

The implementation of a bakery sales project during the COVID-19 pandemic to improve the employability of Semai indigenous students

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Abstract During the COVID-19 pandemic, the practitioner and author of this practice in action took the initiative to carry out a piece of action research, by running a bakery sales project with Semai indigenous students. She found that running this project online and remotely was less successful than anticipated, due to the lack of physical proximity and issues with internet connectivity. Thus, in this practice in action, the resulting action research is discussed qualitatively and narratively, asking the following question: how can the practitioner enhance her practice as a special education teacher of Specific Vocational Skills (Bread Making), to improve the employability of Semai indigenous students through a bakery sales project? The bakery sales project not only exposed students to the work environment, but also enabled the practitioner to improve her content knowledge and pedagogy, especially with regard to developing meaningful lessons during the COVID-19 pandemic.

Keywords: Employability; vocational skills; special education; indigenous students

La implementación de un proyecto de venta de panadería durante la pandemia COVID-19 para mejorar la empleabilidad de los estudiantes indígenas Semai

Resumen Durante la pandemia de COVID-19, la profesional y autora de esta práctica en acción tomó la iniciativa de realizar una investigación-acción, mediante la ejecución de un proyecto de venta de panadería con estudiantes indígenas Semai. Descubrió que ejecutar este proyecto en línea y de forma remota fue menos exitoso de lo previsto, debido a la falta de proximidad física y problemas con la conectividad de internet. Así, en esta práctica en acción, la investigación-acción resultante se discute cualitativa y narrativamente, haciendo la siguiente pregunta: ¿Cómo la profesional puede mejorar su práctica como maestra de educación especial de Habilidades Vocacionales Específicas (Fabricación de Pan), para mejorar la empleabilidad de los estudiantes indígenas Semai a través de un proyecto de venta de panadería? El proyecto de venta de panadería no solo expuso a los estudiantes al entorno laboral, sino que también permitió a la profesional mejorar su conocimiento del contenido y la pedagogía, especialmente en lo que respecta al desarrollo de lecciones significativas durante la pandemia de COVID-19.

Palabras clave: Empleabilidad; habilidades vocacionales; educación especial; estudiantes indígenas.

1. Introduction

This practice in action discusses the practitioner's experiences of being a teacher of Specific Vocational Skills (Bread Making) and conducting action research, through qualitative and narrative analysis. The practitioner, who is the first author of this study, carried out a bakery sales project with three Semai indigenous students. The second author of the practice in action is a critical friend of the practitioner, and their role is discussed in the methodology section. A narrative writing style is used because it plays an essential role in describing the action research process in detail. McNiff (2007) and Whitehead (1989) explain that narrative writing and action research are closely interrelated, as they enable the practitioner to recount their experiences of performing actions to improve self-practice. Thus, the use of the term practitioner in this practice in action is adapted to the narrative approach, as suggested by Coghlan and Brydon-Miller (2014), Reason and Torbert (2001), and Stenhouse (1975).

Action research is a process that begins with a survey and evaluation of the past professional practices of the practitioner (McNiff, 2017). Kemmis et al. (2014) explain that the degree of survey and assessment in the initial stage of action research is a vital process for the practitioner to explore concerns, dissatisfactions, or issues in specific situations. Thus, this study begins with the survey and evaluation phase, to reflect on the professional practices of the practitioner, and to identify issues and challenges in the context of self-teaching. A discussion and analysis of the survey and initial evaluation phase discusses three aspects of the practitioner's professional practices, namely: (i) special education and vocational skills, (ii) the context of Semai indigenous students and their employability, and (iii) the teaching of current vocational skills in the COVID-19 pandemic.

2. Issues and problems

2.1 Special education and vocational skills

"Where there is a will, there is a way" is a proverb that means success will not be achieved without desire and determination. This proverb is synonymous with the journey of the practitioner as a special education teacher who strives wholeheartedly to improve her teaching practices, due to not having a specific background in the field of special education. This field involves various categories of students, and it thus presents challenges in providing them with meaningful and contextual teaching (O'Hanlon, 2009). Furthermore, the practitioner is responsible for handling the Specific Vocational Skills subject, a new curriculum introduced in 2017 as part of the Special Education Integration Programme (SEIP) in Malaysia. Vocational skills are part of the special education curriculum, as drafted in the Malaysia Education Blueprint 2013–2025, which seeks to provide alternative access to special education students to develop and diversify their interests and talents (MOE, 2013).

Schools are institutions that initiate the preparation of practical vocational training for special education students, to enable them to adapt to a situation in the workplace in the future (Mohamed Yusof et al., 2020; Zainun et al., 2020). Cannella and Schaefer (2015) also explain that when vocational skills are planned and implemented in school, students are better prepared to enter the world of work. In this regard, MOE, through its Blueprint, has planned to

equip students with skills in line with industry needs. This planning can also be achieved by increasing the employability of vocational graduates to meet the needs of a better workforce (MOE, 2013). An emphasis on planning has enabled the inclusion of groups with special needs, which include indigenous students and other minority groups.

2.2 The context of Semai indigenous students and their employability

This study involved three Semai indigenous students, named Akel, Ara and Titak (pseudonyms). They are special education students in the category of intellectual disabilities defined by the mainstream. Akel and Ara (female) are 15 years old, while Titak (male) is 17 years old. All three of them are from and live in Kampung Orang Asli Chinggung (Chinggung Indigenous Village), Perak, which is located over 15 kilometres from the school. The geography of the village, which is hilly and close to the Titiwangsa Range, means that the indigenous community has limited transportation links. This is one of the factors that influences the presence and absence of Akel, Ara and Titak at school. Furthermore, through the observations of the practitioner, mainstream education is not viewed as important within the community although it does not devalue their own traditions. Wahab et al. (2020) explain that most indigenous communities in Malaysia are not interested in the curriculum taught in mainstream schools, because they believe that the lessons studied provide less job guarantees for the future.

One of the Semai indigenous students, Titak, once talked about something that had been said by the indigenous village community regarding his attendance at school. Titak explained that a small number of Semai indigenous communities are of the view that his attendance at school is not beneficial for his future. This does not surprise the practitioner, because the basic income of a large number of Semai indigenous villagers depends on forest resources and orchards, notably the harvesting of bitter beans (*Parkia speciosa*) and durian fruit (*Durio*). Thus, not much emphasis is put on mainstream education in the community. The villagers' words made Titak feel sad, and less motivated to continue his studies. Talib and Muslim (2007) explain that the low socioeconomic status of indigenous village communities can lead their children to feel inferior and to suffer from self-esteem issues. As such, the Titak story presents a great challenge to the practitioner as a teacher. She thus sought to plan and implement lessons, in an effort to increase the enthusiasm and motivation of Semai indigenous students, not only to continue their schooling, but also to enhance their future prospects.

The Malaysia Education Blueprint 2013–2025 emphasises equality and equity of education for groups with special needs, which includes indigenous students and other minority groups (MOE, 2013). This coincides with the agenda in bridging the education gap for all groups of students to gain access, equity, and high quality education (Marzuki et al., 2014). The equity of education for indigenous students takes into account aspects such as values, and socio-cultural context, which can improve their knowledge, skills and employment opportunities (Abdul Rahman, 2014; Ramli & Dawood, 2021; Schultz, 1961). By introducing indigenous students to the vocational skills curriculum, they are afforded the potential to overcome employability problems. The curriculum needs to be integrated with the values and practices of indigenous peoples (Abdul Rahman et al., 2020). Thus, the provision of an appropriate vocational skills curriculum can further empower and enable the potential of the indigenous community (Wahab et al., 2020).

The Malaysian Special Education School Standard Curriculum (MSESSC), introduced in 2017, emphasises the vocational skills curriculum for all students with special needs, as they transition to a career (Zainun et al., 2020). The vocational skills curriculum aims to increase the employability of students (Ali et al., 2018; Fatima, 2016), especially rural students and other minority groups, including indigenous peoples. Based on the observations of the practitioner, Semai indigenous students lack core abilities, which makes it difficult for them to get a job after school. Among these core abilities include interpersonal skills, which provide added value and can enhance the employability of a person, as well as his/her quality of life (Levin, 2015; Mohamad Sattar et al., 2009; Mohamad Sattar & Puvanasvaran, 2009; Yusof et al., 2012). The core competencies, as contained in the National Competency Standards, consist of: (i) communication applications, (ii) personal behaviours, (iii) workplace culture, and (iv) behavioural adaptation to the environment, health and safety procedures (DSD, 2015, p. v).

2.3 Teaching vocational skills during the COVID-19 pandemic

During the COVID-19 pandemic, the practitioner was less successful than usual in online teaching, due to the lack of face-to-face contact and issues with internet connectivity, as was also experienced by other vocational skills teachers (Ab Rahman et al., 2020; Ishak & Mir Ahmad Talaat, 2020; Syauqi et al., 2020). The teaching of vocational skills usually needs to be conducted face to face as it involves practical training (Nasir et al., 2014). At the initial stage, the practitioner made attempts to implement online teaching with students using the WhatsApp application as a communication tool (Balasundran & Awang, 2020; Hairia'an & Dzainudin, 2020). Ara and Titak have personal mobile phones, while Akel uses her mother's mobile phone. Through WhatsApp, the practitioner distributed Google Forms links to students to create exercises and quizzes. In addition, she uploaded a video to the YouTube site to provide tutorials for students on how to make doughnuts.

Through online teaching methods, the practitioner expected the students to do the assigned tasks. However, the expectation of the practitioner failed when the students did not respond in regards to the assignments distributed via WhatsApp, with the exception of Ara, who stated that she did not know how to open the video links and quizzes through the Google Forms application. Although the students had been given tutorials on how to use the application, the practitioner found that they were unable to access the exercises and quizzes, because Internet access in their home areas was very poor. The same thing happened with the video tutorial on the YouTube site. Thus, the practitioner expected the students to not be able to access the video, let alone practice their vocational skills at home. It is also worth noting that poor Internet access not only occurs in the context of Semai indigenous students, but also students in higher education institutions in Malaysia (Mohamad Nasri et al., 2020), and thus alternative solutions must be found.

Although there are challenges in implementing online teaching (Efriana, 2021), the practitioner was still working hard to implement vocational skills teaching with Semai indigenous students using other mediums. She made an extra effort by visiting the students in their homes to try and solve the problems they faced related to Internet access. Although the practitioner had provided Internet access to students using different Internet providers, the Internet access in their village area was still found to be weak (Mohd Shafie, 2020). The

practitioner thus concludes that online teaching cannot be conducted with Semai indigenous students. A situation like this makes the practitioner frustrated as a teacher, because, at first, her efforts to provide vocational skills lessons for Semai indigenous students during the COVID-19 pandemic were unsuccessful.

These issues also made the practitioner aware that the teaching of vocational skills needs to be implemented practically and face to face, in order to guide students to carry out vocational skills tasks such as making bread, particularly when involving special education students who lack technological literacy. The teaching of vocational skills not only involves skills related to physical activity but also includes communication application skills, communication behaviours, work culture and behavioural adaptation to the environment, as well as knowledge of health and safety procedures. These challenges made the practitioner ask the following question: what is the best strategy that can be adopted to enable the teaching of vocational skills to continue during the COVID-19 pandemic?

3. Focus of the study

This action research study begins by reflecting on the issues, challenges and concerns of the practitioner as a special education teacher, thus extending the discussion in the previous section. First, as a teacher who does not have a specific background in the field of special education, let alone vocational skills, the practitioner realised the importance of improving her professional practice in both areas, especially in terms of content knowledge and pedagogy. She made a particular effort to enable vocational training to be implemented practically for special education students in their preparation for the world of work.

Second, in the context of the practitioner's professional practices, Semai indigenous students are also part of the Special Education Integration Programme (SEIP). The practitioner is concerned with Semai indigenous students, as they lack self-confidence which can affect their chances of getting a job after school (Abdullah et al., 2018; Bala & Tan, 2021; Shah et al., 2018). In addition, the indigenous community, which emphasises culturally inclusive education, presents challenges to the practitioner in educating their children. The study recognised the importance of equity education for indigenous students, and hypothesised that the intervention would increase the employability of Semai indigenous students. Therefore, the practitioner realised that the application of vocational skills should be in line with the students' values and socio-cultural aspects.

Third, during the COVID-19 pandemic, various challenges were presented in implementing online and remote teaching and learning. Apart from the problem of poor Internet networks in the Semai indigenous village area, the practitioner also realised that the implementation of vocational skills teaching is less suitable for online and remote learning contexts. Furthermore, Semai indigenous students do not have the tools and equipment required to carry out tasks such as making bread in their own homes. Basically, vocational skills need to be implemented practically with full guidance from the teacher, particularly when this involves special education students.

The practitioner carried out this action research to further reflect on improving her professional practice as a teacher. Her involvement in a critical friend group was part of the

support system that led to the success of this action research. In the initial stage, the practitioner shared issues, challenges and concerns in terms of professionalism and teaching approaches with critical peer groups. As a result of brainstorming with the group, the practitioner came up with ideas and interventions to overcome the issues and challenges faced. She also read previous studies based on work-based learning (see Ahmad et al., 2020; Mohamad et al., 2021; Mukhtar & Ali, 2018; Musset, 2019) to develop interventions for this study.

The action research intervention used was a bakery sales project carried out with Semai indigenous students during the COVID-19 pandemic. Thus, this practice in action asks the following research question: how can the practitioner enhance her practice as a special education teacher of Specific Vocational Skills (Bread Making), to improve the employability of Semai indigenous students through a bakery sales project? This question will be explored through a qualitative and narrative analysis, as will be described in further detail in the below methodology section.

4. Methodology

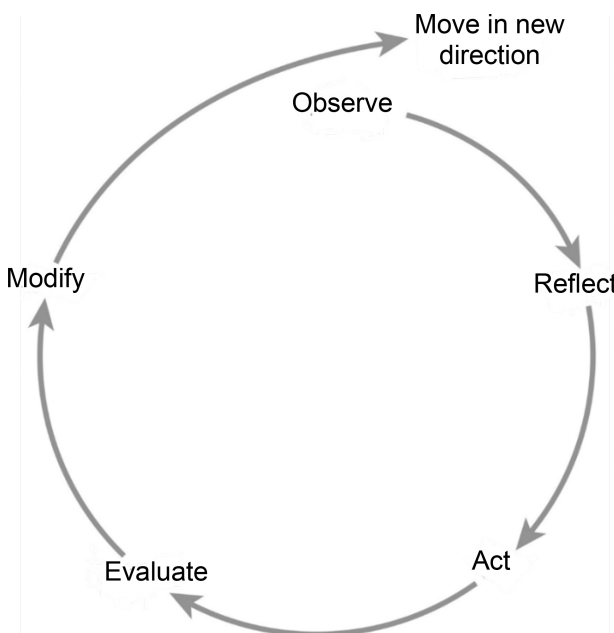
4.1 Study design

This study employed an action research model developed by McNiff (2017), known as the action-reflection cycle. This involved the process of observing, reflecting, action, evaluating, modifying and subsequently planning new actions (see Figure 1). The use of action-reflection cycles in this study helped the practitioner act as a researcher in an effort to develop new practices, knowledge, ideas and theories (McNiff, 2017). Based on this model, at the beginning of the study, the practitioner made observations on past teaching practices, especially during the COVID-19 pandemic, and then reflected on how to improve her practice as a Special Education Teacher for Specific Vocational Skills (Bread Making) by planning a bakery sales project with Semai indigenous students. Later, the practitioner acted by conducting and evaluating the project. As a result of the evaluation, the practitioner modified the method of conducting the bakery sales project by planning new actions. In this study, a total of two action-reflection cycles were implemented, which referred to the double implementation of the bakery sales project.

4.2 Methods of data collection and analysis

In general, data collection is an important process that involves collecting, gathering and defining information obtained from the field to enable a practitioner to answer research questions and to deal with issues. In action research, data are collected systematically to help a practitioner to make an assessment through personal experience (Feldman et al., 2018). The data collected in this study included doughnut preparation, marketing and sales lesson plans, a student's ledger, video and photo recordings. Doughnut preparation, marketing and sales lesson plans are data to show how the practitioner planned interventions through a bakery sales project. Video and photo recordings are observational data, which offer an important source of evidence in support of action research writing (McNiff & Whitehead, 2012). During

Figure 1: A typical action-reflection cycle (McNiff, 2017, p. 12)



the intervention, the practitioner recorded the implementation of the bakery sales project through video recordings and photos, and also by collecting student business record books to enable the purpose of reflecting on and evaluating the projects implemented.

The data collected from this study, especially while planning, implementing and evaluating the bakery sales project, were analysed narratively. Narrative analysis was chosen because such an analytical approach allows the practitioner to narrate their own lives and experiences (Esin et al., 2014). In addition, narrative analysis allows the practitioner to understand complex social relationships in a diverse way, through their storytelling. In this study, the practitioner engaged in a narrative analysis process that began by structuring the storytelling descriptively based on the research questions and issues raised during the study. The results of the narrative analysis are presented in chronological order. As suggested by Mills et al. (2012), narrative narration articulates the whole structure of a study and how it has been planned, implemented and evaluated. One of the important purposes of narrative analysis in this study was to provide a chronological explanation of how to improve the practice of the practitioner as a teacher of Special Education Vocational Specific Skills (Bread Making), in order to improve the employability of Semai indigenous students through a bakery sales project.

4.3 Critical friend group

In the action research literature, a critical friend is widely defined as a trusted person who ask provocative questions, provide data to be examined through another lens, and to offer a critique of a person's work as a friend (Campbell et al., 2004; Costa & Kallick, 1993). Critical

friends are important in action research, as they help to identify the focus of the study, plan actions, collect and analyse data, as well as reflect on the process during discussions (Coghlan & Brydon-Miller, 2014). Thus, this study was conducted through the support and assistance of critical friends, which in turn built its credibility. This approach coincides with McNiff's (2017) work, which highlights that action research requires at least one or two individuals acting as critical friends. During the study, the practitioner was guided by a group of teacher educators to identify issues, plan interventions and evaluate their implementation. The practitioner was also involved in a group of critical friends, i.e., fellow teachers who jointly conducted action research. Other critical friends of the practitioner consisted of fellow teachers of special education and business subjects, who also provided critical views from the beginning of the study. Herr and Anderson (2014) explain that critical friends are also part of the dialogue validity of action research, which provides alternative interpretations of the data and processes involved in the study.

Following Mat Noor and Shafee's (2021) critical friends protocol, the practitioner engaged with a critical friend group by attending a virtual meeting once a week for the duration of the study. In the beginning, the members of the group guided the practitioner in reflecting on her previous teaching experiences, for the purpose of clarifying issues and problems. They posed questions about the practitioner's teaching practice by encouraging her to engage in self-inquiry. In the process, she asked herself questions such as: What does the practitioner do? What tools does the practitioner use? Do students understand the material after performing assignments? How does the practitioner implement teaching? These questions led the practitioner to reflect on issues and problems in her past teaching and learning experiences. Based on the reflections, the practitioner was able to focus on some crucial aspects of the study, particularly the issue of the employability of Semai indigenous students.

This study encouraged the practitioner to be more critical in systematically planning, reflecting on action, and evaluating professional practice. The critical friend group played an essential role in validating every action taken as part of the study. To be clear, the practitioner's critical friends validated the core abilities demonstrated by the students, such as communication and personal behaviours while conducting a bakery sales project. In addition, the evaluation process allowed critical friends to evaluate and challenge the practitioner in making self-assessments and provided a justification for each intervention activity undertaken. This assessment helped the practitioner to make adjustments in the following intervention, for example, the use of ledgers used in the next cycle as a medium for teaching about cost calculation. The role of critical friends did not end there; their guidance was also sought for the documentation of this action research in the form of narrative writing and a review to ensure every detail was relevant (Katsarou & Tsafou, 2016).

4.4 Students as co-researchers

The participating students involved in this study were not treated as data sources, but as active participants or co-researchers (Groundwater-Smith & Mockler, 2016) who helped the practitioners conduct the bakery sale project (Salazar, 2021). The students adopted these roles by providing suggestions and ideas for the duration of the project. Although in the beginning the practitioner found that it was quite challenging to get students to participate in providing opinions and views, she kept providing encouragement and the opportunity for the students to

talk and express their ideas (Yonezawa & Jones, 2009). The practitioner realised that students' voices and suggestions were influential in improving her teaching practices (Bland & Atweh, 2007), as well as shaping the project's activities (Hall, 2017).

In the study, the practitioner allowed students to provide ideas, which were used when carrying out the activities for the bakery sales project. In Step 1, Titak suggested that the project should use durian fruit as a doughnut filling. In response, he voluntarily obtained durian from his grandfather's orchard for the doughnut preparation. In Step 3, Akel and Ara bought all the ingredients and tools needed from a local bakery shop for the doughnut preparation. They also provided suggestions during the selection of the doughnut packaging box. In Step 4, students suggested a shooting location in their village to produce a poster for marketing purposes. In Step 5, Titak offered ideas for improving the recipe by reducing the amount of sugar in the preparation of the durian filling. In Step 11, the students evaluated the quality and quantity of doughnuts provided by offering critical feedback among themselves. Students also gathered and considered customers' feedback, which significantly improved the subsequent bakery sale project in Cycle 2. In Step 12, students themselves generated a marketing and sales report using a ledger.

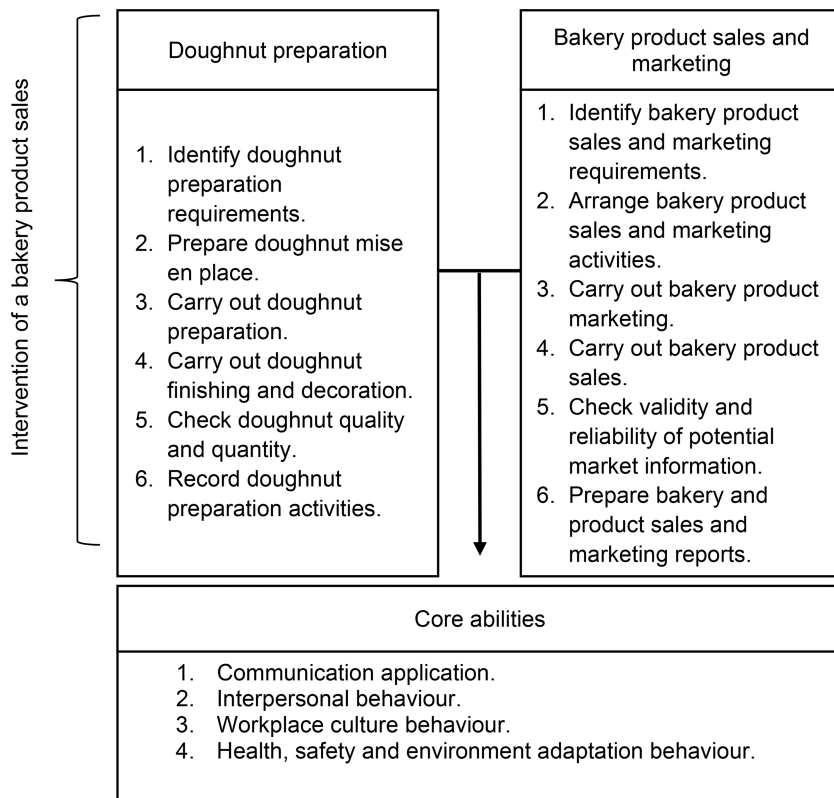
4.5 Study intervention through a bakery sales project

As explained at the beginning of this practice in action, among the main challenges faced by the practitioner as a special education teacher for vocational skills included preparing Semai indigenous students to develop core abilities, as contained in the National Competency Standards (DSD, 2015). Core abilities consist of: (i) communication applications, (ii) personal behaviours, (iii) workplace culture, and (iv) behavioural adaptation to the environment. Health and safety are also important job skills that are essential to improving the employability of students (Anthony et al., 2015).

Thus, these core capabilities were the backbone of the main objective for implementing the bakery sales project in this study. The objective was to enable Semai indigenous students to gain the basic job skills needed for the improvement of their quality of life. This is significant because the poverty rate of Semai indigenous people is still at a critically high level (Dentan, 2001; Mohd Harun et al., 2006). The emphasis on basic job skills is very important for Semai indigenous students, to enable them to "*duduk sama rendah, berdiri sama tinggi*" – a Malay proverb which literally means "sit equally low stand equally high" – with the community outside of their indigenous village.

The bakery sales project intervention, which combined two vocational skills subject syllabi, was developed to enable the practitioner to apply the basic job skills required by Semai indigenous students. The "doughnut preparation" and "marketing and sales" metrics used are based on the National Occupational Skills Standard (DSD, 2011). These two metrics are combined to achieve employability objectives through the core competencies outlined in the National Competency Standards (DSD, 2015), as shown in Figure 2.

Figure 2: The framework of intervention through the combination of two measures to enable core competencies to be achieved by students (as adapted from DSD, 2011; DSD, 2015).



5. Findings and discussions

The findings of this study are discussed in a narrative to answer the research question, namely: how can the practitioner enhance her practice as a special education teacher of Specific Vocational Skills (Bread Making), to improve the employability of Semai indigenous students through a bakery sales project? Through an intervention framework that combines two vocational skills subject syllabus, namely doughnut preparation, and marketing and product sales, the practitioner planned a bakery sales project through the implementation of twelve key steps, as shown in Figure 3. The study was conducted in two cycles, referring to two separate implementations of the bakery sales project. The project was implemented twice to enable the practitioner to reflect on and improve her practice as a teacher of Specific Vocational Skills (Bread Making). This resonates with the main purpose of action research, namely, to improve the practice of a practitioner (Carver & Klein, 2013). Therefore, the findings and discussion of

this practice in action emphasise the comparison between the bakery sales projects carried out in the first and second cycles.

Figure 3: Steps in the implementation of a bakery sales project

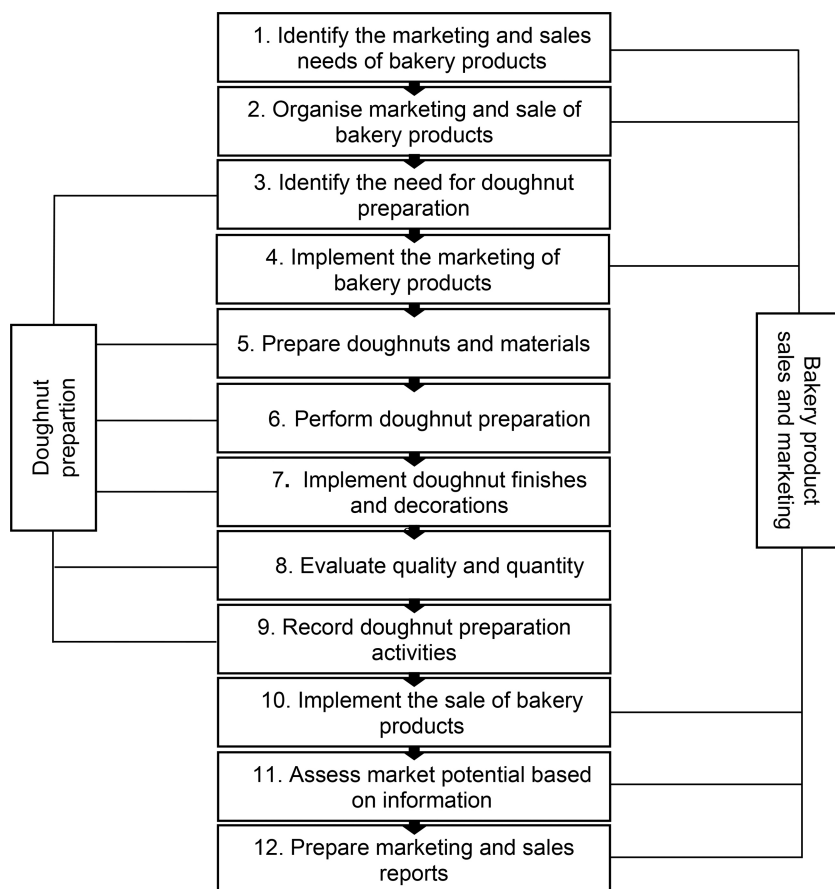


Figure 3 shows the steps involved in implementing a bakery sales project. Steps 1, 2, 4, 10, 11 and 12 relate to product marketing and sales metrics, while steps 3, 5, 6, 7, 8 and 9 relate to doughnut preparation metrics. The combination of these two vocational skills subject syllabi aims to achieve core employability, which is the objective of the implementation of the study intervention. Through this integration, that is, through the bakery sales project implemented within a day, the practitioner could include the learning of students who were delayed due to the COVID-19 pandemic. Thus, the bakery sales project is an alternative initiative that can be successfully carried out during this period. The planning carried out is in line with the curriculum alignment recommended by the MOE (2020), to ensure the continuity of student learning during the COVID-19 pandemic. Curriculum alignment is the reorganisation of pedagogical content and assessment based on the desired learning outcomes, to meet the specific needs of the subject in any situation (MOE, 2020).

Step 1: Identify the marketing and sales needs of bakery products

The practitioner emphasised the importance of identifying the marketing and sales needs of bakery products to the students. This project was carried out during the durian fruit season in Malaysia. Durian fruit is one of the sources of income of Semai natives, due to the geographical form of the area, which is rich in forest products and orchards (Howell et al., 2010). The sale of durian fruit is also a major source of income for parents of Semai indigenous students. Because the marketing and sales needs of a product must take into account the demographics of the place (Adnan et al., 2020), the practitioner suggested to students that they could produce and sell durian-based doughnuts in the first and second cycles. One of the students, Titak, supplied durian fruit obtained from his grandfather's orchard, and the cost of the durian fruit was paid to him based on the current market price. The practitioner also stated that durian-based doughnuts are a market necessity, a perspective that gained acceptance among the students during this project. At the same time, the practitioner wanted to show students that durian fruit can be diversified in terms of sales to get a higher profit than through natural resources alone.

Step 2: Organise marketing and sale of bakery products

In the first cycle, the project was not systematically planned, leading the practitioner to be less prepared to carry out the planned activities with the students. Thus, in the second cycle, the practitioner improved the implementation of the project by organising doughnut preparation and marketing activities as well as the sale of bakery products. Due to the fact that the project carried out had to be completed within a day due to the time constraints imposed by the COVID-19 pandemic, a careful planning schedule was required. The planning schedule included taking students from their villages to the practitioner's home, purchasing doughnut preparation materials, making photographic recordings for promotional purposes, producing digital posters, promoting bakery products on social media networks, calculating material costs, making doughnut kernels, preparing doughnuts, preparing to package, executing sales, and calculating the sales profit and loss incurred. Organised project planning helped the practitioner to be more prepared in carrying out planned activities with the students. She was aware of the importance of structured planning in a lesson that included aspects related to management, implementation and evaluation (Hashim & Ahmad, 2007). In addition, through structured planning, the practitioner not only hoped to achieve the teaching objectives that had been set out, but also to introduce students to working hours that started at nine in the morning, continuing until five in the afternoon.

Step 3: Identify the need for doughnut preparation

In contrast to the first cycle, the practitioner took the students to the bakery in the second cycle to buy doughnut preparation materials such as flour, sugar, yeast and packaging containers. During the process of dealing with the seller, the practitioner found that the students were reluctant to ask about how to get ingredients such as sugar, flour and yeast. This feeling of shyness was due to social gap of culture and language (Salleh & Ahmad, 2009). Salleh and Ahmad (2009) also explain that the gap between the indigenous community and the outside

community is due to the indigenous community's lack of exposure to mainstream education. Thus, the practitioner guided the students with methods they could use to communicate with sellers. They then asked the sellers how to get the necessary ingredients. In the context of the application of these communication skills, the practitioner found that the teacher plays an important role in increasing students' confidence, and in enabling them to become accustomed to interacting with communities outside of their own.

Step 4: Implement the marketing of bakery products

During the first cycle, the practitioner did not emphasise or teach about marketing practices. However, he subsequently realised that this action was not very helpful to the students, as they needed to know how to market a business. Thus, in the second cycle, the practitioner involved students in implementing the marketing of bakery products. Students were guided to produce digital posters as doughnut advertisements, which they then marketed through social media networks, namely Facebook and WhatsApp (Nordin & Lada, 2019). Digital posters (see Figure 4) produced by students emphasised the use of appropriate graphics to attract customers and to provide enough information to enable them to make reservations. The digital posters were uploaded to Facebook pages and WhatsApp applications. Thus, this was an important step to expose students to strategic marketing methods, which could be used to market the results of their bakery products.

Figure 4: Digital poster used to promote doughnuts through social media networks



Step 5: Prepare doughnuts and materials

Based on the proceeds from the sale of doughnuts in the first cycle, students received feedback from customers that the doughnuts were sweeter and less filling than those sold in other stores. The practitioner explained to the students that the feedback received from customers was very important to consider in order to improve the quality of doughnut preparation in future sales. Prior to the second cycle, the practitioner also attended online doughnut-making classes to improve her knowledge and skills in doughnut making. Following that, in the second cycle, the practitioner encouraged students to experiment with doughnut-making recipes to facilitate their further learning. Students were guided to prepare doughnut preparation tools and materials covering the process of weighing, measuring and categorising materials. This process offered an initial preparation of tools and materials, better known as “*Mise en Place*” (French term). *Mise en Place* aims to ensure that the task of preparing tools and materials is carried out in an orderly, professional and organised manner to facilitate and ensure quality during the cooking process (Fisher & Louw, 2020).

Step 6: Perform doughnut preparation

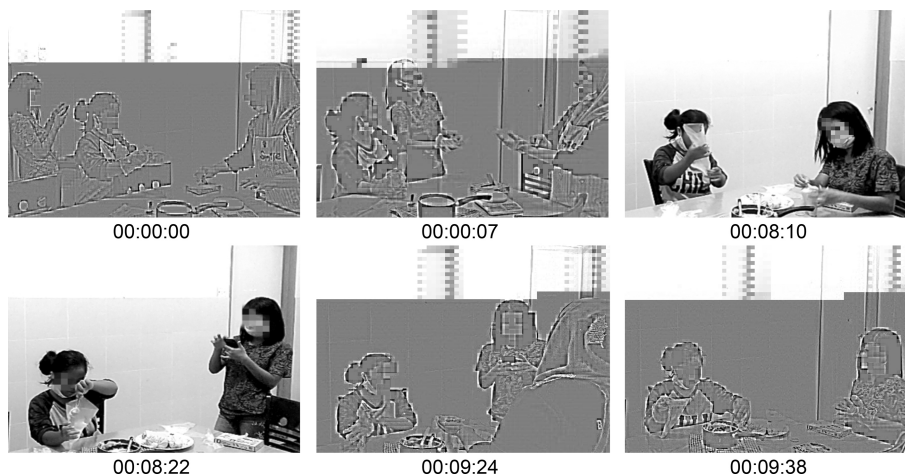
Students were guided to perform doughnut preparation. The implementation of doughnut preparation involves the process of mixing, kneading, expanding, forming dough and frying. This process takes a long time and needs to be done in stages. While running the project in the first and second cycles, the practitioner found that teamwork culture was necessary in order to perfect the process. In the second cycle, in particular, the practitioner emphasised the culture of teamwork to students, as it is part of the cultural element of behaviour at work, and the backbone of an organisation in the workplace (Shukor et al., 2020). Students were always reminded to complete the assignments given in groups while carrying out each doughnut preparation process. The practitioner also reminded students to help each other and to perform tasks diligently in the workplace.

Step 7: Implement doughnut finishes and decorations

During the first cycle, the practitioner guided the students on how to insert the durian filling into the doughnuts, and to make an outer finish. The process of implementing the finishing and decoration of doughnuts was not only focused on the activity of filling the doughnuts alone. Rather, it also enabled the practitioner to monitor the quality of the finish and decoration carried out by the students. Figure 5 shows the video recording suction during the process of inserting the doughnut core into the piping bag. At 00:00:00, the practitioner found that Akel was using a mobile phone, while Ara was focused on doing the task. The practitioner expected Akel's behaviour to be temporary. Therefore, she did not criticise Akel's actions at that time. At 00:00:07, the practitioner explained the importance of hygiene to the students, by wearing gloves before starting the assignment. During the second cycle, the students were found to be more adept at inserting the doughnut filling into the piping bags, as shown at 00:08:10. The practitioner found that the students' existing experience during the first project gave a slight advantage when implementing the project in the second cycle. At 00:08:22, Akel once again used her cell phone in the absence of the practitioner. Akel's less focused be-

haviour in carrying out this task led the practitioner to reprimand him, as shown at 00:09:24. As a result of the reprimand, Akel apologised and resumed the assignment at 00:09:38. The video recording analysis was presented as part of the efforts of the practitioner to apply core abilities through an emphasis on using personal behaviours to enable students to adapt to real work situations.

Figure 5: Video recording during the process of performing doughnut finishes and decorations, as well as observations on Akel's behaviour



Step 8: Evaluate quality and quantity

Students were guided to evaluate the quality of doughnuts in terms of shape, texture, aroma, colour, and flavour. They were encouraged to market doughnuts that looked interesting and appetising. In the second cycle, the practitioner placed more emphasis on the core abilities of behavioural adaptation to the environment, and health and safety procedures. As a result of the reflection from the first cycle, the practitioner realised that aspects of the core competencies needed to be emphasised to the students in each project implementation process. Following that, in the second cycle, the practitioner encouraged students to always clean the kitchen space, and wash their hands before, during and after performing an activity. The practitioner also emphasised that this would be the situation in the workplace later; they thus needed to maintain a clean work environment at all times.

Step 9: Record doughnut preparation activities

During the first cycle, the practitioner did not emphasise the aspect of recording doughnut preparation activities. This process aimed to monitor the development of operations and the efficiency of students performing tasks. The practitioner was aware that students needed to be exposed to methods for recording doughnut preparation activities. During the second cycle, the practitioner explained orally the doughnut preparation tasks that needed to be performed according to the six rules of doughnut preparation work activities. She did this without the aid

of a written record. Thus, she planned to improve the process of recording activities for future projects using written records. The process offered a guide for students in implementing bakery sales projects using checklists, and detailed procedures related to job descriptions, personal hygiene and attitudes, safety, cooking techniques and product results. These aspects can also be used as data for the practitioner to reflect on how to guide students to be able to perform tasks efficiently and to be prepared to apply these skills in the workplace.

Step 10: Implement the sale of bakery products

The practitioner guided the students in carrying out the sale of bakery products. In the initial stage, the students stated that they felt embarrassed to send the resulting doughnut order to the customer's residence. In the same situation as in the third step, feelings of shyness and lack of self-confidence are common among Semai indigenous people when they are faced with a community outside their village (Mustapha, 2020). In the first cycle, the practitioner did not offer enough guidance to the students on how to deal with customers. Realising this, in the second cycle, she highlighted to the students that customers are an important part of the business. The practitioner also guided students on the ethics of selling products, including how to communicate with customers, by greeting them, introducing themselves, stating the product name and total price, as well as the number of durian doughnuts required, returning the balance, and thanking the customer. In addition, the students were also reminded that on the first bakery sales project, they had earned a profit from the sales carried out, and that profit was part of their salary. Therefore, students were encouraged to develop tools for increasing their self-confidence, to enable the sale of bakery products to be implemented outside their community.

Step 11: Assess market potential based on information

After the durian doughnut sales implementation activity, the practitioner guided the students on how to assess the market potential based on the feedback given by their customers. This step had not been emphasised during the first cycle. Thus, in the second cycle, the practitioner guided students to make an assessment of their products' market potential based on the feedback given by customers through the WhatsApp application. Students asked customers about the doughnuts that had been sold in terms of the quality of the core flavour and their texture. The practitioner found that the students were able to communicate well with the customers virtually. In addition, the practitioner emphasised that the purpose of assessing market potential is to improve sales in the future, in terms of product quality, potential sales locations, and attracting new customers. Thus, based on the first and second cycles, the practitioner found that the teacher can diversify the methods used in guiding students, to make an assessment of the sales they implement.

Step 12: Prepare marketing and sales reports

The practitioner guided students to prepare marketing and sales reports. In the first cycle, the doughnut sales carried out by students gained a satisfactory profit. However, an emphasis was

not placed on developing a report based on the calculation of profit and loss because the practitioner lacked knowledge related to the basics of business. Thus, before conducting the second cycle, the practitioner asked a critical friend who is a business subject teacher regarding the method of calculating capital, material costs and sales profit and loss. The teacher suggested that the next project implementation should use a ledger. Thus, in the second cycle, the practitioner guided the students to write the sales report into the ledger, as shown in Table 1. However, the students still did not understand the calculation of material costs and gross sales, or the calculation of profit and loss, even though the practitioner showed them these aspects, one step at a time using a ledger. The practitioner is of the view that this is because they did not have the basic knowledge and skills of accounting to make sales reports. Furthermore, he had never guided students to use ledgers in previous lessons. If students were to become accustomed to business reporting activities through future bakery sales projects, the practitioner is confident that they would have more understanding and be more proficient in using ledgers.

Table 1: Excerpts of doughnut ledger books during the first cycle, produced by Ara

| Date | Details | Debit | Date | Details | Credit |
|---------|--|----------|---------|-----------------------------|----------|
| 20 June | Gross profit (60 doughnuts x MYR 1.50) | MYR90.00 | 20 June | Durian filling ingredients | MYR15.00 |
| | | | | Donughnut dough ingredients | MYR27.00 |
| | Debit-credit (net profit) | MYR48.00 | | | |
| | Total | MYR42.00 | | Total | MYR42.00 |

Overall, through the implementation of the project in the second cycle, the practitioner found that Akel, Ara and Titak were becoming more skilled in preparing doughnuts and making donations and sales. Through structured planning, they became more familiar with the activities of preparation, marketing and sales of bakery products. The practitioner realised that systematic planning can enable the teacher to achieve a single planned teaching objective. Students can then also better understand the process and purpose of learning that is expected and apply the skills learned. One of the students, Akel, expressed a desire after the project implementation to learn cake making skills. She aspired to be like her aunt, who is a successful cake trader. In conclusion, the implementation of interventions through the integration of two syllabi in vocational skills subjects has helped the practitioner to assess the potential for fostering the employability of students through exposure to the real work environment.

6. Conclusion

This action research project did not intend to prove whether the bakery sales project was capable or not of improving the employability of Semai indigenous students. Instead, it was a starting point for the practitioner to plan, implement and evaluate daily teaching and learning strategies that emphasise work-based learning. In the initial stage, the practitioner outlined

three main focus issues of the study. First, she identified the lack of content knowledge and pedagogy as a teacher of special education and vocational skills. Second, based on preliminary observations, she found that the Semai indigenous community did not emphasise their children's engagement with mainstream education, which caused them to lack confidence and motivation to continue schooling. Finally, during the COVID-19 pandemic, the practitioner realised that the teaching of vocational skills in online and remote learning contexts was not appropriate, especially when involving special education students.

This study is the beginning of the practitioner's journey as a special education teacher in the subject of Specific Vocational Skills (Bread Making), to further reflect upon and improve her practice. Through this study, the practitioner has demonstrated the process involved in improving content knowledge and pedagogy through the action-reflection cycle in the context of teaching practices (McNiff, 2017). For example, in the fifth step of the implementation of the intervention, she attended online bakery classes to learn about doughnut making methods, and in the 12th step, she gained marketing and sales knowledge from a critical friend, namely a foundation of business subject teacher. As a qualified teacher, the practitioner is aware of the importance of constantly improving content knowledge and pedagogy in order to guide students as best she can. Systematic instructional planning is not only important to ensure that its implementation is planned but also to enable an outlined objective to be achieved.

Through this study, the practitioner also found that the bakery sales project carried out with the Semai indigenous students has provided them with exposure to the work environment. In addition, Semai indigenous students have also been enabled to interact with people outside of their own community. Indigenous students have been guided through a bakery sales project, which has developed their basic job skills, namely communication and marketing skills, and self-confidence. The practitioner plans to conduct skills learning through practice more frequently and consistently through planned guidance, as this could help to develop the potential of students (Mohamed, 2018). She also hopes that by learning skills through practice more frequently and consistently, students will become more independent in carrying out activities, with minimal monitoring from the teacher.

The current situation of the COVID-19 pandemic has taught the practitioner about the importance of acting wisely in planning, implementing, reflecting on, evaluating and making modifications to pedagogical practices. As a teacher, the practitioner is responsible for modifying the teaching and learning process according to the situation and level of students, especially when involving students with special needs. Through the bakery sales project implemented during the COVID-19 pandemic, the teaching of vocational skills was carried out in the residence of the practitioner, with an emphasis put on personal hygiene procedures. Thus, the practitioner has assessed the extent to which students are able to master core abilities such as behavioural adaptation to the environment, as well as health and safety procedures. However, in the absence of the face-to-face teaching of vocational skills, it was difficult for the practitioner to assess the level of employability gained by the students.

In addition, conducting this action research has taught the practitioner about the importance of aspects of collaboration and involvement with critical friends in assisting the action-reflection process. Involvement in critical friend groups has assisted the practitioner in validating research processes and data. This group of critical friends has also guided him in each research process, starting with identifying issues and challenges, observing each action process, making self-reflections on each action, and providing many ideas for new actions. The practitioner also realised that as both a practitioner and researcher, it is difficult to give a

clear justification for the action that has been taken. However, the results of collaboration with critical friends have helped to cultivate critical thinking skills in reflecting upon the actions and practices of her professional life.

In conclusion, the most important learning that the practitioner has gained through this action research is practical knowledge in the context of personal professionalism. This knowledge will influence her professional daily practices as a teacher. By nature, action research is not temporary and has no finish line; instead, such studies provide important learning for the practitioner, who in turn influences their own professional practices (McNiff, 2017). Through this study, the practitioner learned that it is the responsibility of a teacher to provide meaningful and contextual skills teaching to students, based on their context. This study was part of the effort to enable Semai indigenous students to get a good job and quality of life after graduation. Thus, this study will be expanded through further employment-based projects that use a work-based learning approach in the future, in an effort for the practitioner to improve her practice as a teacher of Specific Vocational Skills (Bread Making), as well as to improve the employability of Semai indigenous, and other special education students.

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The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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