

CBOOK XCESS USAGE ON THE PROCESS OF TEACHING AND LEARNING OF CULINARY ARTS COURSE FOR SPECIAL NEEDS STUDENTS OF LEARNING DISABILITY

¹Mohd Farizan Bin Mohd Saad@Zakaria
Sekolah Menengah Pendidikan Khas Vokasional Merbok
Merbok, Kedah, Malaysia
fariez_79@hotmail.com

Abstract: *Culinary Arts courses based on TVET that are the current choice of students to continue their studies at the secondary school level. Thus, special needs students are also not left behind to continue their studies in this area. The purpose of study is to examine the effectiveness of CBOOK XCESS as a teaching aids during cooking practical classes. This is because of the scarcity of teaching aids in Culinary Arts courses for special needs students in which causes them to have difficulty in remembering and understanding the cooking ingredients, cooking utensils, and the procedure during practical process. The objectives of this study are to look at the effectiveness of CBOOK XCESS as a teaching aids for cooking class session process; Enhancing special needs student's assimilation during the cooking practical session; and Assist in stabilizing emotions of special needs students during cooking practical classes. CBOOK XCESS teaching aids is built from analytical framework, teaching aids design, teaching aids development, teaching aids implementation, and effectiveness evaluation have been used as a design for the development of teaching aid. The participants were eight special needs students with learning disability from SMPKV Merbok, Malaysia. The findings of the study are that the cooking practical session becomes more conducive, the students are more calm and able to continue successfully their cooking practical with the help of the teacher. Therefore, this study will contribute and become useful in the special education world based on TVET.*

Keywords: *Culinary Arts, TVET, Teaching Aids, Special Needs Students, CBOOK XCESS*

1. Introduction

Technical and Vocational Education and Training (TVET) includes formal, non-formal and informal learning that prepare young people with the knowledge and skills required in the world of work. According to the United Nations Organization for Education, Science and Culture (UNESCO), TVET has been called many names over the years – apprenticeship training, vocational education, technical education, technical-vocational education, occupational education, vocational education and training, professional and vocational education, career and technical education, workforce education, workplace education, and others.

No matter its name, the common feature of TVET as defined by UNESCO is that it involves “in addition to general education, the study of technologies and related sciences as well as the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economics and social life”. In TVET, young people have the opportunity to learn from basic to advanced levels across a wide range of institutional and work settings.

Merbok Vocational Special Education Secondary School, Kedah Malaysia (Sekolah Menengah Pendidikan Khas Vokasional Merbok) was officially opened in July 27, 2016 one of channel to pursue a TVET education for Special Education Students in Malaysia. We are offering various of courses to Special Education Needs Students to learn, emphasize in vocational skills, and provide them to nature of industry environment. In recent years the worldwide movement towards integration and inclusion has made special education practices, which aim to facilitate the effective teaching of all special needs students in vocational classes. The appropriate education of

students with disabilities, particularly those with learning difficulties, behavior problems, or mild intellectual disabilities, is now commonly considered the responsibility of classroom teachers (Pearson, 2000; Weishaar, 2001). Today's secondary teachers are expected to be actively involved in the referral and assessment of students, in learning support team meetings, and in the development and implementation of Individual's Education Programs (IEPs) for students with disabilities. This project takes a practical look at IEPs, what they are, why they are developed, and how classroom teachers can program individually and inclusively to cater for the learning needs of all students.

Howard Gardner's multiple intelligence theory reminds teachers that there are many types of learners within any one class. Gardner's research indicates that teachers should aim to appeal to all the different learner types at some point during the course. It is particularly important to appeal to visual learners, as a very high proportion of learners have this type of intelligence. As a teacher, I tried to be helping them with any resources to make them understood. When the idea popped up it was flash card then turned to flash book. As a result, I created innovation project called CBOOK XCESS. CBOOK XCESS is all about cooking book, fully of interactive graphic, clearly instruction of uses and these are simply flash books that display the written word of food preparation. CBOOK XCESS are a handy resource to have and can be useful at every stage of the class. It is bright, colorful and make a real impact on visual learners. They are a great way to present, practice and helping to instruct the students when the teacher cannot accommodate all question and/or demonstrate cooking session to all students in one time.

2. Problem Statements & Project Objectives

The old traditional teacher monopolized instructional method is clumsy and uninteresting to great number of learners. Theoretical instructions by teachers do not promote motivation, interest and mastery of skills that are needed by the learners. In fact, the traditional technique of instruction has contributed to a lot of frustration among students especially, the special education students who would surrender themselves to excessive rote learning and memorization. The application of Dewey's principles of learning by doing (13th July 1995), which is often adopted by teachers, has been fairly helpful in solving the problem. Adoption of activity- based instruction is expected to be more appropriate in enhancing mastery of practical skills in students of vocational and technical education.

So that in this case, I found my special education students:

- May be able to learn information presented in one way, but not in another;
- May have short attention span, be impulsive, and/or easily distracted; May have difficulty telling or understanding instruction;
- May have difficulty following a schedule, being on time, cooking steps, kitchen equipment's man over;
- May confuse food ingredients, such as names of ingredients and/or physical ingredients in order to complete cooking task;
- May have persistent problem with to follow systematic and to organize in order food preparation and production;
- May have difficulty following directions especially multiple directions;

Therefore, a purpose of this study is to examine the effectiveness of CBOOK XCESS as a teaching aids for instructor or teacher during the teaching and learning of cooking practical class. This is because of the scarcity of teaching aids in culinary arts skill courses for special needs students in which causes them to have difficulty in remembering and understanding the cooking ingredients, cooking utensils, and the procedure during the learning and teaching process. The main objective of the study is to look at the effectiveness of CBOOK XCESS as a teaching aids for the learning and teaching process by qualitative and quantitative methods; Enhancing special needs student's assimilation during learning and teaching of the cooking practical session: and Assist in stabilizing emotions of special needs students with learning disability during learning and teaching of cooking practical, especially autism students. The objectives of this study are to seek a better understanding of teaching aids mechanism-based instruction as implemented among my students. Specifically, the study aims to:

- Find the techniques and strategies used in practical lesson delivering in vocational and technical education, especially in practical classes.
- Find problems associated with activity-based instruction in vocational and technical education.

- Developing the most suitable teaching aids to be adopted in enhancing mastery of practical skills in vocational and technical education.

3. Project Methodology

Although vocational education and training is a good option for improving livelihood opportunities for marginalized youth in developing countries, it often suffers from an image problem. This situation affects the quality of entrants, instruction and skills acquisition in training programmers. In this study, the researchers report on results and experiences from a Participatory Action Research (PAR) project initiated to work towards the improvement of vocational education and skills training for trainees. The research project was conducted in class 4 *Penyediaan & Pembuatan Makanan 1* (4 PPM 1), *Sekolah Menengah Pendidikan Khas Vokasional Merbok Cohort 1, 2016-2018*

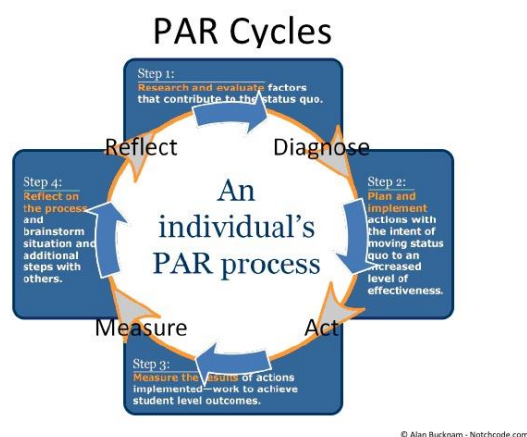


Figure 1: Participatory Action Research Model by Alan Bucknam

CBOOK XCESS give teachers immediate feedback from students, which is extremely useful for teachers and helps them guide which way a lesson should go. The information that the students give is used as a benchmark to measure learning against, which is very useful. The results showed that the project created a change of attitude and class environment on the part of participants towards practical class of Culinary Art course.

CBOOK XCESS is a book bearing information, as words or graphics, on either or both sides, used in classroom drills or in private training. CBOOK XCESS can bear recipe ingredients, selection of right tools and equipment, step by step of methods of food preparing and cooking. CBOOK XCESS started used as a learning drill to aid memorization. They are often associated with spaced repetition, i.e. reviewed at expanding time intervals.

CBOOK XCESS exercise the mental process of active recall given a prompt (the question), one produces the answer. Beyond the content of books, which are collected in decks, there is the question of use – how does one use the books, in particular, how frequently does one review (more finely, how does one practical class review) and how does one react to errors, either complete failures to recall or mistakes? Various systems have been developed, mostly based around spaced repetition –

increasing the time intervals between reviews whenever a book is recalled correctly.

CBOOK XCESS is a more interactive cookery / recipe book, from a recipe list of ingredients to simple and easy-to-understand work and procedures to cook the recipe with real photos of the ingredients and the steps. CBOOK XCESS is placed in front of the practical class and is used by students during the practical class session when they did not understand or forget to implement the practice of cooking are recipes that are taught. Before you begin to format your paper, first write and save the content as a separate text file. Keep your text and graphic files separate until after the text has been formatted and styled. Do not use hard tabs, and limit use of hard returns to only one return at the end of a paragraph. Do not add any kind of pagination anywhere in the paper. Do not number text heads-the template will do that for you

4. Data Analysis

The study was conducted in the practical classroom of Culinary Art course. The practical classroom had a diverse population of students (i.e. different background of learning disabilities, cooking skills and behavioral issues). The practical classroom was staffed by a certified special education teacher and trained industrial practices personnel. The classroom utilized many direct instructions curricular (e.g. math, reading, spelling), which have been shown to be successful for students with learning disabilities (Marchand-Martella et al., 2004; Silbert et al., 2004). The practical classroom was relatively quiet long period till the afternoon when the study was conducted. The classroom could be characterized as having a relaxed classroom atmosphere where students were allowed get up and walk around if they felt the need. The relationships between the students and teacher were quite good. Thus, the students were willing to participate in the instructional format required in the practical classroom.

Through collected data showed students achievement by using the CBOOK XCESS:

Table 1: Checklist of Students and Teacher Observation

No.	Items	Before		After	
		Yes	No	Yes	No
1	Students showed calm during practical session	✓		✓	
2	Students understood to teacher's instruction	✓		✓	
3	Students be able to preforms teacher's instruction	✓		✓	
4	Students be able to performs working paper instruction	✓		✓	
5	Teacher be able to control practical cooking	✓		✓	
6	Teacher be able to focus students individually during practical cooking class session	✓		✓	

Table 2: Performance Marks For Work Assessments And Final Performance Evaluation In Class Of 4 PPM 1 On Fish And Chips Practical Classes Before And After CBOOK XCESS Applied.

BIL	NAMA	JANTINA	W. A1	W. A2	W. A3	W.A 4	PA
1	ILY IZZATIE BT ABDUL RAHMAN	P	66	70	71	93	86
2	MOHAMMAD SYAIFUL AZMI B AZAMUDIN	L	87	84	82	81	91
3	MUHAMAD SHAHRUL AZMI B ADANAN	L	70	78	90	85	88
4	MUHAMMAD FIKRI B SHOFIZAN	L	74	81	86	83	92
5	MUHAMMAD HAIQAL FITRI B ROHIDZAM	L	75	76	71	93	87
6	MUHAMMAD IRFAN B MOHD ALIAS	L	75	80	83	80	89
7	NUR HIDAYAH BT SAZALI	P	76	70	70	76	90
8	PINGGELARUBINI A/P VELO	P	79	73	67	92	89

Legends

	Marks of before CBOOK XCESS applied
	Marks of after CBOOK XCESS applied
	Final Mark

5. Discussion, Suggestion, Implication

The present findings provide additional support for the efficacy of the CBOOK XCESS project. The outcomes provide an additional replication of our previous research (Brasch et al., 2008; Sante Delli et al., 1999; Hayter et al., 2007). In the present investigation, CBOOK XCESS could be successfully employed in a practical class setting. Since almost 50% of the students in special education are diagnosed as learning disabled (Heward, 2008), it is important that the CBOOK XCESS procedures were shown to be effective with this group of students.

Cooking is an incredibly motivating and versatile activity that can be used to teach a wide variety of skills to students with special needs. Cooking is an exciting way to introduce a wide variety of skills to my special students. And who doesn't like food? There are two ways to use a cooking lesson for students with special needs:

- Teaching them how to cook
- Teaching them using cooking

For students with severe special needs, life skills are often a part of their curriculum; the goal is to equip them for independent living. Several distinct skill sets are involved in teaching your students how to cook:

- Understanding kitchen safety
- Understanding cooking vocabulary
- Identifying and using cooking tools
- Reading and following a recipe

- Preparing for and planning a cooking project

When teaching students with special needs to cook, we should follow the same basic principles involved in providing them with instruction in CBOOK XCESS. The basic principles CBOOK XCESS were used to teach special needs children how to cook is task analysis, or breaking tasks into simple steps and explicitly teaching them how to perform each step before putting the steps together. Another principle is utilizing multi-sensory instruction involving as many of the five senses as possible. By its nature, cooking appeals to many senses: pay attention to the instructions used for cooking, providing plenty of visual and auditory cues.

Finally, make sure we are familiar with the individualized goals of our students and tailor cooking instruction accordingly to address those goals. While looking at individual needs, consider the ideas, opinions, and preferences of our students, which will motivate them further to learn to cook. Here we several limitations in the present research. First, we were only able to assess maintenance for a brief period of time. The data collection time period was short due to the completion of the first running of project teaching experience. We were only able to have 3 sessions for practical classes. It would have been

beneficial to have been able to assess maintenance of project effects for the following school year. We required our participants to have three sessions with perfect performance before moving to the next set. It may be that fewer sessions are needed.

References

- Bethany Calderwood. (n.d.). *Teaching Cooking to Special Needs Children*. Retrieved from <https://study.com/academy/lesson/teaching-cooking-to->
- Joanna Budden. (2009). *Using Flash Cards With Young Learners*. Spain: British Council Press. Retrieved from <https://www.teachingenglish.org.uk/article/using-flash>
- Kelly J. Grillo. (2011). *An Investigation Of The Effect Of Using Digital Flash Card To Increase Biology Vocabulary knowledge In High School Students With Learning Disabilities*. unpublished.
- Mann Z, T. W. (2012). The Effects of Direct Instruction Flashcards and Rewards with Math Facts at School and in the Home:Acquisition and Maintenance. *Journal of Special Education Apprenticeship*.
- Odo M.I., A. S. (2012). Enhancing Mastery Of Practical Skills In Students Of Vocational And Technical Education Through Activity Based Instruction. *Journal of Technical Education and Training*.
- Wei, L. &. (2017). *Teacher Training To Increase Teacher's Competency In Teaching Autism Child*. Retrieved from <http://journal2.um.ac.id/index.php/icsar/article/view/339/21>