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Scan and Learn as a Teaching and Learning Tool for Food and Beverage Services in Technical and Vocational Education

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Abstract

Technology and internet have become a huge part in our life, and the usage of QR code is becoming popular nowadays. The innovation of Scan and Learn is developed using the usage of the QR code. An online platform is chosen which is the Wixsites to store the suitable visual aids in food and beverage services education. Scan and Learn is specifically prepared for food and beverages services course which focuses on the procedures needed in preparation of dining area that is called as mise en place, namely the preparation of the guest table, preparation of side table and the napkin folding. With the help of visual aids, the learning process becomes more attractive. It captures the student's interest and attention. Thus, the learning and teaching process is simplified and the students can easily access the link to the website through QR code provided. The origin idea of Scan and Learn arises due to many practical activities involved in food and beverages services course which require the students to perform the tasks according to the established standard, and it is difficult for students to learn without proper visual aids. Thus, the purpose of Scan and Learn is to facilitate teaching and learning in classroom for food and beverage services in technical and vocational education. The product itself is in a small size ID card to make it easy to carry anywhere to get to the visual aids attached online through the use of QR code. The lecturer can effectively guide the students on performing the tasks in food and beverage services with the right technique. It also improves the way students' study. Furthermore, it increases the students' level of understanding in the learning process. Scan and Learn introduces QR code technology in food and beverage services education.

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Key-words: - Food and beverage services, *Mise en place*, QR Code

1. Introduction

The internet has become the most thing people in today's generation are relying on in performing their tasks. The internet is not only about entertainment; it is also useful in many other things as well. Other than internet, other technology such as QR code is also gaining popularity nowadays. QR code which means a quick response code is actually a 2D matrix code, stores large amount of data as compared to 1D bar code and it must be decoded at high speed using any devices like smart-phones. The user scans the code using their smartphones and it directs to them the URLs of pre-established content. In teaching and learning process, QR code may serve as an aid by bringing the information for the users to the pre-developed teaching content.

The QR code is a common things people use in foodservice industry. It is normally used as a payment method during purchasing. But, QR code is not common as a teaching and learning method in foodservice industry. As for food and beverage services education, the visual aids help students to understand the procedures in performing the practical tasks required. Therefore, the researcher decides to create a website that contain videos of one topic in food and beverage services which is the mise en place. In this topic, different types of napkin folding, two types of table setting and how to boxing a table according to specific procedures that are stated in the syllabus is displayed. Not only the website, the researcher also decided to create a flash card that contain those QR code as to make the product tangible.

The second task is table boxing. There are two types of table boxing, which is boxing a table with 3 pieces of table cloth and 4 pieces of table cloth. The last task is table setting. Table setting (laying a table) or place setting refers to the way to set a table with tableware, such as eating utensils and for serving and eating. The arrangement for a single diner is called a place setting. The type of table setting is table setting for a formal fine dining, buffet and so on.

The researcher named this project as “Scan and Learn”. This project is about how to simplify the process of teaching and learning. With this flash card, lecturers need to let the students scan the QR code and watch the video that have been prepared. The right technique is demonstrated in the video with short elaboration that serve as note. It is also can save time from reading many books for one task to simply watch one video for one task.

2. Problem Statement

There is a lot of practical study when learning food and beverage services, so it is a troublesome for a lecturer or teacher to teach their students as there are not many things to aid them in teaching. Furthermore, it is difficult for students to learn without a visual aid. In the learning process, we listen, see and do. With the help in visual aid, the learning process will be more interesting and attractive. It will definitely capture student’s interest and attention. Visual aids assist the students to understand the lecture better and remember the lecture. Therefore, with the help of QR code, of which direct to the attractive video mise en place, the researcher will simplify the learning and teaching process and the students can easily access the link to the website and get the learning process smooth. Furthermore, it definitely can save our time. Thus, the main objective of the project is to develop the visual aids in teaching and learning using QR code for food and beverage services in technical and vocational education.

3. Significant of the Product

It is beneficial to the educators to improve lecture in future which means the process of learning and teaching will be simpler without need to waste their time. Then, the lecturer can teach their students to learn on how to do the task with a right technique. Besides, it is also improve the way students study. It will make it easier on students as it will not waste their time to search one thing from different sources. Then, it will increase the student’s level of understanding in learning process. Scan and Learn also introduces the new technology system that can be linked with a food and beverage services education. It will attract more people to try the new technology as they can learn new things.

4. Literature

Technical and Vocational Educations supply skilled human capital in the food and beverage industry along with other skilful human capital. In food and beverage services, the students learn to manage food and beverage establishments on their own from scratch; prepare food, set up dining area, sell the food and manage the guests. They are institutions in Malaysia that offering Food and beverages service courses such as UPM, UITM, MSU, UMS, UNITAR, BERJAYA and POLITEKNIK.

The study of QR codes in education can be placed in the context of mobile learning. QR codes are not designed in educational terms, however this technology will enhance learning process. QR codes have become widely popular because they provide a large amount of data comparatively quickly. QR codes can contain information such as text, URL links, or other data that can direct users to sources of further information about a particular place or subject. Users with a camera phone equipped with a QR code reader application and Internet connection can scan QR codes to display text, open a web page, get GPS coordinates, or perform some other similar action (Lee et al., 2011). The use of the codes should promote learner-centered learning, not bind teaching and learning to mobile technology (Zhang et al., 2010).

QR technology provides a wealth of benefits for the techno-friendly teacher. Besides the fact that most students own mobile phones that can read QR codes in seconds, they also often have access to laptops in school. Students will not be fazed by a technology that they have probably used outside school already. The impact of interaction on learning cannot be underestimated. The philosophy of social constructivism, for instance, views learning as collaborative and it emphasizes social interaction (Koole, 2009). The social aspect of learning can also be enhanced with QR codes. In the studies by Susono and Shimomura (2006), Chaisatien and Akahori (2007) and Al-Khalifa (2008), students used mobile phones and QR codes to send questions, comments and suggestions to the teacher during the lecture.

5. Teaching and Learning aids: Visual aids

Visual aids arouse the interest of learners and help the teachers to explain the concepts easily. Visual aids are those instructional aids which are used in the classroom to encourage teaching learning process. According to Ranasinghe and Leisher (2009), integrating technology into the classroom begins when a teacher prepare lessons that use technology in meaningful and relevant ways. Developments in technology gave scope for innovative practices in the classroom. Practical improvements in the creation of visual aids for classroom use have been remarkable.

Recent advancements in educational technologies have yielded positive results in our education sector. This new educational technology is supporting both teaching and learning processes and it has increased student's engagement and motivation towards learning (Ramey, 2013). Lastly, using the visual aid in learning and teaching process method stimulated thinking and improves learning environment in a classroom. It will effective when use the visual aids subsists monotonous learning environment. Student can develop and increase personal understanding of the areas of learning when they experience a successful (Khan, 2015).

6. Product Identification

This project is actually a combination between the technology, which is QR codes and the foodservice study in Technical and Vocational Education. An online platform is chosen which is the Wixsites to store the suitable visual aids in food and beverage services education that links with the QR code generated. In this project, the researcher is focusing on food and beverage services with three selected subtopic which is table setting, napkin folding and table boxing. The researcher decided to produce a flashcard which printed the QR code that directs to the selected topic's content in food and beverage services. The material of the card is PVC which is water resistant and believed to last longer. The card is in the size of 86mm x 54mm, which is the same size with the ID card. The packaging of the product is a wallet card holder in black colour. The packaging is plain with the touch of simplicity and elegant. The material of the packaging is mix leather.



Figure 1 Scan and Learn product

7. Conclusion

The researcher has a basic knowledge on the technology and is not proficient in QR code system. Thus, it limits the full potential of the product. However, the researcher is eager to come out with Scan and Learn as to facilitate the practitioners and students in performing the practical tasks required in food and beverage services course specifically during the preparation process, share the correct procedures in napkin folding, table boxing and table setting; put the efforts and learns everything that involved IT in the other web based such as Google and YouTube. The process of producing this product is involved designing the flashcard and making the website which everything is done through the internet. With the limited knowledge on technology, the researcher finally accomplished the objective of the project which is to develop the visual aids in teaching and learning using QR code for food and beverage services in technical and vocational education, focuses on three subtopics of mise en place namely: napkin folding, table boxing, and table setting.

Throughout this project, many progresses have been made on the technology system by using the website and QR Code. Scan and learn is one of the platforms that will facilitate learning and teaching in the classroom. With the flashcard that the researcher has produced, it will help all students and lecturers in teaching and learning process. The product size itself is in a small size ID card to make it easy to carry anywhere. With this product, the researcher is hoping to help others by learning effectively with the help of visual aids which is using the video attached. In conclusion, this study would simplify the education process in classrooms from both lecturer and student's perspective as the learning and teaching process will only being aids by the QR code system with the help of video teaching.

The suggestion and recommendation for the new researcher is to add more subtopic in Scan and Learn for Food and Beverage Services course in Technical and Vocational Education, which does not only focuses on the mise en place topic. There are many interesting subtopic which could be included such as American Service Techniques, Silver Service Techniques, Salad Tossing, Canape Preparation, Fruit Preparation, Chicken Carving, and many more. These potential topics are potential to be included since all of them has the practical activities which require the students to perform according to the established standard. The layout of the content in the websites itself also has room for improvement. Besides that, it is also recommended to switch the tangible element of Scan and Learn to suit the open distance learning style. Scan and Learn is developed before pandemic COVID-19 hit the country, thus, it is developed using both tangible and intangible element as to capture the students interest in class and facilitate the teaching delivery process in physical classrooms. Meanwhile, as for the video recording, the researcher suggests the next improvement to be done is asking or paying the professional to record the video to get the better result and the best resolution.

References

- Al-Khalifa, H. S. (2008) "Mobile SRS: A classroom communication and assessment service", In Proceedings of the international conference on innovations in information technology (pp. 342–346). Al Ain: IEEE
- Chaisatien, P., & Akahori, K. (2007). Demonstration of an application on 3G mobile phone and two dimension barcode in classroom communication support system. In C. Montgomerie, & J. Seale (Eds.), Proceedings of world conference on educational multimedia, hypermedia and telecommunications EDMEDIA 2007 (pp. 3330–3336). Chesapeake, VA: AACE.
- Koole, M.L. (2009). A model for framing mobile learning. In Ally, Mohamed (Ed.), Mobile Learning: Transforming the Delivery of Education and Training (pp. 25-50). Athabasca University Press, Edmonton, Canada.
- Lee "Scan & Learn! Use of Quick Response Codes & Smartphones in a Biology Field Study" <https://files.eric.ed.gov/fulltext/ED557237.pdf> (The American Biology Teacher, 2011)
- Ranasinghe, A. I. (2009) "The Benefit of Integrating Technology into the Classroom", International Mathematical Forum, 4, no.40, 1955 – 1961
- Susono, H., & Shimomura, T. (2006). Using mobile phones and QR codes for formative class assessment. In A. Méndez-Vilas, J. A. A. Solano Martín, M. González, & J. M. González (Eds.), Current developments in technology-assisted education, Vol. 2 (pp. 1006–1010). Badajoz, Spain: Formatex.
- Zhang, B.H. 2010 "Deconstructing and reconstructing: Transforming primary science learning via a mobilized curriculum. Computers & Education" <https://files.eric.ed.gov/fulltext/ED557237.pdf>(Zhang, B.H. 2010)