

Development and Evaluation of a Multimedia Interactive CD: Public Speaking Interactive Media

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DEVELOPMENT AND EVALUATION OF A MULTIMEDIA INTERACTIVE CD: PUBLIC SPEAKING INTERACTIVE MEDIA

ABSTRACT

This paper reports on a study that endeavours to develop a Computer Assisted Learning (CAL) multimedia courseware namely, *Public Speaking Interactive Media*. This courseware was developed specifically for diploma students undergoing *ENG4113 (Business English)* and *ENG 4153 (Public Speaking Skills)* at Kolej Profesional MARA Indera Mahkota, Kuantan, Pahang. The objectives and goals of this study is to develop a CAL courseware which is in-line with the syllabus of the courses using multimedia elements together with the application of behaviorist, cognitive and constructivist learning theories as a basis in the design of the courseware. Moreover, the instructional design and implementation of this CAL multimedia courseware employ active and flexible learning strategies. Utilizing Hannafin and Peck's Design Model, this courseware was developed using Macromedia Director and Macromedia Authorware to ensure that multimedia elements and simulations can be fully integrated. The findings of the study revealed that the courseware fulfilled its objectives in aiding students in comprehending the concept of public speaking skills better by using multimedia elements. In addition, the courseware is in-line with the syllabus and has incorporated the theories and strategies intended successfully.

INTRODUCTION

Public speaking serves many purposes. Not only that speaking serves the objective to communicate and interact, but it also serves the individual needs. Individually, public speaking skills varies according to context; politicians and leaders opt speaking skills to motivate and influence people while for ordinary people public speaking skills and communications skills is for self-enrichment and for the benefit in working area.

According to surveys and studies done on the peoples' behavior in working environment affirmed that bosses who give credits to staffs followed by effective speeches or short commentary are more popular, welcomed, praised and more appreciated by the staffs as compared to the bosses whom the staffs that were given credit without any verbal accompanied (*online <http://www.hrdnet.com.my>*).

Computers and multimedia are also synonym with education. In the past, teaching and learning activities took place in the classroom where teachers and students have constant meetings and interaction. Basic teaching and leaning activities were listening, reading and writing. Whereas, "chalk and talk" were the main ingredients in teaching and learning. But nowadays the use of technology and in fact the development of new technology and applications are parallel with education.

Educators and students should now or in fact must be literate not only in computers but with the internet and multimedia gadgets and applications (Mohamed Amin Embi, 2000). This is the era where computers and technology dominates the lifestyle and the education at large. Human beings are getting more complex thus education, teaching and learning also must be able to muddle through the situation.

BACKGROUND OF THE STUDY

Kolej Profesional MARA Indera Mahkota, Kuantan is one of Majlis Amanah Rakyat (MARA) colleges that provides and offer professional programmes and courses such as Diploma in

Accountancy (DIA), Diploma in Business Studies (DBS) and also Higher National Diploma in Business Information Technology (HND-BIT) for the Bumiputeras. The main aim of these programmes is to prepare students in both skills and academic areas and to produce individuals who are competent in the economic sector.

As part of the syllabus upon finishing the diploma courses, students have to undergone and successfully complete English language skills including public speaking skills. Having to speak in public, it can be categorised as one of the toughest part of English language skills for the students to conquer. Lack of knowledge, skills, self-confidence, shy and less or no exposure makes it more difficult for the students to practise or explore their speaking skills among themselves.

In an unpublished study conducted informally by the English Department of Kolej Profesional MARA Indera Mahkota, Kuantan found out that students have problems in the English language due to lack of exposure. Even though other classes are conducted in English, still student cannot fully understand thus lead to code mixing between English and Malay. Another profound report is that students' lack of self confidence especially in conversing in English.

STATEMENT OF THE PROBLEM

At hand, students undergone the public speaking skills in Kolej Profesional MARA are using text books and teachers as main reference and resources. However it is quite impossible for the students to learn public speaking by reading and with the minimal contact hours in class to make it worse. In attaining the theoretical aspects in public speaking skills, reading is a must but when comes to real life example, students would of course need more than just pictures and imprint sources. Furthermore, reading to speak may eventually result to boredom and confusion. Hence, a lot of hands-on practise and skills is needed and not only chalk and talk or text book and lecture.

Critical factor like limitation of time do come into the picture. Evidently, with the meeting hour only three hours per week would not be enough for instructors or the students themselves to walk freely in the process of teaching and learning, let more to be creative which is more time consuming. Hence, the teaching and learning session cannot be as perfect or as creative as can be due to lack of time. Due to time constraint as well, students are not able to receive appropriate feedback.

Cited in Faridah Che Arr (2004), Nazrul Azha (1998) and Williams (2000) elucidate that teaching process currently evolving where computers and multimedia influence the educational system. Using Computer Assisted Language Learning (CALL), instructors not only can provide more than just text but with video presentations well as interactive exercises. Through non-common teaching methods using different but powerful teaching aids, students will be more motivated to learn the language (Asmah Haji Omar, 1989).

PURPOSE OF THE STUDY

This study intended to develop an interactive Computer Assisted Learning (CAL) CD program namely: *Public Speaking Interactive Media* in which to aid teachers in facilitating Public Speaking course and to assist students to learn independently. The software too would be evaluated as to ensure and distinguishes the strengths, weaknesses, pros and cons of the program in helping students to enjoy learning public speaking skills in a long run.

OBJECTIVE OF THE STUDY

The objective of the study is as follows:

- a) To construct a multimedia courseware *Public Speaking Interactive Media*

- b) To construct a CAL courseware *Public Speaking Interactive Media* with the syllabus of ENG 4113 and ENG 4153
- c) To construct a CAL courseware *Public Speaking Interactive Media* which applies the theories of behaviourist, constructivist and cognitive.
- d) To construct a CAL courseware *Public Speaking Interactive Media* that applies flexible and active learning strategies.

SIGNIFICANCE OF THE STUDY

Through this study, it is hoped to give an insight or point of view regarding the use of Interactive CD in fulfilling the course objectives in preparing students for Public Speaking. Consequently, teachers and students would find new meaning in teaching as well as learning by the means of using technology in the process. This would give a new innovation in teaching and learning methodology in English language learning and hopefully these will help to boost up the motivation of students and teachers. To add, from this study, it can be a motivation for teachers and other instructors of English language to produce a courseware or even multimedia software for their teaching purposes. The use of self-access software or course ware would also reduce the negative dependent of students towards the teachers and instructors. . This will make students become active learners and automatically motivate themselves.

LIMITATION OF THE STUDY

As this is a small-scale research, this study is limited to the semester IV Diploma in Accountancy (DIA) and semester II Higher National Diploma Business Information Technology (HND-BIT) students of Kolej Profesional MARA Indera Mahkota, Kuantan taking subject ENG 4113 (Business English) and ENG 4153 (Public Speaking Skills). Both courses stress and focus on the public speaking skills. The courseware developed is prototype in nature and it is limited due to time constraint, cost, resources and energy.

LITERATURE REVIEW

Federal-Chambers Dictionary (2001:353) defines education as “*the process or system of teaching in schools or other establishments and the development of a person’s knowledge, especially the development of a child’s knowledge at school*”. However, Claxton (1990) identify education as “*bringing up or training of a child: Instruction; strengthening of the powers of body and mind*”.

Through the definition given, we can conclude that education is a process a person acquiring knowledge through informal and formal manner the action or process of developing mentally or morally. Education comprehends instruction and discipline intended to enlighten the understanding, correct the temper, and form the manners and habits of youth, and fit them for usefulness in their future stations. As an example, the total experience of hearing, listening and reading will sum up and formulate new meaning, new understanding and new knowledge. All to that will give effect on their views and perceptions towards universe and how they affect the culture.

In spite of this, education must first be conceptualised and focused. Various methods can be utilized in forming a well developed teaching and learning session. Newby et. al (2000) discusses three important approach in gauging teaching and learning context; behaviourist, cognitive and constructivist.

Behaviourist Theory

In the past 25 years ago, behaviourist theory has conquest and moulds the way and the process of learning in schools (Reiber, 1994). Behaviouristic approach focuses on the reinforcement of actions and the influence of the surroundings towards learning. According to this approach, learning is evaluated through to the stages of progress and the development from the basic to the expert (Ausubel

1968; Mayer 1984; Norman 1982). Learning is the occupying of one series of basic skill to a higher level. The changes of ones behaviour in a certain situation may prove to be that the person is learning or has acquired a new info. Once a person able to acquire new knowledge or enhances the previous knowledge, learning can be considered has taken place (Gagne, 1985).According to Hannafin and Peck (1988), the behaviourist approach uses the concept and the principal of stimulation and response as revolutionised by B.F Skinner in his theory. During teaching and learning session, students are evoked and stimulated by the activities and thus evaluated by the end of the session.

Maizurah (2003) in her writing further discuss that the teachers role as instructors to arrange the external factors so that maximum impact can be obtained during the learning session especially complex behaviour. This process of 'shaping' is a continuous effort and actions in order to achieve the main objective of the learning. Further stressed by Hannafin & Peck (1988) that behaviourist approach is rather a simple operation and does not involve any complex phenomenon because the process the learning does not involve process that happens in the human brain. This is up to a certain extend true but what is important that the message or the objective can be attained. Copeland (1988) agrees that behaviourist approach is very strong in the sense that to equip or to instil students with a certain skills or acquiring factual information in a short time.

Kemp and Smellie (1989) further add that the concept of behaviourist theory incorporates stimulus, feedback and reinforcement. By having the concept clear, the learning principle of the theory is that learning requires inputs, drills and also rewards. The function of reward is to reinforce positive behaviour.

From the explanation, behaviourist theory can be applied in CAL multimedia courseware through:

- a) Sets of questions provided after inputs are given.
- b) Questions provided works as drills to produce feedback from users.
- c) Positive rewards are given for correct response in answering question as reinforcement to keep the good work.
- d) Negative rewards are given for incorrect response in answering question as reinforcement to do better.

Cognitive Theory

Unlike the behaviourist approach, the cognitive approach or *information processing* focuses on the internal factor. That is the process of learning is controlled and administered by the mental process and not affected by the external factor (Gagne, E.D. 1985). Learning takes place when certain knowledge or schemata is enhanced or changed with the new information received.

Teacher facilitates the learning for the students by providing conditions and elements to help to boost the memorization process. The use of visual for example can enhance students understanding of the abstract concepts. The visual is the stored in the brain and when students assess the information, the process happens in the brain – relating new item with the old information and even relating certain info with other information. Through this, students make decisions or solve problem by means of the information gathered by them.

According Paivio (1975) cited in Maizurah (2003), the use of visual can promote a process called 'dual coding'. Dual Coding Theory proposes that memory consists of two separate but interrelated codes for processing information—one verbal and the other visual. The verbal and visual systems can be activated independently, but there are interconnections between the two systems that allow dual coding of information. The link between the two processes interlock and helps to facilitate the interpretation of the surrounding (Rieber, 1994; Simpson, 1995).

The principle of the Cognitive approach is that recall or recognition of information is enhanced by presenting information in both visual and verbal form. For a simple example is use of model, multimedia, video and television whereby the elements of see, touch, hear, taste and smell available for the students.

From the explanation, the principle of cognitive theory can be applied in CAL multimedia courseware through:

- a) The use of multimedia application in presenting information to attract users
- b) The learning objective established should be suitable with the users' ability
- c) Arrange information in systematic
- d) The questions provided varies and from easy to hard
- e) Questions provided relates to the users schemata
- f) Allow users to re-access the information to solve the problem

Constructivist Theory

Constructivist approach derived from the learning theory of Jaen Piaget in which the theory proposes that people or human beings constantly build their knowledge through interaction with the surrounding. Reiber (1994) explains that through the constructivist approach that learning involved the when the schemata are build upon new knowledge through various activities or through experience to achieve balance. The balancing processes perform through accommodation and assimilation whereby new knowledge is formed by fitting new information together with what they already know or restructuring the new information and co-relates it with the old schemata.

The constructivist approach facilitates students to learn inductively through discovering new things on their own. By opting constructivism method of learning, students are actually lurk, discover and ascertain contents, experimenting hypothesis and also build up knowledge in depth (Bruner, 1966). It is proposes that this approach would spark an in-depth understanding and develop intrinsic motivation among the students.

Saunders (1992) stressed that through this method and approach, students should be given an ample space for them to discover their own needs and also style of learning. This state of affairs would promote students to make choices, restructuring and reform the surrounding according to his physiological and cognitive needs.

Taken into consideration the explanation given, the concept of constructivist theory can be applied in CAL multimedia courseware through:

- a) Creation of an atmosphere where learning can be relaxing, comfortable and conducive.
- b) Provide inputs that construct users to explore more and comprehend critically
- c) Supply information or inputs that have space to experiments or restructure.

Pedagogical Approach

Since this software opts for behaviourist concept of presentation, the best pedagogical approach is tutorial. This is because tutorial approach is behavioural in nature and represents traditional instructional design models that seek mastery of specified content by all learners. Alessi and Trollip (1991) suggest that using tutorial approach, users can learn difficult concept by means of other application or style. As tutorial, the computer works as information and questions provider, and provide feedback for reinforcement.

Flexible Learning

Time constraint and scarce of resources are few of the factors of why both students and teachers cannot commit fully to their duties. To resolve the problem flexible learning approach is the best answer. Flexible learning can go beyond the normal boundaries of time and space. Nunan (1996) give the term flexible learning a synonym for open learning.

Active Learning

Active learning theory depicts that the best learning takes place when the learner actively and directly involve in the learning process. Students who read, listen, think and converse while giving active response are regarded as active learners. Knowles (1975) in Faridah Che Arr (2004) evokes that students who are active learners usually have high motivation and able to apply their knowledge in life better.

Active learning is, in short, anything that students do in a classroom other than merely passively listening to an instructor's lecture. This includes everything from listening practices which help the students to absorb what they hear to short writing exercises in which students react to lecture materials, to complex group exercises in which students apply course material to "real life" situations and/or to new problems. As suggest by Faridah Che Arr (2004), active learning in the context of development of multimedia courseware is that students actively involve in their learning activities like reading, thinking, exploring and even answering the questions provided.

Criteria of Excellent CAL

Excellent educational software would have some criteria that depict a certain characteristics. These criteria are important for developers in designing and constructing the software. It works as guidance and checklist as this would enhances the value of the CAL courseware.

Content: Norizan (1998) in Faridah Che Arr (2004) suggest that it is important that the content is given stress and emphasize.

Learning Objective: One of the characteristics of a good CAL courseware is that it provides the users the learning objectives. The learning objective revealed works as schemata activation for the users. As stressed by constructivist and active learning theory, users can recall their knowledge and match with new knowledge and engaged as an active learner.

User Manual: Good in preparation software should provide manual for reference. The manual will explain on the operation and also provide vital information like the specifications needed to operate the software.

Interactivity: Interactivity in this context means that users and computers give and take like the students involvement in clicking specific buttons or icon and the computer move to specific page. Interactivity too can visualize by the users' control over the computer and courseware as suggested by Jamaludin (1996).

User Interface: The function of user interface is like the middle man between user and computer. User select item from the computer screen and the interface will "connect" to the desired place in the software. Shaferi 1992 in Faridah Che Arr (2004) expresses that an effective user interface attracts the users, lure them to explore and motivates them.

Screen: Computer screen can be considered one of the important aspects in a software. This is due to fact that, all of the information, guide, instructions and even visual rely on it. Screen size should be large enough for users to explore. One should be in mind that the screen and the feature of the screen

should be consistent. This is to ensure that users are not confused or lost if the screen is not consistent and changed every now and then.

Navigation: Navigation works as a medium for the users to move or explore the software. By using the navigation, users can go back and forth or even move to new pages. Usually, the navigation is designed in the form of icon or link.

Text: Text is the basic entity that is applied in all software. Text represents the information to the users. Similar to the screen, text also should be consistent. In this context, text includes the use of types of fonts.

Colour: Colour plays a great magnitude in making learning process a live one. However, excessive colours and unsuitable colours would eventually make the courseware not effective.

Visual: Visual illustrates clearly what cannot be mentioned. One of the best thing using Multimedia or CAL is that the integration of visual to the presentation of information. Visual, pictures or images enhances the understanding.

Audio: Sound effects and music provide life to the presentation. When sound integrated with the other multimedia elements, it will create a unique value-added learning experience. The use of background music and sound are to attract users to explore more and stimuli them.

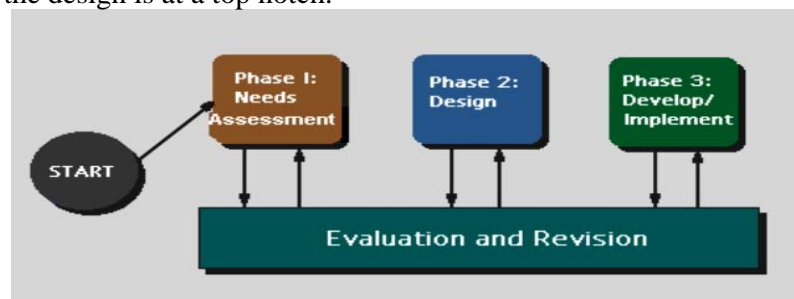
Video: Integration of video in CAL will be more realistic in giving explanation and examples.

Animation: As cited in Faridah che Arr (2004) Horhisham et al. (1996) defines animation as movement made to image, text or picture. Animation is widely use to attract users and thus making the learning process more fun and not dull.

METHODOLOGY

Theoretical Framework of the Design

This study opts for Hannafin and Peck Design Model in which comprises of three phase: Needs Assessment, Design and Implementation. The first phase is Need Assessment whereby in this phase is the underlying aspects of what the software is all about. The second phase, Design, focuses on the aspects of interface and presentation of the materials to the viewers. The phase three of the model is on the Development and Implementation of the software. This is the stage where the software is being produced which take into consideration of all aspect. Concurrently, evaluation and revision is done at every stage to ensure the design is at a top notch.



Hannafin and Peck Design Model

Evaluation of the Courseware

By reviewing Hannafin and Peck Design Model, the evaluation and revision phase is done continuously starting from the need analysis phase, design phase and development phase. Norhashim et al. (1996) cited from Izham Shah Hassan, the critical factors in evaluating software are:

- | | |
|-------------------------------|---|
| a. Easy to use | d. User-friendly screen |
| b. Provide full documentation | e. Use of minimal disk storage |
| c. Provide users' instruction | f. Able to run without having any problems. |

According to Mohamed Amin et. al. (2000) there are only two evaluators who can evaluate a web based software; the web master and the users. So, in this case, the people who can evaluate this software are the students and the experts. The experts here refer to the lecturers or teachers teaching the subject.

Test Instruments

The test instrument for the purpose of evaluating this software and reporting the findings of this study is derived and adapted from the test instrument modified by Izham Shah Hassan which was originally constructed by Jamaluddin et.al. Izham Shah Hassan has done the pilot test to check the validity of the instrument with coefficient Alpha Cronbach 0.88. The test instruments consist of two sets; one for the students (1-4 Likert Scale, 53 items) and one for the experts (1-5 Likert Scale, 33 items).

For the purpose of evaluating the software, *mean score* of each items will be used to interpret and analyse the data and the total mean score of each aspect is used to determine the value the software as to very negative, negative, positive or very positive in general

Samples

For the purpose of this study, the researcher makes use of all the students who have just undergone subject ENG 4113 and ENG 4153. This is because the samples are still fresh and they have gone through the learning process without the use of the software. Hence it is an incredible feedback as the students can compare their experience before. For the experts a total of ten (10) samples are used.

Subject	Male	Female	Total
ENG 4113	4	19	23
ENG 4153	15	20	35
TOTAL	19	39	n = 58

Students sample

PRODUCT OUTCOME, DATA ANALYSIS & INTERPRETATION

Application of Behaviourism Theory

The behaviourism theory applied once the users run the program. The graphic, buttons and the interactivity of the software works as stimulus and response for the users. The application the behaviourism theory in this software can be exhibited from the use of interactive icons. Whenever the users click or mouse over the icon, it creates sounds and effects. This enables and motivates users to explore more and stimulates active learning.

Behaviourism theory depicts exercises and evaluation should be given after a learning session takes place. By providing quizzes and exercises, it is imperative that the software provides feedback and encouragement. In this software, the users will be given an immediate feedback while encouragement can be traced when the software enables users to move on. Another example of application of behaviourism theory is through the design of the software itself. This software is an interactive CD

that enables users to use it independently and moreover it can be self-accessed.

Application of Cognitive Theory

This theory is applied when the tutorial screen provides enough information regarding the objective and goals of the learning. The objectives presented are clear and suitable to the students' level and skills. Whilst, the linking of the text, graphic and video in the simulation can activate students' schemata and also attracts new information to be stored in their minds.

The information presented too is in cluster and sectional. According to the theory, this enables the users to stay focus and not lost while grasping the information presented in the software. In order to reduce or eliminate the lost, the software too is emphasized on the consistency of the screen where the information is positioned. Another example of application of cognitive theory is the ability of the software enabling users to repeat and try out the exercises and the quizzes provided. Hence, the exercises and quizzes given can aid users to retain information.

Application of Constructivist Theory

This theory is applied in the tutorials. The information presented to the users supported by examples will trigger provide new knowledge to them. And using their schemata, they construct new skills by assimilating their previous knowledge and the new input to accommodate their needs.

A very simple example is when the users read the text given as input and watch videos as example or support, users then accommodate to their task. If their task is to give out an informative speech, they then accommodate to the style and characteristics of informative speech using the videos, examples and inputs as guide.

Data Analysis and Interpretation

Mean score	Interpretation
0 – 1.25	Very Negative
1.26 – 2.50	Negative
2.51 – 3.25	Positive
3.26 – 4.00	Very Positive

Mean Score for Students

Mean score	Interpretation
0 – 1.80	Very Negative
1.81-2.60	Negative
2.61-3.40	Uncertain
3.41-4.20	Positive
4.21-5.00	Very Positive

Mean Score for Experts

Student Respondents

Perception of Students towards the Content of Public Speaking Interactive Media

No	Questions	Mean Score
1	Information presented is accurate	3.31
2	Information is applicable in Public Speaking Course	3.52
3	Information is well organized	3.55
4	Information presented is easy to understand	3.47
5	The examples given are realistic	3.24
6	The language used is fairly easy to understand	3.45
7	There is no wrong spelling / typo error	3.41

8	The materials are suitable for students taking Public Speaking course	3.66
9	The information presented able to get the students' attention	3.66
10	The information is inline with the software objectives	3.28
	TOTAL MEAN SCORE	3.45

By looking at these figures it can be deduced that students feel that the content of the software is reliable and useful for them in learning the subject. It can also be generalised that the content of the courseware is suitable and match the objectives intended. Furthermore, the users agree that the content presented is organised systematically and clear for users to understand.

Perception of Students towards the User Satisfaction of Public Speaking Interactive Media

No	Questions	Mean Score
11	No problem encountered while exploring the software	2.97
12	The instructions are easy to understand	3.47
13	It is fun to study using this software	3.72
14	Quotation given is very useful	3.26
15	Presentation is laid out properly / well organized	3.40
16	Presentation strategy able to get the student's attention	3.55
17	The software able to stimulate students	3.31
18	The software facilitate the study	3.34
19	The trivia/quiz is appropriate for learning	3.67
20	The test given is effective	3.41
	TOTAL MEAN SCORE	3.41

In short, students are very satisfied with the outcome of the courseware. When the students utilises the courseware, they do not feel that it wasting their time. Moreover, the courseware provide essential items for their learning such as quizzes and the students feel enjoy when utilize the courseware.

Perception of Students towards the Presentation Design of Public Speaking Interactive Media

No	Questions	Mean Score
21	The design is attractive	3.62
22	Text is clear and legible	3.40
23	Graphics is attractive and effective	3.64
24	The choice of colour is effective	3.40
25	Audio selection is effective	3.34
26	Video clips provided are effective	3.10
27	Combination of text, graphic, audio, video animation and colour enhanced learning	3.43
28	Icons used are appropriate	3.28
29	Icons used are consistent	3.31
30	Guidelines and procedures are clear and easy to understand	3.50
	TOTAL MEAN SCORE	3.40

In short, the design of the courseware is able to attract the users. The choice of colours, icons, audio and graphics presented are admirable. Clear guidelines and easy to understand reinforce the notion the design having high merit.

Perception of Students towards the Interaction Design of Public Speaking Interactive Media

No	Questions	Mean Score
31	Students can take control of the learning process	3.36
32	Not easy to get 'lost' while exploring the software	3.19

33	Access to information is easy using designated buttons	3.45
34	Software development is easy to understand	3.47
35	Easy to exit the program	3.62
36	The interface is simple and attractive	3.52
37	The interface is user friendly	3.41
38	Buttons functioning properly	3.45
39	Buttons provided are enough	3.34
40	Presentation of information is continuous	3.41
	TOTAL MEAN SCORE	3.42

Concisely, having to construct a CAL courseware, students or users find out that this courseware is very much interactive and entertaining as well. Simple yet intriguing, the interface works exactly what is supposed to do while students have full control over the courseware.

Perception of Students towards the Technical Aspect of Public Speaking Interactive Media

No	Questions	Mean Score
41	Software installation guide/help is easy to follow	3.38
42	Guidelines/help can be passed up if needed	3.31
43	Help can be accessed at any time if needed	3.19
44	Software installation guide is complete	3.22
45	The software is light and not burdensome	3.31
46	There is no technical disruption	2.98
47	The software is suitable with the computer	3.24
48	The software is durable	3.17
49	The software is not easy to hang if misused	3.07
50	The software is not easy to crash	3.03
	TOTAL MEAN SCORE	3.19

Ultimately, developing and constructing a CAL courseware requires longer time and group work. So, it is not surprise that the users rated the courseware to 'Positive' only. Technically, the courseware tested is the prototype; hence, there is room for more improvement later.

Experts Respondent

Perception of Experts towards the Information Design: Teaching Strategy of Public Speaking Interactive Media

No	Questions	Mean Score
1	Teaching method is suitable to the topics	4.15
2	Information conveyed is easy to understand	4.75
3	Delivery is systematic	4.35
4	The presentation can attract students	5.00
5	Well-suited examples and exercises	4.20
6	The software encourages students to think creatively	3.75
7	Clear written teaching objectives	3.50
8	Teaching objectives can be attained	4.20
9	Objectives helps students to focus	4.20
10	Learning methods is suitable for the students	3.95
	TOTAL MEAN SCORE	4.20

Accordingly, we can deduce that experts think that the software is workable for students utilize in learning the subject. With the mean score on the verge of categorised to "very positive" it shows that

the courseware can be improved to be better. Another interesting fact from the result, experts 100% agree that the presentation is attractive and can attract students to utilise the courseware.

Perception of Experts towards the Presentation Design of Public Speaking Interactive Media

No	Questions	Mean Score
11	Software screen design is attractive	5.00
12	Software screen design is suitable for target audience	4.75
13	Fonts used is suitable (legible)	4.70
14	Graphics/images in the software are suitable	5.00
15	Graphics/images in the software are effective	4.45
16	The use of colours is effective	4.35
17	The use of audio is suitable	4.35
18	Videos presented enhances students' understandings	5.00
19	Videos presented can assist learning	5.00
20	Icons used can easily be identified	4.80
21	Consistent positioning of texts	5.00
22	Consistent positioning of graphics	5.00
23	Consistent positioning of videos	5.00
24	Consistent positioning of icons	5.00
25	The software is complete with instructions	5.00
TOTAL MEAN SCORE		4.83

Confidence, the presentation design is one of the significant and powerful criteria in the courseware developed. This is because minute and thorough details were given to produce the courseware and Presentation Design is important to attract the students' focus and interest.

Perception of Experts towards the Interaction Design of Public Speaking Interactive Media

No	Questions	Mean Score
26	Good control over teaching process	4.70
27	Well-linked content	5.00
28	Users would not get lost during content giving	5.00
29	Easily understood presentation approach	4.65
30	More than one information seized	4.90
31	Easily acquired information	5.00
32	Users can exit the content at any time	5.00
33	Well-sequenced presentation content	4.75
TOTAL MEAN SCORE		4.89

Developed using the principle of multimedia supported by the learning theories, the courseware applies the principles well to ensure that it interacts with the users.

CONCLUSION

The overall evaluation towards the software exhibits that the multimedia software fulfils the needs of the students and also the teachers. Students' perceptions and evaluation are very important because they are the ones who utilize the software. Furthermore, according to Krashen's Theory of Learning states that the affective filter must be reduce so that learning take place. And to reduce the affective filter is by providing safe environment to learn and increase the students' motivation or curiosity.

This software will motivate the users especially the students to urge them to explore by furnishing the users with great graphics, sounds and presentations. Once the users are fond with the software, the affective filter lowered and students can learn and gain knowledge. However, the software developed

works as a self-access learning and further clarification of the subject matter should be best discussed and refer to the teachers and the textbook.

All in all, from the data analysis, it can be concluded that generally the respondents are pleased with the outcome of the software. Both students and the experts have given high credentials in evaluating the software. Along with the current technology and on-line sources of information, students should be exposed to active learning and flexible learning strategies. What more important is that, the teaching and learning session must be meaningful to both teachers and students.

REFERENCES

- Alessi, S.M. & Trollip, S.R 1991. *Computer- Based Instruction: Methods and Development*. 2nd Ed. New Jersey: Prentice Hall, Inc
- Asmah Haji Omar. 1989. *Kaedah Pembelajaran Bahasa*. Kuala Lumpur: Dewan Bahasa dan Pustaka
- Ausubel, D. 1968. *Educational psychology: a cognitive view*. New York: Holst, Rinehart and Winston
- Claxton, G. 1990. *Teaching to learn: a direction for education*. Long Cassell
- Faridah Che Arr. 2004. *Pembangunan Perisian Pengajaran dan Pembelajaran Berbantuan Komputer Reading Comprehension untuk Peajar DiplomaUTMKL*. Unpublished thesis. UKM
- Gagne, RM. 1985. *The Conditions of Learning*. 4th ed. New York: Holt,Rinehart and Winston
- Hannafin, M.J. and Peck, K.L. 1988. *The Design, Development and Evaluation of Instructional Software*. New York: Macmillan Publishing Company
- Izaham Shah Hassan.2002.*Pembangunan Perisian Kursus Multimedia Interaktif ACAD R14 : Penghasilan Lukisan Persembahan*.Unpublished thesis. UKM
- Jamaludin Harun, Baharuddin Aris clan Zaidatun Tasir. 2001. *Pembangunan Perisian Kursus Multimedia: Satu Pendekatan Sistematis*. Kuala Lumpur: Venton Publishing
- Kemp, J.E & Smellie, D.C. 1989. *Planning, Producing and Using Instructional Media*. 2nd Ed. USA: Harper and Row, Publishers, Inc.
- Lucas, S.E. 2002. *The Art of Public Speaking*. 7th Ed. New York: McGraw Hill
- Maizurah Omar dan Fattawi Mokhtar. 2003. Penggunaan Televisyen Dalam Pengajaran Bilik Darjah. *Jurnal BTP Disember 2001*(3). Kementerian Pendidikan Malaysia.
- Mayer, R. (1984). Learners as information processors: Legacies and limitations of educational psychology's second metaphor. *Educational Psychologist*, J.1(3/4), 151-161.
- Mohamed Amin Embi & Azmi Abdul Latiff. 1999. Membina Perisian Interaktif Multimedia

Pembelajaran Arahkan Kendiri. Konvensyen Teknologi Pendidikan ke-12. N.Sembilan, 8-10 Okt.

Mohamed Amin Embi, Alias Baba, Jamaluddin Badusah, Mohd Isa Hamzah. 2000. *Development and Evaluation of SMART NET as an Internet Based Teaching and Learning Tool*. Laporan Akhir Penyelidikan G 1/99. UKM: Bangi

Nazrul Azha Mohamed Shaari. 1998. *Pembangunan pakej Perisian galakan literasi pendekatan multimedia*. Tesis Sarjana Teknologi Maklumat, Universiti Kebangsaan Malaysia: Bangi

Norhishim Abu Samah, Mazenah Youp, Rose Alinda Alias. 1996. *Pengajaran Bantuan Komputer*. Kuala Lumpur: Dewan Bahasa dan Pustaka & Penerbit Universiti Teknologi Malaysia

Paivio, A. 1971. *Imagery and verbal process*. New York: Holt, Rinehart, and Winston

Paivio, A. 1986. *Mental representations: A dual coding approach*. Oxford: Oxford University Press

Reiber, L.P. 1994. Computer-based microworlds a bridge between constructivisme and direct instruction. *Educational Technology Research and Development* 40(1): 11-24

Williams, M.D. 2000. *Integrating technology into teaching and learning: concepts and application*. Singapore: Prentice Hall