

# Teachers' Attitudes towards the Use of Flashcards as a Teaching Aid in the Teaching and Learning of Pre-schoolers

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## Abstract

This study explored teachers' attitudes towards the use of flashcards as a teaching aid for preschoolers' learning. Employing a qualitative research approach, an exploratory case study was conducted to thoroughly examine the attitudes of teachers. The study primarily focused on three preschool teachers from different settings: public preschool, private preschool, and a children enrichment center. Data were collected using a triangulation technique, which involved interviews, observations, and document analysis. The findings revealed three main themes: the definitions of flashcards, perceptions about their use in pre-schoolers' learning, and the practical challenges associated with their implementation. Each teacher provided a detailed contribution that reflected their understanding, knowledge, and experience of using flashcards. The results of the study suggest that preschool teachers hold positive attitudes towards the use of flashcards as a teaching aid for preschoolers' learning. This research underscores preschool teachers' positive attitudes towards using flashcards in early childhood education. The findings highlight the potential of flashcards as effective teaching aids to enhance pre-schoolers' learning experiences. These insights carry implications for educators, curriculum developers, and policymakers, emphasizing the importance of incorporating flashcards into teaching practices. By leveraging the benefits of flashcards, preschool teachers can improve instructional strategies, creating engaging learning environments that foster the holistic development of young children.

**Keywords:** Flashcards, Teaching and Learning, Pre-schoolers, Preschool Teachers, Teaching Aid.

## Introduction

In today's world, teaching and learning have become major issues for everyone involved in most phases of education, including early childhood education. Parents, teachers, educators, and the government are interested in effective teaching and learning of pre-schoolers, as this is a stage in which children are prepared for further education. This effectiveness is determined by a wide range of aspects. One of them is the teaching aid that the teacher in question uses. In this case, the teacher plays a significant role in ensuring that teaching and learning occur effectively through the chosen teaching aid. The study also showed that

teaching aid is a critical element and has relatively large impact on improving the effectiveness of the teaching and learning process (Sudarsana et al., 2020).

Teaching aids are materials and facilities, which may be electronic or non-electronic, used by the teacher to facilitate the teaching and learning process (Razhiyah, 2006). As mentioned at the beginning of this paper, teaching aid facilitate a meaningful teaching and learning process. It can make it easier for teachers to deliver lessons and provide preschoolers with a better understanding of the subject matter. Most teachers also agreed that the use of teaching aids in teaching and learning led to different experiences and situations according to different circumstances (Sang, 1981). As apparent, preschool teachers must possess appropriate knowledge, understanding, and experience, together with skills, and commitment in planning, selecting, using, and providing teaching aids for pre-schoolers.

Flashcards are essentially one of the teaching aids that have been used in the teaching and learning of pre-schoolers since the 19<sup>th</sup> century. Ironically, the use of flashcards as teaching aid is widespread not only in preschool education but also in various other levels of education. Flashcards belong to visual teaching aids - in pictorial or written form (Dewi, 2020). Their use is one of the simplest and most effective methods that can be used in the teaching and learning process. They are consistent with the principle of early childhood educational practice, learning through play. However, given the various forms of teaching aids available to us today, flashcards are referred to as traditional teaching and learning medium. Thus, their use inside or outside the classroom will, to some extent, influence the teacher's judgement. This judgement depends largely on the teacher's knowledge, understanding, and experience of the use of flashcards as a teaching aid. From this, the teacher's attitude develops.

Studies on attitudes have shown that teachers can have a variety of attitudes, such as positive, negative, neutral, or both (Meng, 2008). According to Chung et al (2010), attitudes and skills usually facilitate the teaching and learning process in the classroom. At the same time, attitude and awareness are the best way to anticipate and predict engagement in flashcard use. In addition, attitude toward flashcards is one of the most important factors that contribute to teachers' acceptance of flashcard use. These statements explain the causal relationship between the teachers' cognitive thinking, emotions, and behaviours that result from their knowledge, understanding, and experience. Thus, teachers' attitudes are worthwhile to explore because it allows us to better understand and analyze related situations, demonstrate the influence of attitudes of teachers' performances, and develop teachers' professionalism. When explored in depth, the findings may be the best references for many parties in the foreseeable future. Therefore, this study objective is to explore preschool teachers' attitudes towards the use of flashcards as a teaching aid of preschoolers in the preschool education setting. Attitude toward the use of teaching aid - flashcards within the context of this study refers to the way a preschool teacher perceives or the opinion the teacher holds about the use of flashcards in the teaching and learning process of preschoolers, which is related to their cognitive thinking, emotions, and behaviour. It indicates the knowledge, understanding, and experience of teachers throughout their profession.

## **Literature Review**

### **Teachers' Attitude Towards Teaching Aids**

Attitude is defined as a psychological tendency expressed in valuing a given entity with some degree of favour or disfavour (Eagly & Chaiken, 1993). As an extension, Davidovitch & Yavich (2021) stated in their studies that attitude is a structured psychological concept with mental-

cognitive and psychological-emotional roots and manifestations that are an essential part of an individual's personality, existence, and perceptions. According to Perloff (2017), an individual's attitude toward a particular object or thing manifests itself both cognitively and behaviorally. In the cognitive context, attitude refers to how the individual perceives and thinks about something, ascribes values to it, and views it as having certain characteristics and influences. In the behavioral context, it refers to the individual's practical responses to something in light of the cognitive features of his or her attitude toward it.

In relation to teachers' attitudes, Zilka (2011) proposed a more thorough and detailed definition, claiming that attitude can be divided into three separate components - the cognitive component, the emotional component, and the behavioral component, with each component existing independently and autonomously and also having causal interactions with the others. The components mentioned by Zilka (2011) are explained below:

- i. The cognitive component refers to the information that the individual possesses regarding the object;
- ii. The emotional component is the individual's explicit behavior toward the object and his or her tendency to perceive this behavior as appropriate for his or her desirable relationship with the object. This behavior is usually influenced by the individual's experiences; and
- iii. The behavioral component is the individual's subjective feelings about the object, usually expressed in terms of general attraction or rejection.

Referring to the study of Yusof and Abdulgalil (2017), they stated that attitude refers to the way a teacher perceives or has an opinion about the use of teaching aids in the teaching and learning process. It is the expressed tendency to act for or against something, which is expressed as a positive, negative, or neutral attitude toward the item in question. This expression was further explained by Davidovitch & Yavich (2021) in their studies, who emphasized that a positive attitude necessarily leads to positive thinking about the object of the attitude (cognitive), positive feelings about it (emotional), and most importantly, the behavioral dimension. The combination of all these factors also applies to negative attitude and neutral attitude.

Ultimately, the attitude should develop from the teachers' understanding, knowledge, and experience toward the teaching aid. This statement is supported by a study conducted by Prasertin et al (2020) on the guidelines for the use of vocabulary cards to encourage reading skills in children with learning difficulties. The findings of this study indicate that teachers are positive about the use of flashcards because they believe that flashcards are useful tools that promote children's interest in learning. Even though in certain circumstances, they do not have direct experience with flashcards for children with learning difficulties, they do have experience with the usage of flashcards to enhance the learning skills of typical children. Therefore, most of them are ready to use flashcards because they are familiar and confident with the nature of them in what will lead to an effective teaching and learning process. In essence, the reported findings reflected the cognitive, emotional, and behavioural aspects of the study participants' knowledge, understanding, and experience. Overall, teachers' knowledge, understanding, and experience are the critical elements that should be explored in a study of teachers' attitudes.

### **Flashcards as Teaching Aid for Preschool Education**

According to a study by Meng (1996), traditional teacher-centered teaching and learning is passive because the knowledge delivered by teachers is only communicated in one direction

in this approach. Therefore, students easily feel bored, distracted, and have no interest in the lesson. It is believed that this approach of teaching and learning is unable to promote efficient knowledge transfer. Therefore, the use of teaching aid is considered as a solution to this situation. Teaching aid is an alternative method used by teachers to support during teaching and learning process (Bakhir et al., 2016). In fact, there are many studies that demonstrate the positive impression of teaching aid in teaching and learning. As the study of Unggang (2008) shows, teaching aid is capable of explaining the objectives to be taught in teaching and learning sessions, maintain students' interest, and promote their achievement. Teaching aid can also encourage students to pursue learning and to understand the topics and/ or subjects they are learning.

In principle, pre-schoolers are children between the ages of four and six, who are enrolled by their parents or guardians to attend a preschool, which is an early childhood education programme (Kementerian Pendidikan Malaysia, 2019). There are many things that occur in the development and growth of children at this age that affect the physical, cognitive, emotional, and social aspects (New York State Office of Children and Family Services, 2015). Acknowledging the awareness of children's developmental and growth needs, preschool education indirectly helps pre-schoolers meet and achieve those needs. According to Cohen (1996), flashcards are suitable as a basic teaching aid in the Early Childhood Education, specifically preschool education for three main reasons: flashcards promote efficient learning principles, optimal metacognitive functions, and reliable repetition. Based on this description, pre-schoolers are generally considered an appropriate group for teaching and learning with flashcards.

In general, flashcards have been used to support children's teaching and learning since the 19<sup>th</sup> century. Favell Lee Mortimer was recognised as the earlier person who used the flashcards. It started with a desire to help children in the area she resides learn to read (Mortimer, 1873). Originally, the card was just white in colour and was used in the form of a paper; in the form of small and large index cards (Lourdes & Silvana, 2011). Paola and Esmeralda (2011) interpreted flashcards as a set of cards with information, such as pictures, words, or numbers written on one or both sides of the card. They also explained that flashcards can contain vocabulary, dates, formulas, and various other things, depending on the topic to be used. This is also confirmed by Roberto (1964) in his work, where he states that flashcards are a set of cards with a word or phrase on one side, while the meaning is on the other side. Based on the above, it can be summarised that flashcards are a medium in the form of a set of cards containing a series of cards with specific topics, designed to convey information to users and recipients in a simple and easy context. Their characteristics comprised of having two sides, the front and the back, and they contain images, words, or numbers on them. Nowadays, flashcards come in different shapes, sizes, and colours, and on various topics. This is because they are flexible in nature, especially in terms of designs (Selamat & Bakar, 2023). Digital flashcards is one of the new forms of attention in education. According to research by Green and Bailey (2010), digital flashcards are designed in the same way as printed flashcards. However, digital flashcards provide an electronic experience to their users, including access to the learning material, usage practices, and printing.

In addition, Lourdes and Silvana (2011) emphasised that using flashcards as a teaching aid in preschool teaching and learning is a useful approach. This is because flashcards allow teachers to use them in different ways to implement their teaching and learning process. According to them, one of the ways they can be used is through games and activities. This play strategy aims to positively stimulate children's development and learning, especially in terms of

speech, language, and cognitive skills. Through play, children are given the opportunity to explore and interact with their environment. Recommended games and activities include Flashcard Pictionary, Music with Flashcard, and memory games. Other than that, a literature study conducted by Sudarsana et al (2020) also proved that learning through flashcards has a positive impact on children's development. They have found that using flashcards makes children happy and motivated to follow learning, encourages children to learn faster, master the topic better, and develop children's intelligence and memory. Therefore, teachers involved in preschool education should consider the type of teaching aid that is suitable and appropriate to facilitate the teaching in terms of the needs, growth, and development of their students (Sudarsana et al., 2020). On the whole, teachers' use of teaching aid is influenced by their knowledge, understanding, and experience as educators. In this context, it is interesting to explore these aspects because it allows us to gain a new perspective on teachers' attitudes towards the use of flashcards in the teaching and learning process of pre-schoolers.

## **Methodology**

### **Research Design**

This study employed a qualitative approach based on various philosophical assumptions; strategies of inquiry; and methods of data collection, analysis, and interpretation; all of which were used throughout the study (Creswell, 2009). The qualitative approach, more specifically an exploratory case study, allowed the researcher to explore, understand, and explain the central phenomenon from an in-depth perspective (Piaw, 2021). In addition, a combination of research techniques, which involved interview, observation, and document analysis, were adopted to address the research questions. This combination is also referred to as triangulation, a research technique that incorporates multiple methods of data collection (Cohen, Manion & Morrison, 2004). According to Merriam (1998), the validity and reliability of a study are believed to be strengthened by using this triangulation technique.

### **Participants**

As stated by Ishak and Bakar (2014), the main goal of sampling for a qualitative researcher is to gather specific cases, events, or actions that can further or clarify the researcher's understanding of the phenomenon under study. To achieve this goal, the researcher used purposive sampling to identify the research participants. The participants involved three preschool teachers from three different sectors – public preschool, private preschool, and child enrichment centre. They were chosen based on the researcher's knowledge about them as well as the administrators of the respective early childhood education centres' recommendations in accordance with the criteria that the researcher had established, which included preschool teachers who had five years or more of experience teaching in a public, private, or child enrichment centre; experienced in early childhood educational teaching aids, particularly with regard to flashcards; and willingness to volunteer to participate in the study. To represent the findings, the participants were named as CIKGU, TEACHER, and SENSEI. The demographic profile of them is summarised in Table 1.

Table 1

*Research participants' demographic profile*

Participants	CIKGU	TEACHER	SENSEI
Sex	Female	Female	Female
Category of Early Childhood Education Centre	Public preschool	Private preschool	Children enrichment centre – Right Brain Education
Early Childhood Education Centre Location	Bangi, Selangor	Kajang, Selangor	Kuala Lumpur
Position	Classroom teacher	Classroom teacher	Manager of the Teaching and Learning Department
Teaching Experience	15	7	12

**Data Collection Methods and Data Analysis**

Multiple sources of data were gathered by the researcher through the triangulation technique. These sources are then categorised as the primary and secondary sources. The primary source is data derived from interviews, while secondary data is data obtained from observations and documents.

For the interview data, the interview questions were developed based on the research objective. The characteristics of the questions used in the interview are open-ended and semi-structured questions. Such characteristics are suitable for research with an exploratory nature (Aberbach & Rockman, 2002). It allows the researcher to study such aspects in-depth and explore on the participants' attitude towards the use of flashcards in the teaching and learning of pre-schoolers. To ensure the validity and reliability of the interview, an experienced early childhood education lecturer evaluated and reviewed the interview questions and procedures. The researcher also carried out a pilot study to determine the feasibility of this interview. The interview took place in a separate setting, which is at the participants' respective centres, and it was a one-to-one interview. Such setting enables the researcher to have an active connection with the participants throughout the interview session. With the authority of the centres' permission, the data obtained from the interviews were recorded and documented before being interpreted into text or transcribed for analysis purposes. Thereafter, a thematic analysis is adopted as it provides a description and understanding of the data.

Next, observations are conducted at the research participants' respective centres with kind assistance from the respective personnel. The observations made were invaluable as it concerns information about a certain setting and actual behaviour related to the central phenomenon compared to reported behaviour or opinions (Hak, 2007). With reference to this context, the researcher applied a non-participant observation – a type of observational technique that is able to refrain any researcher's influence. For this technique, the researcher as the observer was present in but not involved in the setting. During the observation, the researcher observed and recorded everything that happened, especially those that are

relevant to the study. Afterwards, an interpretive analysis was used to examine the findings of the observation.

While for the document analysis, the researcher managed a document study of the relevant documents available at each centre, for examples their background, standard operating procedures (SOPs), and written guideline. Reviews were made by the researcher from the written materials mentioned. This type of analysis is useful to find out any discrepancies that exist (Busetto et al., 2020).

### Findings

The findings of this study address the research question, 'What are the attitudes of preschool teachers toward the use of flashcards as a teaching aid in the teaching and learning of pre-schoolers?'. It is generally based on the research participants' understanding, knowledge, and experience regarding the use of flashcards in their practise as preschool teachers at their respective early childhood education centres. It also includes the analysis of the collected data from the researcher's observations and relevant documents. The researcher presents the findings by identifying the themes that emerged from the data. The themes are presented as definitions of flashcards, perceptions about the use of flashcards in teaching and learning of pre-schoolers, and the practical dilemma of flashcards. The themes fundamentally represent the teacher's cognitive thinking, emotions, and behaviour that result from their knowledge, understanding, and experiences.

#### Theme 1: Definitions of flashcards

Analysis of the findings of the interview question posed to the study participants, "How would you describe flashcards?", shows that all participants have basic knowledge about flashcards. The way they expressed about flashcards also proves that they are familiar with them as a teaching aid (Table 2).

Table 2

*Research findings for definitions of flashcards*

Participants	Data
CIKGU	<i>"...It is a card that has picture or writing on it. There are two types of flashcards, some are flashcards with pictures and writing, and another is either with pictures only or writing only. Flashcards usually have a theme. We make and use it a lot during induction session. There is no specific subject that is using the flashcards, as it is flexible. But most of the time teachers are using it to teach languages like, Malay and English..."</i>
TEACHER	<i>"... To me, flashcards are a material that can be used in a variety of teaching and is often used by most teachers...Flashcards come in a variety of sizes, have two sides, and use thick cards...They are suitable for teaching and learning related to language and activities..."</i>
SENSEI	<i>"...I would define flashcards as a tool to input languages, connect the brain, and integrate the right and left brain. Flash means you need to flash it, the action. Whatever you are doing involves flashing the cards, we will consider them as flashcards... it comes with variety of sizes, small, medium, and big...can cover range of topics, but depends on the purposes...Flashcards help in improving the cognitive ability, listening</i>

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*ability, visualization ability, photographic ability, speech, and languages  
...”*

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Further, it was found that the flashcards were well and easily described by all three participants. This is also confirmed by the researcher's observation. The participants answered the questions asked with full confidence and without hesitation. In addition, most of the participants supported the idea that the flashcards are a teaching aid used by teachers to convey knowledge or information to children, and they also pointed out the nature of flashcards used in terms of the appearance of the card, the size of the card, and the purpose.

### **Theme 2: Perceptions about the use of flashcards in teaching and learning of pre-schoolers**

Theme 2 is based on the findings of the interview question that was asked, 'What do you think about the use of flashcards in teaching and learning of pre-schoolers?'. The findings show that each of them has their own perceptions about the use of flashcards as a teaching aid in teaching and learning of pre-schoolers. According to CIKGU and TEACHER, teachers need to play a role in developing effective strategies for using flashcards during their teaching and learning of pre-schoolers. As stressed by SENSEI, teachers need to adjust the flashcards according to their use, based on the purpose and student's age. The following are the participants' responses (Table 3).

Table 3

*Research findings for perceptions about the use of flashcards in teaching and learning of pre-schoolers*

Participants	Data
CIKGU	<i>“...Flashcards are more static, less moving... We even can see that it used a one-way method of teaching and learning. The card is the way it is, if the card shows an orange fruit, then it is an orange, it can't be anything else. But as a teacher, you can relate it to other things. For example, a related object that is in orange colour. It depends on the teacher's strategy...”</i>
TEACHER	<i>“...The card does have a one-way teaching and learning feature, so teachers have to be good at using it...If it's for students aged 4 years old, it might help. Because they like to play at this age, they can't sit for long...so we can use flashcards to play with them, they don't get bored either. Develop activities from it...”</i>
SENSEI	<i>“...When first time I came here, I don't have much knowledge about it ...I see it's just a tool, to input the kids... But by the time goes, we get the understanding...so everything there is a purpose...So as long as you know the purpose then you can see how important flashcard can be... Flashcards I will say ,it's a one way method...it need one way communication as to reach our goal, our goal here is fast pace, instant memory, input large information at the same time...it will be difficult to reach the goal if we are using two way communication. Because when we are input something, and in between kids are talking, it will interrupt the session...”</i>



Here, the findings reflect each research participant's awareness and acceptance of the use of the flashcards as one of the teaching aid for pre-schoolers. It proves that the use of flashcards is not a new matter among the study participants, as flashcards are part of the materials used in conducting their respective teaching and learning sessions as observed by the researchers in their classes. It was found that the participants understand the use of flashcards. They also acknowledge that the flashcards are a teaching aid that involves a one-way teaching process in which pre-schoolers are taught a wide range of knowledge and things.

### Theme 3: The practical dilemma of flashcards

In order to delve deeper into teachers' attitudes toward the use of flashcards as a teaching aid in the teaching and learning of pre-schoolers, participants in the study were asked a question about the dilemmas they face when using flashcards (Table 4). The findings of the study revealed that the three participants had highlighted the digital flashcards. They mentioned that modernisation, which includes technological lifestyle and digitalisation, influences the selection of teaching aids for children. They also acknowledge that the digital flashcards are very expensive, and therefore, the printed flashcards remain an option. However, the digitalisation of flashcards is still a challenge for them, especially when it comes to convince the used, not only to themselves but also children and parents. In addition, study participants also reported other dilemmas they experienced related to flash cards' management process which involves preparation, storage, and maintenance.

Table 4

*Research findings for the practical dilemma of flashcards*

Participants	Data
CIKGU	<p><i>"...Children now all love TAB, IPAD. They like to see interesting pictures and movements. But we are not using any digital flashcards here. It was expensive for us and not worth it for us to invest. A printed card that can be held is already good for us..."</i></p> <p><i>"...it's good if we can change flashcards every year, so we don't use the same picture for a long time. But all that requires a fund..."</i></p> <p><i>'...as preschool teacher, we need to be creative. So, this made us always be actively looking for ideas...'</i></p>
TEACHER	<p><i>"...During the Malaysia Government Movement Control Order, students use a lot of online things, and gadgets to study and play. But now everything is back physically. It's hard to change all that. If it's about digital, it depends on the budget, because not all preschools afford to buy a projector and bare the electricity charges. So, to save costs, we use flashcards that are made of cards. Students can hold, teachers can move..."</i></p> <p><i>"...If there is a particular space, a container to store it, then it will be easy to manage the flashcards. The way to take care of it actually similar like a book...If there are a lot of cards, it will be difficult to manage it..."</i></p>

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*"...For me, it depends on the acceptance of the students. Some students respond, some students don't. Some ask what the picture is, some are silent...some students want to tell related stories about the cards shown... If the picture part of their interest, they will talk, tell stories, chat..."*

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*"...Like now, we have digital platform, kids now more attracted to gadget compared to like manual thing. For them it fun, because in terms of digital, for graphic wise is more attractive, the colours, the movement, there's a reason they attracted to it, but it costly ...but we can do the same thing to the flashcard even though it is manual thing to pull the attraction towards flashcards..."*

SENSEI *"...The process of preparing a set of flashcards is like a project. We have budget for it. The process involved approval...planning...searching about the topic...finding picture.....here we cannot simply makes the cards..."*

*"...As for teacher, first thing you need to be consistent, your stamina...you need to push yourself to maintain the energy level from beginning to the end of the session...we also not exposed to all topics, which means we have to study it first..."*

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Participants also voiced the dilemma they experienced from the teacher's own perspective, which can be identified based on their experiences using flashcards. CIKGU noted that the use of flashcards requires teachers to be creative and innovative. Thus, it is the teacher's responsibility to actively seek ideas and enrich their use. TEACHER highlights the differences in pre-schoolers' acceptance of teachers' use of flashcards in the classroom. Children's acceptance is difficult for the teacher to anticipate, and their response or cooperation depends on the flashcards used at that time. This indirectly affects the pictures, writing, content, and methods of using the card. SENSEI expressed her position as a senior teacher who sees maintaining stamina and teacher's exposure as a dilemma. For her, it is very important to keep establishing herself in various perspectives to ensure the performance in her profession.

### **Discussion**

Analysis of the findings revealed that teachers' attitudes toward the use of flashcards as a teaching aid for teaching and learning pre-schoolers are positive. The teachers' attitudes are examined through three main themes: definitions of flashcards, perceptions about the use of flashcards in teaching and learning of pre-schoolers, and the practical dilemma of flashcards. These provided an overview of preschool teachers' knowledge, understanding, and experiences related to flashcards. Generally, flashcards are recognised by teachers as basic teaching and learning materials for preschool education. They have been widely used by teachers for a long period until today. In fact, it can be seen that preschool teachers have a variety of teaching aids that they can use in teaching and learning, but flashcards still receive considerate attention and remained in use. This confirms that teachers believe in the credibility of flashcards, which bring many benefits (Selamat & Bakar, 2023).

Generally, the preschool teacher plays the main role, in which he or she uses a teaching aid in every teaching and learning session for pre-schoolers. In relation to the use of flashcards

by the preschool teachers studied by the researcher, the findings of the study found that the teachers understand the concept of flashcards and are able to explain flashcards well. This proves that they have sufficient knowledge about the teaching aid used. It is understood that possessing comprehensive knowledge is essential for a teacher to perform her duties as an educator. It will positively support effective teaching and learning. Ariffin and Yunus (2017) also stated that teachers' knowledge is one of the main aspect in effective teaching and learning process. This knowledge is essentially acquired through teacher training, own initiatives, and also the experience gained.

It is crucial for a teacher to have high and sufficient readiness to use teaching aid in teaching and learning sessions (Sun, Strobel & Newby, 2017). Readiness is largely influenced by and closely related to the teacher's own acceptance of the teaching aid used. If the teacher has a problem with the acceptance of the teaching aid, it will affect the readiness to use them and lead to weaknesses in the teaching and learning that he or she conducts. As shown in this study, participants recognised that flashcards are essentially a one-way teaching method. Nevertheless, they accept it positively and understand its use. Moreover, they have also developed a strategy for using flashcards to ensure that the teaching and learning achieve the set goals and that the pre-schoolers benefit from them. Therefore, the teacher's readiness plays a very important role in supporting pre-schoolers in teaching and learning process, which help them acquire knowledge in an excellent way.

In addition, the findings of this study show that teachers are aware of their role and take the initiative to develop themselves to meet the demands of the role. This is evident through their sharing of the dilemmas they face from different perspectives - digitalisation of flashcards, flash cards' management, and role demands. Their positive attitude towards these dilemmas makes the use of flashcards in pre-schoolers' teaching and learning sessions even more meaningful. As suggested by Hasan (2012), teachers as educators of the future generation must have the passion to change the norm. In this context, teachers as the main users of teaching aids need to play their role, because as Mahamod, Yusoff, and Ibrahim (2009) discussed, the effectiveness of teaching and learning practices is highly dependent on teachers.

### **Conclusion**

In conclusion, this study successfully addressed the research question and achieved its objective by examining attitudes towards the use of flashcards as a teaching aid among preschool teachers. The findings unequivocally demonstrate that preschool teachers hold positive attitudes towards utilizing flashcards in teaching and learning. The themes derived from the analysis shed light on teachers' cognitive thinking, emotions, and behaviors, revealing their knowledge, understanding, and experience. Effective teaching and learning in preschool settings heavily rely on teachers' effective utilization of teaching aids, underscoring the importance of a positive attitude towards their use. It is crucial for teachers to actively enhance their knowledge, understanding, and skills in employing teaching aids. This research confirms that printed flashcards remain an active and widely used teaching aid that effectively supports the needs, growth, and development of pre-schoolers. Despite some challenges, flashcards are recognized as a unique and dynamic tool that can be utilized by teachers to a great extent. Based on the study's results, further exploration with a larger participant pool could be pursued. Overall, this study contributes to the existing knowledge on flashcards and serves as a valuable reference for future investigations on their use.

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