning, risk management, target customers, costing, values and key decisions. These six strategies are moulded into an operating model. The key elements of this operating model are structure, governance, ways of working and capabilities. Mobilizing these six key elements, the design and execution would be able to create detailed organizational system design and implementation, develop capability and acquisition, enhance culture and behavioural change and mitigate risk.
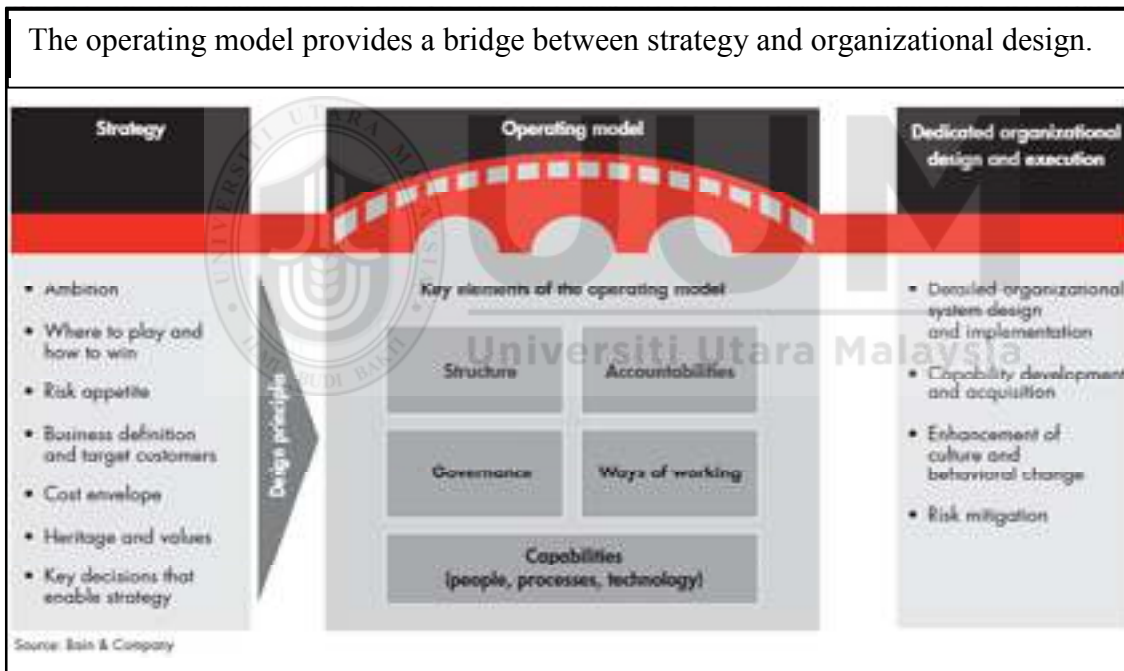
Figure 2.10. Model of Social Consideration Intervention in Insurance
Source: Bain and Company (1987)

2.11.11 Food Industry

Social consideration intervention in the food industry is made up of four main components; broad food system, community food system, social factors and food production exposures. The two disparities that emerge from these four main components are diet and health which is actually the main concern of the food industry.
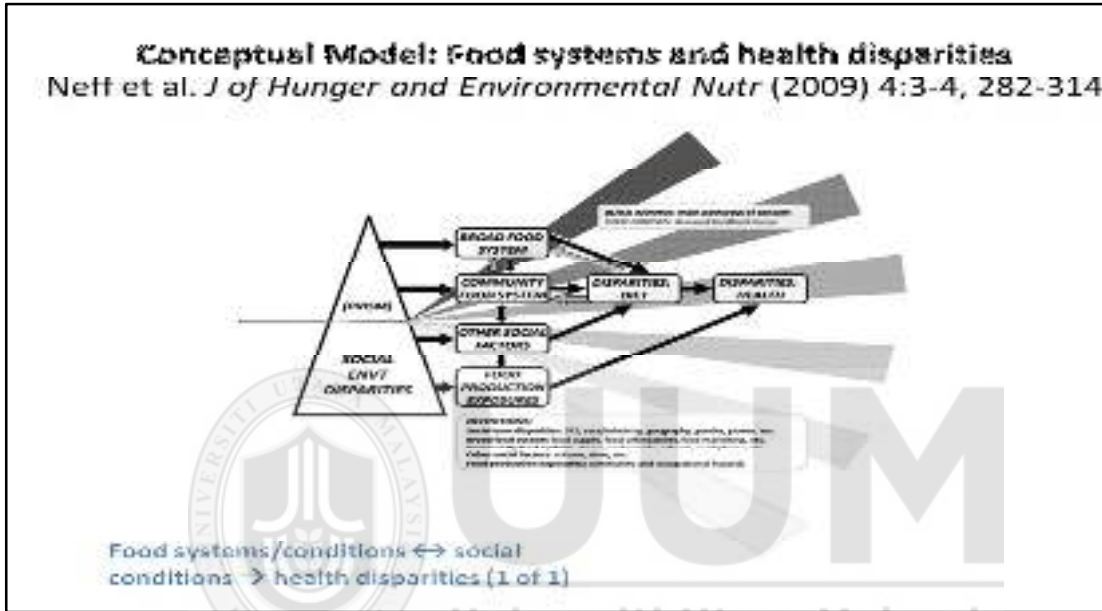
Figure 2.11. Model of Social Consideration Intervention in Food Industry
Source: Neff, Palmer, McKenzie and Lawrence (2009)

2.11.12 Educational Video Program Production by Ministry of Education, Malaysia

The existing model used by the Educational Technology Division, Ministry of Education, Malaysia (as shown in the Table 2.1 below) to produce educational video program has no specific allocation for the elements of social consideration values. It is basically a work chart of video program production created by educational video program producers in the ministry with the advice and consultation from *Institut Penyiaran dan Penerangan Tun Abdul Razak* (IPPTAR-RTM) in 2010.

PROSES KERJA PENERBITAN RANCANGAN PENDIDIKAN BERASASKAN KURIKULUM (2003)

Penerbit : ………………………….

TAHUN : …………………..   **Mata Pelajaran : …………………………**

RANCANGAN	PROSES KERJA PENERBITAN RANCANGAN PENDIDIKAN BERASASKAN KURIKULUM																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
	Arahan Ketua Sektor	Cadangan Penerbitan Rancangan Pendidikan	Pemurnian Cadangan Penerbitan Rancangan Pendidikan	Penyediaan Skrip Rancangan	Pemurnian Skrip Rancangan	Kelulusan Ketua Sektor	Penyediaan Skrip Penggambaran	Tinjau lokasi	Penyediaan Penggambaran dan Membuat Tempahan	Mesyuarat Penerbitan	Latihan Penggambaran	Penggambaran	Menonton *Rushes* dan Mencatat *Time Code*	Suntingan	Tayang Kaji	Pindaan (Jika perlu)	Kelulusan Rancangan	Penyediaan *Master Copy*	Penghantaran Pita Rancangan untuk Siaran	Jumlah Keseluruhan Bilangan Hari
TARIKH																				
BIL. HARI																				

TAJUK-TAJUK RANCANGAN	CATATAN

Figure 2.12. Educational Television Program Production Model

2.12 Analysis of Existing Conceptual Models of Social Consideration Values

Altogether eleven different models of existing conceptual models of social consideration values and an existing workflow used by MOE have been discussed to compare the different values that are being emphasized in each model or field respectively. Table 2.2 shows a comparative analysis of the existing models to the key elements of social consideration values that have been identified by the World Summit on Media for Children, Kuala Lumpur, 2014.

Table 2.2 clearly shows that the seven values identified by the World Summit on Media for Children (2014) is obviously presented only in existing conceptual model for education. The other fields are lacking in some elements, even though economics, food and health only had one identified social consideration value missing; kindness in entertainment and economics; and courage in health. Business, entertainment and environment have two identified values missing, while urban, war, politics and insurance have three different identified elements missing.

This comparison gives a positive lead to generate a conceptual model for educational video program production where education can be used to intervene and ingest social consideration values into educational video programs. The conceptual model will mould all the seven identified values of social consideration to be transformed and ingested into production of educational video programs that will help curb the social problems among Malaysian school children.

Table 2.1.

Comparative Analysis of Existing Conceptual Model of Social Consideration Values

Values identified to be ingested into educational television programs (WSMCF) (2014)	Social consideration values identified in existing conceptual models										
	Business (1999)	Health (2001)	Environment (2000)	Urban (1998)	War 1949	Politics (1959)	Economics (2002)	Education (2001)	Entertainment (2000)	Insurance (1987)	Food 2009
Decency	/	/		/			/	/	/		/
Kindness		/		/				/		/	/
Duty	/	/	/		/	/	/	/	/	/	/
Tolerance		/	/	/			/	/		/	/
Courage	/		/		/	/	/	/	/		
Self-discipline	/	/	/	/	/		/	/	/	/	/
Respect for law	/	/	/		/	/	/	/	/		/

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In conclusion, the arrangement of the social values represents a motivational continuum. The closer any two social values in either direction around the circle, the more similar their underlying motivations and the more distant, the more antagonistic their motivations. The idea that social values form a motivational continuum has a critical implication; dividing the domain of value items into seven distinct values is an arbitrary convenience. Conceiving social values as organized in the circular motivational structure has an important implication for the relations of social values to other variables. It implies that the whole set of seven values relates to any other variable (behaviour, attitude, age, etc.) in an integrated manner.

This research will adapt the Bandura Theory of social values to be intervening and ingested into the production of video programs because of its enormous advantage of offering a sound classification system, not only from a theoretical-conceptual stand point, but also from a statistical-experimental view, that greatly facilitates the analysis of the social values conveyed in video programs. Furthermore, this theory comprises the key elements of social consideration values outlined by the World Summit on Media for Children (2014) in Table 1.1, and also projects categorical outline that facilitates an experimental study to create effective educational video programs that can be ingested with social values incorporated with the social learning theory (Bandura, 1977; Thomas, 2015), which is the base of this research, in order for social learning to lead to pro-social in behaviour of Malaysian children from video program viewing.

Table 2.1 clearly shows that the seven values identified by the World Summit on Media for Children (2014) is obviously presented only in existing conceptual model for education. The other fields are lacking in some elements, even though economics, food

and health only had one identified social consideration value missing; kindness in entertainment and economics; and courage in health. Business, entertainment and environment have two identified values missing, while urban, war, politics and insurance have three different identified elements missing. This comparison gives a positive lead to generate a conceptual model for educational video program production where education can be used to intervene and ingest social consideration values into educational video programs.

As explained earlier, the conceptual model will mould all the seven identified values of social consideration to be transformed and ingested into production of educational video programs that will help curb the social problems among Malaysian school children.

2.13 Chapter Summary

This chapter reviewed and identified researches which were analysed with the idea that video program is a medium that is potentially beneficial with the ability to inspire and ingest social values into school children to promote pro-social behaviour among school children. This process was done by understanding positive and long term effects of video programs; how children develop video program literary and reviewing the ability of educational video programs to teach their intended lessons. The social learning theory by Bandura (1977) and Thomas (2015) was used to explain how the social learning process leads to changes in behaviour and also how this change of behaviour can occur from video program viewing due to children's perception of video programs and characters.

To construct the conceptual model of educational video programs intervened and ingested with social consideration values, eleven different conceptual models of social

considerations from various fields were compared and analysed. The outcome of this analysis confirmed the need to concentrate on the seven identified values of social consideration by World Summit on Media for Children (2014). These identified values will be moulded and used in the generating of a conceptual model of educational video program production ingested and intervened with social consideration values. This finally results in the identification of the focus of research. Figure 2.13 depicts the overall overview of the literature that has been reviewed throughout this chapter.
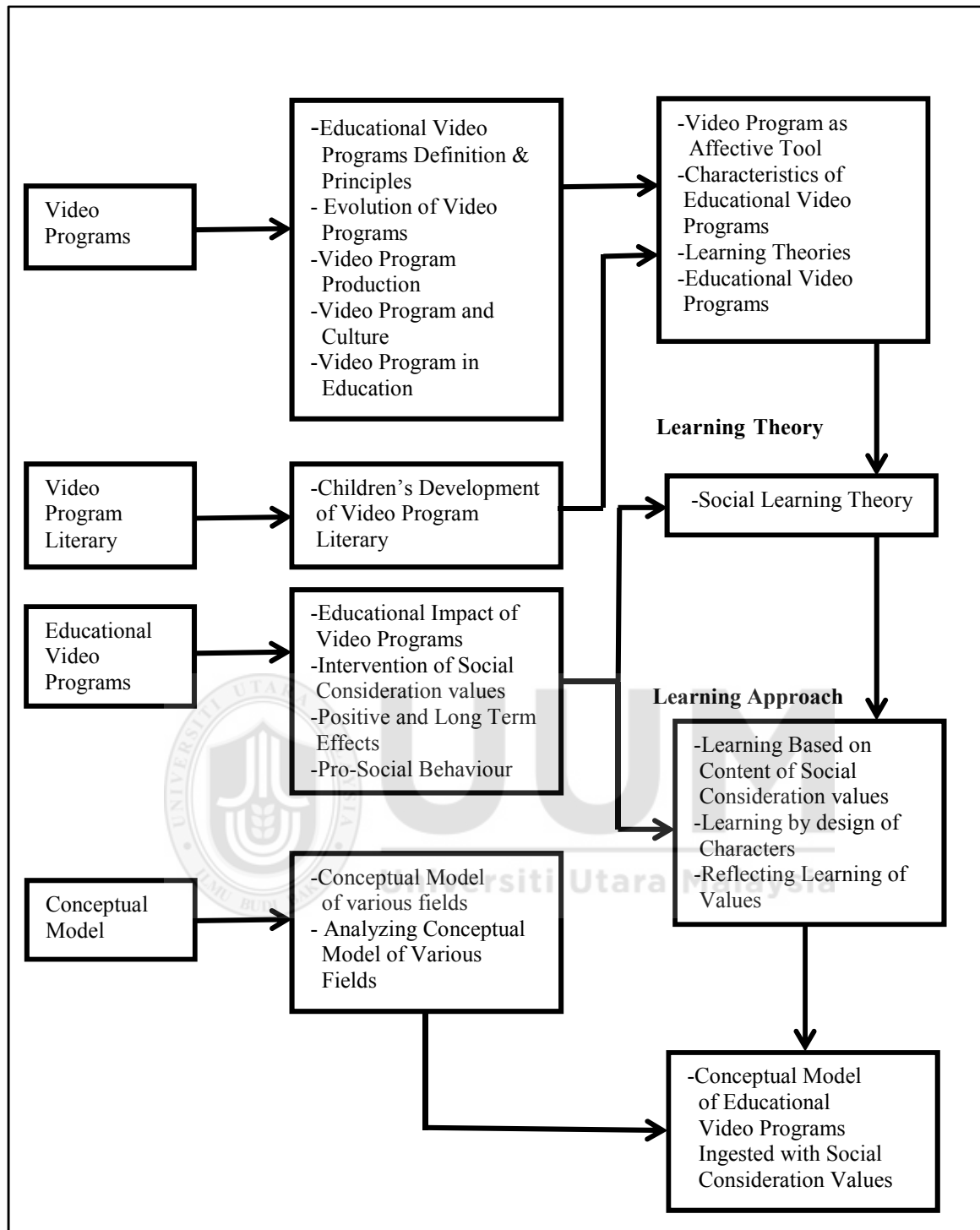
Figure 2.13. Overview of Literature Study

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research design and methodological approach of the research. In particular, this chapter discusses the overall research process and the methods used to accomplish the objectives of this study. Each phase in the methodology and the strategies to be applied are elaborated in details.

3.2 Research Design

According to Oppenheim (1998), the research design is a set of research process that solves a specific problem or issue researchable by finding the answers of particular questions. March and Smith (1995), earlier underlined that specific research design can be defined as a set of process aimed at producing and applying scientific knowledge of tasks or situation in order to create effective artifacts. Meanwhile, from the perspective of Siti Mahfuzah (2011), the research design can be considered as "research improvement" because research design can improve the performance and solve problems. On top of that, to enhance the validity of any study, more than one method (as well as theory) are required to be used to study a phenomenon, which is known as triangulation in social science (Jick, 1979). In fact, Norshuhada and Shahizan (2013), affirms that to attain the objectives of the research design, it needs to repeat the theoretical, development, and empirical aspects in the research process. Besides, Ariffin (2009) also agrees that an iterated process should be applied in theoretical, methods, data sources, and data analysis. Literatures reveal that since 1979 and depending on literature reviews, the Iterative Triangulation Methodology (ITM) (Figure 3.1), has been used, adopted, or implicated in

many studies such as Jick (1979), Lewis (1998), Ariffin (2009), Siti Mahfuzah (2011), and Norshuhada and Shahizan (2013).
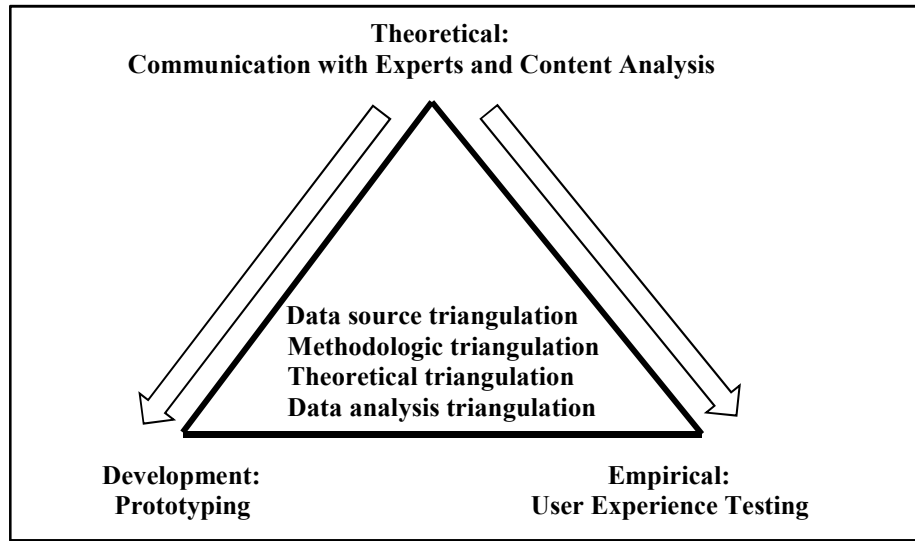
Figure 3.1. The Basis of Methodology
Souce: Ariffin (2009)

Further, this study considers one of the most famous research methodologies in Information Systems, which is called the Design Science Research Methodology (DSRM), to apply the ITM in answering the research questions and achieve the research objectives listed in Chapter 1. DSRM consists of five steps as can be seen in Figure 3.2 developed by Vaishnavi and Kuechler (2008).
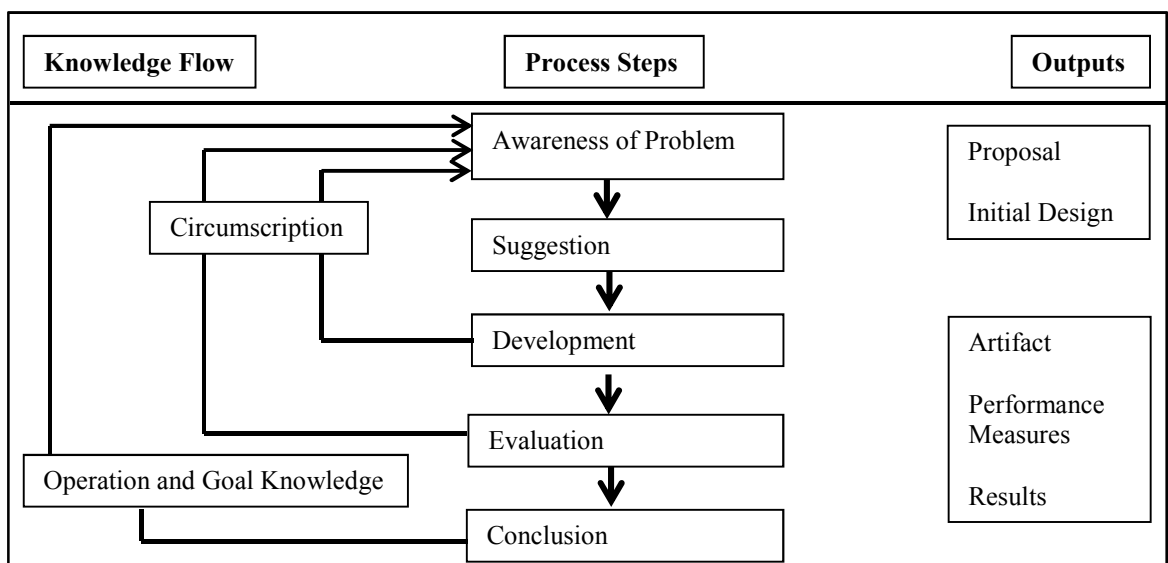
Figure 3.2. The Design Science Research Methodology
Source: Vaishnavi and Kuechler (2008)

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3.3 Design Science Research

This research employed the Design Science Research (DSR) paradigm in achieving the research objective as outlined in Chapter 1. The ultimate goal of DSR is to construct a product or solution in response to unsolved problems and satisfy needs (Alturki, Gable & Bandara, 2013); thus improving situation of environment, institution, and society (Norshuhada & Shahizan, 2013). DSR is largely applied in the area of learning that concerns both people and technology or product (Gregor, 2006). Accordingly, prior works has shown that DSR methodology was progressively implemented in educational technology field (Marjanovic, 2013; El-Masri, Tarhini, Assouna & Elyas, 2015; Carstensen & Bernhard, 2016).

DSR consists of two essential activities which are building a product or solution for a specific purpose and determining how well it performs (March & Smith, 1995). Results from DSR should be understandable, highly focused, and when implemented, it solves a real, current problem (Kuechler & Vaishnavi, 2011). Therefore, in light of DSR guidelines by Hevner et al. (see Table 3.1), it provides a clear reasoning for adopting this paradigm.

Table 3.1

Set of DSR Guidelines

Guideline	Description
1. Design as an artefact	DSR must produce a viable product in the form of construct, a framework, a method or a model.
2. Problem Relevance	The objective of DSR is to develop technology-based solutions to important and relevant problems.
3. Design Evaluation	The utility, quality and efficacy of a design product must be rigorously demonstrated via well-executed evaluation methods.
4. Research Contributions	Effective DSR must provide clear and verifiable contributions in the areas of the design product, design foundations and design methodologies.

5. Research Rigor	DSR relies upon the application of rigorous methods in both the construction and evaluation of the design product.
6. Design as a Search Process	The search for an effective product requires utilizing available means to reach desired ends while satisfying laws in the problem environment.
7. Communication of Research	DSR must be presented effectively both to technology-oriented as well as management-oriented audiences.

3.4 Rationale of Using Design Science Research (DSR) Methodology

The establishment of design as a coherent discipline emerged from development of DSR. Thinking and communicating ways can be designed in a different way compared to common scientific and scholarly ways of thinking and communicating. It can be designed in a way that it is as powerful as scientific and scholarly enquiry methods (Archer, 1979). To develop general substantive and procedural design science, the DSR is mobilized (Van Aken, 2007). This process can solve the field problem occurring in a particular discipline. The ability of DSR to solve field problems is due to its characteristics of interest in field problems and the focus for solution that tags along with the design.

Figure 3.3 below shows how the general methodology of DSR can cause the reasoning that occurs in the course of General Design Cycle (Takeda, Veerkamp, Tomiyama & Yoshikawam, 1990). There is a variety of excellent diagram or charts where the process of design science research is presented (Hevner, March, Park & Ram, 2004; Purao, 2002; Gregg, Kulkarni & Vinze, 2001; March & Smith, 1995; Nunamaker, Chen & Purdin, 1991). The best emphasize of the inherent of knowledge generation is presented in this diagram that has been chosen for this research. This diagram is also the outcome of the process inherent analysis in the design effort.

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Note: * CF – Conceptual Framework   * SC – Social Consideration

Phases	Activity	Outcome

Preliminary Study
-Gather information regarding the social problems among Malaysian school children and experts

- Research Problem
- Problem Statement
- Scopes of Study

Awareness of problem and Identifying the Issue

Literature Review & Content Analysis
-Conceptual Model definitions
-Educational video programs' content concepts and production technologies
-Educational video definitions
-Social consideration values for educational video programs

Core elements of the conceptual model for educational video program production ingested with social consideration values.
(OBJ 1)

Comparative Study of Models
-Existing 12 social consideration (SC) values conceptual models (CM)
-Children development of TV literacy
-Social Learning Theory

Suggestions and Development

Development of conceptual model (CM)
(OBJ 2)   )

-Proposed CM for educational video programproduction ingested with SC values.

Expert Review
-5 IPG academicians and 3 practitioners
-30 school teachers

-Validated CM for educational video programproduction ingested with SC values.
(OBJ 3)

Evaluation

UAT Instrument Construction
-Content validity (15 IPG academicians)
-Face validity (30 school media teachers)
-Reliability: pilot study (30 school children)

User Acceptance Test of Produced Prototype (OBJ 4)
- assessment by experts and practitioners
-60 school children (13 – 17 years old) for prototype acceptance test
-Expert review (5 IPG academicians and 3 Practitioners)

-Analysis of Findings in Terms of User Acceptance Testing (UAT) of the prototype
(OBJ 5)

Conclusion

Communicate Results & Findings
-Review Documentation
-Finalize thesis & publications

-Research question answered
-Research objectives Achieved
-Report & publication

Figure 3.3. Research Methodology

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The following justifies why DSR was chosen as the principle methodology of conducting this research:

i) Generally, DSR prioritizes a novel design product, particularly construct, framework, method or model as the primary research outcome. In relation, the artefact of this research is the proposed conceptual model for educational video program production focusing on social consideration values.

ii) DSR caters for research problem pertaining to real-world practice and design issues. Hence, this methodology is relevant to this research because it encompasses existing classroom and home practice involving educational video programs.

iii) DSR digests the rigorous approaches in development and evaluation of the product. The construction and evaluation of the proposed conceptual model comprise of extensive review of literature, content and comparative analysis, user acceptance test, as well as expert review.

iv) Since DSR also produces technology-based solutions for education, this methodology suits the context and domain of the study.

Based on the discussed philosophical grounding, the process involved, and the research outcomes, DSR methodology provides a strong conceptual model in pioneering this research. Consequently, phases of DSR from Vaishnavi and Kuechler (2007), is adapted to achieve the intended objectives. There are four main stages in accomplishing the goal of research; i) problem awareness, ii) suggestion and development, iii) evaluation and iv) conclusion. The overall research methodology is outlined in *Figure* 3.3. Explanation of figure 3.3 in detail is discussed in the following sections. (The five stages that was mentioned in the Research Framework in Figure 1.5, was modified to suit the DSR methodology)

3.5 Phase 1: Awareness of Problem and Identifying the Issue

Many different sources can create an awareness of a problem. New developments of problems in the particular industry or in a discipline of reference are the most common sources of creating this awareness. In this research, the concern is the challenge that the Ministry of Education, Malaysia is facing in the process of curbing the rising social problems among school children. Besides that, there is also the problem of connecting schools to real life contexts or situations and provide these children with the ability of motivating themselves and gather all the skills to be self-regulated learners. When the problem has been realised, the issues that contribute to the problem is identified and analysed.

In DSR, the awareness of research problem is ascertained by construing issues and aspects from allied discipline (Vaisnavi & Kuechler, 2017). It involves problem and motivation identification, and objectives of a solution definition (Peffers, Tuunanen, Rothenberger & Chatterjee, 2008). Hence, this research conducted three main activities to build awareness of the problem (Figure 3.4); comprised preliminary study, literature review and content analysis, and comparative study of existing conceptual models of social consideration intervention.
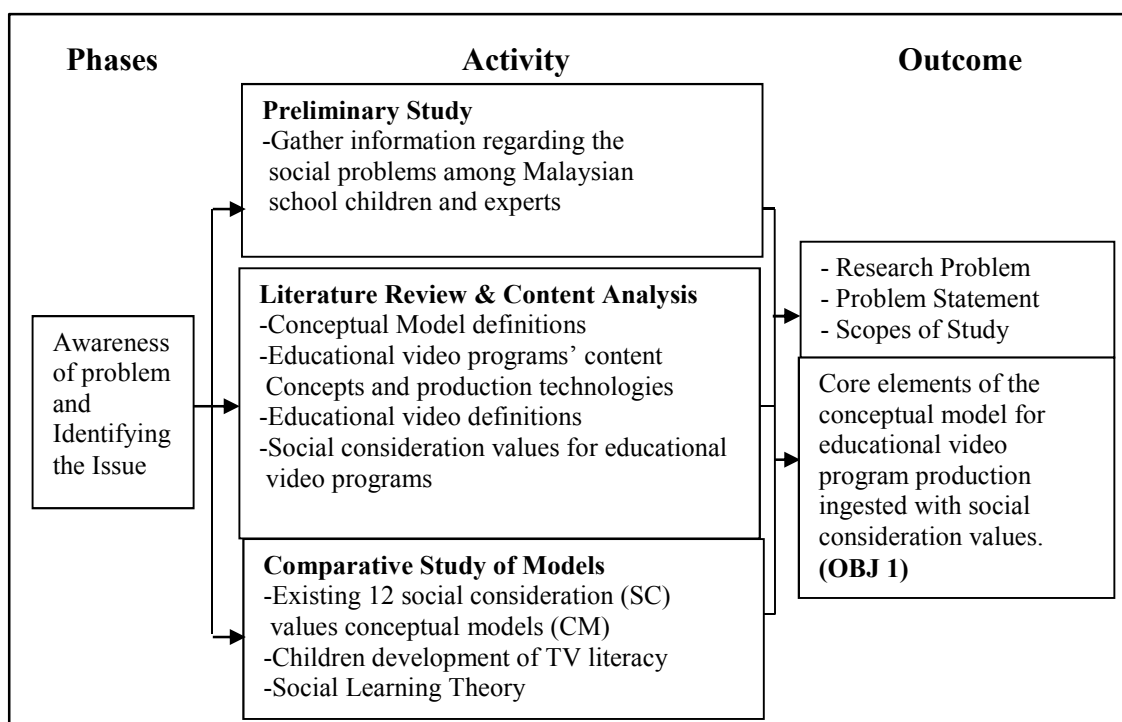
Figure 3.4. Problem Awareness Phase

3.5.1 Preliminary Study

The research area was firstly determined by conducting a preliminary study to gather information regarding the social problems among Malaysian school children and to identify any specific design or strategies to develop educational video programs that are perceived to be able to influence the behaviour of Malaysian school children. The results were used to initially rationalise and motivate this research. The findings and discussion for the preliminary study is disclosed in Chapter 1.

3.5.2 Literature Review and Content Analysis

Content analysis provides a systematic and objective denotation to construct valid extrapolations from verbal, visual or written data in order, by quantifying and relating the categories to the context that produced the data (Kolbe & Burnett, 1991). Reviewing and analysing content recorded in prior literature is important to provide applicable solutions to the problem in DSR (Peffers et al., 2008). Thus, Figure 3.4 visualizes the themes

covered in literature review and content analysis activities. Ability of educational video programs to inspire and ingest social values into school children, children development of video literacy, social learning theory, pro-social behaviour, positive and long term effects of video programs, children perception of video programs and characters, monopoly in Malaysian television market and local channels' programming and existing conceptual models of social consideration intervention were scrutinized in clarifying the problem statement and practical gaps. The literature and content analysis are explicitly discussed in Chapter 2 (2.11) where existing conceptual models of social consideration values intervention in different fields were scrutinized and discussed using Schwartz Theory of Social Values that greatly facilitates the analysis of the social values conveyed in conceptual models.

3.5.3 Comparative Study of Existing Conceptual Models of Social Consideration Intervention

Twelve existing conceptual models were compared and analysed in this phase. The purpose of this activity was to recognize the limitations and strength of selected models in catering the problem defined in this research. From this process, knowledge gaps were discovered. Apart from that, existing concepts and theories from literature review were also used as a basis to support and determine the key aspects and core components in issuance of a conceptual model for educational video program production ingested with social consideration values as the solution to the identified problem. As mentioned earlier, Schwart Theory of social values was adapted for the comparative study of the existing conceptual models because of its enormous advantage of offering a sound classification system, not only from a theoretical-conceptual stand point, but also from a statistical-experimental view, that greatly facilitates the analysis of the social values

conveyed in video programs. The results of these comparative studies are summarized in Chapter 2 (2.11).

3.6 Phase 2: Suggestion and Development

The objective of this phase is to suggest key concepts needed to solve the problem (Takeda, Veerkamp, Tomiyama & Yoshikawa, 1990) and construct the artefact as the solution to the problem (Peffers et. al., 2008; Kuechler & Vaishnavi, 2008). As addressed in Chapter 1, a systematic, scholarly literature supported conceptual model for educational video program ingested with social consideration values is proposed as a solution for producers to design and produce educational video programs. Therefore, as shown in *Figure* 3.5, this phase involved expert consultation, user participation, evaluation instruments construction activities and development of the prototype according to the validated conceptual model.
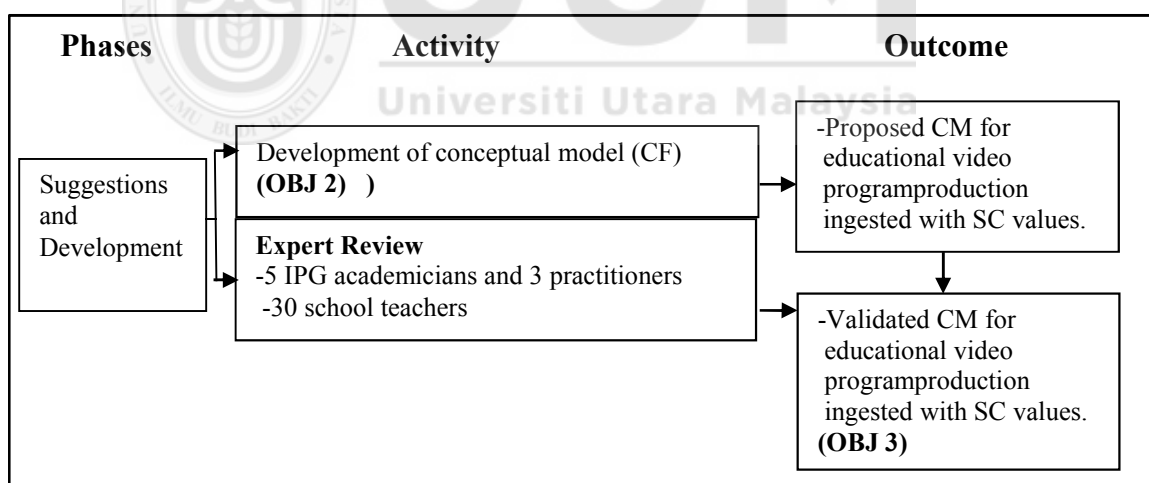
Figure 3.5. Suggestion and Development Phase

3.6.1 Expert Review

Expert elicitation is a structured and transparent approach to address uncertainties (Knol, Slottje, Van Der Sluijs, & Lebret, 2010; Nolte & Prilla, 2013). Thus, in this research, expert review activity was conducted to particularise and structure the proposed model's

components. This allows the experts to validate the components identified through comparative content analysis using the questionnaire which has five dimensions (for the conceptual model) and 4 aspects (for the prototype) to be scrutinized in a quantitative manner.

As a decision making stage for validating and finalize the proposed conceptual model, expert review was the chosen method for this research. To compound in trustworthy results, the experts should investigate the features of the proposed conceptual model (Psomos & Kordaki, 2012). The results obtained from expert review were gathered to replicate several key questions of conceptual model evaluation (Wollf & Frank, 2005) as follows:

Are the facts described by the conceptual model accepted as correct by the domain experts?

Are the described instances on par with the desired level of detail?

Is the conceptual model conforming to necessary standards?

3.6.1.1 Selection of Experts

Experts involved in the review process were selected based on the criteria described in Table 3.2.

Table 3.2

Criteria of Expert Selection

Category	Criteria
Academician	- Have PhD or master's degree in education (moral studies or civic studies) and currently teaching the subject.
	- Have been involved in structuring and restructuring the moral and civic studies syllabus with the Curriculum Development Department of the Ministry of Education, Malaysia.
	- Have at least 15 years of experience in their relevant field.
Practitioner	- Have at least ten years of professional experience in production of educational television programs.
Teachers	- School teachers with at least 15 years experience in teaching.

3.6.1.2 Procedure of Expert Review

There are two phases involved in expert review. Phase 1 is reviewing on the validation of the conceptual model and phase 2 is reviewing the prototype development based on the validated conceptual model. Both review processes have started with the invitation via e-mail to the identified experts. Profile of the experts is elucidated in Chapter 4. After the experts agreed and replied, the official appointment letter by the Director, Education Technology Division, Ministry of Education, Malaysia and consent form were sent to them. Next, the experts received the conceptual model and later (after the production of the prototype) the prototype of educational video program (academicians and practitioners only) and the expert review form. The objective and scope of the conceptual model and prototype were made clear to the experts where the target users are school children between 13 and 17 years old (secondary) and the prototype focuses on educational video program that has been ingested with social consideration values.

The experts were instructed to observe and analyse the supplied conceptual model and later the prototype and its description before carefully filling up the provided spaces in

the review form. As explained in the aforementioned subsection, the expert review form instrument asks about the relevancy of the proposed phases and tasks, the activities within them, connections and flows of all the components, as well as the other aspects of the conceptual model and the prototype.

3.6.2 Educational Video Program Production Conceptual Model
Quality Evaluation Instrument

Several concepts for evaluating conceptual models have been established by former researchers, (eg. Wolff & Frank, 2005; Mehmood & Cherfi, 2009; Heidari & Loucopoulos, 2014) and can be classified into distinctive perspectives. In deployment perspective, conceptual models can be examined in association with its objectives (Frank, 2006). Since educational video program's conceptual model centralizes on the process of ingesting social consideration values into its design and development, the evaluation of educational video program production conceptual model should focus on its validity and practicality. Hence, Matook's & Indulska's (2009), characteristics of conceptual model (refer to Table 3.3) was adopted into the instrument design. It embodies a comprehensive set of criteria with five characteristics that incorporates previous research in reference model field.

Table 3.3

Characteristics of Conceptual Model

Conceptual Model Characteristics	Meaning and Definitions
Generality	Degree to which the model performs a broad range of functions and is usable in different cases easily.
Flexibility	Ease with which a model adapts and accommodates to changes of the requirements other than for those for which it was specifically designed.

Completeness	Degree to which all the components of the model are present under a predefined scope.
Usability	Ease with which a user or user firm can operate, implement and apply the model.
Understandability	Degree to which the purpose, concepts and structure of the model is clear to the users.

Source: Matook and Indulska (2009)

Thus, the proposed conceptual model was measured in terms of generality, flexibility, completeness, usability and understandability. It was implied that these dimensions would represent the quality of educational video program production conceptual model as a valid and practical tool for producing educational video program ingested with social consideration values. Basically, this instrument was utilized to measure if the proposed model has met the user's needs, requirements and expectations (Jun & King, 2008).

Next, cognitive learning items from Dolmas and Ginns (2005) and Pintrich (1993) were adapted into the instrument to measure related constructive learning activities during educational television video production. Then, evaluation items by Bonner (2008) were adapted into appropriate dimensions because the proposed attributes combined several techniques from various works to assess methodologies and processes. Granted that Bonner (2008) claimed his measurement instrument could be employed as a tool in evaluating system development methodology, his work is relevant to be adapted in assessing educational video program production process.

In addition, the items from Syamsul's (2011) mGBL engineering conceptual model evaluation instrument were also borrowed to assess methodology and process. This was due to his instrument is grounded on a number of evaluation dimensions proposed by

earlier researchers to evaluate conceptual model and approaches which were extracted from different fields such as information technology, education and project management.

Therefore, since the constructs are used to assess conceptual model, then they are significant to be adapted in educational video program production conceptual model questionnaire items. In summary, the instrument for assessing educational video program production conceptual model was designed with 22 items as shown in Table 3.4 (Appendix B).

Table 3.4

Educational Video Program (EDV) Production Conceptual Model (CM) ingested with Social Consideration (SC) Values Validation Questionnaire

Dimensions	Proposed Items	Source
Generality	(g1) The CM enables me to summarize what I had learnt in the form of SC values.	A
	(g2) The CM enables me to elaborate and organize knowledge in the form of SC values.	B
	(g3) The CM enables me to relate learning towards essential theories/ ideas/ information/knowledge.	B
	(g4) The CM enables me to apply knowledge to other situations/ social problems of school children.	A
	(g5) The CM enables me to reflect previous knowledge and connect it to new knowledge.	B
Flexibility	(f1) Using the CM fits well with the way I work.	C
	(f2) The CM enables me to develop and ingest social consideration values according to my preferences.	D
	(f3) I have the options to follow or deviate from the phases and activities suggested in the CM.	D
	(f4) The CM enables me to make alterations towards phases and activities in social consideration values development process.	D

Completeness	(c1) All the concepts and components included in the CM are strictly necessary for ingestion of social consideration values.	D
	(c2) All the components in the CM are relevant for the representation of the social consideration values and curiosity development process.	E
	(c3) The CM gives a complete representation of the social consideration values development process.	E
	(c4) The CM enables me to accomplish tasks in social consideration values development more thoroughly.	C
	(c5) The CM allows me to intelligently check the relevance and completeness of social consideration values ingestion.	D
Usability	(us1) Using the CM produces the social consideration values for which it is intended for.	D
	(us2) The CM is effective in providing information I need on social consideration values development.	E
	(us3) Using the CM enhances the effectiveness of social consideration values.	C
	(us4) The CM would be an improvement to a textual description of the social consideration values ingestion.	E
Understand ability	(un1) The CM is clear and understandable.	E
	(un2) Understanding the CM does not require a lot of mental effort.	D
	(un3) The CM with social consideration values as a whole is workable.	C
	(un4) The activities in the CM can be easily followed.	C

Legend: A - (Dolmas & Ginns, 2005); B - (Pintrich, 1993); C - (Bonner, 2008);
D - (Syamsul, 2011); E - (Maes & Poels, 2007).

3.6.2.1 Prototyping

Having a valid conceptual framework needs to be translated into tangible artefact in order to validate its functionality and concepts. Therefore, prototyping approach has been employed. It can be defined as a procedure of converting the system's specification in the constructed conceptual design framework into a tangible masterpiece (Dix et al., 2003; Sharp, Rogers, & Preece, 2007). In fact, prototyping has variety of methods and

approaches. Obviously, the evolutionary prototyping and throwaway prototyping are considered the main bases of all methods and approaches (Dix et al., 2003). Based on Crinion (1992), the evolutionary prototyping refers to the erection of a quite strong prototype in a systematic manner and improving it constantly. Whereas, the throwaway prototyping means building a prototype that would be ignored ultimately rather than fetching it as a part of the final application.

Here, in this research, a prototype was developed along the line of the previous prototypes discussed in various conferences. It was developed following the approach by Laudon and Laudon (2015). According to Siti Mahfuzah (2011), using such a kind of a prototype enables users to test the functionality of the product and its flow. Also, the prototype provides them with a view of the product, which would make them frankly and honestly casting their comments and impressions about the final product. On the other hand, implementing the prototype will enable the developers to test the proposed conceptual model's applicability and usability.

3.7 Phase 3: Evaluation

Norshuhada and Shahizan (2013) recommended several approaches to validate artefacts, namely analysis, experience, example, evaluation and persuasion. Hence, evaluation phase was conducted by the means of user acceptance test (school children) and analysis through expert review. In line with the quality indicator (Perez-Mateo et al., 2011), educational video program (prototype) should emphasis on both process and the characteristics of the produced content itself. This implied that the prototype must be evaluated based on its performance in an authentic setting (Rudmark & Lind, 2011) and on what it is supposed to do; to educate and entertain.

Generally, the effects with a cognitive tool and resulting effects of it on the learners (learner's achievement based on the prototype educational video program) should be scrutinized (Kim & Reeves, 2007). Hence, evaluation of the prototype educational video program (Objective 5) was achieved in user acceptance testing activity.

Phases	Activity	Outcome
Evaluation	**UAT Instrument Construction** -Content validity (15 IPG academicians) -Face validity (30 school media teachers) -Reliability: pilot study (30 school children) **User Acceptance Test of Produced Prototype (OBJ 4)** - assessment by experts and practitioners -100 school children (13 – 17 years old) for prototype acceptance test -Expert review (5 IPG academicians and 3 Practitioners)	-Analysis of Findings in Terms of User Acceptance Testing (UAT) of the prototype **(OBJ 5)**

Figure 3.6. Evaluation Phase

3.7.1 Instrument Design for User Acceptance Test for Prototype

To evaluate the research product, instruments consisted of structured questionnaires were constructed according to Zikmund's (2003) instrument design method as shown in *Figure* 3.7. Two instruments were developed, one for school children (Appendix C) and one for expert review by academicians and practitioners (Appendix D).

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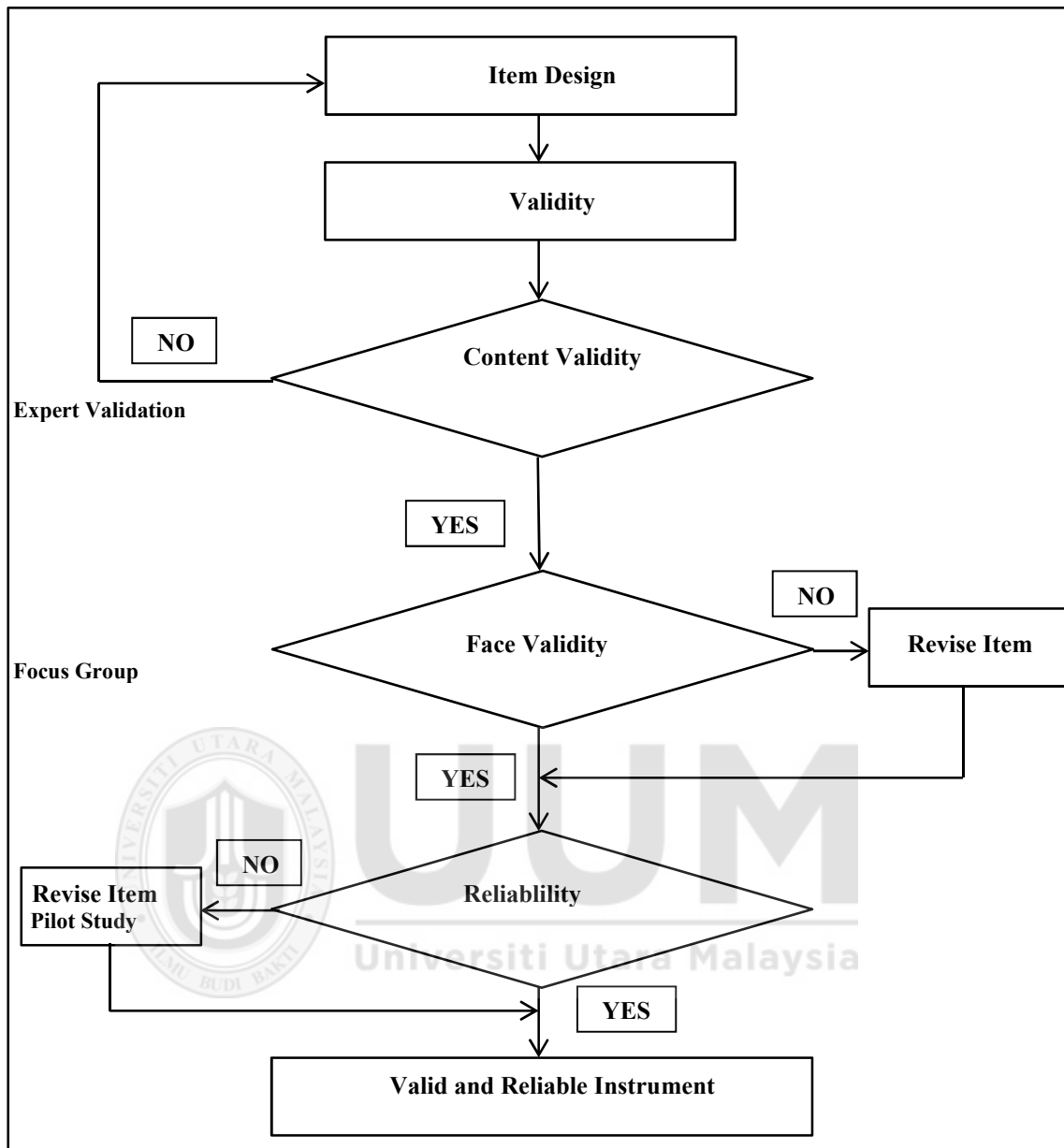
Figure 3.7. Questionnaire Instrument Design Method (Zikmund, 2003)

The dimensions and item statements for the questionnaires were initially selected from literature. In determining the measurement scale for instruments, semantic differential was adopted because it is an established measurement technique in information system (Verhagen, Hoof, & Meents, 2015). This method was also chosen as it is a cost-effective method for obtaining data that could be applied in many different situations or contexts (Dalton, Christopher, Oshida, Hikichi, & Izumi, 2008). Mid-point scale was also used in

instruments because it improves the reliability and validity of the ratings (Krosniick, Judd, & Wittenbrink, 2005).

Besides that, few researchers (Sekaran & Bougie, 2013; Nurulnadwan, 2015) suggest that a systematic approach needs to be adopted to develop the evaluation instrument. Figure 3.8 visually summarizes the development approach of the evaluation instrument.
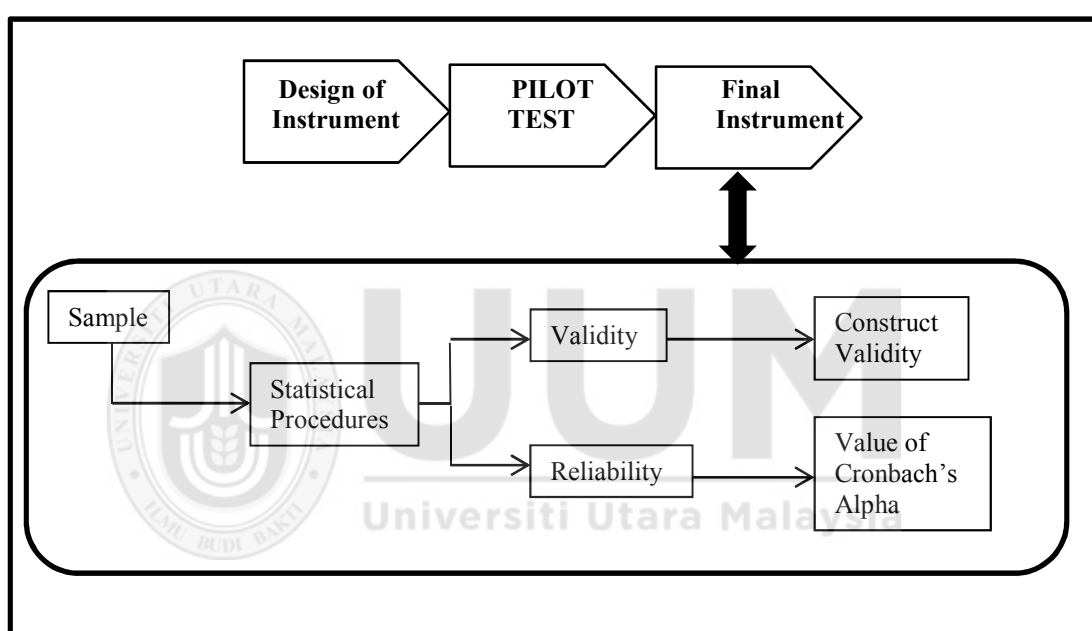
Figure 3.8. Summary of the Instrument Development Approach

As illustrated in Figure 3.8, the development process of the instrument began with an effort to determine the instrument items. To achieve this task, eight standard questionnaires of evaluation tools as listed in Table 3.5, was adapted to develop the user acceptance test instrument. There was a need to modify the evaluation tools according to; i) what is the instrument measuring? ii) what audience was the instrument created for? iii) what context is the instrument for? Four main dimensions were identified from the 8 standard questionnaires listed in Table 3.5. The four main dimensions are: Learning,

Outcome, Aesthetics and Enjoyment and they satisfy the need to cover all the items in the

adapted instrument.

Table 3.5

List of Standard Questionnaires used for Adaptation of Instrument Items

No	Instrument Name	Reference
1.	Questionnaire for User Interface Satisfaction	Chin et al. 2008
2.	Perceived Usefulness and Ease of Use	Davis, 2018
3.	Software Usability Measurement Inventory	Corbett, 2013
4.	Computer System Usability Questionnaire	Lewis, 2015
5.	System Usability Scale	Brooke, 2016
6.	Practical Heuristics for Usability Evaluation	Perlman, 2017
7.	Purdue Usability Testing Questionnaire	Lin et al. 2017
8.	USE Questionnaire	Lund, 2010

Table 3.6

The Adapted Instrument Items

Aspects	Items	Source
Learning	(L1) The educational video program's story and content are relevant to the topic.	4,7
	(L2) The visuals in the educational video program are clear.	2,6
	(L3) The graphics and colours make viewing the program interesting.	3
	(L4) The educational video program storyline is understandable.	1
	(L5) The educational video program makes the topic easy to understand.	4,5
	(L6) The educational video program can be used for different lesson in my book.	6
Outcome	(O1) The facts and information in the educational video program is accurate and free of errors.	2,3
	(O2) The photos and visuals shown are correct for the lesson.	8
	(O3) The educational video program generates ideas and facts of information about the topic.	7,8
	(O4) The characters' in the program are able to help to understand the topic.	1,5
	(O5) The information in the educational video program is well organized and easy to understand.	2,6

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	(O6) The educational video program's ending trigger further questions related to the educational topic.	1,3
Aesthetics	(A1) The educational video program contains an interesting production style and genre that actively involves the viewers.	1,3
	(A2) The visuals and graphics are matched correctly to help understand the topic.	5
	(A3) The story pace and shots are natural to be followed.	4,6
	(A4) The storyline strengthens the flow of the story.	8
Enjoymment	(E1) The educational video program has a beginning, middle, end and a good continuatuion to the next sequel.	5
	(E2) The plot exhibits good development and continuity for next episode.	1,7
	(E3) The characters are believable and well developed.	2,3
	(E4) The educational video program provides enough content and action to keep the viewer moving through the story and to the next episode.	6,8

The evaluation instrument is shaped as a series of questions that can be answered by using predefined multiple choice answers. A nine-point scale answers anchored by 'Strongly Disagree' (1) to 'Strongly Agree' (9) are used. Subsequently, the instrument was piloted to test the validity and reliability before it is used in the real environment to measure the usability of the prototype.

3.7.2 User Acceptance Testing

The user acceptance testing adopted quasi-experimental non-equivalent control group design methods in order to evaluate the prototype produced. The justification and procedure are discussed in the next subsection.

3.7.2.1 Sampling

The users of educational television programs are school children. Thus, in this research, 60 school children from all over Malaysia were selected as the participants in the user acceptance testing activity for the prototype. This was because the apparent homogeneity of school children and teachers enhances research validity where they tend to be similar on dimensions as users of the prototype educational video program and the conceptual model respectively (Peterson & Merunka, 2014). Accordingly, the designated participants were children of 13 to 17 years old using the syllabus and will be doing the same set of examinations (Appendix C). The 60 school children were participants of the NILAM program of the Ministry of Education, Malaysia. They are from different category schools from all over Malaysia. They attended a 6-day seminar and workshop in Educational Technology Division, Ministry of Education, Kuala Lumpur. The researcher set up a classroom session for the use of the prototype in classroom session with selected teachers to teach these children during this seminar.

Convenience sampling method was adopted because it enables comparability across different types of cases on a dimension of interest (Teddlie & Yu, 2007). In the experiment, participants were assigned into two groups; experimental and control group. The experimental group (30 school children) used the prototype educational video program (produced using the proposed conceptual model) in their classroom learning session. These children were then assigned to evaluate the quality of the teaching and learning session.

The control group (30 school children) learned the same topic in the prototype but used existing video program that was produced without using the proposed conceptual model.
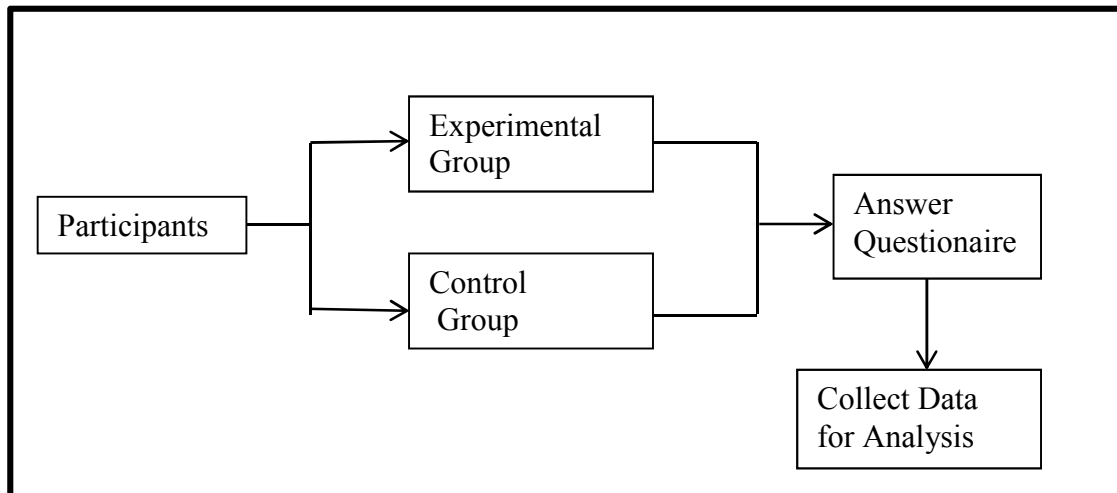
Figure 3.9. The Steps of Data Collection

Respond from the control group towards the lesson would be compared with the submissions by the experimental group.

3.7.2.2 Procedure for User Acceptance Testing (School Children)

To carry out the intervention, Nolte and Prilla's (2013) method for non-expert model interaction was utilized because the children were novice in using such prototype in their learning process. Model expert facilitation was required where the researcher provided the prototype educational video program to be used in the teaching and learning process in the classroom. The prototype educational video program was uploaded to the www.eduwebtv.com website (figure 3.10) so that teachers and students can have free and easy access to the program.

Figure 3.10. Printscreen of the www.eduwebtv.com website

Figure 3.11. Printscreen of the prototype

The experimental group was instructed to use the prototype educational video program to present their understanding on the selected topic (refer to Appendix C). The controlled group will also present their understanding on the selected topic except for they do not

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use the prototype program but instead they will use an existing program from the same topic in the prototype (produced without using the conceptual model).
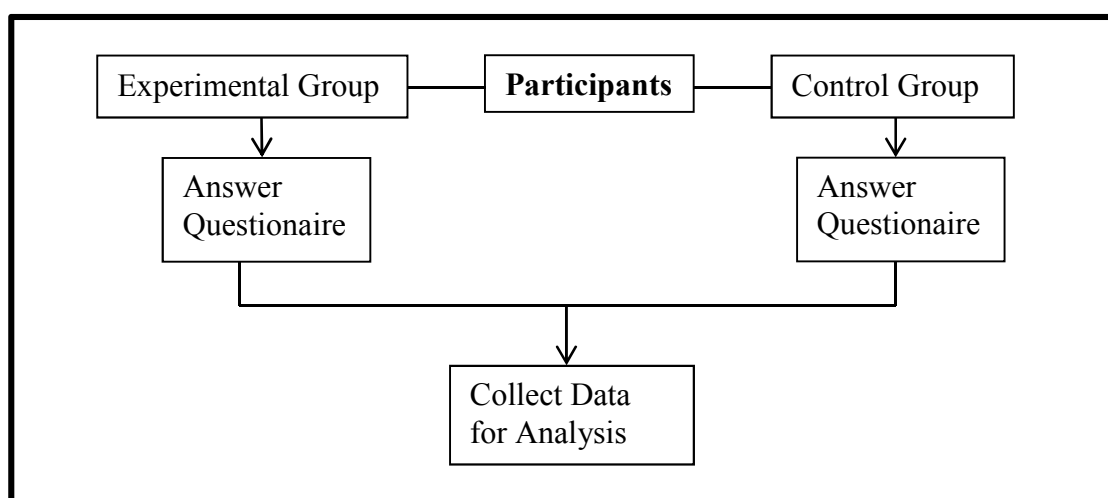
Figure 3.12. Procedure of User Acceptance Testing for School Children

During the intervention, the researcher observed the participants interaction with the prototype. The researcher was able to monitor the participants' from both the groups based on their understanding, character comments and plot comments.

Table 3.7.

Monitoring of Participants' Understanding (using the prototype)

Social Consideration Values	Ability to understand the social consideration values	Ability to make comments on characters	Ability to make comments on the plot of program
Decency	/	/	/
Kindness	/	/	/
Duty	/	/	/
Tolerance	/	/	/
Courage	/	/	/
Self-discipline	/	/	/
Respect for law	/	/	/

Table 3.8.

Monitoring of Participants' Understanding (not using the prototype)

Social Consideration Values	Ability to understand the social consideration values	Ability to make comments on characters	Ability to make comments on the plot of program
Decency			
Kindness	/	/	/
Duty	/		/
Tolerance			
Courage			
Self-discipline	/	/	/
Respect for law		/	

The researcher noted that the participants' (experimental group) understanding of the social consideration values were very clear and obvious when they used the prototype as shown in Table 3.15, but the control group was unable to understand most of the social consideration values that has been projected in the video program that they used, besides not being able to make comments on characters and plot of the lesson (Table 3.16).

The intervention ended after the participants submitted their completed assignments to the teacher. As satisfaction survey comparison is one of the evaluation items to measure the functuality of the artefact with the solution objectives (Peffers et al, 2006), participants from the experimental group were provided with questionnaire instrument to rate their experience in using the prototype. The control group was also provided with questionnaire instrument to rate their experience in learning using the video program provided to them.

3.7.3 Data Collection

As earlier mentioned, the evaluation method named trial-run is used to evaluate the developed prototype. According to Sharp et al (2007, 2011), in trial run method, users are

asked to perform the whole range of tasks and activities in the real classroom environment. Questionnaire was used as the instrument to collect data. On top of that, observation and interviews were used to collect additional data such as enthusiasm, experssions and acquisitions. All the techniques were used to collect data in the classroom during teaching and learning session.

3.7.4 Hypothesis Formulation

As clarified in Chapter 1, the third objective of this research is to evaluate the quality of the proposed conceptual model; granted that it was hypothesized that the proposed conceptual model would be a valid and practical tool for educational video program producers to design and produce educational video programs ingested with social consideration values. In other words, the process or method proposed in the conceptual model was evaluated by practitioners and experts in this field. This coincides with the second and third objective of this research which is to develop a conceptual model and to validate the conceptual model.

Therefore, hypotheses were formed as depicted in Table 3.9. Supporting references to the hypotheses are also included. Based on Matook and Indulska's (2009) dimensions of conceptual model characteristics, the first five hypotheses were formulated to evaluate the quality of the educational video program production conceptual model. The purpose of the sixth hypotheses is to test for statistically significant differences of educational video program scores between the sample groups; and further assess the prototype educational video program in the aspects of learning and environment. These processes are intended to support the richness of the findings, besides the descriptive analyses.

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Table 3.9

Research Hypotheses

Hypothesis	Supporting references
H1 The proposed educational video program production conceptual model is significantly generalizable.	(Matook & Indulska, 2009) (Syamsul, 2011)
H2 The proposed educational video program production conceptual model is significantly flexible.	(Matook & Indulska, 2009) (Syamsul, 2011)
H3 The proposed educational video program production conceptual model is significantly complete.	(Matook & Indulska, 2009) (Syamsul, 2011)
H4 The proposed educational video program production conceptual model is significantly usable.	(Matook & Indulska, 2009) (Syamsul, 2011)
H5 The proposed educational video program production conceptual model is significantly understandable.	(Matook & Indulska, 2009) (Syamsul, 2011)
H6 There is a significant difference in educational video program assessment scores between the experimental group and the control group.	(Creswell, 2013)

3.8 Phase 4: Conclusion

The final phase is the conclusion where the findings and results of user acceptance testing and review were construed; as explained in Chapter 7. The iteration of the prototype was performed for the last time to visualize the final form of the production framework in accordance to the experts' feedback. Once the last validation was done, finally, as the prototype was completed, the direction and future research to promote improvement on the research were elaborated as part of the conclusion phase.
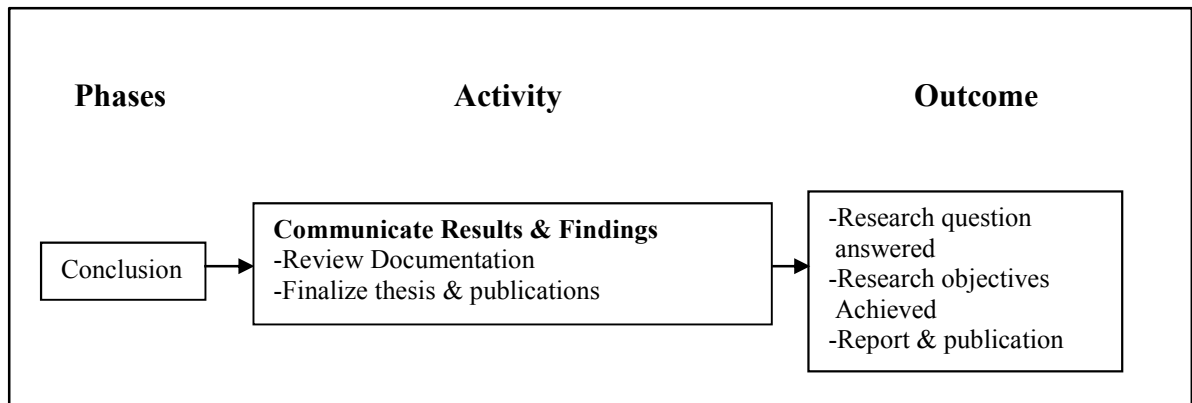
Figure 3.13. Conclusion Phase

3.8.1 Data Analysis

IBM SPSS version 18 was used to analyse the data collected through the questionnaires. As mentioned earlier, the Cronbach's Alpha Coefficient was used in the evaluation phase to test the instrument reliability. This means the data analysis took place in evaluation and conclusion phases. T-test and Descriptive Statistics were used to perform the comparison between the two groups. The significant value of T-test should be less than 0.05 to prove that there is a significant difference between the two groups (Coakes & Steed, 2009). Therefore, to prove that the population of this study is homogenous, the significant value of T-test should be greater than 0.05, which implies no significant difference between the two groups, as hypothesized earlier. Thus, the significant value of T-test should be less than 0.05 to show that there is a significant difference between these groups.

3.8.2 Communicate Results and Findings

The claims in this research were justified through breakdown of results and findings. The answer of research questions and discussions of findings were highlighted. A final form of the scholarly endorsed artefact was presented. Summaries of research limitations and research contributions were fabricated. Discussion of future research and conclusions of the study were discussed in detail in Chapter 7.

3.8.3 Review Documentation

Upon completing this phase, the ensuing outcome was established into academic publications and this research thesis.

3.9 Chapter Summary

This chapter has distinctly explained how DSR research methodology was adopted in this research. The research design, data collection approach, procedure, sampling techniques and evaluation methods applied in this research were described. In particular, the overall research processes and the instruments used to accomplish the objectives of this research were elaborated. The following chapter discusses the procedures in the construction of the conceptual model and the production of the prototype educational video program ingested with values of social consideration.

CHAPTER FOUR
CONSTRUCTION OF CONCEPTUAL MODEL
FOR SOCIAL CONSIDERATION VALUES INGESTION

4.1 Introduction

The chapter begins with explanation of the general approaches adopted for the design and development of the proposed conceptual model. Then, the educational video program production conceptual model core elements were identified. Consequently, this chapter explains the construction procedure of the conceptual model.

4.2 Models Selection

As mentioned in Chapter 1, many efforts have been initiated to solve the rising social problems among school children. Unfortunately, most of it was not through the use of media or to be precise, the use of educational video programs. Therefore, as a response to that, this research focuses on designing a way to use educational video programs effectively to curb this problem. A preliminary study has been conducted to understand and gather information regrading the social problems among Malaysian school children.

12 existing conceptual models for social consideration (SC) values have been used as the basis in constructing the conceptual model for ingestion of social consideration values into educational video programs. The comparative analysis of these 12 existing conceptual models has been done in Chapter 2 to get the generic components of this conceptual model (CM. The samples that have been included in the comparison were collected from various fields and industries as described in Table 4.1 below.

Table 4.1

Description of Existing CM with SC Interventions

No.	Name and Source	Descriptions
CF 1	Model of SC Intervention in Business. (Europe SME Foundations, German, 1999).	This model explains the 3 main elements of SC in business; the value created by business, the value destroyed and the value missed.
CF 2	Model of SC Intervention in Health Programs (INOVA Health Education, UNICEF, 2001).	This model explains the two main components of SC intervention health programs; socio economic and political context, and social position.
CF 3	Model of SC Intervention in Enviromental Projects. (NEXI International, New York, 2000).	This model explains the SC intervention in environmental projects to create product environmental impact assessment check sheet.
CF 4	Model of SC Intervention in Urban Development Projects. (Finance, Economics & Urban Development, World Bank, 1998).	This model explains how to achieve the perfect planning solution and require a combination and robust mixture of SC interventions in urban development.
CF 5	Model of SC Intervention in War. (Geneva Conventions, UN, 1949).	This model establishes the set of rules that seek to limit the effects of armed conflict, protects the people who are not involved in hostilities and strictly restricts the means and methods of warfare.
CF 6	Model of SC Intervention in Politics. (Commonwealth Department of Administration Services, 1959).	This model explains the elements of human personality that will end at the society that will create the influence of political powers.
CF 7	Model of SC Intervention in Economics. (Commonwealth Department of Administration Services, 2002)	This model explains the elements of shareholders, customers, financial analysts, union employees, local communities, government and non-government in implementation of SC values in economics.
CF 8	Model of SC Intervention in Education. (UNESCO, 2011)	This model explains the 3 pillars of SC intervention in education; specific skills, standards and instruction.
CF 9	Model of SC Intervention in Entertainment. (Expert Interviews, McKinsey Analysis, 2000)	The six steps of social consideration intervention in entertainment; consider, evaluate, buy, experience, advocate and bond is explained in this model.
CF 10	Model of SC Intervention in Insurance. (Bain & Company, 1987).	The seven strategies of SC Intervention in insurance; ambition, playing and winning, risk management, target customers, costing, values and key dimensions are discussed in this model.
CF 11	Model of SC Intervention in Food Industry. (Hunger and Environmental Nutr, 2009).	This model explains the four main components of SC intervention in food industry; broad food system, community food system, social factors and food production exposures.

| CF 12 | Model of SC Intervention in Television Program. (Ministry of Education, Malaysia, 2003). | No specific allocation for the elements of SC values intervention is discussed in this model. It is basically only a work chart of television program production. |

Generally, each conceptual model selected for this research has been selected based on a set of criteria and reasons, which is unique according to interest. Some conceptual models interest this research via the interaction models, while some with the contents as well as their content basis as stated in Table 2.1. Therefore, it has been emphasized in advance that the selected conceptual models have been selected in order to produce generic components of the conceptual model to ingest social consideration values into educational video programs. The next section will discuss the construction of the conceptual model for this research.

4.3 Conceptual Model Construction

This section describes the generic components that form the proposed conceptual model to ingest social consideration values into educational video program. The components are defined separately in terms of structural components, educational video program production task, development principles and the production approach.

4.3.1 Structural Components

The proposed conceptual model must be organized properly in order to ensure that producers and practitioners are getting the appropriate assistance effectively and properly during the production of educational video program ingested with social consideration values. Therefore, the conceptual model must be structured in a coherent and consistent manner starting from the beginning until the end (Efendioglu, 2012; Nurulnadwan, 2015).

Briefly, the way of presenting the contents should make sense to the producers and practitioners.

Accordingly, content analysis and comparative analysis techniques were utilized in determining the components of the conceptual model. This research takes the advantage of the existing models intervened with social consideration values from different fields and industries (Table 3.7) to determine the structural component segments of the proposed conceptual model. Ariffin (2009) and Nurulnadwan (2015) discovered that the structural components comprise three sections. They are (i) opening segment that contains an overview of the program, (ii) content segment that contains the program's actual contents or story and (iii) closing segment that ends the program. Previously, Freytag (1900) and Elisabeth (2009) have discovered that a video program should also be divided into three main sections and five sub sections. The three main sections of Freytag's and Elisabeth's are the same as Ariffin (2009) and Nurulnadwan (2015). Thus, the conceptual model to be proposed for this research would blend the three main sections with the five sub sections as shown in Table 4.2.

Table 4.2

Details of the Structural Components

Section/ Sub section	Components (SC Elements)	Details
Opening (Exposition)	-Language -Belief System -Native/Culture Roles	-Introduction of important background information. -Explanation of the setting. -Events that occurs before the main plot. -Characters' back stories. -Use of flashbacks and characters' thoughts.
Content (Rising Action and Climax)	-Gender/Sexual Roles -Sexual Orientation -Violence -Political Bias/ Regional Bias -Age -Ethical/Legal Issues -Socio-Economic Status	Rising Action -A series of event build up towards the point of greatest interest. -Development of the entire plot to set up the climax. Climax -The turning point, which changes the protagonist's fate. -The unfolding of the plot to draw on hidden strengths or weaknesses of characters.
Closing (Falling Action and Denouement)	-Safety Standards/ Compliance -Multiculturalism -Affevtive Mediation	Falling Action -The conflict between the protagonist and antagonist unravels. -May contain a moment of final suspense in which the final outcome of the conflict is in doubt. Denouement -Unravelling of the complexities of the plot. -Comprises events from the end of the falling action to the actual ending. -Conflicts are resolved. -Release of tension and anxiety. -Rebuild tension by creating curiosity in the next episode.

Adapted from Freytag (1900); Ariffin (2009); Elisabeth (2009) & Nurulnadwan(2015).

To help practitioners and producers organize their toughts and ideas, Freytag created a pyramid that symbolizes his theory of dramatic structure. Figure 4.1 below illustrates the sections and suc-sections of the pyramid that gives a clear picture of the structural components' roles in developing the conceptual model.
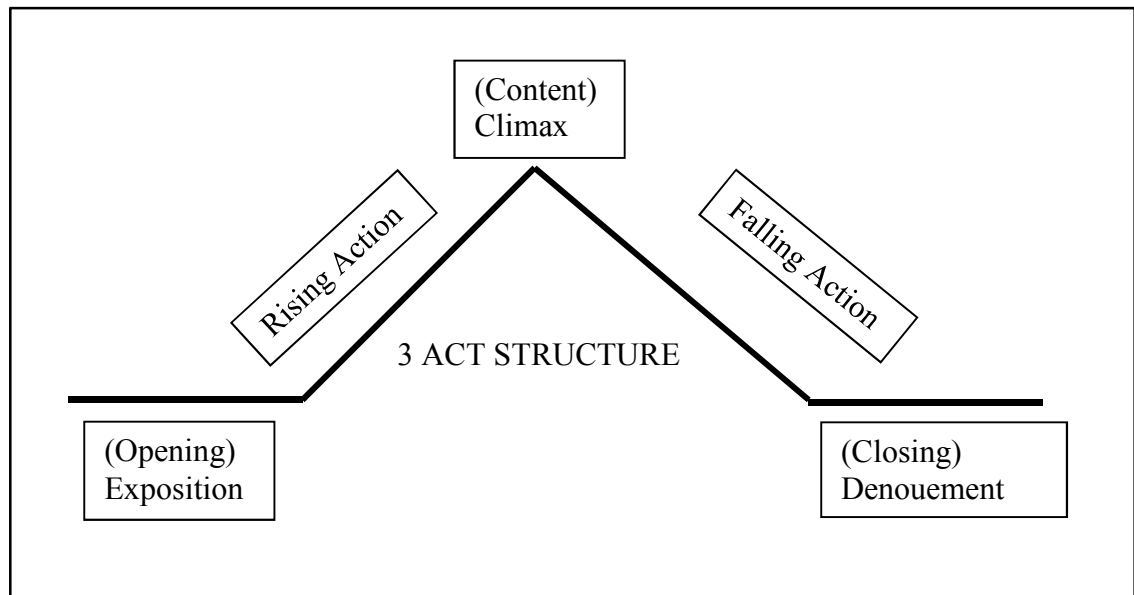
Figure 4.1. Freytag's Sections and Sub-sections of the Structural Component (1900)

4.3.2 Educational Video Program Production Task

The production of educational video program consist four main constructs or criteria (Media for Children, 2014; UNESCO, 2015); Content, Instructional Design, Technical Design and Social Considerations. The first three constructs (content, instructional design and technical design) will be briefly explained in this section but the social consideration construct, which is the core construct and main intention of this thesis will be elaborately explained.

4.3.2.1 Content

The content of educational video program is the experience and information directed towards the audience and it will make sure that the right materials are delivered according to the needs of the students. Producers can determine how closely it supports and matches the curriculum's prescribed learning outcomes by examining the resource's content. Figure 4.2 below shows the dimensions of the content construct.

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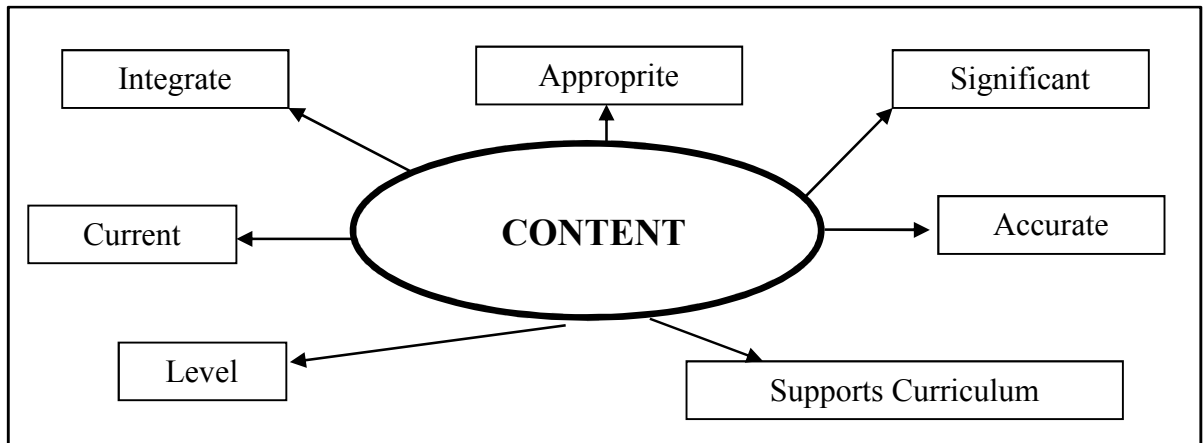
Figure 4.2. Elements of Content Construct
Souce: WSMCF (2014)

4.3.2.1.1 Current

The resource is not dated in its visuals, language, contents or in a way that will reduce its operational and educational value.

4.3.2.1.2 Accurate

The content should not have out dated factual errors, information, inaccurate graphs or displays, improper use of statistics, examples, invalid or oversimplified simulations or models and errors in grammar or spelling. This form of inaccuracies will cause the programs to lose their validity.

4.3.2.1.3 Supports Curriculum

The content will assist the student in achieving the intended learning outcomes. Typically, resources are evaluated for Specific Curriculum Outcomes (SCOs) and General Curriculum Outcomes (GCOs).

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4.3.2.1.4 Level

Treatment of topics should be at an appropriate level of detail and satisfies learning outcomes. Overview materials may require augmentation with additional materials and often sacrifice depth.

4.3.2.1.5 Significant

Malaysia is featured in references, examples, analogies, maps, and data.

4.3.2.1.6 Appropriate

Concepts, visuals, vocabulary, and internal structure should be developmentally appropriate and meaningful to a broad range of abilities and achievement levels. The support materials should be consistent with the expected ability level of the audience (e.g., vocabulary, phrasing, and sentence length).

4.3.2.1.7 Integrate

Content that supports the integration of personal, familiar, and cultural contexts of Malaysian society is meaningful for many students. Links with real-world activities are incorporated, and provision is made for hands-on experiences. The experience of the individual student should form the context for learning.

4.3.2.2 Instructional Design

The instructional design criteria of the resource involve its goals, objectives, teaching strategies, and assessment provisions. Producers should begin with the instructional objectives and work through the methodology as shown in Figure 4.3 below.

Table 4.3.

Elements of Instructional Design Construct

Instructional Design	Instructional goals and learner objectives are clearly stated.
	Resource is suitable for a wide range of learning.
	Resource promotes student engagement.
	Methodology promotes active learning.
	Methodology promotes communication skills.
	Resource encourages group interaction.
	Resource encourages student creativity.
	Resource allows/encourages student to work independently.
	Resource is suitable for its intended purpose.
	Materials are well organized and structured.
	Materials have unity/congruency.
	Concepts are clearly introduced.
	Concepts are clearly developed.
	Concepts are clearly summarized.
	Integration across curriculum subjects is supported.
	Non-technical vocabulary is appropriate.
	Technical terms are consistently explained / introduced.
	Pedagogy is innovative.
	Adequate pre-teaching and follow-up activities provided.
	Adequate assessment/evaluation tools are provided.
	Text relates to visuals.

Source: WSMCF (2014)

4.3.2.3 Technical Design

Technical design has elements and applications that will draw up plans that are used to develop video programs. The designs are normally drawn up on to make sure that the production is parallel to the needs of the audience. Mechanical ability and visual aptitude are important factors that will help in the designing of the technical elements of a video

program. Figure 4.3 below gives a picture of the elements involved in the technical design construct.
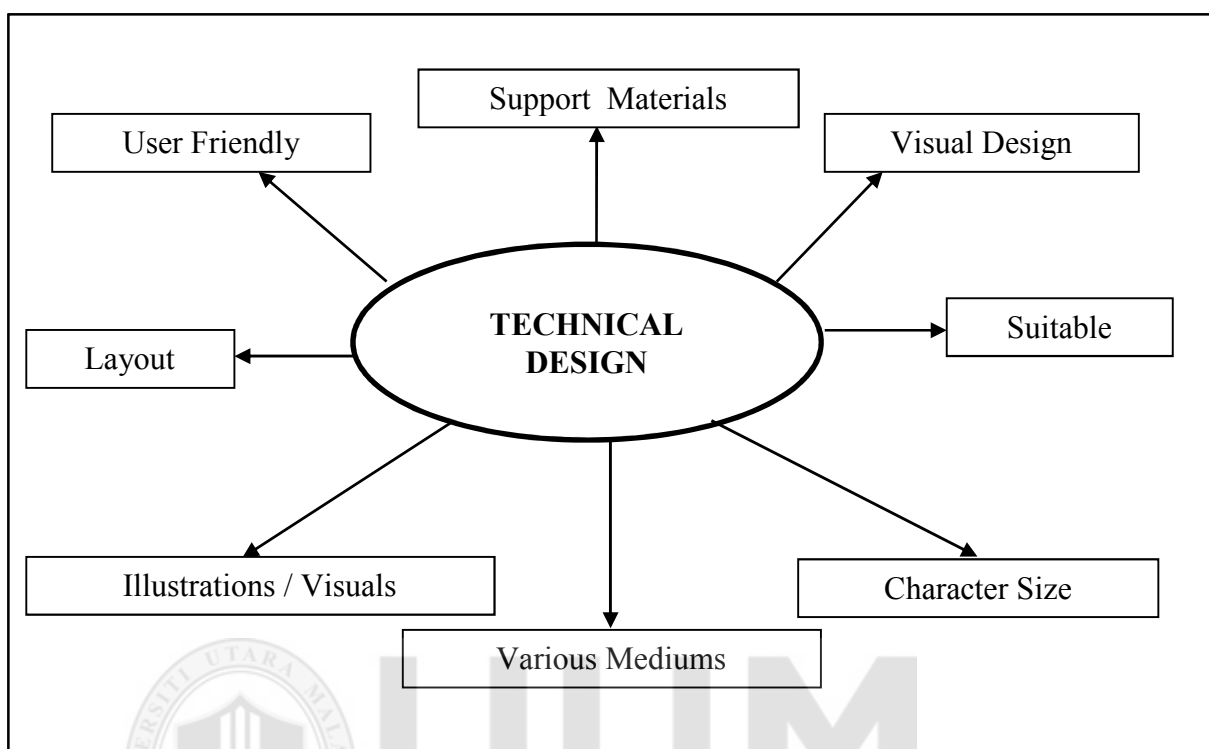
Figure 4.3. Elements of Technical Design Construct
Souce: WSMCF (2014)

4.3.2.3.1 Support Materials

Producers should assess whether support materials contribute to the achievement of the resource's objectives. The use of all components should be clearly identified. Good support materials include sufficient material for a variety of activities including pre-instruction and follow-up for students. For teachers the relevant materials are description of the instructional activities, an overview of how these relate to each other and to the curriculum/resource goals, and identification of prerequisite skills.

4.3.2.3.2 Visual Design

Regardless of the content and medium, the actual presentation of the information will appeal to and enhance effective use for both students and teachers. Graphics, colour, and

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sound enhance the learning process, drawing the student's attention to important points. Programs should be visually clear, with good visual contrast.

4.3.2.3.3 Illustrations / Visuals

The illustrations focus attention on the important content areas and should be appropriate to the student's maturity level. Animations and graphics are of a high quality, add to the instructional design, and should be used appropriately to enhance the message. Visuals should be light, uncluttered, and have competing elements. A variety of different types of visuals should be used to support and represent concepts (flow charts, webs, diagrams, tables).

4.3.2.3.4 Character Size

The program should use effective typographic design in the main body of text, captions, indices, diagrams, etc. Cueing devices should be used to attract attention to specific points (variations in typeface, boxes, underlining and spacing).

4.3.2.3.5 Layout

The material should be presented in a well-organized, consistent, and predictable fashion. The structure should be apparent to the user in the table of contents. Individual pages or screens should be laid out in logical, uncluttered fashion. The number of "buttons" and the information blocks should not be too complex. Layout should feature appropriate use of text, visuals, and backgrounds.

4.3.2.3.6 User Friendly

The program should be easily used and understood by both the teacher and student. Envision an instructional situation in which the resource could be suitable and easy to Facilitate students. Teachers can control pace and difficulty levels, if desired. The prerequisites should be identified and equipment set-up should be adequately explained or demonstrated. Programs should be easily used in the space typically available and easily adaptable to a variety of classroom environments. Directions should be accompanied by useful examples and 'how to use', 'how to read', and 'how to approach/study information' aids, as appropriate.

4.3.2.3.7 Suitability

The text, captions, labels, pictures, and diagrams should be attractive, clear, and free of errors. Components should be packaged for easy access (e.g., teacher materials can be separated from student materials). Containers for organizing and storing all components, if needed, should be provided.

4.3.2.3.8 Various Mediums

Each component used in the program should take full advantage of the unique aspects of the particular medium. Producers should consider whether the subject matter could be better handled by another medium and whether the instructional objective is best served by the medium chosen. This consideration is critical in the case of video programs, where, use of visuals and sound should be maximized.

4.3.3 Development of Social Consideration Values in Educational Video Program

Producers should avoid social issues that are loaded with offensive elements or potentially controversial. This issue could exist in the presentation of content. They highlight content where the resources' support pro-social attitudes and promote human rights and diversity. Removing the controversy is not the intention of this screening process but rather to ensure that opinions and views that are controversial are presented within the framework of the model besides checking that views of alternate points are presented appropriately. The purpose of presenting these alternative points of view is clear. Content is suitable for the level of maturity of the intended audience. A range of community standards and view that are expressed, reflect the opinions in promoting opportunities for critical thinking.

Role models and positive traits should be emphasized by material. Producers can do this by considering the suitability of material (video) that depends on the target audience (including level of maturity), teaching and learning context (e.g. whether a video on sensitive topics like reproduction is designed for self-directed student use or teacher-directed learning) and subject area. In the case of students being exposed to controversial view point, it will be better to consider these views in the context of total resource.

Physical setting, geographic location, political and social context and time period all help in determining whether a particular matter should be of concern or not. For instance, imposing modern values on a work by Moliere (2013) would not be valid. The work should actually be discussed in context as a 'period peace' and the differences between today's values and values of the time today should be understood clearly. All aspects of

the resource will be influenced by the author's tone on the subject matter and audience. Something that might be perceived as an omission error might actually be an omission deliberately made and as such might be identified and justified by the author.

The way a reference is made on a controversial issue is the feature that determines the appropriateness of the resource and the level of attention that should be given to the issue. Specifically, the way social issues are handled by the video should be examined as discussed further in this chapter.

Table 4.4

Core Elements of Social Consideration Values

Value	Elements
Decency	1. Gender and Sexual roles
	2. Sexual orientation
Kindness	3. Language
	4. Violence
Duty	5. Political Bias and Regional Bias
	6. Safety Standards Compliance
Tolerance	7. Belief system
	8. Multiculturalism (and anti-racism)
	9. Native and Culture roles
Courage	10. Affective Mediation
Self-discipline	11. Age
Respect for law	12. Ethical and Legal issues
	13. Socio-economic status

Source: WSMCF (2014)

These elements of social consideration are presented as a conceptual model based on the development process of social consideration values ingestion into educational video program in Table 4.4.

4.3.3.1 Gender/Sexual Roles

Gender issues portrayed in approved resources should be relevant and in accordance to the curriculum for which the resource to be prepared. It should also be appropriate for the intended audience's age level. Producers should check to make sure that diverse relationships and roles are portrayed in a balanced manner; experiences, contribution and perspectives of various individuals and groups are acknowledged; language and tone are appropriate (abusive, sexist and derogatory reference to gender should be avoided) and finally stereotypes of gender must be avoided.

4.3.3.2 Sexual Orientation

Positive awareness and sensitivity should be reflected by video programs in the portrayal of diverse sexual orientations. References made to sexual orientation should be according to the context of the curriculum that the resource is being considered and also appropriate to the audience's age level. Tone and language should be appropriate (e.g. derogatory language and stereotypes are to be avoided. Besides that, diverse sexual orientations should be portrayed, transgendered individuals are recognized, and diverse relationships (e.g. families, couples) should be portrayed. Differences to sexual identity and sexual orientation should be relevant in the context.

4.3.3.3 Language

Language that is used in these video programs should be appropriate to the maturity, context and intellectual level of the audience. Trendy language that will become outdated very fast should be avoided. Suitability of the language can be judged from the frequency of use of the language.

4.3.3.4 Violence

If there is a presence of incidences of violence in the video programs, it should be suited to both the context and the maturity level of the audience. A continuum of violence and bullying from pushes, put downs, ridicule, exclusion, harassment, assault and physical threat should be considered by the producers.

4.3.3.5 Political Bias / Regional Bias

Political biasness should be avoided by these video programs (e.g. political point of view should not be mentioned). Some topics may be very sensitive. (e.g. elections, land use and environment). No geographical region should be favoured of another by these videos. The extent to which the bias affects the materials' use should be evaluated.

4.3.3.6 Safety Standards Compliance

Activities presented in these video programs should comply with community standards and legal issues, standards of safe practice and common sense.

4.3.3.7 Belief Systems

An organized set of doctrines or ideas (religion, philosophy, political ideology) is actually a belief system. Overstating or denigrating any belief system should not be done. How a

certain group or individual are presented should be monitored by the producers (e.g. attitudes, appearance, activities and socio-economic status). Besides that, generalizations (e.g. all politicians) should be avoided and distinction between fact and opinion and "groups" or "classes" should not be stereotyped.

4.3.3.8 Multiculturalism (And Anti-Racism)

The perspective of information presentation is important. Merely including video clips, pictures or texts of multicultural people alone is not sufficient. These people must be shown in such a way, where they are seen participating in valid roles that recognize their meanings and value in these video programs. Producers should examine the culture from within and not from and observer's point of view. Stereotyping a certain ethnic group should be avoided, both positively and negatively (e.g. suggesting that Chinese students are good in mathematics). The level of respect shown for the culture and language of any specific ethnic group should be appropriate. Presentation of lifestyles, customs, traditions, culture and religion should be in a manner that articulates their value, role and meaning. Finally, minority group members should be portrayed as positive roles in these videos and cultural similarities and ethno-specific group differences are acknowledged.

4.3.3.9 Native / Culture Roles

Realistic and balanced view of native people should be effectively promoted. A variety of aspects of native language, culture, history, historical and cultural issues perspective, their contribution from a range of different backgrounds and the variety of their roles could be highlighted in these video programs. Content and issues should be well balanced to avoid undue stress on particular conflicts or problems involving these native groups along with traditional aspects of their lives.

4.3.3.10 Affective Mediation

Affective Mediation is related to affective involvement of mediators when intending to enhance the motivation of learners (Fauziah Abdul Rahim, 2007). It can be further divided into 3 types: global / values, use of feedback or praising and informal approach. Global / value consist of building confidence, building and gaining trust, use of humor, caring, showing warmth, encourage or motivate oneself and inculcation of good moral values. Use of feedback or praising can be divided into emotive feedback for providing encouragement, emotive feedback for praise, accepting praise and encouragement, emotional peer support to collaborate, encourage creativity and element of fun. The use of feedback or praising and the insertion of the element of fun are also related to managing anxiety, i.e. reducing anxiety in order to help learners to become more engaged in the learning process.

4.3.3.11 Age

Different age groups should be portrayed by these video programs and reflect the society's treatment of them. Consideration should be made on whether groups of different age are represented, views of senior people are included, relationship between different age groups are depicted, inclusion of age-integrated activities are included and whether the aged are portrayed positively.

4.3.3.12 Ethical/Legal Issues

Close examination should be done on issues subject to debate on moral or legal grounds. Currency and accuracy of data and evaluation for biasness should be considered. Prominent examples include use and abuse of drugs, abortion, prostitution, pornography, nuclear energy and weapons, freedom of expression and sexual orientation.

4.3.3.13 Socio-Economic Status

Socio-economic issues should be addressed by these video programs. This includes family related values, family income, standard of living and income related perspectives.

4.3.4 Production Approach

The definition of 'production' serves as a root for designing the 'phase' component of educational video program production model. Regardless to the media output such as video (Bright, 2015), audio (Levelt, 1992), and animation (May-Chan, 2014), literature regularly have referred the term 'production' as a process described in 'stages'. In general, the production of digital content is structured into three main stages; pre-production, production and post-production (Litchfield, 1998; Musburger & Kindem, 2009). Plus, examining current multimedia models of process and production, most of them are presented in steps and stages (Martins & Pimentel, 2011).

Jeffrey-Poulter (2003) however, reminded that traditional linear methods with fixed goals and a defined completion point are usually mixed with the iterative, cyclical processes used in multiple platform production which involves the constant re-purposing and updating of content. Nonetheless, in order to conceptualize the generic phases of educational video program production model as stated in the previous section, four selected works on educational video program classroom strategies by scholars were compared to characterize the overall steps required in educational video program production. The processes with commonalities are classified and grouped into generic phases, described in Table 4.5. These phases are proposed to initially formulate educational video program production model.

Table 4.5

Comparison of Development Steps in Educational Video Program Production Stages

Stages	Phases	Maldonado (2002)	Siemens (2012)	Upson (2014)	Meyers (2014)
Pre-Production	Context Setup	-Select topic	-Learn software -Understand educational video convention	-Understand output requirement -Learn production	-Learn production -Understand output requirement
	Narrative Brain-Storming	-Focus and organize topic -Develop story and character	-Develop story and character	-Select and reflect topic	-Study and select content
Production	Script writing	-Narration and dialogue -Script formatting	-Narration and conversation	-Frame the story	-Script formatting
	Story boarding	-Design production layout	-Design story board	Not relevant	Not relevant
	Filming	-Produce program	-Produce program	-Produce program	-Produce program
Post-Production	Editing	- Edit and upload	-Edit and upload	-Edit and preview	-Edit and preview
	Assessment	-Present and discuss program	Not relevant	-Present and discuss program	-Review and present program

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Comparing educational program development process (with three main stages; pre production, production and post-production) simplemented in the production process, a complete steps and flow were categorized and fabricated according to their commonalities where social consideration values are ingested into the three production stages as shown in Table 4.6. Eventually, Figure 4.4 shows the first draft of the conceptual model of social consideration ingestion into educational video program, which generally consists of four generic components, which are; (1) structural, (2) production task, (3) development of social consideration values and (4) production approach.

Table 4.6

Classification of Production Phases to be Ingested with Social Consideration Values and Elements for a 30 Minute Duration Educational Video Program

Stages	Phases	Section & Subsection	Production Time Line	Production Details and Social Consideration Values
Pre-Production	Context Setup	**Not Relevant**	Before start Filming	-Develop story and character with all 7 values of social consideration (Table 4.6) being narrated.
Production	Script Writing	Opening (Exposition)	0 – 1 min	-Montage and introduction of title **(proper** language).
	Story Boarding		2 – 4 mins	-Introduction of characters (native and culture roles).
	Filming		5 – 7 mins	-Introduction of important background information (belief system).
			8 – 10 mins	-Explanation of the setting (belief system) -Events that occurs before the main plot (belief system, native and culture roles). -Characters' back stories (nature and culture roles). -Use of flashbacks and characters' thoughts (language, belief system, native and culture roles).
		Content (Rising Action and Climax)	11 – 22 mins	-A few series of events that began immediately after the exposition of the story will build up to the point of greatest interest.

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				-Plot mainly made up of gender/sexual roles, elements of violence and biasness and age issues. These elements will develop the entire plot to set up the climax. -In climax, the turning point which unfolds the the plot draw on hidden strengths/weaknesses of characters is highlighted in the form of ethical/legal issues and socio-economic status.
	Closing (Falling Action and Denounement)	23 – 30 mins		-Decision making of the fate of the protagonist and antagonist. -Either side can win or lose with ingestion of **safety standars compliance, multiculturalism and affective mediation.** -A moment of final suspension where conflicts are resolved, complexities of plots are unravelled and tension, anxiety and curiosity released and recreated.
Post Production	Editing Assessment	**Not Relevant**	**Not Relevant**	-Shot checking -Edit list -Editing -Preview -Correction and modification -Present and discuss program

Conceptual Framework

① Structural

has sections/subsections

Opening (Exposition)
- Introduction
- Title
- Background
- Setting
- Flashback

Content
- Rising Action
- Climax

Closing
- Falling Action
- Denouement

② Production Task Contains and Must Apply

Content

consists of
- Accurate / Integrate
- Supports Curriculum
- Level / Current
- Appropriate / Significant

Instructional Design

consists of
- Objectives / Intended Purpose
- Wide Range / Independent Work
- Student Engagement
- Active Learning / Innovative
- Group Interaction
- Student Creativity / Assessment
- Well organized / Structured
- Across Curriculum / Pedagogy

Technical Design

consists of
- Visual Design
- Suitable / Character Size
- Illustrations / Layout
- Various Mediums
- User Friendly
- Support Materials

③ Social Consideration Values and Elements

based on

Values **involves** **Elements**

Values	Elements
Decency	Gender / Sexual Roles / Sexual Orientation
Kindness	Language / Violence
Duty	Political/ Regional Bias / Safety Standards
Tolerance	Belief System / Multiculturalism / Native / Culture Roles
Courage	Affective Mediation
Self-Discipline	Age
Respect for Law	Ethical / Legal Issues / Socio Economic Status

④ Production Approach

has phases and steps and must apply

Pre-production
- Context Setup-Develop Story & Characters

Production-Opening (Exposition)
- Montage & Title (Proper Language
- Characters Introduction (Native/ Culture)
- Background Information (Belief System)
- Setting (Belief System)
- Events before Main Plot (Native/Culture)
- Flashback (Language/Belief System)

Production-Content (Rising Action & Climax
- Built up to point of greatest interest
- Plot (gender/sexual roles, elements of violence and biasness and age issues)
- set up climax
- plot unfolding (characters' strengths and weaknesses, ethical/legal issues and socio-economic status

Closing (Falling Action & Denounement)
- Fate of protagonist & antagonist
- Ingestion of safety standards, Multiculturalism and affective mediation

Satisfy

Post Production (Editing, Preview & Discussion)

Figure 4.4. The Proposed Conceptual Model

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4.4 Conceptual Model Validation

Chapter 1 mentions that objective three of this research is to validate the conceptual model through expert reviews. According to Radice (2002) and Wiegers (2002), expert review is accepted and adopted as one of the significant techniques for product quality improvement and complementary to other types of product tests. In addition, Morgan (1996) affirms that expert review is a popular technique that can be used in gathering qualitative data about a topic specified by the researcher. Therefore this research explores expert review to evaluate and enhance the proposed conceptual model. Shneiderman (2010), confirmed that the sufficient number of experts involved in the expert review is between five to eight experts. Based on those recommendations, this research has engaged eight experts, whom their details are listed below in Table 4.7. The procedure for the expert review is elaborated in Chapter 3 (refer page 101 to 107).

Table 4.7

Demographic Profile of Experts

Expert	Gender	Age (Year)	Position	Academic Qualification	Affiliation	Experience (Year)
A	Female	59	Senior Lecturer	PhD	*IPG* Ilmu Khas	28
B	Male	57	Senior Lecturer	PhD	*IPG* Teknik	28
C	Male	57	Senior Lecturer	PhD	*IPG* Batu Lintang	26
D	Male	52	Lecturer	Masters	*IPG* Sultan Mizan	19
E	Female	49	Lecturer	Masters	*IPG* Perlis	19
F	Male	58	Practitioner	Masters	ASTRO	30
G	Male	55	Practitioner	Masters	MEDIA PRIMA	28
H	Female	48	Practitioner	Masters	ETD, MOE	22

4.4.1 Profile of Selected Experts

Eight experts were involved in this activity which comprised of five academicians from Malaysian Teachers' Training Institute (*IPG*) and three practitioners (producers) from ASTRO, Media Prima and Educational Technology Division (ETD), Ministry of Education, Malaysia (MOE). Demographic information about the experts such as gender, age, position and experience were collected to support the dependability of the selected experts in evaluating the educational video program conceptual model. In terms of educational background, three of them are senior lecturers with PhD, while two of them are lecturers with master's degree. The remaining three are practitioners with master's degree. All of them have more than 10 years' experience in their respective field and holding key positions in their department.

It is important to emphasize that the criteria of selecting experts qualified for reviewing educational video program production conceptual model was primarily based on their expertise in educational technology and digital media production. Particularly, expert A, B and C are senior lecturers while expert D and E are lecturers who are all lecturing in Teachers' Training Institute. They are experts in moulding teachers to become practitioners of educational technology in the process of teaching and learning. Besides that, expert D and E are also specialists in the subject of Civic and Moral Studies which deals with the social consideration subject matter as needed for this research.

Expert F, G and H are practitioners of conceptual model in the production of educational video. All three of them are trained in production of educational programs. They produce educational based video program for their companies.

4.4.2 Results of Expert Review

The gathered data were recorded in frequency and tabulated in Table 4.8 based on the questions asked in the instrument (Appendix B - Item (1) to (5)). In general, results from the analysis showed that the majority of the experts approved that most of the phases, tasks and activities proposed in the educational video program production conceptual model are essential and need to be included in the model. Majority of them also agreed that the proposed conceptual model is usable, has logical flow and the terminology used is understandable.

Table 4.8

Frequency Table of Responses from Expert Review for Conceptual Model (n=8)

Components	Essential		Useful but not Essential		Not Necessary	
	f	%	*f*	%	*f*	%
GENERALITY						
Development	8	100	0	0	0	0
Narrative Brainstorming	8	100	0	0	0	0
Treatment/Storyboarding/Scripting	5	62.5	3	37.5	0	0
Character Development	6	75	2	25	0	0
Mid Credit Scene	8	100	0	0	0	0
Value Ingestion	6	75	2	25	0	0
Monitoring of Audience Perception	7	87.5	1	12.5	0	0
COMPLETENESS						
Purpose	8	100	0	0	0	0
Scope	7	87.5	1	12.5	0	0
Knowledge	7	87.5	1	12.5	0	0
Storyline	7	87.5	1	12.5	0	0
Treatment	5	62.5	3	37.5	0	0
Storyboard	8	100	0	0	0	0
Social Values	8	100	0	0	0	0
Elements of Social Values	8	100	0	0	0	0
Characters	6	75	2	25	0	0
Story Development	7	87.5	1	12.5	0	0
Exposition	7	87.5	1	12.5	0	0
Rising Action and Climax	7	87.5	1	12.5	0	0
Falling Action and Denounement	8	100	0	0	0	0
Entertainment	6	75	2	25	0	0

FLEXIBILITY

Components	Yes		No	
	f	*%*	*f*	*%*
(3) The connections and flows of all the components are logical	7	87.5	1	12.5
(4 The production conceptual framework is usable to the production of educational television programs.	8	100	0	0
(5) The terminology used in the production conceptual framework is understandable	7	87.5	1	12.5

In conclusion, all 8 experts generally agreed to the necessity of the components inserted in the phases of the conceptual model. However, components such as closing and treatment had 3 experts saying they are useful but not essential. The same goes with instructional design and characters components where 2 experts say they are useful but not essential. These responses are reflected in additional comments by the experts.

To further contemplate the feedbacks given by the experts, all of the experts' written comments were also qualitatively analysed. These feedback and suggestions were grouped from the responses recorded in Item (6) to (12), (refer to Appendix B). In conveying the clearer meaning, some of the comments were rephrased from the original versions as exhibited in Table 4.9.

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Table 4.9

Further Comments from the Experts for the Conceptual Model (understandability, and usability

Expert	Comments
A	(1) Target audience should be included in the purpose and scope phase.
	(2) A Narrative Brainstorming phase, should be included.
	(3) The description under Character activity may include the aspect of size and physical appearance. Language must be appropriate for the target audience. Creating a sequel in production will create impact.
	(4) The social values to be ingested should be identified initially.
	(5) Overall, it is very important to identify the purpose and scope of the educational video program from the beginning of the process. This will determine the suitability of the following process.
B	(1) An initial brainstorming phase is very important as it sets up the very purpose of the project.
	(2) You should ingest the social consideration values at the falling action segment and create a mid-credit scene so that sequels can be started.
	(3) You might add a discussion activity as part of Narrative Brainstorming activity before you start the production process.
	(4) Scriptwriting is certainly something to include, but given the time constraints, perhaps it is something you would consider making optional.
	(5) Good job with giving a broad range of instructional design options. Perhaps consider providing ideas for different modes of production.
	(6) I like how technical design component is included so that there is a clear outcome to work toward.
	(7) Conceptual Model description is very clear and understandable.
	(8) You have done an excellent job in the creation of this conceptual model. You have provided a very usable and effective conceptual model. I think it will be very useful and effective for producers and practitioners. As you move forward, you may want to provide actual examples of these steps in action, perhaps in video. Overall, I think this is an excellent work
C	(1) Yes, the conceptual model has a logical flow but you should create cliff hangers at the end of every program to open up avenues for series.
	(2) Change the structural phase to a development phase to allow a brainstorming session to start and re-evaluate the project.

D (1) Sequel of program is essential because it defines the educational
    video program's ability to get the children's attention sustained.
  (2) A special task force team could be formed to work on the development
    of the development of the project before production begins.

E (1) Character development is essential to create well-paced storyline.
  (2) Social consideration values should be placed at the right time frame
    and and sequeled or else the program will lose its value.
  (3) Develop the characters slowly and avoid rushed story telling as this
    subject deals with moral values.

F (1) The Context Setup is very essential for setting up the foundation for
    whole production. Narrative Brainstorming is important for group
    project. Scriptwriting is not essential because this usually can be
    included in pre- production phase.
  (2) Presentation of the chart flow of the production is good, but need more
    detail explanation on the structural phase.
  (3) The conceptual model is visually practical and understandable.

G (1) I would recommend a development phase to be an essential phase
    as it will allow a team of experts to work on the development of the
    project before story boarding.
  (2) Create a mid-credit scene that will set up an opportunity for a sequel in
    production to construct a story with a beginning, middle and an end,
    rather than just an incident.

H (1) The conceptual model is adaptable for producing educational
    video program for different lesson or subject.
  (2) The conceptual model could include original source material to
    safeguard its originality.
  (3) The theme of the educational model program should be clear.
  (4) This conceptual model is helpful to motivate learning,
    understand content and encourage high level thinking, through the
    production of educational video programs.
  (5) Talking Heads should be used to introduce the program and its' scope.

Based on the comments, it can be concluded that; while majority of the experts approved

the proposed phases and tasks, additional details could be included within the activities

suggested in the conceptual model. As pertaining to effective educational video program

production, the experts pointed out their suggestions on the preparation, narrative and visual elements of educational video program production. Overlapping elements should also be amended.

4.4.3 Justification on Experts' Comments

The most apparent critique was towards the **flexibility** aspect on educational video program production conceptual model. Primarily, two experts stated instructional designing phase as useful but not essential. Accordingly, since some practitioners directly draft their script into the storyboard, Expert F and Expert G recommended that instructional designing and technical designing phases should be combined. In fact, Expert B prompted that these two phases should be optional due to time constraints. These criticisms were decisively accepted by the researcher because it had been proven in the expert consultation stage where several participants concentrated straightforwardly on their storyboard rather than the story script. In addition, the character development phase is used as platform within the storyline to create mid-credit scene, tension, drama and cliff hangers at the end of an episode to set up a sequel. This will arouse the agony in the viewers to get engaged into the storyline and consequently interact with the social values that are being highlighted. Besides that, Expert H recommended that 'talking heads' be used to introduce the program, its' purpose and scope. Since this recommendation coincides very well with the proposal of academicians from Universiti Pendidikan Sultan Idris (Ahmad Zamzuri, 2014) that 'talking heads' has been observed to be as effective a tool as a virtual teacher in aiding learning, the researcher had inserted 'talking heads' into the revised conceptual model.

Secondly, the focus was on the **understandability** aspect of the proposed conceptual model. Answering Expert E's comments regarding the visuals of educational video program production conceptual model, readability of the diagram could be improved without confusing phase shapes. Thus, this research visually revised the conceptual model by using consistent rectangle shape for each phase. However, Expert E's suggestion on modifying the diagram colours was omitted. This was because the colours matched with the phrases' description referred during educational video program production.

Next, the **completeness** aspects from the review were scrutinised. First, inclusion of content analysis and narrative conceptual model was suggested by Expert D. As a response, the first two elements were embedded in Knowledge and Storyline tasks with the Narrative Brainstorming phase. Depending on the educational video program's story, audition would be an optional element under the Character task. Secondly, addition of super graphic was proposed by Expert E. These elements were considered inclusive in technical designing component. Thirdly, as addressed by Expert H, the theme element had already been included in the Purpose task. Fourthly, Expert A highlighted the importance of target audience to be included in the Conceptual Model. This element is certainly associated with the instructional design task. When Topic and Objective are defined, target audience should also be relatively clarified. As a whole, most of the suggested elements by experts were included in the revised description section of the educational video program production conceptual model.

The next review focused on **generality** aspect. Concerning Expert C's argument on the difference between social values and elements of social values component, the

clarification was made in the conceptual model description. Despite their resemblance, elements of social values are subsets of the social values that will deliver the principles of good governance in the society. Although Expert B evoked that discussion should be added into the conceptual model, Expert F exclaimed that this embedded activity is more relevant to group projects within Narrative Brainstorming phase. Thus, responding to the experts' recommendations, these suggested elements were included in the revised description section of the educational television program production conceptual model.

Finally, Expert B, Expert F, and Expert H emphasized on the **usability** aspect of the conceptual model. For instance, Expert B suggested actual examples of educational model program production process in action through video. Expert F on the other hand, preferred an interactive infographic version of the proposed conceptual model. These useful feedbacks were taken into major consideration in future research. This research undoubtedly acknowledged that a multimedia presentation of the proposed conceptual model is an efficient factor in improving the quality of educational video program production. In summary, the action taken towards the additional comments, critique and suggestions by experts is depicted in Table 4.10 below.

Table 4.10

Response towards Experts' Comments and Suggestion Categorized into 5 Main Aspect of User Acceptance Testing

Aspect	Experts' Comment	Action Taken
Flexibility	Instructional Design phase is useful but not essential because this process can be carried out in storyboarding.	Scriptwriting phase was altered into Script task. This means the Scripting and Story boarding activity were merged.
	Character development is considered as a Storyline element.	'Talking Heads' are used for introduction and purpose of program. Character development is used to create mid-credit scenes.
Understandability	Conceptual Model should be film line monochrome.	Omitted because the colours are used to instantaneously refer the description of the conceptual framework.
Completeness	Include the content analysis element.	This element was elaborated in Content activity description.
	Include narrative conceptual model.	This element was embedded as a narrative type example in presentation activity description.
	Include audition phase, target audience element and theme element.	These elements were considered inclusive in character phase, purpose task and Value Creating task respectively.

Generality	Include discussion activity.	This element was considered inclusive in Narrative Brainstorming phase.
	Specify the difference between Storyboard and Scriptwriting task.	The differences were clarified in Storyboard and Scriptwriting phase description.
Usability	Provide video or interactive infographic version of the Conceptual Model.	This suggestion was very useful and taken into major consideration in future research

4.5 Revised Conceptual Model of Educational Video Program

Based on the experts' comments in Table 4.9, the first draft of the conceptual model was revised and redesigned as shown in Figure 4.7 to enhance and give adequate impression upon the model. This was achieved by applying experts' remarks regarding the flow and connection of all elements as well as the consistency and understandability of the design principles.

The experts' remarks listed in Table 4.9 show that the proposed conceptual model is reasonable, easy to understand, and indicated the uniqueness of educational video program ingested with social consideration values. The experts also agreed that the components are clearly stated. However, the experts requested that some correction be made to this proposed conceptual model based on the five aspects; (i) flexibility,   (ii) understandability, (iii) completeness, (iv) generality and (v) usability. Summarization of the experts' comments and actions taken to revise the proposed conceptual model is shown in Table 4.10.

4.5.1 Theories and Principles that were Adapted for the Conceptual Model

The conceptual model is inline with many theories and principles such as the theories and principles of usability, multimodality (multi modal interaction) and information architecture as well as the existing studies and usability guidelines. Therefore, based on those theories and principles, this model comes out with appropriate components and elements for structure, contents, design principles and production approaches. The framework is proposed to ingest social consideration values into educational video programs by providing a concrete and holistic production process. Therefore, for clarity and better understanding of the conceptual model, the theories and principles that served

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as basis for the conceptual model have been explained in the appropriate components of the framework design. This is inline with the experts' remarks about the theories used in the framework design.

4.5.2 Uniqueness of the Conceptual Model

Even though some experts confirmed that the model is reasonable, easy to understand, and they can see the uniqueness of the application, but some experts remarked that the proposed conceptual model is complicated, compact and needs some rearrangement to improve understandability. Accordingly, the following actions have been taken:

(i) The main components of the conceptual model were rearranged to start with the component number at the top left of the figure.

(ii) Regarding the comments about highlighting the uniqueness of the model, even though some experts state that they can clearly see the uniqueness of the model, this research highlights the uniqueness by putting the unique elements of a development phase before production begins. Besides that, the principles of social values and its elements are used for character development that will help create a mid-credit scene to set up a sequel and a well-paced story telling scenario of the educational video program.
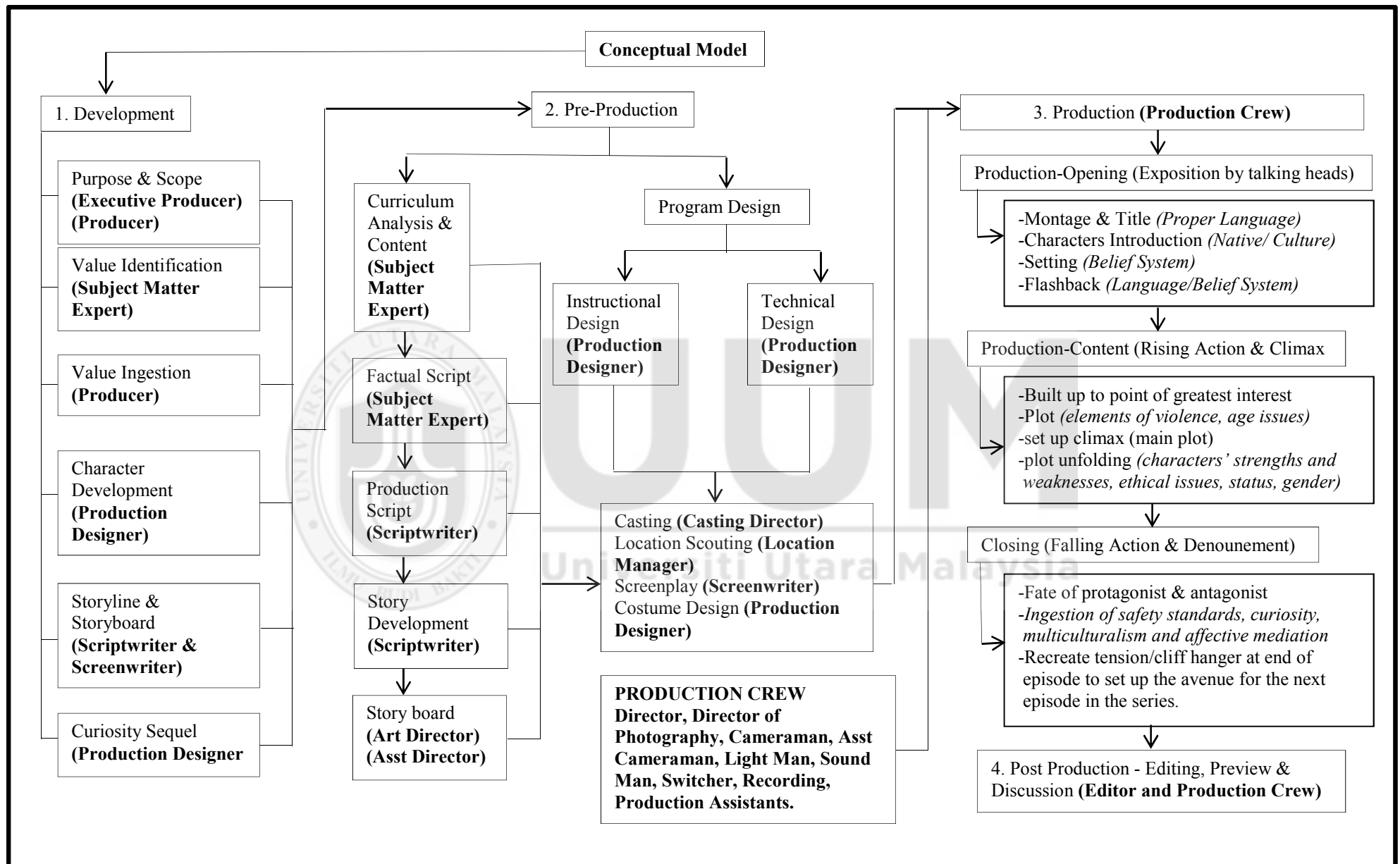
Figure 4.5. Revised Conceptual Model

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4.6 Chapter Summary

This chapter elaborates on the steps in constructing and activities involved in the development of the proposed conceptual model for ingestion of social consideration values into educational video program in detail. It begins with identifying the usability attributes in general and selecting only the appropriate attributes for conceptual model. The outcome of this activity serves to support the first objective of this research.

Consequently, an initial model of conceptual model was constructed to fulfil the second objective of this research. Also, the components in the proposed model were expected to contribute to the usability of the prototype educational video program. The outcome of the expert review serves to support the third objective of this research which is to validate the conceptual model, which eventually leads to the generation of the revised conceptual model. The differences between the first draft of the conceptual model and the revised version are elaborately discussed in Table 4.10.

This research evaluated the proposed conceptual model in terms of quality. The individual dimension results conveyed that generality, flexibility, completeness, usability and understandability of educational video program production conceptual model are significant. This implied that the proposed conceptual model was significant in serving as a guideline for producers to design and produce educational model programs. Next chapter elaborates in detail the process of developing the prototype educational video program based on then validated conceptual model. Later, an evaluation was carried out to measure the usability of the prototype, explained in Chapter 6.

CHAPTER FIVE
PROTOTYPE DESIGN, DEVELOPMENT AND PRODUCTION

5.1 Overview

Chapter 4 describes in detail the construction activities of the proposed conceptual model for educational video program production ingested with social consideration values. After that, a detailed explanation on the process of reviewing the proposed model among experts follows, where 8 experts were involved in validating the model. Finally, the first draft of the proposed conceptual model was revised based on the experts' remarks. To achieve the third objective of this research, the proposed model needs to be validated through prototyping approach, as carried out by Norshuhada and Shahizan (2013) and Tosho (2016).

This chapter demonstrates the phases carried out to develop the prototype of the educational video program ingested with social consideration values. Generally, the development process involves three main phases which are (i) pre-production, (ii) production and (iii) post-production. The difference in this production is, there will be an additional phase which is the development phase before pre-production. The following sections describe the phases of the prototype development and production and their activities.

5.2 The Development of Prototype Educational Video Program

The development process in this production takes place before the pre-production phase, as shown in Table 5.2 (page 178). A special task force team comprising of subject matter experts and instructional designers worked on the development layout of the prototype before it moves into the pre-production process. The task force team created a layout in

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the form of ideas and formats, do site visits for research purposes, write them up and used

them as 'calling card' to be passed to the production team. The 'calling card' identified a

growing trend or offer an alternative format for the production of the prototype, taking

into consideration the viewers, intention and preferred channel.

Development starts with the executive producer and producer setting the purpose and

scope of this particular prototype. As the prototype's purpose and scope is set for

educational video program, the subject matter experts identified the values to be ingested

into the prototype. The identified value ingestion process into the layout is done by the

producer. When the layout is completed with the values that need to be ingested, the

production designer developed the characters in the layout according to the values that

are ingested. This is followed by the scriptwriter and the screenwriter creating the

storyline and storyboard of the prototype. Before the layout goes to the pre-production

stage, the production designer set up the sequel for curiosity. Figure 5.1 shows the task

force team at work and Figure 5.2 shows the Eduwebtv webpage.

Figure 5.1. Task Force Team at Work   *Figure 5.2.* Eduwebtv Webpage

Montage-school as a moral community

Exposition
-Montage & Title
-Introduction
-Setting and Theme
-0 to 1 min

Tension Built Up-moral courage as a willingness to do what is right in difficult circumstances

Anxiety
-Create Tension
-1 to 2 mins

Identify Purpose and Scope-sustaining different ways of life using 'Talking Head'

Opening
-Character Introduction (Native / Culture)
-Background Information (Belief System)
-Setting (Belief System)
-3 to 5 mins

Rising Action-demonstrate the values of honesty, trust and respect in relationship with peers

Content
-Built up to point of greatest interest and tension
-Plot thickens (gender and sexual roles, elements of violence and biasness, and age issues)
-11 to 16 mins

Identifying Value-honesty and truth as the basic of culture

Content
-Opening: Events before main plot (native and culture), Flashback (language and belief system)
- 6 to 10 mins

Climax-collaborate with others in enriching vision of life

Content
-Set up drama and climax
-Plot unfolding (Character's strength and weakness, ethical /
 legal issues and socio-economic status)
-17 to 22 mins

Falling Action-show fairness in dealings with classmates

Closing
-Fate of protagonist and antagonist
-Ingestion of safety standards
-Multiculturalism and affectice mediation
 -23 to 28 mins

**Denouement and Cliff Hanger-moral and culture differences
is respected and valued in difficult circumstances**

Closing
-Recreate tension after affective mediation to set up the
 avenue to the next episode of the series and also create the
 anxiety and curiosity with a cliff hanger in audience at the
 end of the episode.
-29 to 30 mins

Figure 5.3. Production Process of the Prototype

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5.3 The Production of Prototype Educational Video Program

Educational video program production is the process of film making. A number of stages are involved in the process of film making. It includes a story, commission or idea, through scriptwriting, casting, shooting, sound recording and reproduction, editing, and screening the final product before an audience that will be established as film release. All these processes are carried out using standard operation procedure with forms specially prepared to execute the task for each process (refer Appendix E – Appendix L).

Educational video program production is happening in many places around the world in a range of social, economic and political contexts, and uses a variety of cinematic techniques and technologies. Conventionally, it involves a big group of people, and takes from a few months up to several years to complete. As discussed earlier in this chapter, educational video program production consists of three major stages (Simens, 2012) as shown in Table 5.1 below:

Pre-production — the first stage in which the ideas for the film are created, rights to books/plays are bought, the screenplay is written and financing is prepared. Preparations for the shoot are made, film crew and cast are hired, sets are built and locations are selected.

Production—the raw footages for the film are filmed in production.

Post-production—the image, visual effects and sound of the film are edited.

Table 5.1

Stages of Video Program Production (Maldonado; 2002, Siemens; 2012, Upson; 2014 and Meyers; 2014)

	Stage 1 Pre-Production	Stage 2 Production	Stage 3 Post-Production
1.	Casting Story Development	Set Up	Editing
2.	Location Scouting & Treatment	Rehearsal	Sound Mixing
3.	Shot List Scriptment	Setting Up Shots	Music
4.	Script Breakdown Plot Points	Recording	Test Screenings
5.	Tech Scout Structure	Checking Shots	Preview
6.	Scheduling Writing Screenplay		
7.	Costume Design Screenplay Reading		
8.	Production Design Re-Writing		

The prototype production of the educational video program for this research will also follow the standard rules of film making, except for it has a special agenda of ingesting social consideration values into the context and divided into phases of purpose and scope, identifying value, value ingestion, character development, storyline and storyboard and

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finally curisoty sequel in the development stage before pre-production as elaborated in the revised conceptual framework. The specification of the activities that takes place in the development stage is elaborated in Table 5.2.

Table 5.2

Modified Stages of Video Program Production (Adapted from Table 5.1)

	Stage 1 Development / Narrative Brainstorming	Stage 2 Pre-Production	Stage 3 Production	Stage 4 Post-Production
1.	Purpose and Scope	Content Curriculum Analysis	Set Up	Editing
2.	Identifying Value	Treating & Location Scouting	Rehearsal	Sound Mixing
3.	Value Ingestion	Scriptment	Setting Up Shots	Music
4.	Character Development	Story Development Story Board	Recording	Test Screenings
5.	Storyline and Storyboard	Casting Structure	Checking Shots	Preview
6.	Set Up Sequel for curiosity	Scheduling Writing Screenplay Costume Design		
7.	Value Treatment	Screenplay Reading		
8.	Value Placed Accurately	Production Design Re-writing		

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5.3.1 Stage 1 – Development

This is a creation stage that explains the purpose and scope of the premise for a program or series by the executive producer and producer. It tells us why the characters are in the situation they are in and it supports and defends the task force team's idea and the values identified (first 5 minutes in the prototype - Figure 5.3). Conflicts are involved from the very beginning of the program or series. The conflicts created by the production designer has a reason, has something to be solved, and it has something to be attained with the ingestion of the values by the producer. This is shown as the tension and anxiety built up in the prototype. The characters (including talking heads) are introduced and background information is established in this stage.

Storyline, storyboard and scenarios are created by the scriptwriter and the screenwriter to ingest social consideration values (minutes 6 to 10 in the prototype-figure 5.3). The characters are developed by the production designer accordingly to navigate the scenarios and embrace their internal and external issues and problems (minutes 11 to 16 in the prototype - Figure 5.3). Mid-credit scenes are created by the production designer to set up a sequel for the program. This will raise the agony and curiosity of the viewers to get engaged with the characters and story and at the same time create a well-paced story-telling to ingest the social consideration values for educational video programs (minutes 29 to 30 in the prototype - Figure 5.3). .

An important task for the development team is to successfully capture the audience's attention in the first 10 seconds of the video program. This is done during the exposition session (montage – 0 to 1 minute in the prototype - Figure 5.3). To execute this task, the development team planned for the sequel in the production of the prototype. The

development team also monitored the reaction and reception of students regarding the social consideration values ingested in the prototype video program. Whenever there is a lack of receptance towards the content, character or plot of the program, the development acted immediately in changing the storyline in order to keep the audience hooked to this program and the execution of the social consideration values is done effectively to suit the purpose and scope of the educational program.

5.3.2 Stage 2 – Pre-Production

This is a period where assembling the functional elements takes place and the video program's conception takes place, which may overlap at certain junctures. The context setup which consist the development of the story and characters takes place in this part.

5.3.2.1 Content and Curriculum Analysis (Subject Matter Expert)

In this phase, the content of the video program's story is identified according to the curriculum analysis. The producer should seriously determine the video program's content structure as a matter of priority in the phase according to the advice of the subject matter experts. After the content structure is developed, the video program's scene-by-scene outline in the form of treatment takes place. The social values planned for the ingestion into this educational video program (prototype) is outlined. For the production of this protoype, the values are honesty and truth as the basic of culture (minutes 6 to 10 in the prototype - Figure 5.3).

5.3.2.2 Treatment and Location Scouting

The location manager uses the treatment as his basis to start the location scouting where shooting spot for every scene of the movie is decided. The location for every shooting

spot has to be suitable for the scene and story that is presented in the treatment. As for this prototype, the locations are Kuala Lumpur City Cites, Taman Burung and a school classroom.

5.3.2.3 Scriptment

The scripting process by the scriptwriter will follow up when the treatment is ready. This is the most important part of the pre-production phase as this is where the prototype gets its structure for the following stages of story development and story boarding.

5.3.2.4 Story Development and Story Boarding

From the script, the story is developed in the form of a storyboard also by the scriptwriter. Figure 5.3 shows the story development prototype. Every section of the story is flagged with time frame for the development of the story. Following from this, a story board is created for every scene for the filming purpose.

5.3.2.5 Casting and Struture

Talents, artists and actors for every scene are identified by the casting director and his team according to the needs of the story and script. The casting process also sets the structure of the prototype because these are the characters which will present the story to the viewers. As for this prototype, the casts are the drug addicts, the host and the children in the classroom.

5.3.2.6 Scheduling, Writing Screenplay and Costume Design

The shooting scheduling is the core business of the assiatant director. He sets and arranges the shooting schedule of every scene. The writing process of the screenplay can

only literally begin when the screenplay writer has a clear picture of the plot points, structure and scene outline. This helps the screenwriters not to go off-track with the screenplay's structure or runout of material. Costume design is done by the costume designer according to the suitability of evey scene.

5.3.2.7 Screenplay Reading

The completed screenplay is read by the producer's team and wherever necessary, the screenplay is re-written to suit all the 4 categories mentioned for the prototype development; Content, Instructional Design, Technical design and Social Considerations Values.

5.3.2.8 Crew Members

Key crew members are selected as soon as the video program's preparatory stage begins. The key crew members from this stage onwards are as shown below:

Executive Producer
Producer
Director
Assistant Director
Casting Director
Location Manager
Production Manager
Production Designer (Art Director, Special Effects, Costume, Prop, Make Up)
Screenwriter
Director of Photography

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Cameraman

Assistant Cameraman

Light Man

Soundman (Sound Designer, Sound Recorder, Boom)

Switcher and Recording

Production Assistants

Editor and Dubbing Editor

Figure 5.4 below shows how these key crew members are organized as a production

team.
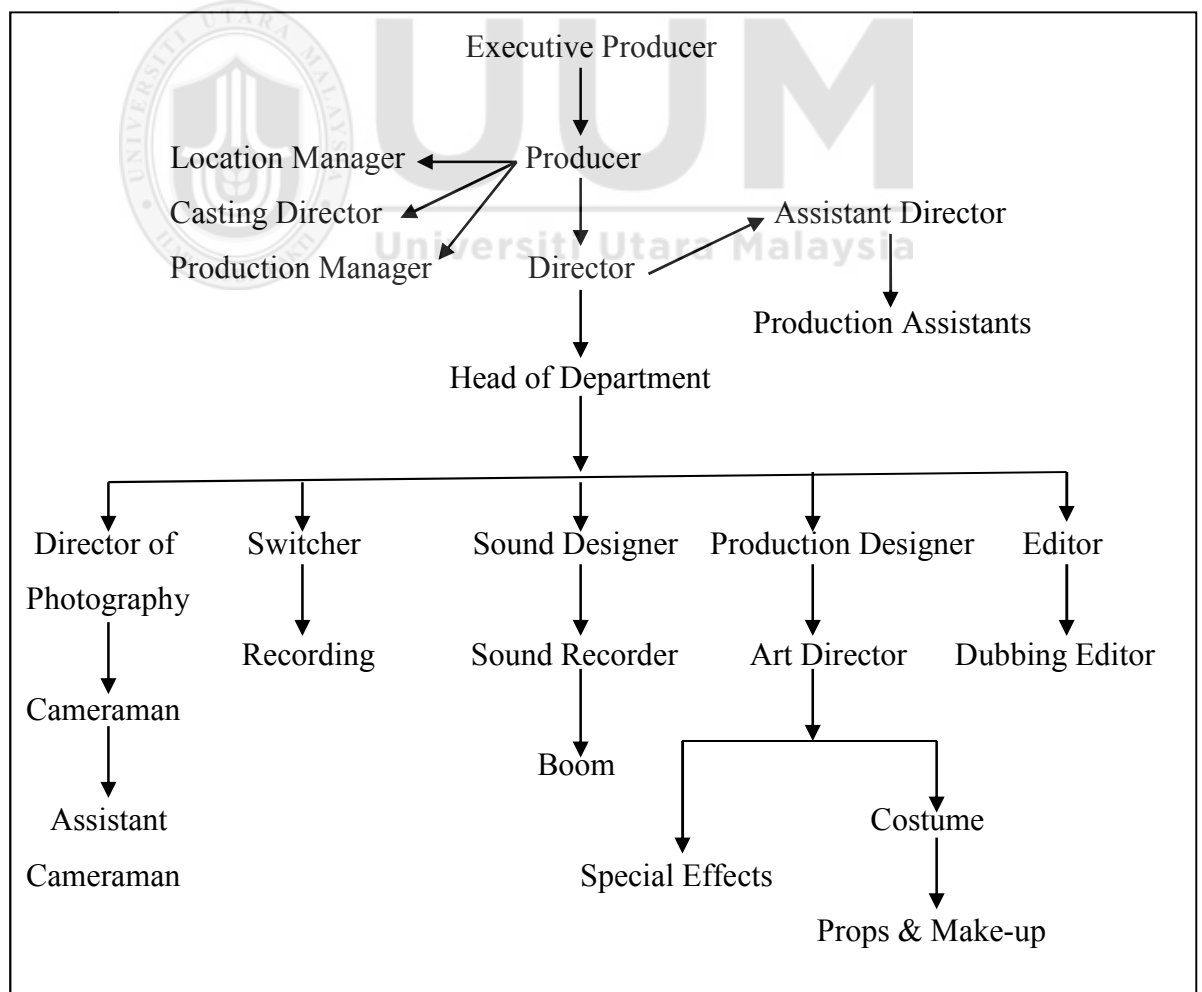
Figure 5.4. Film Production (Key Crew Members) Organizational Chart

Figure 5.5. Production crew preparing for filming and recording.

5.3.3 Stage 3 – Production

The most important part of a program is the filming and recording and this starts in this stage. Basically, this is the stage where the program is created. The four processes that take place in this stage are principal photography (setting up), rehearsal, setting up shot and checking the take. As for this prototype, exposition by a talking head started the program (minutes 3 to 5 in the prototype - Figure 5.3). This is followed by the montage and title, and on to character introduction (minutes 9 to 1 in the prototype - Figure 5.3). Flashback and events before main plot also takes place in this part (minutes 1 to 2 in the prototype - Figure 5.3). The most important part of the production, which is the content that explores the rising action, the climax and the closing (falling action and denoument), mould this section (minutes 11 to 22 in the prototype - Figure 5.3). The fate of the protagonist and antagonist will also be decided in this section. Finally, the program should recreate the tension by creating a cliff hanger at the end of the episode to set up the avenue for the next episode in the series (minutes 23 to 30 in the prototype - Figure 5.3).

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Figure 5.6. Principal photography, rehearsal, setting up shots and filming.

5.3.3.1 Principal Photography – Setting Up

The call time begins each day's schedule. This is the time the crew must report on location. The process of overseeing the crew is done by the assistant director while the director works on the shots.

5.3.3.2 Rehearsal

While the crew start setting up their equipment, the director start blocking the shot by briefing the actors on the shot and what they should exactly do in front of the camera. Refining and tweaking of the shots happens at the shoot sometimes with radical change. With proper planning in advance, the shaping of the plots takes place more effectively.

5.3.3.3 Setting up Shots

Having chosen the focal length, camera placement, the actor's marks and other details such as camera movement, the director tells the cinematographer where to put the camera, which lens to use and the details of any camera movement.

5.3.3.4 Checking the Take/Shots

After a take, the director reviews the take and decides the next step. Retakes will continue until the director is satisfied. Reviewing the takes is very important to achieve good results. It will answer the question 'Is this what I wanted?' and 'How can I make it look better?'

Figure 5.7. Production crew preparing for filming and recording.

5.3.4 Stage 4 – Post-Production

After the filming, the video program will get its full shape and structure in this stage. In this stage, the program will be edited by the editor. The four processes involved in this stage are editing, sound mixing, music composing and test screenings and preview.

5.3.4.1 Editing

During the editing process, the program will be scrutinized and all the unwanted or bad shots are taken out (edited). The prime idea is to create a clean body of the whole story without any flaws. The duration of the program is also decided in the editing process.

5.3.4.2 Sound Mixing

Sound mixing is a process of setting each soundtrack's level, adding of any suitable and necessary sound tracks and making the soundtrack to be at its best level.

5.3.4.3 Music Composing

The main element of this stage is the composition and production of the program's music. The following aspect are the composer's task : deciding the instruments to be used, the beginning and ending of every music cue, happy or sad music and its speed and any other relevant musical effects required by the director.

5.3.4.4 Test Screenings and Preview

When the producer and the director have the first cut of the video program, there will be a preview session or a test screening with a small number of people or audience. Misjudged scenes or mistakes in editing will be identified from the audience's feedback and correction will be done accordingly.

5.4 Chapter Summary

This chapter describes in details the procedure of transforming the conceptual model which has been developed in Chapter 4 into a educational video program. The proposed conceptual model recommends a development approach consists of four phases; (i) development, (ii) pre-production, (iii) production, and (v) post-production. Based on that development approach, the prototype of educational video program ingested with social consideration values was produced and webcasted on the www.eduwebtv.com website under the channel *Pendidikan Sivik dan Moral* in *Kurikulum* folder.

In addition, this chapter aims at providing a means (the prototype educational video program) that can be used in validating the conceptual model through end user testing. Meanwhile, having elaborated them in the previous sub-sections, this work concludes that the fourth research objective of this research was achieved by developing the prototype educational video program.

Consequently, the prototype educational video program is ready to be used for field data collection as planned in the actual user acceptance testing. As stated earlier in the fifth research objective of this research, the produced prototype must be utilized in user acceptance testing to determine whether the produced prototype has the ability to assist in curbing school children's social problems. Chapter 6 provides further explanation about the user acceptance testing.

CHAPTER SIX

VALIDATION AND USER ACCEPTANCE TEST OF PROTOTYPE

6.1 Overview

All the difficulties faced by the Ministry of Education, Malaysia in curbing social problems among school children have been revealed in Chapter 1, while the usability issues and the limitations of the existing models of conceptual models have been explored in Chapter 2. As a response to that, this research proposes a conceptual model for usable guidelines to produce educational video program ingested with social consideration values as a solution to address the identified research problem. Meanwhile, Chapter 4 deals with the process of constructing and validating the proposed conceptual model. Further, prototyping approach has been utilized to validate the revised conceptual model as described in Chapter 5. Consequently, the fifth objective of this research, which is to gather user feedback through user acceptance testing on the usability of the prototype, is deliberated in this chapter.

6.2 Expert Review of the Prototype

As a decision making stage for validating prototype, expert review was the chosen method for this research. To compound in trustworthy results, the experts should investigate the features of the prototype (Psomos & Kordaki, 2012). The goal of the expert review is to validate that the produced prototype educational video program is suitable for curbing the social problem among Malaysian school children.

6.2.1 Procedure of Expert Review

The review process started with the invitation via e-mail to the same identified experts as mentioned in the validation of conceptual model process. Next, the experts received the

prototype educational video program together with expert review form. The objective and scope of the prototype were made clear to the experts where the target users are school children of 13 to 17 years old (secondary) and the prototype focuses on educational video program that has been ingested with values of social consideration. The prototype was uploaded to the www.eduwebtv.com website under the curriculum folder. The direct link to the prototype is http://www.eduwebtv.com/eduwebtv/?p=11915.

The experts were instructed to watch, observe and analyse the supplied prototype and its description before carefully filling up the provided spaces in the review form. As explained in the aforementioned subsection, the expert review form instrument (Appendix D) asks about the relevancy of the proposed phases and tasks, the activities within them, connections and flows of all the components. The respond column for every component is divided into three categories; clear, relevant and effective. The experts have to fill in the 'YES' or 'NO' column for item number 1 to number 5. For item number 6 to 13, the experts will give their feedback in the column given. The feedback is elaborated in Table 6.2.

6.2.2 Results of Expert Review

The gathered data were recorded in frequency and tabulated in Table 6.1 based on the questions asked in the instrument (Appendix D). In general, results from the analysis showed that the majority of the experts agreed that most of the phases, tasks, components and activities in the prototype are clear, relevant and effective in carrying out its function as an educational video program (prototype) ingested with social consideration values. Majority of them also agreed that the prototype is usable, has logical flow and effective in achieving its objective.

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Table 6.1

Frequency Table of Responses from Expert Review for Prototype (n=8)

Components	Clear		Relevant		Effective	
	YES	NO	YES	NO	YES	NO
Development	8	0	8	0	8	0
Narrative Brainstorming	8	0	8	0	8	0
Treatment/Storyboarding/Scripting	8	0	8	0	8	0
Character Development	6	2	6	2	7	1
Mid Credit Scene/ Cliff Hangers	8	0	8	0	8	0
Value Ingestion	6	2	6	2	7	1
Monitoring of Audience Perception	7	1	7	1	8	0
1. Purpose	8	0	8	0	8	0
2. Scope	7	1	7	1	8	0
3. Knowledge	7	1	7	1	8	0
4. Storyline	7	1	7	1	8	0
5. Treatment	8	0	8	0	8	0
6. Storyboard	8	0	8	0	8	0
7. Social Values	8	0	8	0	8	0
8. Elements of Social Values	8	0	8	0	8	0
9. Characters	8	0	8	0	8	0
10.Exposition	6	2	6	2	8	0
11.Rising action and Climax	7	1	7	1	8	0
12.Falling action and Denoument	7	1	7	1	8	0

Components	YES	NO
(C) The connections and flows of all the components are logical	7	1
(D) The prototype is usable as educational video program ingested with social consideration values.	8	0
(E) The terminology used in the prototype is understandable	8	0

To further contemplate the feedbacks given by the experts, all of the experts' written comments were also qualitatively analysed. These feedback and suggestions were grouped from the responses recorded in Appendix D. In conveying the clearer meaning,

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some of the comments were rephrased from the original versions as exhibited in Table 6.2.

Table 6.2

Further Comments from the Experts for Prototype

Expert	Comments
A	(1) Target audience should be included in the **development** phase.
	(2) The character introduction scenes may include the aspect of size and physical appearance. Language must be appropriate for the target audience. The idea of **creating sequels and cliff hangers** is excellent.
	(3) The prototype is understandable, practical and effective.
	(4) Overall, it is very important to identify the target audience of the educational video program from the beginning of the process. This will determine the suitability of the prototype to achieve its' objectives.
B	(1) Development phase is very important as it sets up the very purpose of the project and it can open up the avenue for a sequel in production.
	(2) You did a nice job in giving the scope of how students should pull together their ideas in the prototype educational video program.
	(3) You might add a discussion activity as part of Narrative Brainstorming in the prototype. It would be good for students to provide feedback.
	(4) The development phase is certainly something to include, but given the time constraints, perhaps it is something you would consider making optional to educational video programs for specific purposes like creating a sequel or series of drama.
	(5) Good job with creating sequels and cliff hangers. This program should be used as viewing materials and later used for assessment and evaluation purposes in classroom sessions.
	(6) I agree that the preview phase component is included so that there is a clear outcome and evaluation phase to work toward.
	(7) The prototype is very clear and understandable in delivering the social consideration values and good for classroom evaluation.
	(8) You have done an excellent job in the creation of this prototype. You have provided a very usable and effective educational video program. I think it will be very useful and effective for producers and practitioners. As you move forward, you may want to provide actual examples of these steps in action, perhaps in video. Overall, I think this is an excellent work.

C	(1) Yes, the prototype has logical and usable flow of activitties.
	(2) Creating a cliff hanger at the end of program will definitely help to uplift anxiety and curiosity in the students.
D	(1) Rising Action and Climax is essential because it defines the effectiveness of the social consideration values ingestion.
	(2) Audition should be added to assess character design.
	(3) Characters could be grouped under Storyline task.
	(4) Overall, the prototype has embedded all the necessary components for educational television program ingested with social consideration values.
E	(1) Character development will help to deliver the message clearly.
	(2) The prototype was able to deliver message in a simple way.
F	(1) The development phase is very essential for setting up the foundation for whole production. Production task is important for group project. Instructional Design is essential because it reveals the intended purpose. Editing save all the documentation and makes the final product run smoothly.
	(2) The prototype is visually practical and understandable.
G	(1) I would not recommend Instructional Design to be a production task this phase process can be done during the story boarding.
	(2) Overall, the prototype is a a good example of educational video program ingested with social consideration values.
H	(1) The prototype is a good example for educational video program production for different lesson or subject.
	(2) The prototype could include more examples for the proposed components.
	(3) The theme of the prototype should be made clear.
	(4) This prototype is helpful to motivate learning, understand content and encourage high level thinking, through the production of educational video programs.

Based on the further comments from the experts, it can be concluded that the narrative brainstorming session in the development phase should play a vital role in creating the very purpose of the project and consequently set up the foundation for production.

Besides that, the development phase should also be used to open up the avenue for a sequel in the production, where rising action and climax components will be essential to effectively ingest the social consideration values into the education video program.

6.3 User Acceptance Testing Results (for School Students)

User Acceptance Testing is defined as the process where the client verifies requirements that have been requested exist and provide the functionality as outlined in the user story or requirements document. Due to this, it is important to clearly define the requirements that will be reviewed by the client and also to verify that the application meets the expectations of the end user.

In total, 60 school children took part in the user acceptance testing. As explained in Chapter 3, convenience sampling was adopted where collection of data was gained from conveniently available members of the population (Sekaran, 2016). (194)
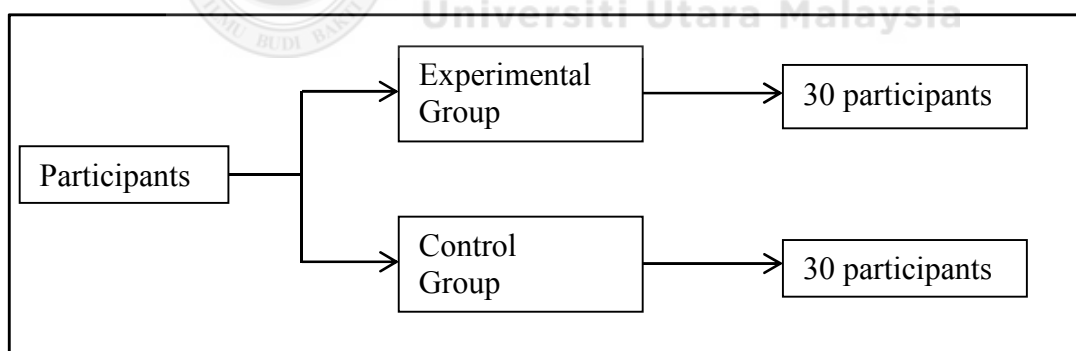
Figure 6.1. Participants (Students) in User Acceptance Testing

Accordingly, 30 participants in the experimental group were provided with the prototype. This number is adequate for educational video program quality evaluation since at least 30 data sets should be employed for obtaining reliable results in statistical test (Sekaran & Bougie, 2016). Then, these participants were instructed to evaluate their experience in

using the prototype by filling up the educational video program quality questionnaire instrument (refer to Appendix C). The demographic profile of the participants is illustrated in Table 6.3.

Table 6.3

Demographic Profiles of Participants (Students) in Experimental Group

		Frequency	Percentage (%)
Gender	Male	15	50.0
	Female	15	50.0
Age	13-14	10	33.3
	15-16	10	33.3
	17	10	33.3
Race	Malay	10	33.3
	Chinese	8	26.7
	Indian	7	23.3
	Others	5	16.7

The next subsection reports the findings and results of the educational video program quality evaluated by the participants.

6.3.1 Analysis and Findings

As explained in Chapter 3, educational video program (prototype) ingested with social consideration values quality evaluation is categorized into four aspects; namely; (i) Learning, (ii) Outcome, (iii) Aesthetics, and (iv) Enjoyment. Learning aspect assesses at what level the prototype allowed its' user to utilize it in diverse educational purposes while outcome aspect evaluates on how effective the learning outcomes are. Meanwhile, aesthetics aspect measures if the components in the prototype were entirely required to successfully ingest social consideration values intended for this research. Enjoyment

aspect refers to how effective is the prototype in hooking up the students into engagement of learning. It is preferable that data normality is assessed both visually and through Shapiro-Wilk test (Ghasemi & Zahediasl, 2012). Table 6.4 displays the results of data normality test for each dimesion.

Table 6.4

Test of Normality Results (Students)

Dimension	Statistics	df	Sig.
Intention	.873	30	.000
Outcome	.964	30	.045
Aesthetics	.864	30	.000
Enjoyment	.948	30	.015

Lilliefors Significance Correction

To analyse and descriptively interpret the data from the 9-point semantic scale instrument items, a six scale measurements with the range of interval 1.33 from strongly disagree to strongly agree was formulated as the scale (see figure 6.2). This number was achieved by dividing the range of scale with number of scale as suggested by Zulkarnain (2001).

$$\text{Interval} = \frac{(\text{Highest score} - \text{lowest score})}{\text{Number of scale}} = \frac{(9 - 1)}{6} = \mathbf{1.33}$$

List of Scale (Level of Agreement)

Highly Disagree	=	1.00 – 2.32
Disagree	=	2.33 – 3.65
Slightly Disagree	=	3.66 – 4.98
Slightly Agree	=	4.99 – 6.32
Agree	=	6.33 – 7.65
Highly Agree	=	7.66 – 9.00

Figure 6.2. Conversion of Numerical Scale for Data Analysis

Table 6.5

Descriptive Statistics of Composite Factors

Dimension	Summary Statistics				
	Mean	Median ($\sim x$)	Std. Deviation	Skewness	Kurtosis
Learning	7.5965	8.0000	.86313	.036	-.634
Outcome	7.3509	7.5000	.92463	-.309	.213
Aesthetics	7.5965	8.0000	.82701	.801	-.516
Enjoyment	7.7368	8.0000	.79116	-.160	-.573

Scale: Highly Disagree = (1.00 – 2.32), Disagree = (2.33 – 3.65), Slightly Disagree = (3.66 – 4.98), Slightly Agree = (4.99 – 6.32), Agree = (6.33 – 7.65), Highly Agree = (7.66 – 9.00)

In general, all dimensions excluding 'outcome' scored 8.0000 for most of the median scores. So far, the findings had hinted participants' positive acceptance towards the prototype. These numbers implied that majority of the participants in the user acceptance testing activity have come to an agreement that the prototype educational video program is suitable to be used according to its tested aspects. To strengthen the validity of the results, evaluation of the prototype's quality in a mode of hypothesis testing is explained in the hypothesis testing section.

6.3.1.1 Analysis and Findings of Experimental Group Compared to Control Group

The descriptive results of the prototype educational video program assessment score achieved by the participants in experimental group (using prototype) and control group (not using prototype) are presented in Table 6.6 and 6.7.

Table 6.6

Frequency Table of Prototype Educational Video Program (ETV) Assessment Score

Group	Educational Television Program Assessment Score (0-100 marks)						
	70.0	75.0	80.0	85.0	90.0	95.0	Total
Using Prototype **(Experimental)**	0	3	3	2	4	18	30
Not Using Prototype **(Control)**	26	2	2	0	0	0	30
Total	**26**	**5**	**5**	**2**	**4**	**18**	**60**

Table 6.7

Descriptive Summary

Group	Mean	Mean Std. Error	Median	Variance	Std. Deviation
Experimental	85.882	2.1538	85.000	8.8803	7.860
Control	71.154	.8309	70.000	2.9957	8.974

From the statistics, it was discovered that in the control group, the existing educational video program (not prototype), 26 students scored 70 out of 100 and none scored more than 80. On the other hand, the prototype in the experimental group; 18 students received the uppermost score of 95.0. The least score (70.0) was given to the existing program; 86.7% (not prototype) from the control group in contrast with the experimental group; 0%. (prototype).

These results straightforwardly demonstrated that by using the prototype educational video program, the participants in the experimental group were able to achieve higher scores for their educational video program assessment.

The results represented that several aspects in the prototype (experimental group) were well incorporated compared to the existing educational video program (control group). This analysis indicated that the total assessment score of educational video program between the experimental group and control group were relatively different. Thus, a hypothesis test was performed in the next subsection to validate these findings.

6.4 Hypothesis Testing

As previously stated, the five characteristics (generality, flexibility, completeness, usability and understandability) represent the mode in the term of 'quality'. Therefore, based on established method in measuring users perceived the proposed conceptual model and the prototype as having quality (Maes and Poles, 2007; Norshuhada & Tenh, 2014) and consistent with the numerical scale previously described in *Figure 6.3*, the same measurement (median = 6.33) was used as the primary indicator to determine whether educational video program production conceptual model and the prototype is significantly generalizable, flexible, complete, usable and understandable. Essentially, a score of 6.33 and above is the cutting point (hypothesized median) for statistical significance for each dimension.

6.4.1 Hypothesis Testing I

In compliance to the positive interval value in Figure 6.3, decision to accept or to reject the null hypothesis (H_0) depends on the median value. Particularly, this research rejects H_0 when median is more than 6.33 and fails to reject H_0 when median is less than 6.33. For generality dimension, the null hypothesis is as follows:

H_0: The proposed educational video program production conceptual model is not significantly generalizable.

One sample Wilcoxon signed rank non-parametric test was run and the results are displayed in Table 6.8.

Table 6.8

One Sample Wilcoxon Signed Rank Analysis on Generality

Attribute	Sig.	Decision
The median of Generality equals 6.33	.000*	Reject the null hypothesis

*Asymptotic significance is displayed. The significance level is .05.

Here, the result discloses that the null hypothesis would not be accepted. This finding interprets that the proposed educational video program production conceptual model is significantly generalizable.

6.4.2 Hypothesis Testing II

For flexibility dimension, the null hypothesis is as follows:

H_0: The proposed educational video program production conceptual model is not significantly flexible.

One sample Wilcoxon signed rank non-parametric test was run. The results depicted in Table 6.9 rejects the null hypothesis. This finding invokes that the proposed educational video program production conceptual model is significantly flexible.

Table 6.9

One Sample Wilcoxon Signed Rank Analysis on Flexibility

Attribute	Sig.	Decision
The median of Flexibility equals 6.33	.000*	Reject the null hypothesis

*Asymptotic significance is displayed. The significance level is .05.

6.4.3 Hypothesis Testing III

For completeness dimension, the null hypothesis is as follows:

H_0: **The proposed educational video program production conceptual model**

is not significantly complete.

The results of one sample Wilcoxon signed rank is presented in Table 6.10 which discards the null hypothesis. This finding describes that the proposed educational video program production conceptual model is significantly complete.

Table 6.10

One Sample Wilcoxon Signed Rank Analysis on Completeness

Attribute	Sig.	Decision
The median of Completeness equals 6.33	.000*	Reject the null hypothesis

*Asymptotic significance is displayed. The significance level is .05.

6.4.4 Hypothesis Testing IV

For usability dimension, the null hypothesis is as follows:

H$_0$: The proposed educational video program production conceptual model

   is not significantly usable.

One sample Wilcoxon signed rank non-parametric test was run. The results depicted in Table 6.11 rejects the null hypothesis. This finding invokes that the proposed educational video program production conceptual model is significantly usable.

Table 6.11

One Sample Wilcoxon Signed Rank Analysis on Usability

Attribute	Sig.	Decision
The median of Usability equals 6.33	.000*	Reject the null hypothesis

*Asymptotic significance is displayed. The significance level is .05.

6.4.5 Hypothesis Testing V

For understandability dimension, the null hypothesis is as follows:

H$_0$: The proposed educational video program production conceptual model

   is not significantly understandable.

The results of one sample Wilcoxon signed rank non-parametric test as shown in Table 6.12 indicates that the null hypothesis would not be accepted. This finding discloses that the proposed educational video program production conceptual model is significantly understandable.

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Table 6.12

One Sample Wilcoxon Signed Rank Analysis on Understandability

Attribute	Sig.	Decision
The median of understandability equals 6.33	.000*	Reject the null hypothesis

*Asymptotic significance is displayed. The significance level is .05.

Finally, one sample Wilcoxon signed rank non-parametric was run another round (including all 5 dimensions) to measure the overall quality of the proposed conceptual framework. The results revealed that the Quality median ($\sim x = 8.000$) is higher from the hypothesized median ($\sim x = 6.33$). Therefore, it is confirmed that users perceived the proposed educational video program production conceptual model as having quality. This concludes that educational video program production conceptual model has significantly served as a guideline to design and produce educational video programs ingested and intervened with social consideration values.

6.4.6 Hypothesis Testing VI

Initially, a Shapiro-Wilk test was run to examine the distribution of both data sets (using prototype group and not using prototype group). As shown in Table 6.13, the significance value results conveyed the assumption that the data was not normally distributed.

Table 6.13

Test of Normality for Educational Video Program Assessment Score

	Statistics	df	Sig
Experimental	.871	70	.023
Control	.458	30	.000

Lilliefors Significance Correction

Since the assumption of normal data distribution was not met, non-parametric methods were employed in running this hypothesis. The aim of this test is to determine whether there was a significant difference of educational video program assessment scores between the experimental group and the control group. The null hypothesis is as follows:

H0: There is no significant difference in educational video program assessment between the experimental group and the control group.

Consequently, Table 6.14 shows the results from a Mann-Whitney non-parametric test.

Table 6.14

Independent-Samples Mann-Whitney U Test on Scores

Attribute	Sig.	Decision
The distribution of Scores is the same across categories of using prototype and not using prototype	.000	Reject the null hypothesis
Asymptotic significances are displayed. The significance level is 0.5.		

From the results ($p = 0.000$ is less than 0.05), it was decided that the null hypothesis was rejected.

From the answers obtain in the assessment score instrument (Appendix C – refer page 268), it is obvious that the experimental group were better able to align the learning goal, constructive activity, argumentation and consistency of the prototype video program compared to the control group which never had the opportunity to do so because these element were missing in the existing video program that they used. Table 6.15 summarizes the difference between the prototype video and the existing video.

Table 6.15

Differenece between Prototype Educational Video and the Existing Video

Video	Learning Goal	Constructive Activity	Argumentation	Consistency	SCV Key Elements	Mid-Credit Scenes	Dramatic Values
Prototype (Experimental)	/	/	/	/	/	/	/
Existing Video (Control)	/	X	X	/	X	X	X

* Dramatic Values – Rising Action, Climax, Falling Action and Denoument

6.5 Chapter Summary

This chapter discusses the results of the user acceptance testing. The experiment was carried out in real classroom setting. The test aims at measuring the usability of the prototype on user's satisfaction. Generally, the test projected a positive attitude of the prototype towards ingestion of social consideration values into educational video programs.

Further, this chapter also discusses and illustrates the results of the six hypothesis testing. The independent sample test shows that there is a significant difference between the experimental group and the control group as well as the level of acceptance between the users of the prototype. Next chapter includes more discussions on the results of measuring usability of the prototype and also some concluding remarks.

CHAPTER SEVEN
DISCUSSION AND CONCLUSION

7.1 Introduction

This chapter provides important aspects that can be verified from the research of educational video program production conceptual model and the production of a prototype educational video program. It highlights the answers of the research questions and discussion of findings. The concept that video programs are basically a medium of entertainment is not relevant anymore. The ability to adapt and follow different approaches when used in different educational situations is the strength of educational video programs in this changing paradigm. This cognitive style will ultimately affect how information is processed in the students' memory structure. Students will also easily process the given information, if it is performed in accordance with their dominant learning style (Ahmad Zamzuri, 2016).

Educational video programs can be aligned with school time tables and curriculum, and will take the form of school broadcast when systematically organized. The mode of delivery of educational video program has varied tremendously as more and more platforms like Google Classroom and Microsoft Learning Platform emerge as content delivery and leaning management systems. The gadgets, like computers, smartphones and tablets which are tools for operating this content delivery and learning management systems are also getting more and more sophisticated. As learning become more self-directed in the 21st century, the content and subject matter in the form of educational video program will experience a steep demand. This chapter also provides summaries of research limitations and contributions. Finally, this chapter ends with a discussion of a future research and conclusions of the research.

7.2 Answers of Research Questions

This research aims to develop a production conceptual model of educational video program which functions as a systematic guideline that includes the fundamental components to produce educational video programs. Accordingly, this research was conducted based on six research questions:

i) What are the core elements of social consideration values for Malaysian educational video programs?

ii) What has been the role of the Ministry of Education in improving the social problems among Malaysian school children?

iii) How to develop a conceptual model for ingestion and intervention of social consideration values into educational video programs?

iv) Is the developed conceptual model suitable for production of educational video programs ingested with social consideration values (prototype)?

v) Is there a significant difference between the control group and experimental group that took part in the user acceptance test of the produced prototype?

vi) Is the produced prototype educational video program ingested with social consideration values suitable to curb social problems among school children?

A) Research Question 1:

What are the core elements of social consideration values for Malaysian educational video program?

Production of educational video program ingested with social consideration values comprises of (i) Stages, (ii) Phases (iii) Task, (iv) Time Frame, and (v) Social Consideration Values. These stages, phases, task and time frame are described in detail with their relevant social consideration values identified in this research in Table 7.1.

Table 7.1

Core Elements of Social Consideration Values for Malaysian Educational Television Program

Stage	Phase	Task	Time Frame	Core Elements of Social Consideration Values
Development	Structural Set Up	Narrative Brainstroming	-	-
Pre-Production	Context Setup	Develop Story, Character and Storyboarding	-	-
Production	Opening (Filming)	Exposition of Storyline	0 – 10 minutes	Proper Language Native /Culture Roles Belief System
Production	Content (Filming)	Layout of Rising Action and Climax	11 – 22 minutes	Gender / Sexual Roles Elements of Violence Elements of Biasness Age Issues Character's Strength Character's Weakness Etical / Legal Issues Social Economic Status
Closing	Falling Action and Denounement	Fate of Protagonist and Antagonist	23 – 28 minutes	Safety Standards Affective Mediation Multiculturalism
Closing	Cliff Hanger	Recreate Tension For Next Episode	29 – 30 minutes	-

These components were determined based on activities described in Chapter 4.

B) Research Question 2:

What has been the role of the Ministry of Education in improving the social problem among school children?

The MOE has established a comprehensive set of school rules and also introduced the punish-based disciplinary practice to curb disciplinary problems. Enforcement of school rules are carried out by a surveillance system, punishments and penalties, which include corporal punishments, demerit points, suspension, expulsion and alternate school placement.

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A committee to handle student discipline problems has been setup to help plan and strategize reduction of disciplinary problems in schools (KPM, 2016). This committee which is a collaboration of ten ministries also work hand in hand with the police force to tackle discipline problems among school children in Malaysia.

Furthermore, the Ministry of Health and the MOE cooperated to implement 'Healthy Mind Program' to determine the mental health state of secondary school students by conducting screening of mental health on symptoms of anxiety, stress and depression. Detected students were given interventions to help them overcome their problem and reduce disciplinary issues.

Another strategy by the MOE is to integrate emotional and social elements into the curriculum through Moral Education and Health Education subjects. Emphasize is on school counsellors to play an important role to help students with disciplinary problems. This is done through mental and psychological welfare programs such as 'Healthy Mind Program', hysteria case program and sexual symptoms program. At the same time, personal counselling sessions are also carried out with these students (KPM, 2016).

Finally, intervention through single educational programs such as exhibitions, anti-drug campaigns and seminars are carried out by schools with the blessing and guidance of MOE. All these programs are actually interrelated but there seems to be an important link or gap that is missing to put these programs into a systematic approach in implementation. Apparently, what the schools need is an inclusive approach, proactive, systematic, educative prevention and an early intervention educational video program through reliable and effective medium that will target all students to reduce and prevent

behavioural problems while enhancing students socio-emotional functioning. The possible solution at this juncture is by using the educational video programs produced by the Educational Technology Division, MOE. These educational video programs can be tailored to tackle the social problems among school children.

C) Research Question 3:

How to develop a conceptual model for ingestion and intervention of social consideration values into educational video programs?

As a conceptual process framework, this research formulated that educational video program production conceptual model consists of phases classified into development, pre-production, production and post-production.

The phases were identified through a competitive study of educational video program classroom strategies. Then, the educational video program production steps with commonalities were categorized into distinct phases. Next, the task components were acquired by extracting social consideration values, story and learning elements through comparative study of DST models and frameworks as well as comparative analysis of professionals' creative process. Subsequently, the activity components were attained through expert consultation with educational video program producers and practitioners and literature review. Finally, the flow of educational video program production was determined through user participation. The components mentioned above were put into a flow of work process as shown in Figure 7.1 below.
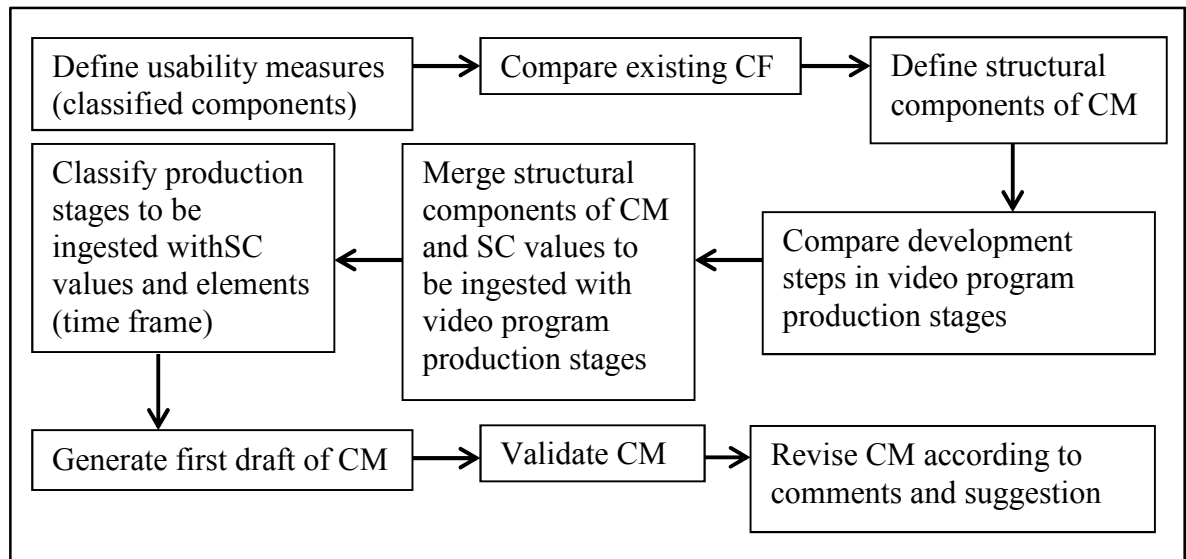
Figure 7.1. Process of constructing a conceptual model (CM)

D) Research Question 4:

Is the developed conceptual model suitable for ingestion and intervention of social consideration values into educational video program?

This research seeks to provide a unified DST method for ingestion and intervention of social consideration values into educational video program. Accordingly, educational video program production conceptual model has been evaluated through user acceptance testing and expert review in its suitability to ingest and intervent social consideration values. These two evaluation stages ensure that the implementation represents a systematic approach of producing educational video programs ingested with social consideration values.

To measure if educational video program production conceptual model is significant in assisting producers and practitioners to ingest and intervent social consideration values into educational video program, expert review activity was executed to confirm the suitability in terms of quality. The expert review process was conducted as a conformity

assessment of educational video program production conceptual model quality. Principally, results from the expert review described that the majority of the experts approved the most of the phases, tasks, flow and activities proposed in the educational video program production conceptual model. Subsequently, critiques and suggestions from the experts in the aspects of generality, flexibility, completeness, usability and understandability were analysed under their respective category accordingly.

Complying with the quantitative and qualitative evaluation by experts, as well as user acceptance testing result, all the revisions suggested, finally made the definitive and validated version of the educational video program ingested with social consideration values production conceptual framework (refer to Figure 4.5). Consequently, it is accepted that the developed conceptual model is suitable for ingestion and intervention of social consideration values into educational video program.
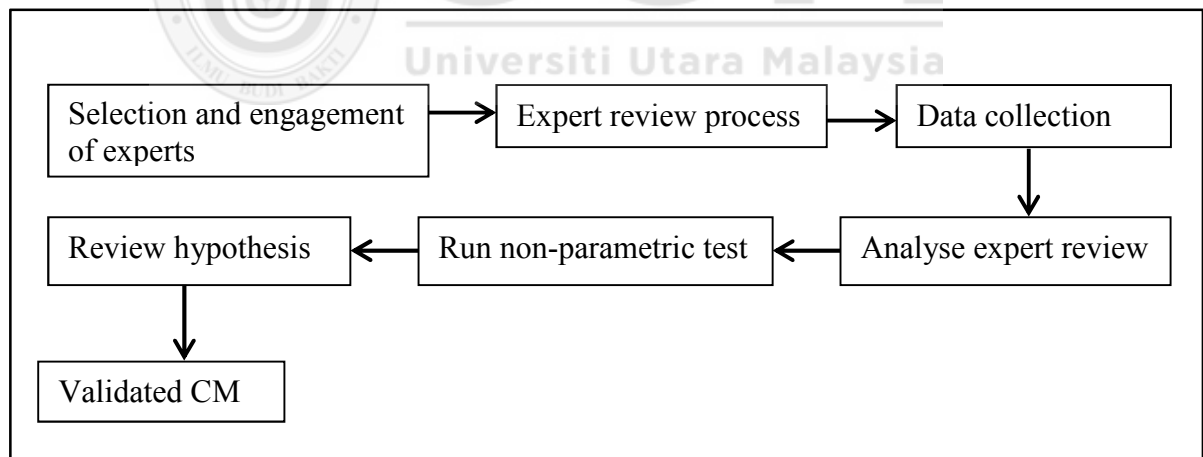
Figure 7.2. Process of validating the proposed conceptual model (CM)

E) Research Question 5:

Is there a significant difference between the control group and experimental group that took part in the user acceptance test of the produced prototype?

In the learning aspect, the experimental group was able to align the learning goal, constructive activity, argumentation and consistency of the prototype video program compared to the control group which never had the opportunity to do so because these elements were not given priority in the existing video program that they used. This effect can be seen in the answers given for question number 4 in Appendix C (What would you have done in the situation where Loren's dress got wet because of Ramesh?). The answers from the experimental group could generate ideas, have argumentation elements and recollect facts of information from the topic but the control group answers were direct and mostly just with one sentence merely explaining what they would have done. There was no relevancy to the organization of facts or information found in the video program.

Both groups were able to comment on the agility, typography and reusability of the educational program as these elements were present in both the videos. Besides, these elements were not an agenda that needs any analysing but instead can be seen at face level of the video programm.

Emphasis of key concepts (social consideration values) was also better organized in the prototype as the experimental group was able to analyse and synthesize the information in the video until the part where the program's ending triggered questions related to the educational topic. This element is also missing in the existing video program used by the control group.

Finally, the ability of the prototype to provide enough content and action to keep the viewers moving through the story and follow on to the next episode (use of cliff hanger) is a plus point to the prototype. During cross section discussion between the groups, the control group students agreed that they would like to have these elements in the video that they watched because as it is now, there is no catch between them, the characters in the video and the storyline development. This concept aligns with what has been mentioned in the literature review; when children acquire their language, they tend to develop representational thinking skills. This will allow them to discuss and talk about the characters in the video program where they start engaging in abstract thought which projects the understanding of video program codes and conventions and be able to follow storylines. They will also be able to link the segments and chunks that constitute a video program.

The differences between the experimental group and the control group in their ability to understand the social consideration values, make comments on characters and make comments on the plot of the video program is shown in Table 3.15 and 3.16 in page 129 and followed by a discussion to show the outcome of the intervention.

It is obvious that children gradually develop different types of skills through watching video programs. Given time they do learn how to understand video programs, but at the same time, may not perceive it as adults do. Understanding what children can and cannot do with video programs and how they perceive it can help to understand how it impacts their lives. As children acquire more understanding of video programs, their ability to comprehend its content and translate those meanings into learning experience, will increase (refer to page 58 – literature review). In conclusion, it can be established that

there is a significant difference in educational video program assessment scores between the experimental group and the control group and due to that, there is a significant difference between the control group and experimental group that took part in the user acceptance test of the produced prototype.

F) Research Question 6:

Is the produced prototype educational video program ingested with social consideration values suitable to curb social problems among school children?

As mentioned in the literature review (page 59), educational video programs are able to teach their intended lessons if they are designed as functional videos with a specific goal to communicate skills. To help prepare children for entering schools, some educational video programs are designed with focus for young children on a variety of academic and social skills. In this research a prototype educational video program was produced and two evaluation instruments (Appendix C and Appendix D) were designed to assess the educational video program produced (prototype) using the proposed conceptual model. Appendix C is the instrument used for user acceptance test by school children.
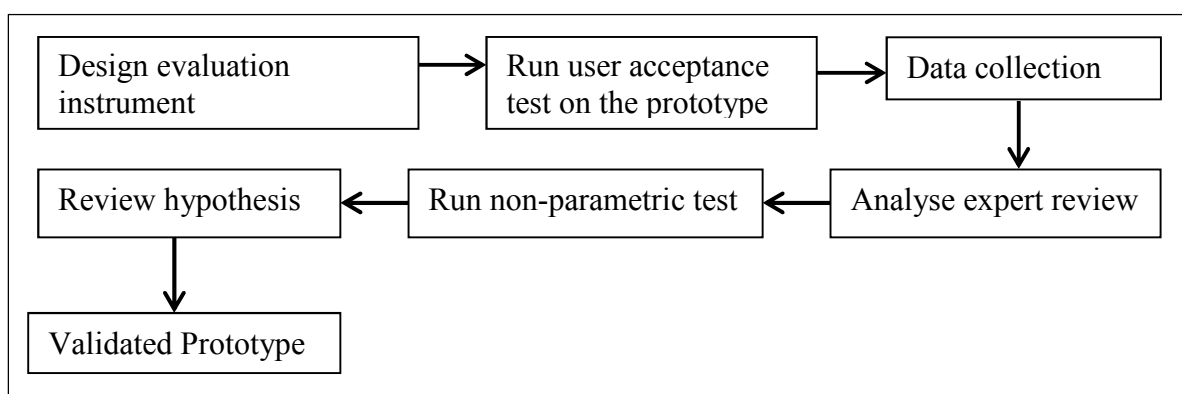
Figure 7.3 Process of conducting user acceptance test on the prototype

It is learned from the survey done that the experimental group was able to detect the relevance of the video program's story with the content and at the the same time understand the storyline. They were also able to generate further ideas and facts of information about the topic that is being discussed. This enables them to trigger further questions related to the topic. The interesting production style of the prototype had actively involved the school children in the program that so much so, the students agreed that they themselves feel that they are involved in the video program and to a certain extend, imagine themselves as some of the characters in the video.

This format of content and action of the educational video program managed to keep the school children moving through the story and on to the next episode. The cliff hanger and mid-credit scenes inserted at the end of the video program provoked the school children's agony to wait for the next episode and watch it.

All in all, when the school children are engaged with the characters and the storyline of the video program and they have gone to the extend of imagining themselves in the program, they agree that they get angry with the antagonist and support the protagonist and this makes them value their own actions when they are in the real world situation dealing with civic, moral and social issues. This change in behaviour has been explained by Brofenbrenner (2011) in the literature review (refer page 60). He proposed the idea that several models, exhibiting similar behaviour, are more powerful inducers of change than a single model". As pertains to video peograms, this means that repeated exposure to similar types of behaviour by several different characters can be more effective in eliciting change than can the influence of one or two adults or peers whose similar (or opposing) behaviour is observed only occasionally (Raffa, 2016). In conclusion, this

ability of the prototype educational video program definitely makes it suitable to curb social problems among school children.

In comparison, the existing video program was only able to establish the learning goal which does not really concentrate on social consideration values but a mere declaration of good behaviour inserted into the video program as a cross curriculum agenda in to a subject (e.g. Mathematics, Science or English language) in the form of do's and dont's among school children. There was no affiliation between the video program and the school children. Therefore, it is not surprising that the school children did not really pay much attention or even watch this sort of educational video programs meant to curb social problems among school children.

7.3 Objective of the Research – Revisited

The main aim of this research is to propose an educational video program production conceptual model focusing on social consideration values and to produce a prototype using the conceptual model and validate both the conceptual model and the prototype. At the end of this research, the primary aim has been achieved through completion of the five supporting objectives: (1) to identify core elements of social consideration values, (2) to develop a conceptual model focusing on ingestion of social consideration values into educational video program, (3) to validate the conceptual model for suitability through expert review, (4) to produce a prototype educational video program that applies the conceptual model and (5) to evaluate the produced prototype for suitability in curbing social problems among school children through user acceptance test.

The first objective was achieved through the identification of the educational video program production conceptual model elements from content analysis, comparative studies and expert consultation. The second objective was accomplished with incorporation of the identified elements into the proposed conceptual model that was adapted and developed from the twelve existing conceptual models that were discussed in literature review. Next, the third objective was realised through expert review. Results from hypothesis testing confirmed that users have perceived educational video program production conceptual model as having quality which concludes that the proposed conceptual model has significantly served as a guide line for producers and practitioners to design and develop effective educational video programs. It was also justified that the proposed conceptual model has been well-accepted by experts.

The fourth objective was achieved by using the proposed conceptual model to produce the prototype with the four phases of educational video program production, namely; (1) Development, (2) Pre-Production, (3) Production and (4) Post-Production. Lastly, the fifth objective was attained through educational video program assessment scores; gained through school children evaluation (user acceptance testing) and expert review. Results from both activities has implicated there are significant differences between the educational video program developed using the proposed conceptual model (prototype) in the aspects of learning and entertainment. Essentially, the experts agree that the proposed production conceptual model was able to systematically produce educational video programs with well-framed story, organized educational content and effective visual storytelling techniques. Overall, evaluation results concluded that the proposed conceptual model is not only significant in terms of quality but it also assists producers

and practitioners in constructing and producing well-developed educational video programs for its specific purpose.

7.4 Findings of the Research

As mentioned in Chapter 4, the phases, tasks, activities and flow of educational video program is basically divided into three phases; i) pre-production, ii) production and iii) post-production. The production activities of identifying value creating elements and its subsequent activities are categorized under the pre-production stage. This means that it is already part of the idea creation process which will be blended into the theme, story boarding, script and screenplay writing.

The 12 existing models of social consideration values (from different field of industry) that have been studied for literature review purpose (Chapter 2) are also built based on the existing three conventional phases and processes of production as mentioned above.

Findings from this research show that these processes should not be blended into the pre-production stage. Instead, they should stand alone and executed separately from the production phase. Due to this, this research proposes an additional stage in the educational film making process that occurs before the pre-production stage. This stage is called the 'Development' stage. The 'Development' stage begins with the identification of purpose and scope of the educational video program. A team of experts in the social consideration genre (subject matter experts) identified the purpose and scope in development phase. Next, the social consideration values are identified before creating the storyline which has the rising action, tension, drama and climax. Finally, this team

rectified the time line of social consideration values ingestion by plotting the falling action, denouement and cliff hangers at every episode ending.

Generally, educational video programs are stand-alone episodes without any avenues to a sequel or drama. Every story ends at the end of the particular program. Through this research, it is proposed that the educational video program ingested with social consideration values should be made a series of drama or sequel. Every episode in this series of drama should have rising action, tension, drama, climax, falling action, denouement and cliff hangers at the end of the episode to get the audience hooked up to this series of program. Ahmad Zamzuri (2013) had proposed that segmented instructional animation is significantly more effective than play-pause animation and continuous animation in enhancing students' learning performance. Consequently, this proposal blends well with the findings of this research. The idea of the segmented instructional animation can be adopted in the production of educational video program where the ingestion of social consideration values is executed in segmented phases and these segments are inter-connected and help to create the following episode and form a series of the program.

To execute this task, the special task force team of subject matter experts and instructional designers need to have narrative brainstorming sessions to identify the value creating elements that suit the strategy, context setup and continuity of each episode. The anxiety and curiosity of the audience have to be sustained from episode to episode so that the program would not not lose its' steam and popularity. In the case of the program losing its steam and popularity, the task force team have to immediately act in rewriting the storyline and storyboard to get the program back on track for its intended purpose. By

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doing this, the program can be effectively used to deliver the values of social consideration to Malaysian school children.

It is also proposed that the mode of using educational video programs in classrooms should be changed from optional to compulsory. These programs should be used as viewing materials in the classroom and later used for discussion and project or assignment presentation purposes, especially when flipped classroom method is used. These discussions and presentations should be evaluated by the teacher and the marks should be taken into students' assessment progress report. This will encourage the students to seriously scrutinize every social consideration value to deeply understand the need for practising the values in their daily life.

There is no guarantee that this process will end all our discipline and social problems in school but it will definitely help to reduce the problems that we face among Malaysian school childen. Furthermore, the rising action, tension, drama, climax, falling action, denouement and cliff hangers at the end of every episode will be a talk of the school and at times even referred to some negative characters that exist among the school children. This will also indirectly help to instill the good values that we are trying to ingest into our school children via educational video program ingested with social consideration values.

As stated in Chapter 2, the social learning theory by Bandura explains how social learning leads to change in behaviour and this change of behaviour can occur from video program viewing. Since social learning theorists believe that behaviour of human can be moulded either by direct experience or by observation and modelling, educational video programs will be able to deliver that direct experience and also opportunity to observe

and model according to the characters, plot and theme that is being projected. Consequently, this will influence the children's behaviour by engaging in new patterns of behaviour and also engaging in a particular healthier behaviour.

As pertaining to video programs, repeated exposure to similar types of behaviour by several different characters can be mere effective in eliciting change then can the influence of one or two adults or peers whose similar or opposing behaviour is observed only occasionally (Raffa, 2008).

Now, why is this different from the conventional three stage production process? When the 'Development' stage is combined into the 'Pre-production' phase, the main task of the team is to start the production phase. The value creating elements that are identified are not tested and verified separately by a different team of experts. Instead, it is the production team that carries out this task. Due to this, these elements are not given priority. It is recommended, that every dimension of social consideration values and elements identified in this research (Table 1.1) is moulded separately by a special task force team and explored vividly to extract the underlying context and present it in the context of developing the topic and objective as an initiative of the project start up. From the presentation of the 'Development' team, the production moves on to the conventional 'Pre-production' stage where the design concept is selected to suit the idea created.

7.5 Contributions of the Research

This research contributed a relevant and practical method to digitally intervene social contribution values into educational videoprograms that will help curb social problems among school children in Malaysia.

In the effort to prepare an effective set of guidelines to ingest values of social consideration into educational videoprograms, this research has successfully generated a conceptual model that combines the development, pre-production, production and post-production phases. The conceptual model will guide production designers of educational video programs to plan their treatment towards embedding elements that are perceived could influence the behaviour of school children. At the same time, the conceptual model also adapts the values of the society in which the children live and harmonize with the society's culture which will raise the children in the position of an ideal citizen. In the development phase of the conceptual model, moral principles despite differences in culture and beliefs known as the universal values of good and evil has been carefully slotted in segments of purpose and scope, value identification, value ingestion and character development.

As it is, the motive of intervening social consideration values into educational video program can be executed with the guidelines mentioned in the conceptual model. The pre-production phase of the conceptual model analyses the curriculum and content of the educational video program for the process of scriptwriting, story development and story boarding. This is a vital part because at this point, a mechanism that controls consciousness of individuals are carefully inserted into the program to maintain organized social life and provide peace and happiness.

Since the conceptual model for ingestion of social consideration values is in place, the follow up contribution of this research is the educational video program production itself. The prototype video that was produced had values of social consideration values embedded into it. With this, the video program has the ability to regulate social life into the laws of human relationship and embed spirituality based on the moral sanction. Subsequently, the video program will channel children to being aware of their responsibility and fulfilling duties falling on the model citizem morality.

Finally, this research contributes a comples understanding that education is the most important thisng for individuals to adopt social values. Formation of citizenship requires an active process with lessons given in schools based on learning the values of life in society. The moral education that children take in family environment or in school make them aware of social responsibility that respect universal values, which focuses on the rights and freedoms of others that contribute and help them to be informed citizens of Malaysia.

7.6 Limitations and Recommendations for Future Works

This research outlines two areas of limitation which are (i) the production conceptual model of educational video program and (ii) the educational program program (prototype). The following subsection will address each of the limitation in detail.

7.6.1 Educational Video Program Production Conceptual Model

To construct educational video program production conceptual model, a number of educational video program classroom strategies, DST models and frameworks were analysed in extracting their common components or elements. Nevertheless, the studies

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used for comparative analysis are less exhaustive since the selection represents the design methods and models for the past 10 years (i.e. 2004 – 2014). Definitely, consideration of more recent studies of educational video program classroom strategies and DST models might produce different conceptual model for production.

Secondly, only local experts committed to participate in the initial design and development of educational video program production conceptual model. Although the conceptual model components and their respective examples were acquired successfully, input from the experts was limited to a certain degree as they focused more on visual storytelling techniques within Malaysia. Thus, consultation with international designers would have generated a broad range of elements for educational video programs in the perspective of learning and education. Perhaps, with a focus group study involving a group of both international and local experts and academicians might substantially lead to diversified components of educational video program.

The third limitation is about the participant selection for the user acceptance testing. For the purpose of homogeneousness, convenience sampling was adopted. Hence, the conclusions of educational video program production conceptual model quality may not be generalizable to a broader cross-section of the population because this research was restricted to a particular group of students, which were Malaysian school students. Consequently, replication studies of measuring the quality of educational video program production conceptual model is encouraged as part of the adoption effort so as to add to the body of knowledge. Plus, the demographic background of participants did not consider their past experience in using educational video programs. This indicates in

what way existing and previous experience in educational video program influence users'
perception and attitude towards educational video program.

Fourth, although this study was able to fabricate an adaptive assessment method for
educational video programs, the user acceptance testing did not determine which specific
components in educational video program production conceptual model contribute to the
scores of the program. Due to restricted contact hour, the educational video program
classroom session was conducted for a total 2-hour for the students (experimental and
control). This research did not have the capacity to observe the participants' precise steps
and proficiency of using educational video program during the stated time frame. Thus, it
is put forward that upcoming research should channel the user to itemize the process of
components and elements that assist them to effectively use the prototype and its series or
sequels for the user acceptance testing sessions.

7.6.2 Educational Video Program Prototype

The user acceptance testing activity results have revealed that there is a significant
difference in learning and entertainment aspect scores between the experimental and
control group. This outcome denotes that, by using the prototype produced with the
guidance of the proposed conceptual model, the participants in the experimental group
were able to achieve higher range of scores for their educational video program
assessment. Nonetheless, it was also discovered that even though participants in the
control group did not use the prototype, they were still able to score sufficiently in
learning and entertainment aspects. It was found that several elements suggested in the
proposed model were indirectly applied into the educational video program used by the
control group; thus impacted their scores. This implication suggested that the educational

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video program production conceptual model would still be representative in assisting producers and practitioners to design and produce educational video programs that are capable to educate and entertain.

Therefore, although it is possible to draw general conclusions about the validity and practicality of educational video program production conceptual model, further investigation is crucial to examine the exact elements within the proposed conceptual model that contribute to the learning and entertainment aspects of educational video program. Discussion during the user acceptance testing activity however has emphasized on the advantages of the produced prototype and the possibility of creating its series or sequels by the experimental group compared to the control group.

Primarily, educational video program produced using the proposed conceptual model is more outstanding, well-organized and potentially extendable to a series of episodes. The concepts and factual information within the storyline are concise, relevant, thorough, balanced and consistent compared to the educational video program used by the control group. Plus, in the prototype, visual storytelling elements are well utilized by inserting elements of rising action, tension, drama, climax, falling action, denouements and cliff hangers. These evidences suggested that by referring to educational video program production conceptual model, producers and practitioners have the advantage to clearly and strategically reflect, structure and present knowledge, ideas and narrative and apply effective visual storytelling techniques resulting in a comparatively more educational and entertaining educational video program. Hence, as previously illuminated, extended research should strictly investigate which precise elements within the proposed

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conceptual model enhance the prototype's learning and entertaining aspects and also the necessity of creating the series of episodes.

7.6.3 Content Specifications of the Prototype

The user acceptance test results show that the prototype program should be current in its content and supporting visuals. Even the presenters of these programmes are expected to be from the recent group of celebrities or show masters. Teachers are very concern about the program's ability to support the Malaysia Standard Curriculum. They expect the content to assist the students in achieving the prescribed Specific Curriculum Outcomes (SCO) and General Curriculum Outcomes (GCO). Students, ironically, expect this program to offer them more than the curriculum. They expect the educational video program to have the ability to link lessons to other relevant events and matters that will help them in requiring more relevant knowledge.

Scope and depth of each program should be tailored specifically to suit different appropriate level of student's ability besides being able to satisfy learning outcomes. The visuals, concepts, internal structure and vocabulary should be meaningful and appropriate to a broad range of abilities and levels of achievement. The featured materials are preferred to have significant Malaysian context.

7.6.4 Social Consideration Specifications of the Prototype

Generally, teachers and producers of educational video programs are very cautious when they deal with the aspect of social considerations in the educational video program production. Controversial views and opinions should be presented with alternate points of view and suitable content. The suitability of material with the intended audience has been

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marked as one of the most important point in the social consideration construct of educational video program. This includes the balanced geographical location, physical setting, time period and political and social context. Portrayal of gender issues should be relevant to the curriculum and appropriate for the age level of the intended audience. Balanced sexes and appropriate tone and language is a must do in preparing the treatment for educational television programs. References that are being made to sexual orientation or sexual identity should be relevant in the context and according to age group. Philosophy, religion and political ideology are the key elements of Malaysia belief systems. Individuals or groups should be presented fairly in appearance, attitudes, socio-economic status and activities. The language used in the production of the educational video program has to be closely monitored to avoid any ethnical biasness or stereotyping of a particular ethnic group in a negative perspective. Different age group should also be presented in the educational video program to reflect society's treatment of them and create the relationships between this different age group.

The multi-ethnicity and multi-culturalism of Malaysian population should be given sufficient and valid roles that recognize their value and meaning. Visuals and footages should present a variety of cultures, ethnic background and also visible minorities. This will ensure that people of all races, religious groups and culture are presented in a manner that articulates their role, value and meaning. As Malaysia is rich with native culture and roles, it is important that effective promotion of a balanced and realistic view of native people and their culture is projected in these educational video programs. Issues that are subject to debate on moral or legal grounds should be examined closely, considered for accuracy of data, evaluated for biasness and if not necessary, be totally avoided from being discussed. Finally, incidences of violence should be completely avoided. This

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includes a continuum of violence, bullying, assaults and verbal abuse. On the contrary, safety standards compliance must be inserted into these programs.

7.7 Summary

This research has proposed and produced educational video program production conceptual model that has been constructed through extensive literature review, expert guidance, user participation and analysis of theories, elements, technological and systematic approaches of educational video program and DST; through the layered components of media, story, learning and entertainment. The underlying premise of this research is; a systematic educational video program production conceptual model based on storytelling and learning elements combined with an understanding of social consideration values development processes can contribute to the planning, implementation and evaluation of moral and social education in schools. Essentially, the conceptual model demystifies many aspects that should be taken into account to produce effective educational video programs.

Although considerable future works remain, this thesis has demonstrated that educational video program production conceptual framework is significant as a guideline for producers and practitioners to design and develop effective educational video programs intervened and ingested with social consideration values. From the findings obtained in this study, there were indications that open up new means, avenues, methods and strategies for educators to adopt educational video programs into their project-based classroom practice. In conclusion, this research will not only demonstrate the potential and impact of educational video program production in technology-enhanced student-

centred learning, but also provide a capstone on educational video program research in field of other subject matter.

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APPENDICES

Soal Selidik Rekabentuk Rancangan Video Pendidikan Matapelajaran Moral Berdasarkan Pandangan Murid Sekolah.

Salam sejahtera,

Anda telah dipilih untuk menjawab soalan-soalan di dalam soal-selidik ini. Borang soal-selidik ini diedar untuk mengumpul dan menganalisis pendapat murid sekolah terhadap rancangan video pendidikan matapelajaran Moral yang akan ditonton dalam kelas pada hari ini.. Segala kerjasama dan masa yang diluangkan didahului dengan ucapan ribuan terima kasih.

BAHAGIAN 1: Latar Belakang Asas

1. Umur: _____   2. Jantina: _____

3. Bangsa: _____   4. Tingkatan: _____

Nyatakan jawapan anda dengan menulis (X) pada ruang jawapan berdasarkan skala yang

diberikan.

BAHAGIAN I1: Tahap kekerapan Menonton Rancangan TV Pendidikan

No.	Setiap minggu, berapa kerapkah anda belajar menggunakan rancangan video Pendidikan	1 hingga 7 hari seminggu	Jarang sekali atau tidak pernah.
1.	Rancangan TV Pendidikan yang disiarkan melalui saluran 601, 602 dan 603 di ASTRO.		
2.	Rancangan video pendidikan yang disiarkan melalui eduwebtv.com.		
3.	Rancangan video pendidikan yang disiarkan melalui Youtube.		

BAHAGIAN II1: Tujuan Menonton Rancangan Video Pendidikan Matapelajaran

Moral

No.	Tujuan VS Skala	Amat Setuju	Setuju	Sederhana Setuju	Tidak Setuju	Amat Tidak Setuju
1.	Menonton rancangan video pendidikan matapelajaran Moral dapat mengurangkan rasa stress dengan rutin harian.					
2.	Menonton rancangan video pendidikan matapelajaran Moral memang menyeronokkan.					
3.	Ciri-ciri rancangan video pendidikan matapelajaran Moral yang menggabungkan fakta matapelajaran dengan elemen hiburan menyebabkan saya gemar menonton rancangan video Pendidikan.					
4.	Mesej yang disampaikan melalui rancangan video pendidikan matapelajaran Moral mampu menjana minda dan kemahiran berfikir saya.					
5.	Rancangan video pendidikan matapelajaran Moral yang diselitkan unsur gabungan kepada matapelajaran lain membantu saya lebih memahami kerja sekolah saya.					

BAHAGIAN IV: Rancangan Video Pendidikan Matapelajaran Moral (Prototaip)

No.	Item VS Skala	Ya	Tidak
1.	Saya selalu menonton rancangan video pendidikan.		
2.	Kandungan rancangan video pendidikan yang menepati silibus pembelajaran Malaysia masih kurang disiarkan.		
3.	Rancangan video pendidikan yang menepati keperluan menjawab peperiksaan kurang disiarkan.		

No.	Item VS Skala	Amat Setuju	Setuju	Sederhana Setuju	Tidak Setuju	Amat Tidak Setuju
1.	Rancangan video pendidikan matapelajaran Moral mampu mengajar nilai murni dan fahaman agama yang baik.					
2.	Rancangan video pendidikan matapelajaran Moral mampu membantu saya memahami dan menghayati fakta yang diajar dengan lebih berkesan.					
3.	Rancangan video pendidikan matapelajaran Moral mampu membantu saya memahami konsep moral dan sahsiah.					

BAHAGIAN V: Penggunaan Rancangan Video Pendidikan Matapelajaran Moral

No.	Item VS Skala	Amat Setuju	Setuju	Sederhana Setuju	Tidak Setuju	Amat Tidak Setuju
1.	Rancangan video pendidikan matapelajaran Moral membolehkan saya mengaanalisa setiap elemen moral yang diajar.					
2.	Rancangan video pendidikan matapelajaran Moral yang diselitkan dengan elemen cerita bercorak kisah benar membuat saya terharu dengan watak dan jalan cerita.					
3.	Fakta akademik yang digabungjalinkan dengan elemen hiburan menjadikan rancangan video pendidikan matapelajaran Moral sangat menarik dan membantu pembelajaran.					
4.	Kandungan rancangan video pendidikan matapelajaran Moral yang ditonton seimbang dari segi fakta akdemik dan jalan cerita.					

No.	Item VS Skala	Amat Setuju	Setuju	Sederhana Setuju	Tidak Setuju	Amat Tidak Setuju
5.	Kandungan rancangan video pendidikan matapelajaran Moral yang ditonton memaparkan identiti dan imej Malaysia.					
6.	Rancangan video pendidikan matapelajaran Moral yang ditonton mampu menjadi bahan rujukan untuk persediaan peperiksaan.					

No.	Item VS Skala	Amat Setuju	Setuju	Sederhana Setuju	Tidak Setuju	Amat Tidak Setuju
1.	Saya tertarik pada watak yang menunjukkan sikap positif di dalam rancangan video pendidikan matapelajaran Moral.					
2.	Watak negatif dalam rancangan video pendidikan matapelajaran Moral menjadikan saya rasa jijik dengan tingkahlaku dan kebiadapan yang ditunjukkan.					

No.	Item VS Skala	Amat Setuju	Setuju	Sederhana Setuju	Tidak Setuju	Amat Tidak Setuju
3.	Saya tidak setuju dengan sikap toleransi dan baik hati yang keterlaluan yang ditunjukkan oleh watak dalam rancangan vidoe pendidikan matapelajaran Moral.					
4.	Kalau saya diberi pilihan, saya ingin menjadi atau melakonkan watak-watak positif dalam rancangan video pendidikan matapelajaran Moral.					
5.	Rancangan video pendidikan matapelajaran Moral ini telah menjadikan saya lebih berminat untuk menonton drama bertemakan masalah moral di sekolah.					
6.	Saya setuju dengan tindakan dan balasan yang dikenakan ke atas watak negatif dalam rancangan video pendidikan matapelajaran Moral.					

No.	Item VS Skala	Amat Setuju	Setuju	Sederhana Setuju	Tidak Setuju	Amat Tidak Setuju
7.	Saya berpendapat masalah moral dan sahsiah seperti dalam rancangan video pendidikan matapelajaran Moral boleh diselesaikan dalam lakonan sahaja dan bukannya dalam kehidupan seharian.					
8.	Saya percaya semua masalah moral dapat diselesaikan jika kita bersikap positif seperti dalam rancangan video pendidikan matapelajaran Moral.					

Cadangan / Komen lain (sekiranya ada)

_____

_____

_____

_____

_____

Terima kasih kerana sudi meluangkan masa untuk berkongsikan pendapat anda.

Questionnaire for Expert Review of Educational Video Program Production Conceptual Model (CM)

Based on your experience of using the proposed Educational Video Program Production Conceptual Model, please rate the appropriate scale for each ítem.

1.	Are the following proposed components relevant to represent the phases of am?	Essential	Useful but not essential	Not necessary
	GENERALITY			
	Development			
	Narrative Brainstorming			
	Treatment / Storyboarding / Scriptwriting			
	Character Development			
	Mid-Credit Scene / Cliff Hangers			
	Value Ingestion			
	Monitoring of Audience Perception			

2.	Are the following proposed tasks and the activities within them relevant to represent all conceptual elements of educational video program?	Essential	Useful but not essential	Not necessary
	COMPLETENESS			
	Purpose			
	Scope			
	Knowledge			
	Storyline			
	Treatment			
	Storyboard			
	Social Values			
	Elements of Social Values			
	Characters			
	Story Development			
	Exposition			
	Rising Action and Climax			

Falling Action			
Denounement			
Entertainment			

FLEXIBILITY

3. The connections and flows of all the components are logical.   **YES** [ ]   **NO** [ ]

4. The prototype is usable as educational video program   **YES** [ ]   **NO** [ ]
   ingested with social consideration values.

5. The terminology used in the prototype is understandable.   **YES** [ ]   **NO** [ ]

USABILITY

6. Would you add any phase, tasks or activities? If so, please explain what and why?

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7. Would you remove any phase, tasks or activities? If so, please explain what and why?

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UNDERSTADABILITY

8. Would you refine any phase, tasks or activities? If so, please explain what and why?

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9. Would you suggest any improvements related to the conceptual model description? If so, please explain what and why?

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10. Could the conceptual model be made more understandable? How?

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11. Could the conceptual model be made more practical and flexible? How?

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12. Could the conceptual model be made more useful? How?

13. Please write you further comments below.

Appendix C (Objective 5)

<u>**Questionnaire for Educational Video Program (Prototype) User Acceptance Test by School Children**</u>

Instruction: Please watch and carefully observe the prototype educational video program provided. Then, based on the attached assessment criteria, fill in the number that fits your best response towards the program.

Aspects		Description	Strongly Disagree – Strongly Agree 1 ⟷ 9									Remarks
			1	2	3	4	5	6	7	8	9	
(1) Learning												
a.	Learning Goal Alignmnet	The educational video program's story and content are relevant to the topic.										
b.	Agility	The visuals in the educational video program are clear.										
c.	Typography	The graphics and colours make viewing the program interesting.										
d.	Consistency	The educational video program storyline is understandable.										
e.	Recipient	The educational video program makes the topic easy to understand.										
f.	Reusability	The educational video program can be used for different lesson in my book.										

	(2) Outcome											
a.	Accuracy	The facts and information in the educational video program is accurate and free of errors.										
b.	Reliability	The photos and visuals shown are correct for the lesson .										
c.	Argumentation / Constructive Activity	The educational video program generates ideas and facts of information about the topic.										
d.	Thoroughness	The characters' in the program are able to help to understand the topic.										
e.	Emphasis of Key Concepts	The information in the educational video program is well organized and easy to understand.										
f.	Prospective	The educational video program's ending trigger further questions related to the educational topic.										
	(3) Aesthetics											
a.	Visual Appeal	The educational video program contains an interesting production style and genre that actively involves the viewers.										

b.	Layout	The visuals and graphics are matched correctly to help understand the topic.											
c.	Clear Instructions	The story pace and shots are natural to be followed.											
d.	Navigation	The storyline strengthens the flow of the story.											
	(4) Enjoyment												
a.	Organization	The educational video program has a beginning, middle, end and a good continuatuion to the next sequel.											
b.	Plot	The plot exhibits good development and continuity for next episode.											
c.	Characters	The characters are believable and well developed.											
d.	Feedback	The educational video program provides enough content and action to keep the viewer moving through the story and to the next episode.											

Answer the questions based on the educational video program you watched. (Assessment Score)

	Question	Answer
1.	List 3 qualities of a drug addict and their relevant scenes from the video prgram.	
2.	Explain a scene from the televisión program that shows willingness to do what is right in difficult circumstances.	
3.	Why is trust between people very important for those who learn togethet in a classroom.	
4.	What would you have done in the situation where Loren's dress got wet because of Ramesh?	
5.	Explain the statement 'do not receive or take any drinks or food from people we don't know' by the former Inspector General of Police.	
6.	Give an example from your own experience where you practiced justice in relationship with your friends.	

7.	Differentiate "trust" and "respect". Use scenes from the video program to explain.	
8.	Name one charácter in this video program that resembles you. Explain using the scenes in the video program that is related to incidents in your own life.	
9.	Is punishment the best way to deal with wrong doings? Explain using scenes from this video program.	
10.	Give example and explain a situation from your personel experience where you are justified to lie or net telling the truth.	

Appendix D (Objective 5)

<u>**Questionnaire for Educational Video Program (Prototype) Expert Review by Academicians and Practitioners**</u>

Based on the preview of the educational video program (prototype), please (/) tick your choice.

1.	Are the following proposed components relevant to represent the phases of educational video program?	Clear		Relevant		Effective	
		YES	NO	YES	NO	YES	NO
	Development						
	Narrative Brainstorming						
	Treatment / Storyboarding / Scriptwriting						
	Character Development						
	Mid-Credit Scene / Cliff Hangers						
	Value Ingestion						
	Monitoring of Audience Perception						

2.	Are the following proposed tasks and the activities within them relevant to represent all conceptual elements of educational video program?	Clear		Relevant		Effective	
		YES	NO	YES	NO	YES	NO
	Purpose						
	Scope						
	Knowledge						
	Storyline						
	Treatment						
	Storyboard						
	Social Values						
	Elements of Social Values						
	Characters						
	Story Development						
	Exposition						
	Rising Action and Climax						
	Falling Action and Denounement						

3. The connections and flows of all the components are logical. **YES** [   ] **NO** [   ]

4. The prototype is usable as educational video program **YES** [   ] **NO** [   ]
   ingested with social consideration values.

5. The terminology used in the prototype is understandable. **YES** [   ] **NO** [   ]

6. Would you add any phase, tasks or activities to the video program? If so, please explain what and why?

[   ]

7. Would you remove any phase, tasks or activities of the video program? If so, please explain what and why?

[   ]

8. Would you refine any phase, tasks or activities of the video program? If so, please explain what and why?

[   ]

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9. Would you suggest any improvements related to the educational video program? If so, please explain what and why?

10. Could the educational video program be made more understandable? How?

11. Could the educational video program be made more practical and flexible? How?

12. Could the educational video program be made more useful? How?

13. Please write you further comments below.

PROPOSAL FOR PRODUCTION
EDUCATIONAL TV PRODUCTION

Producer	Subject
Title	**Year / Form**
Program Format	**Duration**
Filming Date	**Filming Location**
Synopsis of Program	**Filming Crew**
	Editor
	Date of Completion
Date of Broadcasting (TX)	**Costing**
Producer's Signature	**Date**
Executive Producer's Signature	**Date**
*Approved/Not Approved	
Executive Producer's Comments	

KEMENTERIAN PENDIDIKAN MALAYSIA

APPROVAL OF SCRIPT FOR PRODUCTION

Program:

Title:

Producer:

Assistant Producer:

Script Writer:

APPROVED FOR PRODUCTION:

…………………………….................   …………………
         Signature   Date

    Executive Producer

KEMENTERIAN PENDIDIKAN MALAYSIA

PERMISSION FOR EXECUTION OF PRODUCTION DUTIES

Production Duties:

Discussion (Date: ....) ☐   Script Reading (Date: ....) ☐

Research (Date: ....) ☐   Filming (Date: ....) ☐

Recee (Date: ....) ☐   Others (Date: ....) ☐

Rehearsal (Date: ....) ☐   Details: ....

Producer: ....

Assistant Producer: ....

Program Title: ....

Location: ....

Signature : ....   Date : ....

Comments and Approval :
Signature : .... Executive Producer   Date: ....

KEMENTERIAN
PENDIDIKAN
MALAYSIA

CALL SHEET

Program: …………………………………………   Date: …………………………

Title: …………………………………………………   Crew: ………………………..

Producer: …………………………………………………

Assistant Producer: …………………………………………

FILMING DATE AND TIME		
Departure Time:	Time at Location:	Start Filming: ....
LOCATION AND SCENE DESCRIPTION		
REFERENCE	**TRANSPORT**	
NOTE		

KEMENTERIAN PENDIDIKAN MALAYSIA

CONTINUITY SHEET

Program/Title: ……………………………………………………………..

Producer: ……….……………………………………………………………

Assistant Producer: ………………………………………………………

Filming Date: …………………………………………………………

Time Code	Shot Description	Dialogue	G/NG*

SHOT LIST

KEMENTERIAN
PENDIDIKAN
MALAYSIA

Program: …………………….. ……….. Title: …………………………………………..

Producer: ………………………………… Assistant Producer: …………………………..

Page: …………………………

Time Code		Shot Description
TC IN	TC OUT	
: : :	: : :	
: : :	: : :	
: : :	: : :	
: : :	: : :	
: : :	: : :	
: : :	: : :	
: : :	: : :	
: : :	: : :	
: : :	: : :	
: : :	: : :	
: : :	: : :	
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: : :	: : :	
: : :	: : :	

KEMENTERIAN PENDIDIKAN MALAYSIA

PREVIEW INSTRUMENT

Subject:…………………………….. Standard/Form: …………………

Program/Title: ………………………….. Producer:.………………………..

Evaluator's name: ……………………… Date: ………………………………..

Sila tandakan (√) pada ruangan yang berkenaan mengikut skala berlikert di bawah. Sila berikan ulasan, jika ada.

1 – Amat Tidak Setuju **Strongly Disagree**	2 – Tidak Setuju **Disagree**	3 – Kurang Setuju **Nuetral**	4 – Setuju **Agree**	5 – Amat Setuju **Strongly Agree**
1 markah	**2** markah	**3** markah	**4** markah	**5** markah

Bahagian A: Isi Kandungan:

BIL	PERKARA	1	2	3	4	5	ULASAN
1.	Isi kandungan rancangan adalah menepati Huraian Sukatan Pelajaran						
2.	Isi kandungan rancangan dikembangkan secara terancang dan mudah difahami						
3.	Program ini dapat membantu pelajar memahami tajuk/topik yang diajar						
4.	Dialog/temuramah/perbualan jelas dan mudah difahami						
5.	Penggunaan grafik tepat dan sesuai serta membantu kefahaman						
6.	Set dan prop/lokasi sesuai dengan rancangan						
Jumlah		+	+	+	+	=	

Bahagian B: Persembahan Teknikal:

BIL	PERKARA	1	2	3	4	5	ULASAN
1.	Pengendalian Kamera: Syot-syot yang dipaparkan menarik dan baik						
2.	Kualiti Visual: Baik						
3.	Teknik Pencahayaan: Sesuai dengan situasi dan format rancangan						
4.	Suntingan: Baik dan teratur						
5.	Kesan Bunyi/Muzik: Sesuai dengan topik/isi kandungan						
6.	Kualiti Audio: Baik						
Jumlah		+	+	+	+	=	

Rumusan Keseluruhan:

....

(T/Tangan Penilai)

ULASAN PENILAIAN (Diisikan oleh Penerbit Rancangan Berkenaan)

Jumlah Markah Bahagian A	/30	Jumlah Markah Bahagian B	/30
Jumlah Markah Bahagian A + Bahagian B			(X)
Jumlah Maksimum yang boleh diperolehi = (30 + 30)			/60 (Y)
Peratus Markah Penilaian = (X/Y) x 100 %			

<u>**KEPUTUSAN**</u>:

Di bawah 30 %	:	Tidak boleh disiar
31% - 50 %	:	Perlu buat semula penggambaran/suntingan
51% - 70 %	:	Perlu buat pembetulan dan ditayang kaji semula
71 % - 90 %	:	Lulus dengan pindaan
90 % ke atas	:	Lulus

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BROADCASTING APPROVAL

Program: ....

Title: ....

Program No.: ....

Tape/Roll No.: ....

Filming Date: ....

Broadcasting Date: ....

Producer: ....

Asssitant Producer: ....

Producer's Comments:

APPROVED FOR BROADCASTING:

………………………….................. …………………
         Signature   Date

Name: ....

Stamp:

Appendix M

Permission Letter

KEMENTERIAN PENDIDIKAN MALAYSIA
MINISTRY OF EDUCATION MALAYSIA
Bahagian Teknologi Pendidikan
Educational Technology Division
Persiaran Bukit Kiara
50604 KUALA LUMPUR
MALAYSIA

KEMENTERIAN PENDIDIKAN MALAYSIA

Tel: 603-2081 7777
Faks: 603-2081 7788
Laman Web: www.moe.gov.my/btp

Ruj.Kami:KP(BTP-TVP)8808/1/2/JLD (15)
Tarikh : 2 Januari 2018 / 14 Rabiulakhir 1439H

Pengarah
Jabatan Pelajaran Negeri
(Negeri Seperti Dalam Lampiran)

Tuan,

KAJIAN KEBERKESANAN DAN KEPERLUAN RANCANGAN VIDEO PENDIDIKAN TERBITAN KEMENTERIAN PENDIDIKAN MALAYSIA

Dengan segala hormatnya saya merujuk kepada perkara di atas.

2.   Sukacita dimaklumkan bahawa Sektor Penyiaran Pendidikan, Bahagian Teknologi Pendidikan, Kementerian Pendidikan Malaysia, sedang menjalankan kajian keberkesanan dan keperluan rancangan televisyen pendidikan yang diterbitkan oleh Kementerian Pendidikan Malaysia.

3.   Sehubungan itu, dalam usaha memantapkan lagi penerbitan rancangan tersebut, pihak kami amat berbesar hati agar pihak tuan dapat bekerjasama dalam menjayakan kajian ini dengan menjawab soal-selidik yang telah dimuatnaik ke portal eduwebtv. Nama sekolah-sekolah yang dipilih untuk menjawab soal selidik ini telah disenaraikan dalam lampiran yang dikepilkan. Tarikh akhir bagi melengkapkan soal selidik ini adalah pada 28 FEBRUARI 2018.

4.   Pegawai yang bertanggungjawab menguruskan kajian ini ialah Encik **Suras Kanagasabai** yang boleh dihubungi melalui talian 03-20817727 atau 019-9185924.

5.   Komitmen dan kerjasama yang diberikan untuk menjayakan kajian ini amatlah dihargai dan didahului dengan ucapan terima kasih.

Sekian.

"BERKHIDMAT UNTUK NEGARA"

(ZAIDI BIN YAZID)
Pengarah
Bahagian Teknologi Pendidikan
Kementerian Pendidikan Malaysia

Teknologi Untuk Pendidikan Bestari

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Specification of Syllabus for Moral Education

Category: **Secondary**

Subject: **Moral Education**

Learning Area Outcome: can learn about, and from, their own experience of the world and from the beliefs, practices and traditions of others.

Subject Focus: Learning about, and from their own, experience of the world, and from the beliefs, practices and traditions of others.

1] relate to the experiences of children in school, who are not in the classroom, promoting the idea of the school as a moral community, marked by care for, and about, others even those of its members who are strangers.

2] can make a list of qualities that make a good neighbour.

3] can define the terms 'friends', 'acquaintances' and 'strangers'.

Learning Area Outcome: can understand how religious and secular cultures and belief systems sustain different ways of life, and can co-exist harmoniously in societies, where moral and cultural difference is respected and valued.

Subject Focus: Religious and Secular Cultures and Belief Systems

1] can talk about the importance of moral principles to guide their life.

2] can talk about caring for others as a motive for moral action.

3] can define moral courage as a willingness to do what is right in difficult circumstances.

4] can talk about moral cowardice as a form of egoism and moral blindness.

5] can talk about caring for truth and justice as a motive for moral action.

6] can distinguish between impulsive and reflective acts, and give examples of each.

7] can define a "virtuous act" as an act that avoids extremes which tend to be harmful, and a "virtuous character" as a character that is disposed to moderation.

Learning Area Outcome: able to understand and value the notion of a human community, and the diverse ways it expresses itself in, and to see this as a source of richness.

Subject Focus: The Human Community

1] can argue that healthy human relationships require trust between people who live together in a community.

2] can talk about neighbourhood as a geographical and social space, and the implications of living in it, such as obligations towards neighbours.

3] can discuss 'friends', 'acquaintances' and 'strangers' as relationships within neighbourhoods.

4] can describe neighbourhood as a community where people share something in common, and are obliged to respect and care for that which belongs to individuals, together with that which is common to all, such as taking care of shared spaces such as schools and parks.

Learning Area Outcome: have a positive sense which nurture through self-care and self-mastery, and of connectedness with others, with the natural environment (animal and material).

Subject Focus: Fostering a positive sense of ourselves

1] can participate in a discussion about the different forms of ownership, specifically, to what extent they can say that something is "mine" or "ours".

2] can distinguish between how they should treat objects such as toys, and how they should treat living beings such as pets and other animals.

3] along with others, can take care of the natural environment such as the sea and the natural world, which belongs to all of us.

4] can show that they care for all children in class and in school, even if they don't know them.

5] can perceive the world as a shared space which belongs to all of us, and towards which we all have an obligation to care for.

6] can recognise the importance of the natural environment, including the air we breathe and the atmosphere, in general.

7] can take care of animals, not just pets, but also those animals living in the built-in environment, such as public places and in the wild.

8] can discuss subjects of a controversial nature, such as whether wild animals should be hunted.

Learning Area Outcome: can formulate and express questions that are fundamental to human experience and endeavour to find an answer.

Subject Focus: Questions that are fundamental to Human Experience

1] can describe the principle of reciprocity, the mine and yours, as a principle of fairness.

2] can demonstrate a strong sense of justice in relationships with peers.

3] can give examples of instances where disadvantage and preferential treatment were shown, and discuss them as issues of justice.

4] can distinguish between fairness as treating people according to their need, and fairness as treating people equally.

5] can discuss the relationship between "trust" and "respect".

6] can apply what they have learnt about honesty and truth to own life, especially in relationships with my peers.

7] can discuss the notions of retribution, namely getting one's own, back, and forgiveness.

Learning Area Outcome: able to understand contemporary moral language and its central concepts and metaphors, including those of rights, virtues, duties, obligations, autonomy, self-regarding and other-regarding acts, side-effects, and consequences.

Subject Focus: Contemporary Moral Language and its Central Concepts and Metaphors

1] can define the words "right" and "duty" in terms of the right of respect for one's property, and the duty to respect other people's property.

2] can discuss what are the obligations towards things that people share in common, such as neighbourhood.

3] can discuss what are the obligations towards the environment and other living things.

4] can demonstrate the values of honesty, trust, and respect in my relationship with my peers.

5] can discuss the importance of values in lives and the community we live in.

6] can argue that animals have the right not to be treated as objects.

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Learning Area Outcome: able to reflect on that language critically but with due respect for those with different beliefs and a different moral outlook

Subject Focus: Respect for others

1] can explain why it is necessary to have a working definition of the notions we use, in the interest of having a meaningful discussion. It is important to establish, for example, what one means by the terms 'a right', 'freedom', 'an obligation' etc., and how, for example, having a right to something is different from wanting or desiring something.

2] can show how a process of thinking and discussion can lead to such working definitions. It is important to communicate clearly with others, asking them what they mean by certain ideas such as 'right', 'freedom', 'obligation', etc.

3] can use thinking skills when participating in a discussion.

Learning Area Outcome: can contribute meaningfully and reflectively to moral debate even on fundamental and contentious questions, duly respecting the right of others to think and argue differently.

Subject Focus: Engaging in Moral Debate

1] can argue in favour of treating others, who are strangers, with respect.

2] can distinguish between personal relationships, e.g. friends, and role relationships, e.g. teacher/student.

3] can recognise the connection between justice and fairness.

4] can rank different needs according to their importance.

5] can talk about issues of merit and punishment.

Learning Area Outcome: can collaborate with others in the construction of a shared and mutually enriching vision of life.

Subject Focus: ollaborating with others in the construction of a shared and mutually enriching vision of life

1] can participate in a discussion about the school as people living together and sharing a way of life.

An example could be; a discussion about the school uniform and how it signifies that they are part of a community. The discussion may also explore the meaning of being a member of the school.

2. can list some of the rules that enable a discussion to take place, such as not speaking out of turn, giving due space for others to speak, and listening to others without interruption.

3] can share belongings with other children in class.

4] can identify what they share with others in their neighbourhood. The focus here is to explore the idea of a neighbourhood as a geographical and social space, and the implications of living in such a space in terms of relationships, responsibilities and obligations.

5] can talk about neighbourhood in terms of a community of neighbours who share an interest in their mutual well-being.

Learning Area Outcome: committed to be fair and just towards oneself and others, to live a reflective life subject to moral and other values, and mindful of obligations towards others who form the society and community and towards other beings who form the world community, human and non-human (or animal), of which they are also an active and responsible member.

Subject Focus: Justice and Fairness

1] can give examples of how we mistreat, or take insufficient care of other people, animals and the environment.

2] can argue that taking care of the environment is a worldwide concern, and that we are all duty-bound to protect it.

3] can show fairness in dealings with classmates in the day to day life of the school.

4] can show respect for others in school by practicing good manners with members of the school community.

5] can identify moral values and participate in a discussion about them.

6] can distinguish between lying and withholding the truth, and give examples.

7] can give examples of situations where we are justified to lie or withhold the truth from others.

VITA

The researcher, Suras Kanagasabai, is currently working with the Educational Technology Division, Ministry of Education, Malaysia, as the producer of educational video programmes. The programmes produced by this division will be uploaded to the ministry's official website; www.eduwebtv.com.

The researcher has worked as a teacher for 24 years in both primary and secondary schools and after completing his masters in Instructional Technology, joined the ministry, as an educational video program producer in 2005. To date, the researcher has produced more than 600 educational video programmes that are being used nationwide by students and teachers.