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USING E-MODULES IN TEACHING TECHNOLOGY & LIVELIHOOD EDUCATION FOR THE REVITALIZED ALTERNATIVE DELIVERY MODE PROGRAM OF HOLY SPIRIT NATIONAL HIGH SCHOOL

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ABSTRACT

This study aims to reveal the effects of e-modules strategy in teaching technology and livelihood education as an alternative mode of program in Holy Spirit National High School. The sample of the study consists of (56) male and female grade 7 students randomly chosen from two sections, students are divided into two groups: Control and Experimental. Researchers have developed an e-materials relevant to carry out module's strategy for teaching technology and livelihood concepts in the TLE text book for grade seven students, though the development of achievement test to measure the direct and the postponed achievement by the study's sample. The consistency and reliability of the test have been obtained. The study's results revealed that students in the experimental group are exceptional over students in the control group in both types of achievement. At the same time results showed the lack of difference between male and female students in direct and long-term achievement test. Based upon the study's results, researcher recommends the necessity to use more modern means to teach students the "TLE" domain, to hold courses and workshops for teachers training on implementing modules strategy. Furthermore, to make available textbook and references which facilities this style of teaching. Finally, is to conduct similar studies over different domains in TLE like electricity, electronics, food and beverage, cookery.

Keywords: *Modules, Alternative Delivery Mode, TLE, Revitalized*

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Chapter 1

INTRODUCTION

Education is a continuous process. It tends to keep abreast with the changes of time. Our own educational system is no exception to this. We tend to follow the trends of time, since the world is moving in a rapid pace of development especially in the field of technology and livelihood education. This mobility gave insight to educators to strengthen philosophies, redirect goals, and improve strategies every now and then in order to meet the challenges.

Selections of teaching materials and strategies are left to the teacher's resourcefulness and ingenuity. Furthermore, the scarcity in classrooms and instructional materials in different level is one of the major roadblocks for the effective accomplishment of the educational objectives. There are some objectives which are not geared towards the realization of minimum learning competencies of students.

Recent innovations in the secondary education curriculum however make teacher's role now a very challenging circumstance. A teacher is not only equipped with the necessary background of information and skills needed to teach the subject, but it also acquainted with the latest approaches and trends which have been found effective in teaching.

The students on the other hand are exposed to new techniques and teaching strategies. Individual differences among learners have given attention.

Every learner being unique from his fellow learners in interest, abilities, and social effectiveness. There are learners who have difficulty in learning and there are those who are bored by task that do not challenge their learning capacity. Gone are the days when students only parroted facts and never given the opportunity to apply what they have learned. The idea that students do better and learn faster when left alone to work on their own has been overlooked. With the advent of technology, enrichment teaching materials plays a vital role in the teaching – learning process. The new education program was designed to involve the students more actively in the learning process by using self-pace instructional materials. Teaching strategies and approaches now cater to the individual interests and abilities of the participants students. Teachers give increased emphasis on helping students from their own scientific and technological connects and discover principles useful in making decision. Approaches to teaching and learning are paced on minds-on and hands-on activities which are bases on guided discovery on electronic modular instruction. This new teaching technique provides individualized instruction with the use of electronic module. This electronic modular approach will maximize teaching – learning in the preparation of new instructional materials.

Technology and Livelihood education has also benefited from this new approach. A look at the TLE instruction at present tells us that there is a need for some redirection, not in the content or structure, since much have already been done in these aspects, but in the teaching process or methodology.

The researcher's experience as a fourth year TLE teacher at Holy Spirit National High School, made her realized the need for an innovative approach in teaching TLE subject. First year TLE, being the foundation of higher TLE, should be learned with optimum extent and mastery. With this premises, it is the researcher's desire, to provide an effective learning material, the electronic module which students of varying abilities can use with the least help from the teacher. The other reason is the fact that the researcher could hardly find enough time to give enrichment exercises to students who finish their work of time and/or to give remedial lessons to

slow learners. It is in this context that the researcher decided to undertake this study on the use of electronic module in teaching technology and livelihood education for the revitalized alternative delivery mode program of the school.

In view of these observations, the researcher believes that the proposed e-module in TLE would be a great help not only to the students but also to the teachers. This may also serve as a guide in the preparation of other electronic modules to use in their own classes.

The research question to be answered is:

1. Is there a significant difference between the perception of students regarding the present teaching tools and the proposed e-modules in TLE?

Chapter 2

REVIEW OF LITERATURE

INTRODUCTION

Survey related literature provides valuable help in the development of knowledge in research work. It helps the researcher to gain insight into various aspects of the problem area that is in formulating a framework for the study, developing the methodology, constructing the tool for data collection and planning the analysis of data.

Since the problem under investigation is "Is there a significant difference between the performance of the experimental group which used the e-modules and the control group which used the traditional method during the 2nd grading based on their grades in TLE?" the researcher tried to collect studies related to modules. After going through the profuse literature, the researcher has selected only those that are relevant for the present study.

Module is a self-contained, independent unit of instruction with well defined objectives [Murray (1971), Shore (1973), Russel (1971), Cross (1971), Buch et. al (1978), Bautista (1978), Gabriel (1981), Warwick (1978), and The Scientific Encyclopedia (1976)]. In the APEID report (1976) a module was defined as a set of learning opportunities organized around a well-defined topic which contains the elements of instruction, specific objectives, teaching-learning activities and evaluation.

The module emerged as recent developments mainly affect a whole curriculum shift to learning for all students' style. The aims include:

1. To encourage change in teacher style in methodology towards practical and experimental learning.
2. To increase student motivation by setting students' short-term realizable goals, and
3. To generate a more relevant curriculum.

In essence, it breaks down the curricular offering into units very much smaller than teachers have ever felt possible. The use of modules grew rapidly, and currently e-modular approach is well entrenched as a measure of tailoring instruction to individual needs. Nearly all individualized instruction is based on the use of e-modules.

Foreign Literature

According to Ralf Carry, "the module approach uses programmed materials which are carefully organized in a logical sequence through which the learner advances at his own paces, with each

of his responses confirmed or correctly immediately."

As suggested in Driscoll's first goal, the internet provides a format for a complex, realistic, and relevant learning environment (2000). Students can explore hyper-linked websites, ideas, and concepts in a rich exchange of information, unlimited by geographical boundaries. The internet also lends itself to display of visual models that deepen students' understanding of complex concepts, and these visual models can be simultaneously shared with an entire class.

Online teaching allows students to work on projects beyond the confines of a traditional school setting (Jonassen, Peck, and Wilson, 2000). For example, Moallem (2001) examined traditional method, "Instructional Design and Classroom Evaluation," that was moved to an online environment, thus allowing more opportunities for interactive learning. According to Moallem's account of the online class, each lesson provided students with a real-world problem in the form of a case. Learners also constructed mental images and were encouraged to visualize the activity, extending learning understanding far beyond the confines of traditional lecture formats.

Furthermore, the e-modules provides greater range of ways through which learners can express their knowledge, including the publications of multimedia presentations at large through the internet (Perrett, 2004). Truly, it is crucial for the advancement of informative research within composed disciplines and the continued successful integration of e-module as applied in the Philippine setting with resources to higher education systems determining that certain group of students can acquire and gain effective knowledge literacy skills through the e-module process and understanding the value of education services crafted to provide best teachings as possible (Belle and Boote, 2004). Lastly, encourage the use of e-module in parallel to active learning style which allows to students to interact with their classmates and does help the teacher facilitate an enhanced learning experience through e-module application mode and to finally emphasize the value of making student information connection with a subject teacher for instance geared upon for in-depth education success (Ewald, 2006)

Local Literature

World Declaration on "Education for All" broadened the means and scope of Basic Education and stressed that the basic learning needs of youth and adults are diverse and should be met by a variety of delivery systems and all available instrument and channel of information, communication knowledge and infer to educate people on social issues.

To keep up with these global thrusts, the Department of Education instituted a framework of governance for Basic Education known as Republic Act No. 9155, wherein one of its provision provide thus: The state shall ensure that the values, needs and aspirations of a school community are reflected in the program of education for children, out-of-school youth, and adult learner. Schools and learning centers shall be empowered to make decisions on what is best for the learners they serve.

In the school year 1999-2000, the UST Educational Technology Center installed two state-of-the-art multimedia classrooms as pilot laboratories in the Faculty of Engineering. Designed for computer aided lectures with access to multimedia equipment, the EdTech Center facility was offered to the authors of this literature for rendering Powerpoint Aided Lectures (PAL) for one semester, using a good computer and projection system. The paper cited here is an assessment and discussion of that experience, underscoring the pros and cons of using PAL as a teaching tool. The study is thus substantially relevant to this research, tracing and evaluating as it does the progress and result of the initial use of the multimedia classroom prototype.

Chapter 3

METHODOLOGY

Location

The research will be conducted in Holy Spirit National High School. It has more than of 3,500 students with 62 sections in the different year levels. The average class size is 57 students per class.

Participants

The participants will be first year students, who will be divided into two groups. There are 56 students in one section who will be grouped regardless of their grades.

Materials

The e-modules to be used for the study is based on the curriculum of the Technology and Livelihood Education (TLE) of the Basic Education for the second grading of S.Y. 2011 – 2012. The assessment of the performance of students will include attendance, tests, quizzes, assignments, participation and report card.

Length of Study

The timeline is one eight-week grading period of the second quarter that will start in August and will end in late October 2011.

Methods

Students in 2 sections the first-year level will learn the TLE lesson for the second grading period in different ways. One section or the traditional will learn using textbook and reference books. The other group or the experimental will use e-modules. Both groups will be given a pre-test, after the eight-week period, a post-test will be given to find out whether there is a difference between the performance of the two groups.

Analysis

The information will be gathered from the over-all performance of the students in two sections through their scores in the pre-test and post-test assessment.

One criterion will give the general view of the research, is comparing the assessment scores to determine the performance of students.

Chapter 4

RESULTS AND FINDINGS

This research sought to introduce an e-modules system in TLE subjects so it can serve as a basis for classroom management.

Specifically, this study provided answer to the following questions:

1. What is the profile of the students in terms of:

1.1 Age

1.2 Gender

1.3 Course

1.4 Year Level

2. What is the profile of the moderators in terms of:

2.1 Age

2.2 Sex

2.3 Teaching experience

3. How do the students perceive the present teaching tools as compared to the proposed e-modules in TLE in terms of:

3.1 Program Design

3.2 Lesson Efficiency

3.3 Utilization Process

4. How do the moderators perceive the present teaching tools as compared to the e-modules in TLE?

5. Is there a significant difference between the perception of students in regard to the present teaching tools and the proposed e-modules in TLE?

6. Is there a significant difference between the perception of the respondents in regard to the proposed e-modules in TLE?

Hypotheses

The following were tested:

1. There is no significant difference between the perception of students on the present teaching tools and the proposed e-modules.
2. There is no significant difference between the perception of moderators on the present teaching tools and the proposed e-modules.
3. There is no significant difference in the perception of the respondents on the proposed e-modules.

The study involved fifty-six and ten teachers of Holy Spirit National High School. Stratified random sampling was conducted to represent all 3 courses in Alternative Deliver Mode (ADM) Program. Demonstration and discussion about e-modules were conducted prior to survey-gathering. Two (2) sets of questionnaires were given to the respondents; evaluation tools for the present teaching tools and for e-modules. Data were tabulated and computed values were compared.

Summary of Findings:

The following presents the answer to the questions set forth in the statement of the problem in the Chapter 1.

1. What is the profile of the students in terms of age, sex, course and year level?

1.1 Fifty-six percent (56%) of the students range 15-17, thirty-nine percent (39%) range 18-20, while the remaining five percent (5%) range 21-23;

1.2 Majority of the students are female that is fifty-six percent (56%) of the total student respondents.

1.3 Among the students, fifty-five percent (55%) are in Bread and Pastry, thirty-two percent (32%) are in Foods and Food Service and only thirteen percent (13%) in Technical Drawing.

1.4 Most number of students is in their second year with thirty–six percent (36%), while the least of them are in their fourth year. Both first year and third year levels have twenty-five percent (25%).

2. What is the profile of the teachers in terms of age, sex, and teaching experience?

2.1 Thirty percent (30%) of the teachers have an age range 28-30. Twenty percent (20%) of them have an age range 25-27, 31-33 and 34-36 and above. Ten percent (10%) have an age range of 35-37 while no one age 38-40

2.2 Majority of the teachers are Males, comprising eighty percent (80%) of the total teachers' respondents.

3. How do the respondents perceive the present teaching tools as compared to the proposed e-modules in TLE in terms of program design, lesson efficiency and utilization process?

3.1 Since the computed mean is 3.78 (Program Design: 3.71, Lesson Efficiency: 3.81, Utilization Process: 3.82), the students "Agree" that the present teaching tools are efficient.

4. There is no significant relationship between the perception of students in regard to the present teaching tools and the proposed e-modules in TLE.

CONCLUSION:

The research has attempted to highlight the benefit of using e-modules in TLE subjects on student achievement, based on the principles of social constructivism and activity theory integrated into an online interactive platform. It was found that by implementing a cost-free e-modules approach for students at the secondary level including ADM resulted in improved overall achievement.

The rapid technological advancements that have been seen in the last decade have not been matched by the effective implementation of this technology in teaching to maximize the achievement of learners. To benefit from the latest technologies, there is a need to integrate this with active learning strategies such as cooperative learning to improve student aspects of the interactive module.

Recommendation:

It is proposed that using e-learning modules in TLE subjects especially who are enrolled in ADM as the results have demonstrated a higher level of achievement of students assigned to this learning method.

An approach to designing online learning that is interactive will allow leaners to engage their various senses, learn interactively at their own pace and from others while improving interpersonal and communication skills, with communication tools such as online discussion is vital for instructors to be able to design a more participatory learning environment which maximizes on the outputs of e-learning module.

Further, research however still required to investigate the impact of different e-modules styles on the cognitive preferences and types of learners. The implementation of the cognitive load theory is designing new e-modules may provide some empirically – validated guidelines for developing effective students and contributory citizen to the society.

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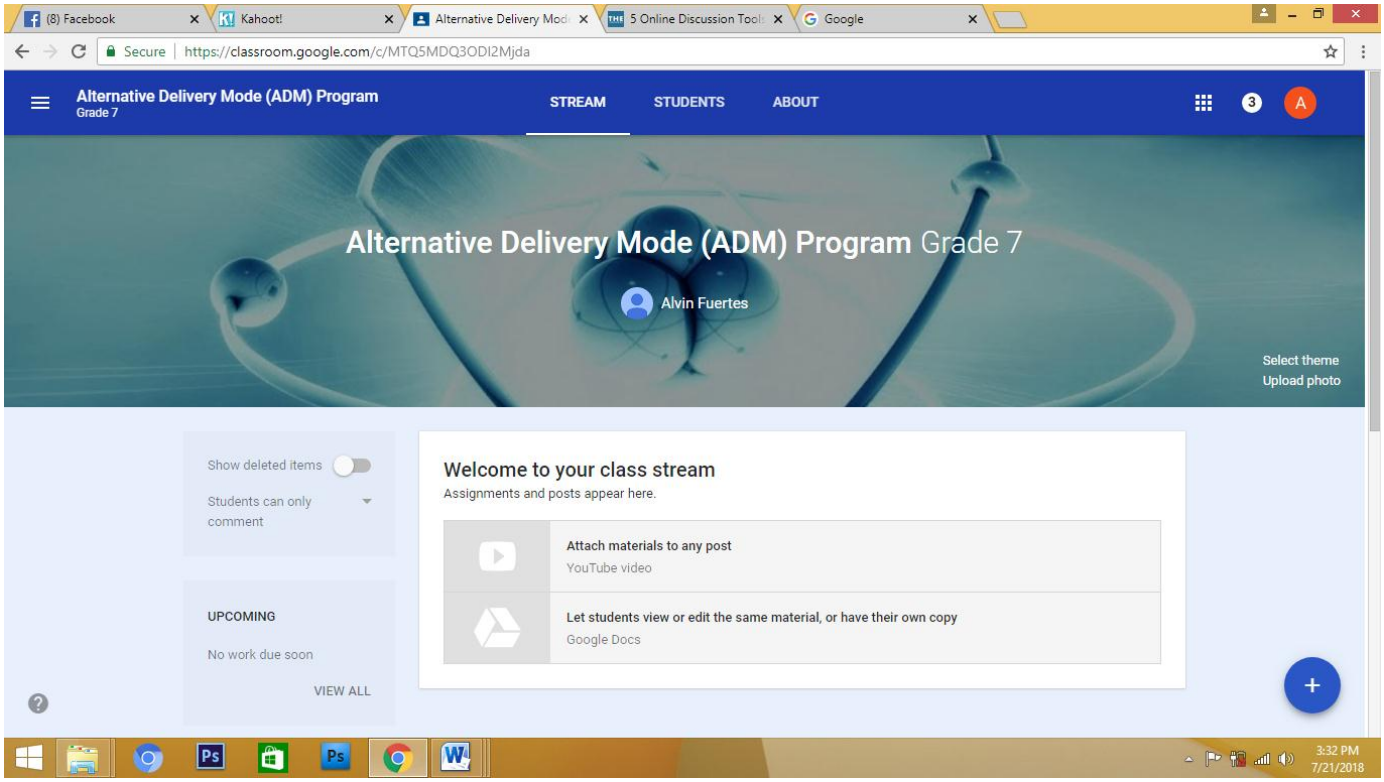
Attachment: **Modules uploaded in Classroom Google**



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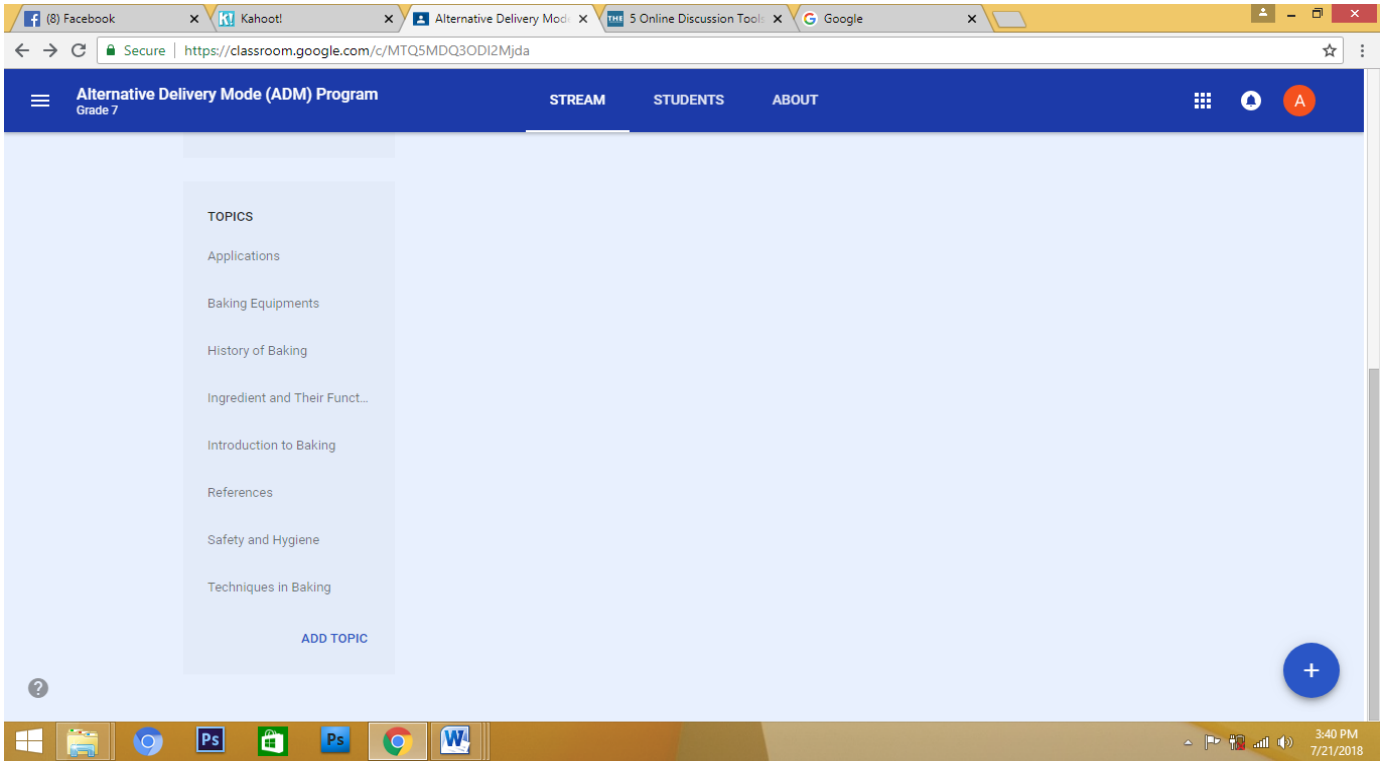

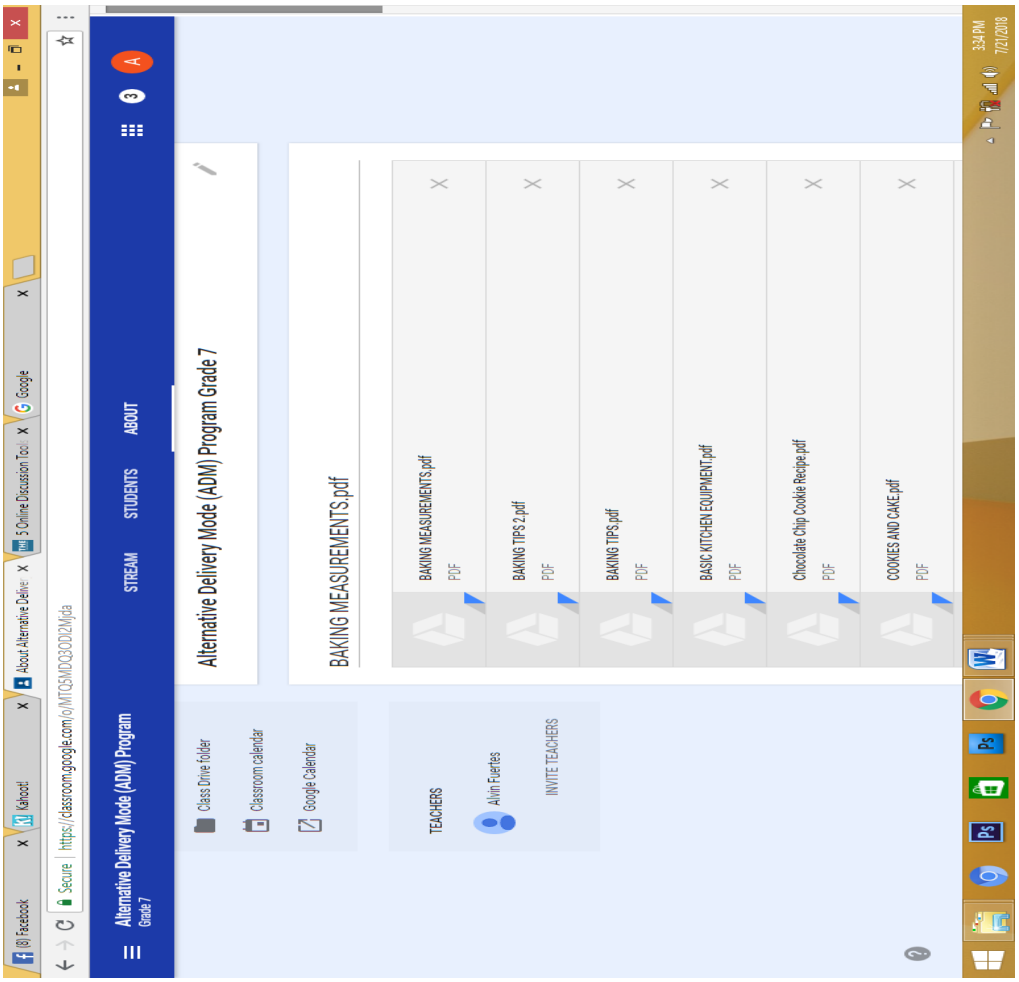

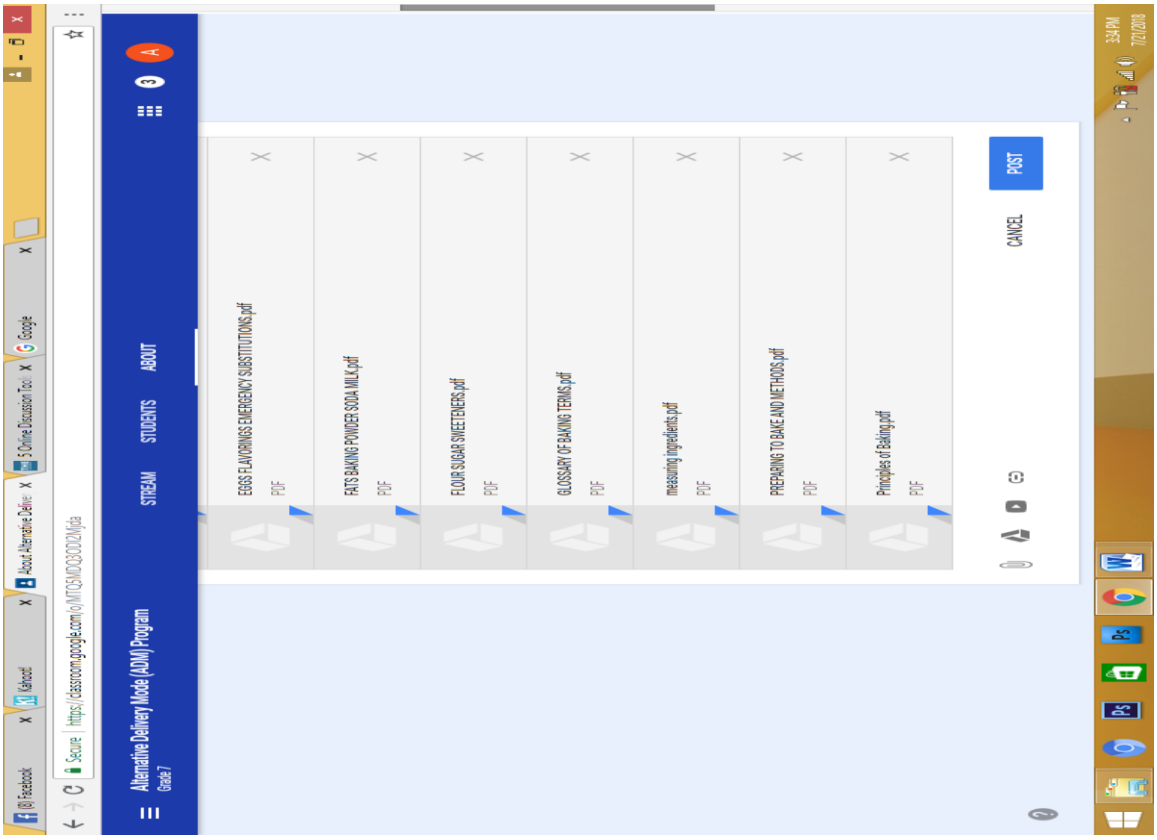
Alternative Delivery Mode (ADM) Program
Grade 7
STREAM
STUDENTS
ABOUT
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FATS BAKING POWDER SODA MILK.pdf
FLOUR SUGAR SWEETENERS.pdf
GLOSSARY OF BAKING TERMS.pdf
measuring ingredients.pdf
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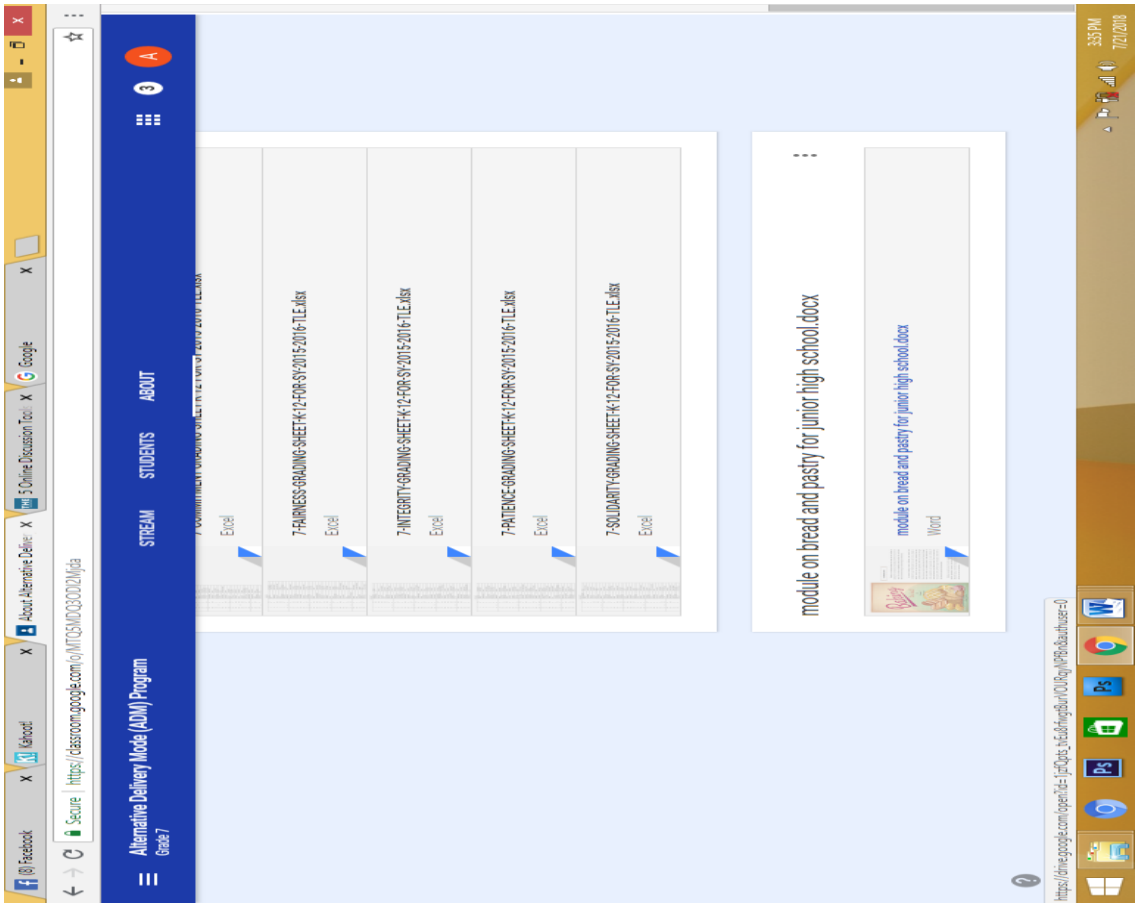
Alternative Delivery Mode (ADM) Program
Grade 7
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STUDENTS
ABOUT
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Excel
module on bread and pastry for junior high school.docx
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