Perfecting the Culinary Arts via the YouTube way

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Abstract-YouTube, known as an entertainment and social interaction website has created a trend in the current teaching amongst the educationists. This blended learning, of which using YouTube in teaching has made teaching and learning more effective in classroom. Students are easily amazed by the videos that have been uploaded and selected for teaching purposes. Students, moreover, find it more enjoyable and effortless in watching video rather than calculating, reading, speaking or writing in classroom. In fact, video teaching can offer 'an accessible visual and emotional experience to students', since it presents 'a literacy', and a new language - the 'language of images', and a form 'symbolic visual codes'. With this in view, a research has been carried out among students of culinary arts to seek new ways of improving the teaching and learning process via the use of current media. In the culinary classroom, however, hands-on-teaching of which students need to experience first-hand learning of processes namely vegetables cutting on their own is being emphasized. Therefore, this research will address the following issue of how effective teaching and learning via YouTube among students in the culinary arts is in the higher institution. A set of questionnaire has been administered and results have indicated a positive impact among the selected students in acquiring better grasp of the concepts, techniques and method in learning the arts of culinary via the means of this particular media.

Index Terms—YouTube, Culinary Arts, Blended Learning, Effectiveness, Media.

I. INTRODUCTION

The term blended learning is no longer an alien term. Many academicians have moved from 'chalk and board' that seems no longer effective in teaching and delivering lectures. With the vast technology advancement and conducive amenities provided by the varsities, many academicians combine their ways of teaching with modern gadgets or depend on the internet for support. Combine methods of teaching help to assist better acceleration and the blended way of learning. Blended learning is found to be a popular choice because of three reasons which are improved technology, increased access and flexibility and increased cost –effectiveness [1].

Blended learning as best defined in Graham [2] from Driscoll [3], most of the definitions are just variations of a few common themes. The three most commonly mentioned definitions, documented by [1], are combining instructional modalities (or delivery media) [4], [5], One year of online blended learning : Lessons learned) [6]-[7] combining instructional methods [3], [8], [9] and combining online and face-to-face instruction [10]-[14]. From these definitions, it is clearly seen that Blended learning is the 'in- thing' in this current teaching trend. One of the most popular choice would be the YouTube.com. YouTube was founded in February 2005 and has grown exponentially in popularity and use [15]. It is seen as one of the source of social and entertainment website that works very well with blended learning.

The use of media has brought effective learning and undeniably allows more excitement in the classroom teaching. According to reference [16] blended learning or using video clips as 'purposeful media' help accelerate or identify students' preferences on learning method and intelligence. Gardner Multiple Intelligence theory [17] recognizes various media form as a way to enhance Multiple Technology.

Students of today are noted to be highly skilled when it comes to technology. According to reference [18] in reference [19] Liu named students' of today as 'Digital Native'. They are born into the technology community that day and night they are surrounded with the Internet and technology. When the social media technology surfaced, they are quick to learn and adapt to the technology such as Facebook, Twitter, Youtube, blogging, I-tunes and others. Although these social media technology act as a social networking, it is now, move from the platform as a tool for teaching and learning. In the classroom, YouTube is becoming an educational tool to enhance learning in innovative ways [20].

Using of Web 2.0 in the classroom for blended learning has long been practice in the classroom. In a study by Savery (2002) on the faculty and students perceptions of technology integration in teaching shows that 59% agree that the use of technology help to enhance their learning experience. A recent study by [21] Check-Yee Law on students' perceptions of MyMathLab as an online Learning tool has discovered that 49.6% agreed that online learning had helped them to achieve a higher grade and 63.3% felt that the online system had helped them to understand the subject matter better. Another study on learning mathematics through e-learning was done by [22]. 87.5% of the subjects indicate that blended learning had helped them to learn the topic better and there is a significant increase in the means of pre-test and post-test, from 4.08 to 9.00.

The use of Web 2.0 specifically YouTube in teaching and learning has been used in many disciplines such as nursing where YouTube is integrated in the nursing curriculum [23]. Not only in the medical field but it also can used in language classroom [24] conducted a research on how YouTube can be utilized to enhance language learning. In a research by [25] on Youtube, language learning and teaching techniques, she

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interviewed a few respondents on how useful is YouTube in English learning and the response was positive where it helps in practicing verbal communication and listening skills. Reference [26] used YouTube video-clips to promote individual learning styles for masters' students who are undertaking Marketing-related modules. The use of YouTube in these different disciplines has proven that YouTube do help to give positive results both to the students and the educator. To prove if the use of YouTube could give such result in the discipline of culinary arts, this research is undertaken.

Integrating technology has been found fruitful. Reference [27] mentioned educational technologies should be introduced into the Culinary classroom and studios, as it could help better learning to take place. An inexperienced instructor can easily rely on technologies in classroom teaching. The Culinary Arts learning is one field that demands the hands on demonstration which somehow limited the usage of using internet for support or teaching. Students are constantly required to practice their technique in cutting, blanching, In this field, the media usage, i.e. YouTube is used to demonstrate the skills required to learn which allows learner to have a better viewing of the technique. At the same time, students who are exposed to constant viewing of the method have the chance to perfect their techniques.

As oral presentations skills are needed in each demonstration, the focus of presentation skills has deemed as the weight age of demonstrating the skill is seen more vital. However, presentation skills must not be forgone as a successful demonstration requires effective presentation skills. Presentation Skills in the Virtual Environment can be seen as a solution to help academicians to counter the problems of students being unable to demo or present in front of a crowd. It helps students to practice and the end of the day, perfected their skills in front of a virtual audience and finally to a live audience when ready. Students are given spontaneous feedback from their peers and teachers to help master both skills. Teachers on the other hand get to see their students practicing and learning simultaneously, and, thus allowing them to provide fair grade as they get to paused, rewind the video that has been posted.

II. PURPOSE OF THE PAPER

This paper aims at investigating the effectiveness of using YouTube as a tool of blended learning for on line presentations and discussions among the instructors and the Arts and Culinary undergraduate students.

III. IMPLEMENTING ORAL PRESENTATIONS IN VIRTUAL ENVIRONMENT

Students of the Arts Culinary were exposed to the method of vegetable cutting during their first two months of their first semester in the diploma program. Throughout these two months intensive lecturing and demonstration were done in the kitchen lab. In the final two months, students were asked to post their video of basic vegetable cutting to be assessed by the lecturers. Previously, students were assessed on one to one basis towards the end of the semester, however, due to the growing number of students and the availability of kitchen labs, the use of online presentations was proposed. Students were eager to use the readily available internet hosting instead of video campus hosting as the files were large, the server connection convenience. The availability of peer feedbacks and familiarity of technology are also the contributing factors for students' preferences of virtual presentations.

A rubric was specifically designed to assess and to guide the students while presenting their skills over the YouTube. Students are then required to fulfill the questionnaires as to measure how effective online presentations via YouTube are. The self and peer feedback that are given in the post at YouTube account are made to help the students to improve their presentation skills.

IV. DATA ANALYSIS

Two different set of questionnaires were given, one set to the instructors who taught the course . Another questionnaire was given to the students of the Culinary School who enrolled for the course of Basic Culinary Skills 1 in March-June intake 2012. Questionnaires were administered via Survey Monkey which is done primarily online. The questionnaire consists of 2 sections which are the students' perception towards using the technology- which is YouTube. Another section is to seek the instructors' perception of integrating the technology in their classrooms. Data was collected analyzed using frequency counting via Survey Monkey. A good mixture of respondent were taken as students vary from 18 to 21 who are the 'digital natives' and instructors who varies from 25 to 50 years of age who are somewhat ready for changes in their teaching environment.

A. Students' Perception of Integrating Technology in Classroom

In order to gain insights to the research, a set of questionnaires were given to the students. The subjects were 84 students of the undergraduates of the Arts and Culinary program (Table I). Most of the respondents ranging from 58% to 79% have agreed that this exercise has provided them with an overall improvement in of their presentation skills. With regards to their culinary skills, they believe that the use of YouTube video exercise they were to compare and contrast, serves as more accurate and fair form of assessment. They also believe that learning via YouTube also managed to enrich their culinary experience and skills over a typical hands-on kitchen lesson. This is because they are able to imitate and enhance their understanding of a certain technique portrayed by their chefs better, due to the nature of the videos - the playback, feedback and comment features made available at the base of the videos. Some of the techniques and skills of vegetable cutting are such as Brunois, Chiffonade, Batonnet and Jullieanne.

Based on these, they also are able to gain immediate responses upon the viewing of the videos and this of course promotes active learning to take place. In addition to this is the respondents' strong agreement of how they found such feedbacks made by their own peers on the videos they have produced to be useful. This makes up nearly 93% of the respondents. Moreover, 90% of them also agreed that the viewing of the YouTube videos have actually helped them to identify any form of problems relating to their own presentations and culinary skills. It could be due to the misinterpretation of a particular technique or process and as such, this could easily be rectified by the instructors' advice or comments at the end of the video uploaded on the YouTube.

Time also could have played a contributing factor in making the YouTube videos more appealing to the students as shown in the statement that watching YouTube videos related to their discipline allows them to learn according to their own leisure hours.

STUDENT'S PERCEPTION						
			answered question			84
				skipped question		6
	Strongly	Disagree	Agree	Strongly	Rating	Response
	Disagree		J	Agree	Average	Count
1.I find using youtube is useful	2.4% (2)	6.0% (5)	64.3% (54)	27.4% (23)	3.17	84
2.You tube has helped me to identify my problem in my presentation and culinary skills	1.2% (1)	8.3% (7)	65.5% (55)	25.0% (21)	3.14	84
3.I find feedback from my peers useful	1.2% (1)	7.2% (6)	74.7% (62)	16.9% (14)	3.07	83
4.1 find I have improved overall in my performance and my skills.	1.2% (1)	14.5% (12)	65.1% (54)	19.3% (16)	3.02	83
5.This exercise has made me aware of the importance of presentation and culinary skills.	1.2% (1)	4.8% (4)	65.1% (54)	28.9% (24)	3.22	83
6.This exercise will be more accurate and fair in accessing my presentation and culinary skills.	1.2% (1)	3.6% (3)	69.9% (58)	25.3% (21)	3.19	83
7. I believe I can improve my knowledge and skills after watching culinary presentations over youtube	1.2% (1)	3.6% (3)	60.2% (50)	34.9% (29)	3.29	83
8. I believe learning from youtube provide better experience than typical kitchen lesson.	3.7% (3)	25.6% (21)	58.5% (48)	12.2% (10)	2.79	82
9. Learning via youtube allows me to gain better insight of the importance of culinary skills.	1.2% (1)	10.8% (9)	66.3% (55)	21.7% (18)	3.08	83
10.Watching youtube videos allows me to learn according to my leisure.	2.4% (2)	2.4% (2)	73.2% (60)	22.0% (18)	3.15	82

TABLE I: STUDENT'S PERCEPTION

B. Instructors' Perception towards Integrating Technology in Classroom

Video teaching and viewing of YouTube videos highlighting the culinary skills proves to be advantageous to both parties; the instructors and learners as shown in the response of the survey. While only 5 to 10 % respondents strongly disagree to the various positive outcomes for the use of YouTube language, the other 90-95% of respondents attests to the advantages and benefits. Some responses include the instructors' strong indication that the easy availability and features of a YouTube video i.e. the immediate viewing, replying and pausing features have made the YouTube learning and teaching more feasible and encouraging. As for the instructors' personal professional development, the use of these YouTube recordings, observed via the response of the survey, recorded an overwhelming agreement that recorded cooking lessons via YouTube should be the mode in enhancing their professional skills.

Moreover, in responding to the suggestion that they are able to enhance the clarity of a chosen topic via the YouTube video, almost 94% of respondents agreed that the use of such medium does help in accelerating their teaching and understanding of their students (Table II).

In terms of students' learning development, a majority of respondents agreed that the post-viewing of YouTube videos highlighting the culinary skills selected, does enable the students to combine some visual elements comprising of colors, shapes, sizes and textures into their food presentation. Another 90% of the respondents also agreed that they gain a better insight into the importance of the culinary skills in the use of YouTube. This could be due to the repetitive nature of the video viewing and the ability to pause on a certain technique shown in the video.

TABLE II: I	INSTRUCTION	POINT OF	VIEW.

				answered question skipped question		81 9
	Strongly Disagree	Disagree	Agree	Strongly Agree	Rating Average	Response Count
 Using youtube allows viewers to gain better insight into importance of the culinary skills. 	5.3% (1)	10.5%(2)	63.2%(12)	21.1%(4)	3.07	15
2. Watching youtube videos allows viewers to view it almost immediately.	5.3% (1)	10.5%(2)	68.4%(13)	15.8%(3)	3.16	15
3. Watching youtube videos allows viewers to replay and pause them many times.	5.3% (1)	10.5%(2)	63.2%(12)	21.1%(4)	3.2	19
4, Recording lessons via youtube videos for self observation has a well known motivating effect.	5.3% (1)	10.5%(2)	73.7%(14)	10.5%(2)	3.12	15
5. Video recording via youtube of cooking lessons should be done for their successful professional development.	5.3% (1)	10.5%(2)	73.7%(14)	10.5%(2)	3.15	15
6. Video teaching via youtube makes teaching culinary skills more efficient.	10.5%(2)	15.8%(3)	63.2%(12)	10.5%(2)	3.07	15
 After viewing the youtube videos, students be able to combine visual elements (colours,shapes,sizes,textures) into their uses in food presentation 	10.5%(2)	21.1%(4)	57.9%(11)	10.5%(2)	3.13	15
8. When creating video lesson via youtube for students,the instructors are able to enhance the clarity of chosen topic (lecture, discussion,hands on, activities)	5.3%(1)	15.8%(3)	68.4%(13)	10.5%(2)	3.14	19

V. CONCLUSION

In blended learning, students undergo a few phases .The first phase which is the traditional classroom teaching- chalk and board, where students are exposed to the theoretical aspect where minimum culinary skills are being applied. From this stage, the instructor will propose a virtual integration of technology is to be used in classroom teaching. YouTube is seen as one of the popular choice of most educators. Moving on to the next stage, students will now be more active as they are in their self learning time to watch the video, the classroom teaching and producing their own simulation based on the subject.

Students are seen to benefit the most as it will help them to accelerate faster and better on grasping the skills as some instructors are new and inexperienced. According to [28], blended learning will benefit the learners as 'live' lessons are shown.

In short, continuous improvement in teaching and learning of culinary skills can be made possible through various modes of blended learning. YouTube for one, exemplifies the ideals of providing the learners with a stimulating experience and more exposure towards the art of culinary skills via the use of this medium.

Instructors are encouraged to have a constant review of students' presentations in order to obtain the desired results. If a student isn't participating or performing poorly, instructors are required to provide immediate feedback so as to ensure the continuity of blended learning's effectiveness.

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