International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

Application Of Questioning Skills To Train Critical Thinking In Early Childhood

Wahju Dyah Laksmi Wardhani[1]
[1]Teacher Training of Early Childhood Education Dept Universitas Muhammadiyah Jember East Java
Misyana[2]
[2]Teacher Training of Early Childhood Education Dept Universitas Muhammadiyah Jember East Java

Corresponding author: dyahlaksmi_paud@unmuhjember.ac.id

Abstract

This article aims to narrate the results of good practices in the application of questioning skills to train critical thinking skills carried out by students of the teacher profession program who are currently studying for teacher profession education at one of the universities in East Java. Learning designed with a project play approach with STEAM content is the basis for designing learning activities carried out for early childhood. This research is a type of qualitative research, with data collection techniques based on 3 cycle learning videos carried out by 2 students. One student carries out learning activities based on the 2013 Early Childhood Education Program curriculum and one student has implemented the Independent Curriculum. Data analysis is presented with an integrative narrative approach, namely integrating the results of observations of the experiences of one student with other students at the same stage. The results of the study show that teacher skills in asking questions can improve children's understanding of the STEAM concept more broadly and deeply.

Keywords: Project play; questioning skill; STEAM

INTRODUCTION

Curriculum changes in Indonesia in 2022 impacted the learning process in early childhood education. K13 Early Childhood Education Program learning outcomes were directed to form

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

children's competencies at the end of a certain age. While in the Merdeka Curriculum, it is directed to achieve a Pancasila student profile who is better prepared for the challenges of the times. This is stated in the Learning Achievements (see: https://www.paud.id/bskap-033-h-kr-2022-revisi-cp-paud-kurikulum-merdeka/) for Early Childhood Education Program which explains that the learning period in Early Childhood Education is the foundation phase, which means that this phase is the child's first step in the world of education and the aim is to facilitate optimal growth and development of children, who are not only ready to go to school, but are better prepared to take their journey in developing and playing a role in the community, country, and world.

So far, the tendency of learning activities in Early Childhood Education Program is always done in a play setting, but more in the form of assignments. Tasks are associated with stimulating developmental aspects. (Dyah et al., 2023). Although in K13 Early Childhood Education Program the goal of stimulation is aimed at achieving and forming the four core competencies holistically, the tasks tend to take the form of tasks that represent developmental aspects. These developmental aspects are then linked to indicators in basic competencies which are indicators of core competencies.

In Merdeka Curriculum's learning activvities, teachers are introduced to the project playing model which is planned in stages with a variety of learning resources. Project playing activities are also expected to give children the opportunity to get to know, explore, and try several options while the media is not necessarily given/provided by the teacher. Project playing activities are designed to last for at least a week which include a daily learning plan. Teaching modules are a means for teachers to design a number of activities holistically from day to day over a certain period of time based on topics or sub-topics that become teaching materials, equipped with a trigger sentence in the preparation of teaching modules is one of the characteristics of project-based learning. The trigger sentence in project-based learning in early childhood education plays an important role in arousing children's curiosity, interest, and enthusiasm for the topic to be studied. Sentences that are designed simply but can be arousing, interesting, related to children's daily experiences, so that they can stimulate children to explore, discuss and be actively involved in learning.

This is different from teachers' learning plans in the previous curriculum which tended to design activities to be carried out in one day. Learning planning is also more of an assignment in accordance with the teacher's direction, with the same media for all children and with the same expected results.

Teachers are expected to build discourse and design children's critical thinking so that

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

children can make decisions and determine the actions they will take. Project playing activities are designed to give children the opportunity to learn from a variety of learning sources in various ways that the children can choose. ((Mercer et al., 2019; Owen, 2007; Pebriana, 2017; Piscitelli & Penfold, 2015) Project playing trains children to have better communication skills and convey the results of their reasoning or ideas. ((Cortés Loyola et al., 2020; Putri, 2019) Project playing also trains children to develop linguistic skills related to other learning such as STEAM and the arts (Broderick et al., 2023; Cohrssen et al., 2017; Cohrssen & Tayler, 2016; Makar et al., 2018)

In addition, reinforcement of learning that trains children to think critically, creatively and develop the ability to convey messages is facilitated by Learning Outcomes in the elements of STEAM, pre-literacy and pre-numeracy. Specifically in STEAM play activities, it is usually in the form of assignments in core activities, which separately measure children's abilities, especially in cognitive stimulation, fine arts/motor skills, writing skills, early mathematics and reading. STEAM play activities presented with project-based games are expected to be able to develop critical thinking skills, creativity and the ability to innovate, the ability to work together and learn from various learning sources. (Miquel Pérez Torres, 2023) (Egan, 2020) (Alsina, 2020) (Zyrah G. Basalo, 2022). STEAM activities in play projects provide opportunities for children to be able to build continuity in understanding concepts more broadly and deeply. So far, the tendency in learning in Early Childhood Education, children play with the aim of getting to know concepts with an understanding that is not introduced more deeply and broadly. Children who have a greater curiosity about a concept cannot gain a better understanding. Children who learn about mathematics, or science and engineering usually want to know more which is generally related to their daily experiences. (Diana Leyva, 2022, volume 80) (Shannon Stark Guss, 2023). Arousing curiosity, logical thinking, critical and increasing the involvement of early childhood requires trigger sentences. With trigger sentences that challenge children are encouraged to think deeper, actively participate and arouse children's interest and desire to learn naturally without coercion and develop better speaking and language understanding skills (Lestari, 2023) (Lestari, et al. 2024) (Luluk, 2023) (Hidayah 2023) (Suningsih, 2024)

This paper will narrate how Early Childhood Education Program teachers with the first model and Early Childhood Education Program teachers with the second model design project playing activities to be implemented during teaching practice. This paper will also examine how teachers practice project playing in learning activities based on teaching modules or daily learning implementations plans (RPPH).

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

RESEARCH METHOD

This research is divided into three cycles. Data is obtained from RPPH or teaching modules uploaded to the LMS. This learning plan is then downloaded and compared with the learning process that has been recorded in video. Some of these videos have been uploaded to YouTube, but some have been uploaded to Google Drive. Students write links on the LMS page. Data analysis will be carried out by interpreting the data narratively, by explaining the data findings, both written and video, presented in a detailed story-telling style. The videos that become the data sources is the longer version videos, which present learning activities between 30-45 minutes. Learning activities are carried out starting from the opening activity, namely when students discuss the material/topic that day and during the core activity, namely the activity when children gather information.

The subjects in this research consisted of 2 teachers who represented each model. The first subject, Mrs. El, represented teachers who are still designing the RPPH form. The second subject was Mrs. Na who represented a school that was preparing KOSP and writing a learning plan in the form of a teaching module. Both Mrs. El and Mrs. Na teach in kindergarten group A, which is still around 4-5 years old.

RESULTS AND DISCUSSIONS

The learning design developed by the teacher can be in the form of a RPPH or teaching module. In the teaching module the teacher designs project playing activities for a certain period of time, whereas for those in the form of RPPH it is realized in project activities which are completed within one day. Mrs. El designed activities on the topic of the benefits of chickens and played with her project of making toast filled with chicken. Mrs. Na designed activities on the topic of fruit by playing the fruit weighing project. The learning plan in Mrs. Na's teaching module consists of 6 days of activities, but only one day is selected for the activities that will be practiced. The day chosen for practice is the second day. The following is an excerpt of the learning plan prepared by Mrs. El and Mrs. Na:

1. Mrs. El's RPPH activity steps
   A. Introduction (±60 minutes)
      - Flag ceremony
      - Meet, greet, and pray
      - Attendance check with singing

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

- Theme apperception: children watch a video about the benefits of chickens for human

B. Core activities (±60 minutes)
- Children observe a tutorial video on how to make a toast
- Children are given the chance to ask and express ideas or informations that they obtained from the video
- Children gather informations through playing activities such as:
  - smearing breads
  - toasting breads
  - filling breads
  - writing down toast serving cards
- Children are given the time to think about:
  - how to smear breads
  - how to make toasts
  - how to choose fillings for toasts
  - how to write serving cards
- Children are able to narrate their experience from project playing activities that were carried out

2. Mrs. Na's Teaching Module Activity Steps (practiced)

A. Introduction
- Opening routine (playing outside, reading Qur'an, moving and singing, accustoming Dhuha Prayer, eating together)
- Observing available fruits
- QnA about "do bigger fruits always weigh more?"

B. Core activities
- Children separate fruits based on their weight through weighing
- Children group fruits with the same weight
- Children label the fruits weights
- Children compare images (https://quizizz.com/join?gc=465837)

C. Closing
- Children narrate about their favorite activities
- Teachers strengthen the concepts that the children obtained throughout the activities

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

- Teachers request the children to make an agreement on the activities for the next day

Mrs. El's project is making toast using an oven. Mrs. El's learning activities are to introduce children to daily technologies/appliances. In this first cycle (https://drive.google.com/file/d/1VNAA442SdDYvHmMjsVHuIErQ572wbxbk/view), Mrs. El opened the activity by talking about the benefits of chickens. Mrs. El shows the ingredients that will be used on that day. Mrs. El asked the children to name the available ingredients. The children enthusiastically shouted the names of the ingredients pointed out by Mrs. El. Bread, sausage, cheese, butter, mayonnaise, eggs, and nuggets. Mrs. El asked, "What can we make with these ingredients?" The children answered, "toasts!". Mrs. El asked who had an oven at home. There are children who answered that they have oven, but need a stove. Mrs. El explained, “Oh yes, they function the same way, but our school’s oven uses electricity“.

After asking about the steps of making toast, Mrs. El asked about how to operate an electric oven to toast bread.

Mrs. El : “If we want to make toast, what is the first thing we should do to the oven?’
Children : “Toast it”
Mrs. El : “Before toasting it, what should we do to the oven?”
Children : “Turn it on”
Mrs. El : “How do we turn the oven on?”
Children : “By plugging it in”
Mrs. El : “Yes, we plug the oven first. Then what should we do to the oven?”
Children : “Turn it”
Mrs. El : “Yes, turn it. How much do we turn it?”
Children : “Two!”

Mrs. Na opened the activity by asking about the names of the various fruits that had been provided. Mrs. Na reminded the children about yesterday's activity which was about comparing the size of fruit. Mrs. Na took a weighing tool made from a paper bowl hung on wood. Mrs. Na said today we will prove which fruit is heavier or lighter. Mrs. Na asked, "What tool are we going to use?" One child reacted by answering, “Seesaw tool.” Mrs. Na answered the name of the weighing tool. Mrs. Na provided instructions for the children to look at the worksheet provided to see which fruit will be weighed.

The children are given the opportunity to try various fruits according to the worksheet but also given the opportunity to try other variations. The children tried various fruits and then spoke

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

about their discoveries. A child stated that the weight of the banana was heavier than the weight of the orange. Mrs. Na helped with the loose scales. In another group, Mrs. Na borrowed a guava to be weighed by another group. Another group weighed guavas and oranges. A child stated to Mrs. Na, “orange is heavier”.

Pada siklus kedua terdapat beberapa perubahan dalam cara mengajar, namun untuk rencana pembelajaran tertulis Ibu El tetap menggunakan topik tentang manfaat ayam, tetap menggunakan proyek roti panggangnya untuk meningkatkan pemahaman anak terhadap teknologi di rumah. Ibu El menggunakan rencana pembelajaran yang sama seperti yang digunakan pada siklus 1. Pada rancangan siklus 2 Ibu Na tetap menggunakan topik tentang macam-macam buah. Kegiatan yang diinginkan anak masih tentang menimbang buah, namun anak diberikan penguatan untuk mengelompokkan buah terlebih dahulu sebelum ditimbang.
Anak-anak dikelompokkan berdasarkan beberapa ciri sekaligus, seperti pengelompokan berdasarkan jenis kulit (tebal dan tipis), berbiji atau tidak, besar dan kecil. Berdasarkan pengelompokan tersebut, anak-anak memperoleh klasifikasi buah berkulit tebal/tipis, besar dan kecil, berbiji dan tidak berbiji. Anak-anak dapat membedakan dan menilai buah berdasarkan pengelompokan yang diperolehnya.
Ibu El kembali menjelaskan manfaat daging ayam pada pembukaan siklus kedua. Bedanya, pada siklus 2 Ibu El yang sudah menyiapkan bahan-bahan untuk membuat roti panggang, bertanya tentang manfaat daging ayam. Setelah dipotong, Ibu El menunjuk ke arah sosis dan nugget sambil bertanya, “Daging ini bisa digunakan untuk apa saja?” Anak-anak menjawab sosis dan nugget. Setelah itu, Ibu El menunjukkan berbagai bahan tambahan untuk membuat roti panggang.

In the second cycle there were several changes in the teaching method, but for the written lesson plan, Mrs. El still used the topic of the benefits of chicken, still using her toast project to improve children's understanding of technology at home. Mrs. El used the same lesson plan as used in cycle 1. In the design of cycle 2, Mrs. Na still used the topic of various fruits. The activity that the children wanted was still about weighing fruit, but the children were given reinforcement to group the fruit first before weighing it.

Children were grouped based on several characteristics at once, such as grouping by skin type (thick and thin), seeded or not, large and small. Based on this grouping, children obtained a classification of thick/thin-skinned fruit, large and small, seeded and seedless. Children were able to distinguish and assess fruit based on the grouping they obtained.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Mrs. El again explained the benefits of chicken at the opening of the second cycle. The difference was, in cycle 2, Mrs. El, who had prepared the ingredients to make toast, asked about the benefits of chicken. After being cut, Mrs. El pointed to the sausages and nuggets while asking, "What can this meat be used for?" The children answered sausages and nuggets. After that, Mrs. El showed various additional ingredients for making toast.

Ibu El: "Saya jadi penasaran, kalau roti panggangnya dibuat dengan bahan-bahan ini, setuju nggak?"
Anak-anak: "Setuju"
Ibu El: "Baiklah."
Ibu El meminta anak-anak untuk menonton video yang menunjukkan cara menggunakan oven dan cara membuat roti panggang. Setelah menonton video, anak-anak kembali ditanya tentang cara membuat roti panggang.
Ibu El: “Siapa yang masih ingat cara membuat roti panggang? Apa langkah pertama?”
Anak-anak: "Ambil rotinya"
Ibu El: “Ambil rotinya. Berapa? (Ibu El mengacungkan dua jari)”
Anak-anak: "Duaaa"
Bu El : “Dua. Terus gimana?” (jawab anak kecil memanggangnya. Bu El mengangkat telapak tangannya di depan dada, dan satu tangannya digerak-gerakkan seperti kipas di atas tangan satunya. Seolah-olah sedang memperagakan cara mengoles)
Anak-anak: "Diolesi"
Ibu El: "Diolesi apa?"
Anak-anak: "Margarin" (beberapa anak menjawab mentega dengan suara pelan)
Ibu El: "Setelah dioles, trus gimana?"
Anak-anak: "Dipanggang"
Ibu El: "Iya, dipanggang sampai kita dengar apa?"
Anak-anak menjawab serempak, "Ting!"
Ibu El: "Ya, sampai kita mendengar Ting. Lalu, apa?"
Anak-anak: "Isi saja"
Ibu El: “Tadi kita inget roti panggang. Terus kita nonton video tentang oven”
Ibu El: "Apakah ada yang punya oven di rumah?"
Ada beberapa anak yang menjawab, “Mama punya”, “Aku punya”, “tapi ovennya pakai kompor”
Bu El : “Ternyata ada beberapa dari kalian yang punya oven, ovennya Mama. Dan ovennya pakai

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

kompor. Kalau di sekolah, ovennya pakai listrik."
Ibu El : "Tapi kalau pakai kompor atau listrik, kalau oven dinyalakan pasti panas.
Ibu El : "Sebelum kita membuat roti, apakah ada yang tahu cara membuat roti? Pertama-tama, apa yang harus dilakukan?"
Anak-anak: "Hubungkan"
Ibu El: "Hubungkan oven ke listrik. Setelah itu?"
Anak-anak: "Nyalakan"
Ibu El: "Nyalakan, sampai kapan? Sampai lampunya…?
Anak-anak menjawab serempak "Lampunya merah"
Bu El: "Nyalakan sampai lampunya merah. Setelah itu, kita masukkan rotinya."
Anak-anak: "Pakai sarung tangan"
Ibu El: "Iya, pakai sarung tangan atau kain ya, biar tangan tidak panas".
Ibu El: "Setelah itu, kapan dilakukannya?"
Anak-anak: "Sampai kita mendengar Ting"

Mrs. El: "I'm curious, if the toast is made with these ingredients, do you agree?"
Children: "Yes"
Mrs. El: "Okay."
Mrs. El asked the children to watch a video showing how to use the oven and how to make toast. After watching the video, the children were asked again about how to make toast.
Mrs. El: "Who still remembers how to make toast? What's the first step?"
Children: "Take the bread"
Mrs. El: "Take the bread. How many? (Mrs. El holds up two fingers)"
Children: "Two"
Mrs. El: "Two. Then how?" (Answered the little boy toasting it. Mrs. El raised her palms in front of her chest, and moved one hand like a fan above the other hand. As if demonstrating how to spread it)
Children: "Smeared"
Mrs. El: "Smeared with what?"
Children: "Margarine" (some children answered butter in a low voice)
Mrs. El: "After it's smeared, then what?"
Children: "Baked"
Mrs. El: "Yes, baked until we hear what?"

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

The children answered in unison, "Ting!"
Mrs. El: "Yes, until we hear Ting. Then, what?"
Children: "Just fill it"
Mrs. El: "Earlier we remembered toast. Then we watched a video about ovens"
Mrs. El: "Does anyone have an oven at home?"
Some children answered, "Mom has one", "I have one", "but the oven uses a stove"
Mrs. El: "It turns out that some of you have an oven, Mom's oven. And the oven uses a stove. At school, the oven uses electricity."
Mrs. El: "But if you use a stove or electricity, if the oven is turned on, it will definitely be hot.
Mrs. El: "Before we make bread, does anyone know how to make bread? First of all, what should be done?"
Children: "Connect"
Mrs. El: "Connect the oven to the electricity. After that?"
Children: "Turn it on"
Mrs. El: "Turn it on, until when? Until the light...?
The children answered in unison "The light is red"
Mrs. El: "Turn it on until the light is red. After that, we put the bread in."
Children: "Wear gloves"
Mrs. El: "Yes, wear gloves or cloth, so your hands don't get hot".
Mrs. El: "After that, when is it done?"
Children: "Until we hear Ting"

Pada siklus 2, Ibu Na mengawali dengan menanyakan kepada anak-anak kegiatan apa yang ingin mereka lakukan hari itu. Seorang anak menjawab, menimbang buah-buahan lagi. Ibu Na mengambil sebuah kotak kecil berisi berbagai macam buah. Kemudian Ibu Na menanyakan nama buah tersebut dengan menyanyikan pertanyaan tersebut sambil mengangkat contoh buah yang dimaksud. Setelah itu, Ibu Na meminta anak-anak untuk menonton video. Video tersebut berisi tentang cara menimbang buah dengan menggunakan timbangan sungguhan. Dalam video tersebut terlihat bahwa setelah buah diletakkan, anak-anak harus melihat jarum yang menunjuk ke angka tertentu. Angka yang ditunjuk oleh jarum tersebut menunjukkan berat buah yang sebenarnya. Timbangan tersebut memiliki satuan gram.
Ibu Na kemudian memperagakan cara menimbang dan meminta anak-anak untuk memperhatikan angka yang tertera pada jarum. Ibu Na memberikan contoh dengan beberapa buah, seperti jeruk,

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

dan apel. Kemudian anak-anak diminta untuk mengisi lembar kerja masing-masing. Selain itu, anak-anak menuliskan beratnya pada kertas harga. Ibu Na mengatakan, setelah menuliskan semua pada kertas harga, anak-anak diminta untuk mengelompokkan buah-buahan berdasarkan berat buah tersebut. Anak-anak kemudian berlatih menimbang dan menuliskan berat buah tersebut.

Saat mengelompokkan buah, Ibu Na berkeliling melihat setiap kelompok. Ibu Na bertanya kepada setiap kelompok buah mana yang paling berat dan mana yang paling ringan. “Apakah ada buah yang beratnya sama?” Ibu Na meminta setiap anak untuk melihat hasil kerja mereka. Ibu Na kemudian menambah pertanyaannya untuk mengukur daya pikir kritis anak.

In cycle 2, Mrs. Na started by asking the children what activities they wanted to do that day. One child answered, weighing fruits again. Mrs. Na took a small box containing various kinds of fruit. Then Mrs. Na asked the name of the fruit by singing the question while holding up an example of the fruit in question. After that, Mrs. Na asked the children to watch a video. The video was about how to weigh fruit using a real scale. In the video, it can be seen that after the fruit is placed, the children have to look at the needle that points to a certain number. The number indicated by the needle indicates the actual weight of the fruit. The scale has units of grams.

Mrs. Na then demonstrated how to weigh and asked the children to pay attention to the numbers on the needle. Mrs. Na gave examples with several fruits, such as oranges and apples. Then the children were asked to fill in their respective worksheets. In addition, the children wrote down their weight on a price sheet. Mrs. Na said, after writing everything on the price sheet, the children were asked to group the fruits based on the weight of the fruit. The children then practiced weighing and writing down the weight of the fruit.

When grouping the fruits, Mrs. Na went around looking at each group. Mrs. Na asked each group which fruit was the heaviest and which was the lightest. “Are there any fruits that weigh the same?” Mrs. Na asked each child to look at their work. Mrs. Na then added her questions to measure the children’s critical thinking skills.

Ibu Na: "Mengapa mangga di kelompok ini dan kelompok itu beratnya tidak sama padahal keduanya adalah buah yang paling berat?"

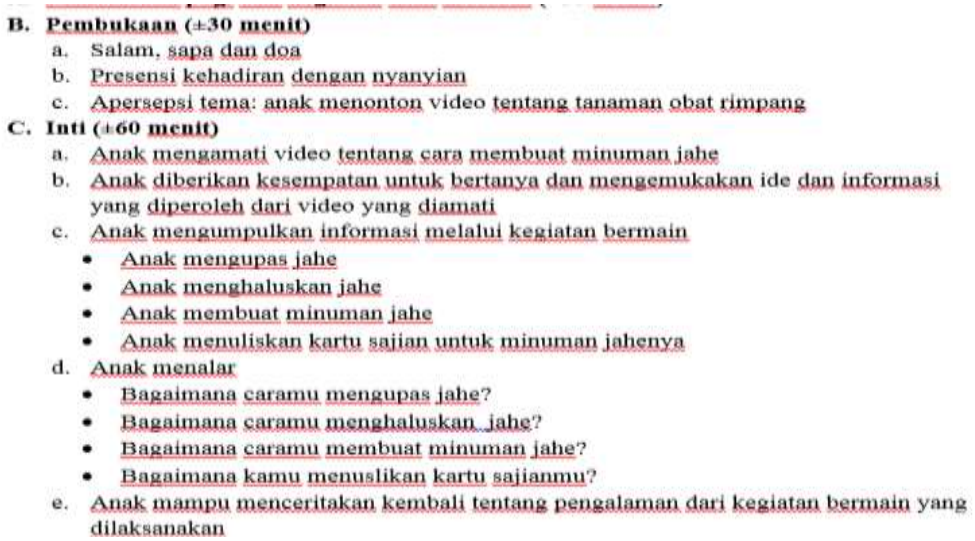
Ibu Na: "Yang ini beratnya 500 gram. Yang di sana beratnya 400 gram. Ada yang tahu kenapa?"

Beberapa saat anak-anak terdiam, Bu Na mengulang pertanyaan dan meminta anak-anak untuk melihat kedua buah mangga yang sedang dibandingkan. Seorang anak menjawab, "Karena ada

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

yang besar dan ada yang kecil."
Ibu Na: "Ya, yang ini lebih besar. Yang itu lebih kecil."
Ibu Na: "Sekarang tunjukkan buah mana yang paling kecil beratnya"
Anak-anak dalam setiap kelompok menunjukkan buah yang paling ringan. Anak-anak mengangkat buah yang paling ringan. Ada yang mengangkat jeruk, salak, atau pisang.
Pada siklus ketiga, Ibu El dan Ibu Na mengganti topik. Ibu El mengganti topik menjadi Jahe dan Ibu Na mengganti topik menjadi Sayur. Ibu El mengajak anak-anak untuk memahami jahe dengan bermain proyek tentang minuman jahe kesukaan mereka, sedangkan Ibu Na mengajak anak-anak bermain proyek Warung Pecel Madiun. Perubahan rencana pembelajaran pada siklus 3 tampak sebagai berikut:



B. Pembukaan (±30 menit)
a. Salam, sapa dan doa
b. Presensi kehadiran dengan nyanyian
c. Apersepsi tema: anak menonton video tentang tanaman obat rimpang

C. Inti (±60 menit)
a. Anak mengamati video tentang cara membuat minuman jahe
b. Anak diberikan kesempatan untuk bertanya dan mengemukakan ide dan informasi yang diperoleh dari video yang diamati
c. Anak mengumpulkan informasi melalui kegiatan bermain
- Anak mengupas jahe
- Anak menghaluskan jahe
- Anak membuat minuman jahe
- Anak menuliskan kartu sajian untuk minuman jahenya

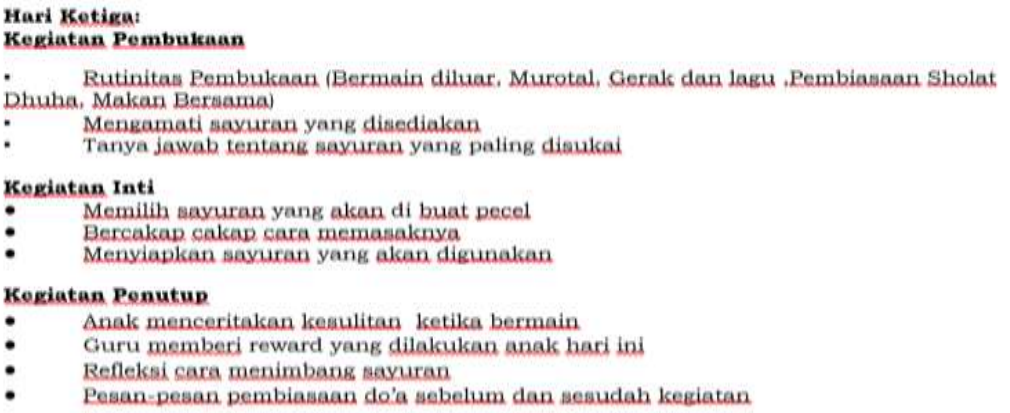
d. Anak menalar
- Bagaimana caramu mengupas jahe?
- Bagaimana caramu menghaluskan jahe?
- Bagaimana caramu membuat minuman jahe?
- Bagaimana kamu menuslikan kartu sajianmu?

e. Anak mampu menceritakan kembali tentang pengalaman dari kegiatan bermain yang dilaksanakan

Gambar 3. Langkah-langkah Kegiatan RPPH Ibu El pada Siklus 3

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS



Hari Ketiga:
Kegiatan Pembukaan

- Rutinitas Pembukaan (Bermain diluar, Murotal, Gerak dan lagu ,Pembiasaan Sholat Dhuha, Makan Bersama)
- Mengamati sayuran yang disediakan
- Tanya jawab tentang sayuran yang paling disukai

Kegiatan Inti

- Memilih sayuran yang akan di buat pecel
- Bercakap cakap cara memasaknya
- Menyiapkan sayuran yang akan digunakan

Kegiatan Penutup

- Anak menceritakan kesulitan ketika bermain
- Guru memberi reward yang dilakukan anak hari ini
- Refleksi cara menimbang sayuran
- Pesan-pesan pembiasaan do'a sebelum dan sesudah kegiatan

Gambar 4. Langkah-langkah Kegiatan Modul Pengajaran Ibu Na pada Siklus 3

Mrs. Na: "Why are the mangoes in this group and that group not the same weight even though they are the heaviest fruits?"
Mrs. Na: "This one weighs 500 grams. The one over there weighs 400 grams. Does anyone know why?"
After a few moments of silence, Mrs. Na repeated the question and asked the children to look at the two mangoes being compared. One child answered, "Because there is a big one and a small one."
Mrs. Na: "Yes, this one is bigger. That one is smaller."
Mrs. Na: "Now show me which fruit weighs the least"
The children in each group showed the lightest fruit. The children lifted the lightest fruit. Some lifted oranges, salak, or bananas.
In the third cycle, Mrs. El and Mrs. Na changed the topic. Mrs. El changed the topic to Ginger and Mrs. Na changed the topic to Vegetables. Mrs. El invited the children to understand ginger by playing a project about their favorite ginger drink, while Mrs. Na invited the children to play a project about Warung Pecel Madiun. The changes in the learning plan in cycle 3 are as follows:

1. Mrs. El's RPPH activity steps
   C. Introduction (±30 minutes)
      - Meet, greet, and pray
      - Attendance checks with singing

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

- Theme apperception: children watch videos about medicinal plants rhizomes

D. Core activities (±60 minutes)
   - Children observe a tutorial video on how to make a ginger drink
   - Children are given the chance to ask and express ideas or informations that they obtained from the video
   - Children gather informations through playing activities such as:
     - Peeling ginger
     - smoothing ginger
     - making ginger drink
     - writing a serving card for ginger drink
   - Children are given the time to think about how they do the activities
   - Children are able to narrate their experience from project playing activities that were carried out

2. Mrs. Na's Teaching Module Activity Steps (practiced)
   A. Introduction
      - Opening routine (playing outside, reading Qur'an, moving and singing, accustoming Dhuha Prayer, eating together)
      - Observing available vegetables
      - Discussing about favorite vegetables
   B. Core activities
      - Picking vegetables to make pecel
      - Discussing about cooking
      - Preparing vegetables that are going to be cooked
   C. Closing
      - Children narrate about their hardship during playing
      - Teachers give out rewards to children for their participation during the activities
      - Reflection on how to weigh vegetables
      - messages to encourage prayer before and after activities

Ibu El memulai kegiatan hari itu dengan mengingatkan anak-anak tentang topik bahasan yang telah disepakati sebelumnya. Ibu El memutarkan sebuah video, yang ternyata isinya tentang jahe. Setelah menonton video tersebut, Ibu El mengambil berbagai macam rimpang jahe. Anak-anak diajak untuk berdiskusi tentang rimpang jahe. Ibu El menanyakan tentang berbagai jenis jahe dan

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

ciri-cirinya. Ibu El menunjukkan satu rimpang jahe yang berukuran besar dan berwarna putih. Seorang anak mengatakan jahe gajah. Ibu El menanyakan mengapa dinamakan jahe gajah. Anak itu menjawab karena ukurannya besar dan berwarna putih. Ketika diperlihatkan jenis rimpang yang kedua, anak itu menyebut jahe emprit. Ibu El menanyakan mengapa dinamakan jahe emprit. Anak itu menjawab karena warnanya kuning. Sedangkan pada jenis jahe yang terakhir, anak itu menyebutnya jahe merah karena warnanya merah.

Ibu El kemudian meminta anak-anak untuk membandingkan aroma jahe, mana yang lebih harum. Ternyata tidak semua anak memiliki pendapat yang sama. Ada anak yang mengatakan jahe emprit lebih harum daripada jahe gajah. Ada pula yang mengatakan jahe gajah lebih harum daripada jahe merah. Ibu El menawarkan untuk membuat olahan dari jahe. Ibu El berkomentar, “Minuman apa saja yang bisa kita buat? Kita bisa membuat jamu, angsle, ronde, atau minuman jahe. Dari keempat ini, apa yang sebaiknya kita buat? Atau kita cari resepnya dulu di internet? Boleh?” Ibu El mengajak anak-anak untuk mencari resep minuman jahe di internet.

Sebelum membuat minuman yang dipilih, anak mengerjakan lembar kerja siswa yang berisi rencana pembuatan minuman tersebut. Setelah anak memilih bahan dan memasukkan resep ke laptop Ibu El, anak dapat mencetak desain resep tersebut. Anak senang ketika pilihan resep mereka dicetak.

Seperti yang telah disampaikan sebelumnya bahwa pada kegiatan pembelajaran kali ini Ibu El ingin mengenalkan kepada anak-anak tentang fungsi-fungsi peralatan elektronik rumah tangga sebagai bagian dari pengenalan teknologi. Dalam bermain proyek pada siklus ini Ibu El mengajak anak-anak untuk memahami dan mampu mengoperasikan blender serta menggunakan laptop dan printer untuk kebutuhan pembelajaran. Setelah belajar menggunakan blender, anak-anak memilih resep minuman dan Ibu El membantu menuliskan nama untuk resep minuman yang telah dipilih. Apabila resep sudah pasti, Ibu El mencetak kertas resep tersebut dan anak-anak kemudian memilih bahan-bahan sesuai dengan resep yang dibuat. Tidak semua anak memilih untuk membuat minuman dengan blender. Ada yang memilih untuk membuat minuman secara manual. Anak-anak saling berbagi resep yang telah mereka pilih dan coba buat. Ibu El menanyakan rasa dari resep yang telah dipilih dan dicobanya. Berikut percakapan Ibu El setelah anak-anak selesai mencobanya:

Mrs. El started the day's activities by reminding the children about the previously agreed topic of discussion. Mrs. El played a video, which turned out to be about ginger. After watching the video, Mrs. El took various types of ginger rhizomes. The children were invited to discuss

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

ginger rhizomes. Mrs. El asked about the various types of ginger and their characteristics. Mrs. El showed a large, white ginger rhizome. One child said elephant ginger. Mrs. El asked why it was called elephant ginger. The child answered because it was large and white. When shown the second type of rhizome, the child called it emprit ginger. Mrs. El asked why it was called emprit ginger. The child answered because it was yellow. As for the last type of ginger, the child called it red ginger because it was red. Mrs. El then asked the children to compare the aroma of ginger, which was more fragrant. It turned out that not all children had the same opinion. There were children who said emprit ginger was more fragrant than elephant ginger. There were also those who said elephant ginger was more fragrant than red ginger. Mrs. El offered to make processed ginger. Mrs. El commented, “What drinks can we make? We can make jamu, angsle, ronde, or ginger drink. Out of these four, which one should we make? Or should we look for the recipe on the internet first? Is that okay?” Mrs. El invited the children to look for a ginger drink recipe on the internet.

Before making the chosen drink, the children worked on a student worksheet containing a plan for making the drink. After the children chose the ingredients and entered the recipe into Mrs. El’s laptop, the children could print the recipe design. The children were happy when their recipe choices were printed.

As previously stated, in this learning activity Mrs. El wanted to introduce the children to the functions of household electronic equipment as part of the introduction to technology. In playing the project in this cycle, Mrs. El invited the children to understand and be able to operate a blender and use a laptop and printer for learning needs. After learning to use a blender, the children chose a drink recipe and Mrs. El helped write the name for the chosen drink recipe. When the recipe was certain, Mrs. El printed the recipe paper and the children then chose the ingredients according to the recipe they had made. Not all children chose to make drinks with a blender. Some chose to make drinks manually.

The children shared the recipes they had chosen and tried to make. Mrs. El asked about the taste of the recipes they had chosen and tried. Here is Mrs. El's conversation after the children had finished trying them:

Ibu El: "Jadi, apakah kamu sudah mencoba membuat resepnya? Apa nama resepnya?
Anak-anak: "Susu, coklat, jahe"
Ibu El: "Apakah semua orang di sini sudah selesai? Apa yang kalian buat?"
Anak-anak: "Teh, jahe, manis."

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Ibu El: “Baiklah, tunggu di sini.”
Ibu El: "Semua sudah selesai? Apakah semua sudah mencoba semuanya?"
Anak-anak: "Sudah".
Nona El: "Bagaimana rasanya?"
Anak-anak: "Pahit"
Ibu El : "Kalau pahit, saya jadi bertanya-tanya apa yang membuatnya pahit? Apa yang bisa kita tambahkan agar rasanya lebih manis?”
Ada anak yang menjawab susu, ada anak yang menjawab gula. Kelompok yang membuat resep mengatakan ingin menambahkan susu lagi. Ibu El bertanya apakah jika ditambahkan susu, rasanya akan lebih manis?
Ibu Na mengajak anak-anak untuk berjualan sayur dengan mengajak anak-anak untuk berperan sebagai penjual sayur. Ibu Na mengajak anak-anak untuk berdiskusi mengenai berbagai kemungkinan masalah yang mungkin terjadi ketika berjualan nanti. Kegiatan dilakukan di luar kelas. Berdasarkan lembar kerja tentang harga sayur yang akan dijual, Ibu Na memulai diskusi mengenai harga-harga yang dituliskan oleh anak-anak. Ibu Na mengatakan (sambil melihat lembar kerja yang dibuat oleh masing-masing kelompok), ada yang memberi harga rendah, dan ada yang memberi harga tinggi.
Ibu Na: "Mengapa begitu mahal?
Anak-anak: “Karena harganya *mundak* (naik)”
Ibu Na: "Oh jadi kalau harganya naik berarti kamu yang membuatnya mahal ya?"
Ibu Na: "Kalau misalnya penjualan Anda lebih mahal dari yang lain, apa yang harus Anda lakukan supaya tidak kehilangan penjualan?"
Anak-anak: "Berarti kita nggak dapat uang. Nggak mungkin kita nggak dapat uang kalau kita jualan. Kalau uangnya *sitik* (sedikit), kita nggak dapat uang."
Anak-anak: “Kalau mau harganya jangan mahal, penjualannya kecil-kecilan. Uangnya sedikit”
Ibu Na: "Oh kalau murah, penjualannya kecil. Misalnya satu ikat kecil harganya 1000 ya?
Anak-anak: "Uh huh"
Ibu Na: "Kalau penjualannya banyak, berarti harganya mahal. Begitu ya?"
Anak-anak: "Tidak, kalau penjualannya sedikit, harganya murah. Kalau penjualannya banyak, harganya juga ikut naik.
Ibu Na: “Ya, benar. Kalau penjualannya banyak, harganya jadi lebih mahal.”

Mrs. El: "So, have you tried making the recipe? What is the name of the recipe?

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Children: "Milk, chocolate, ginger"
Mrs. El: "Has everyone here finished? What did you make?"
Children: "Tea, ginger, sweet."
Mrs. El: "Okay, wait here."
Mrs. El: "Everyone finished? Has everyone tried everything?"
Children: "Yes."
Miss El: "How does it taste?"
Children: "Bitter"
Mrs. El: "If it's bitter, I wonder what makes it bitter? What can we add to make it sweeter?"
Some children answered milk, some answered sugar. The group that made the recipe said they wanted to add more milk. Mrs. El asked if it would be sweeter if milk was added?
Mrs. Na invited the children to sell vegetables by inviting the children to act as vegetable sellers. Mrs. Na invited the children to discuss various possible problems that might occur when selling later. The activity was carried out outside the classroom. Based on the worksheet on the price of vegetables to be sold, Mrs. Na started a discussion on the prices written by the children. Mrs. Na said (while looking at the worksheet made by each group), some gave low prices, and some gave high prices.
Mrs. Na: "Why is it so expensive?
Children: "Because the price has gone up"
Mrs. Na: "Oh, so if the price goes up, it means you're the one who made it expensive, huh?"
Mrs. Na: "If, for example, your sales are more expensive than others, what should you do so you don't lose sales?"
Children: "That means we don't get money. There's no way we don't get money if we sell. If the money is small, we don't get money."
Children: "If you want the price, don't make it expensive, sell it on a small scale. The money is small"
Mrs. Na: "Oh, if it's cheap, the sales are small. For example, one small bundle costs 1000, right?
Children: "Uh huh"
Mrs. Na: "If the sales are high, the price is high. Is that right?"
Children: "No, if the sales are low, the price is cheap. If the sales are high, the price also goes up.
Mrs. Na: "Yes, that's right. If the sales are high, the price becomes more expensive."

Dengan melihat contoh percakapan yang terjadi antara guru dengan anak dari siklus 1 sampai

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

siklus 3, terlihat adanya perubahan pada kemampuan anak dalam mengomunikasikan ide atau pengetahuan baru yang diperoleh dari pengetahuan sebelumnya. Broderick (Broderick et al., 2023) menyatakan bahwa percakapan dan interaksi yang terjadi sehari-hari antara guru dan anak dapat mengembangkan keterampilan berpikir anak dalam artian membangun hubungan antara pengetahuan yang diperoleh dari pengalaman belajar sebelumnya dengan pengetahuan baru, serta pengetahuan dan keterampilan bertindak. Hal ini dapat dilihat dari cara bertanya yang dilakukan oleh Ibu El dan Ibu Na pada siklus 1 sampai siklus 3.

Pada siklus 1, guru cenderung menanyakan informasi yang sudah diketahui anak secara jelas. Misalnya, Bu El menanyakan informasi tentang cara menggunakan oven berdasarkan informasi video yang sudah ditonton anak sebelumnya. Bu Na menanyakan aktivitas yang dapat dilakukan anak dengan benda nyata yang mana anak juga dapat mengamati perbedaannya. Bu Na melatih kemampuan berpikir abstrak anak dengan memberikan timbangan tanpa instruksi kecuali perbedaan tinggi akibat beban benda pada alat timbang. Bu El melatih kemampuan berpikir abstrak anak dengan menghubungkan informasi nyata yang dapat dilihat anak dengan ketidakseimbangan timbangan saat diisi buah.

Percakapan yang dipicu kalimat tanya antara guru dengan anak usia dini merupakan gerbang untuk melatih anak berpikir kritis. Pertanyaan yang menuntut jawaban tidak hanya berdasarkan media fakta atau dari informasi yang pernah didengar dapat menjadi pemicu anak untuk berpikir kritis atau kreatif memberikan jawaban. Wujud pengembangan kemampuan kritis adalah kemampuan anak dalam menggunakan bahasanya sendiri untuk bidang pembelajaran nonbahasa, seperti matematika, sains, atau rekayasa teknologi (Cheung et al., 2022; Cortés Loyola et al., 2020; Putri, 2019). Perkembangan berpikir kritis anak, kreativitas dalam menyampaikan informasi dengan bahasanya sendiri, atau perkembangan keterampilan literasi yang terkait dengan bidang studi lainnya disajikan dalam tabel berikut:

By looking at the example of conversations that occur between teachers and children from cycle 1 to cycle 3, there is a change in children's ability to communicate new ideas or knowledge obtained from previous knowledge. Broderick (Broderick et al., 2023) states that conversations and interactions that occur daily between teachers and children can develop children's thinking skills in the sense of building relationships between knowledge obtained from previous learning experiences with new knowledge, as well as knowledge and skills to act. This can be seen from the way Mrs. El and Mrs. Na ask questions in cycle 1 to cycle 3.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

In cycle 1, teachers tend to ask for information that children already know clearly. For example, Mrs. El asks for information about how to use an oven based on information from a video that the child has watched before. Mrs. Na asks about activities that children can do with real objects where children can also observe the differences. Mrs. Na trains children's abstract thinking skills by giving them scales without instructions except for the difference in height due to the weight of the object on the scale. Mrs. El trains children's abstract thinking skills by connecting real information that children can see with the imbalance of the scales when filled with fruit.

Conversations triggered by interrogative sentences between teachers and early childhood children are a gateway to training children to think critically. Questions that require answers not only based on facts or information that has been heard can trigger children to think critically or creatively to provide answers. The form of critical ability development is the child's ability to use their own language for non-language learning areas, such as mathematics, science, or engineering technology (Cheung et al., 2022; Cortés Loyola et al., 2020; Putri, 2019). The development of children's critical thinking, creativity in conveying information in their own language, or the development of literacy skills related to other fields of study are presented in the following table:

Table 1. Trigger sentence matrix with children's language development skills

Period	Trigger (Mrs. El)	Children reaction	Trigger (Mrs. Na)	Children reaction
Cycle 1	What should we do to the oven first? How do we do it?	Connect to electricity Turn on, Up to two	We will prove which fruit is heavier or lighter, using this tool.	Seesaw tool, heavier orange color
Cycle 2	Who still remembers how to make toast?	Statements about facts (bread, two, plug, mama's oven, put on the stove, ting)	Why is the mango here heavier than the mango there?	Because there are small ones and there are big ones
Cycle 3	If it is bitter, I wonder what makes it bitter? What can we add to make it sweeter?	Give milk or sugar	Why did you give it such a high price?	if sales are low, the price is cheap. if sales are high, the price is also high

Pernyataan dari anak yang mampu berpikir lebih kritis, anak lebih berani menggunakan bahasa atau istilah mereka sendiri sesuai dengan perbendaharaan kata yang dimilikinya. Anak juga cenderung menggunakan istilah dalam bahasa daerahnya atau istilah berdasarkan informasi yang dapat diamati secara visual. Istilah-istilah yang muncul bukanlah istilah baku dari perbendaharaan kata bahasa resmi. Beberapa istilah baru yang muncul dapat dilihat pada tabel berikut:

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Statements from children who are able to think more critically, children are more daring to use their own language or terms according to the vocabulary they have. Children also tend to use terms in their local language or terms based on information that can be observed visually. The terms that appear are not standard terms from the official language vocabulary. Some new terms that appear can be seen in the following table:

Table 2. Children's vocabulary and description of its origins

Children vocabulary	Description
Dicolok/mencolok *(Indonesian)*	**Colokan** is an electrical plug (small children know the term electrical plug because they see the cable connected to the power outlet)
mundak (Javanese)	**Mundak** is Javanese which means to increase
sitik (Javanese)	**Sitik** is a Javanese word which means a little or a bit

Dari pengalaman mengajar guru yang sedang mengikuti Pendidikan Profesi Guru (PPG) terlihat bahwa RPP yang dirancang oleh guru, meskipun tidak tampak memberikan kontribusi secara langsung terhadap pelaksanaan pembelajaran, dapat menjadi sarana kontrol bagi guru untuk mengetahui apakah stimulasi yang diberikan kepada anak telah meningkatkan kemampuan dan keterampilan berpikir anak atau belum. Pada siklus 2, guru belum mengubah RPP yang digunakan pada siklus 1. Dengan menggunakan RPP yang sama nampaknya memudahkan guru untuk memperbaiki proses pelaksanaan pembelajaran dengan melatih anak dengan penggunaan kalimat pemicu yang tidak hanya meminta anak untuk mengulang informasi yang sudah diketahui. Dengan demikian ketika pada siklus 3, guru lebih berani untuk memicu keterampilan nalar anak untuk memberikan analisisnya. Disamping itu pada siklus 3 jauh lebih tampak bahwa kemampuan anak dalam bernalar secara kreatif muncul melalui ungkapan/jawaban sederhana dengan menggunakan bahasa anak sendiri. Keterbatasan kosakata dalam bahasa Indonesia tidak menjadi halangan bagi anak untuk mengungkapkan ide apa yang dipikirkannya, tanpa merasa takut salah.

From the teaching experience of teachers who are currently taking the Teacher Professional Education (PPG), it is seen that the lesson plan designed by the teacher, although it does not appear to provide a direct contribution to the implementation of learning, can be a means of control for teachers to find out whether the stimulation given to children has improved children's thinking abilities and skills or not. In cycle 2, the teacher has not changed the lesson

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

plan used in cycle 1. By using the same lesson plan, it seems easier for teachers to improve the learning process by training children with the use of trigger sentences that do not only ask children to repeat information that is already known. Thus, when in cycle 3, teachers are more courageous in triggering children's reasoning skills to provide their analysis. In addition, in cycle 3, it is much more apparent that children's ability to reason creatively emerges through simple expressions/answers using the child's own language. Limited vocabulary in Indonesian is not an obstacle for children to express what ideas they think, without fear of being wrong.

CONCLUSION

Penerapan keterampilan bertanya dalam kegiatan pembelajaran berbasis STEAM dan permainan berbasis proyek berperan penting dalam mengembangkan keterampilan berpikir kritis anak usia dini. Melalui strategi bertanya yang efektif, anak-anak didorong untuk mengamati, mengeksplorasi, menganalisis, dan menghubungkan konsep-konsep yang mereka temui dalam pengalaman bermain. Keterampilan bertanya yang terbuka, reflektif, dan menantang merangsang rasa ingin tahu dan membantu anak-anak membangun pemahaman yang lebih dalam. Dengan demikian, integrasi pendekatan ini dalam pendidikan anak usia dini menjadi strategi yang efektif dalam meningkatkan keterampilan berpikir kritis sejak usia dini, yang pada akhirnya mendukung kesiapan mereka untuk menghadapi tantangan pembelajaran di masa mendatang.

The application of questioning skills in STEAM-based learning activities and project-based games plays an important role in developing critical thinking skills in early childhood. Through effective questioning strategies, children are encouraged to observe, explore, analyze, and connect concepts they encounter in play experiences. Open-ended, reflective, and challenging questioning skills stimulate curiosity and help children build deeper understanding. Thus, the integration of this approach in early childhood education is an effective strategy in improving critical thinking skills from an early age, which ultimately supports their readiness to face future learning challenges.

References

Broderick, JT, Sareh, N., & Aggrey, PM-B. (2023). Mengajarkan Guru Prasekolah untuk Berkomunikasi Secara Produktif dengan Anak-anak: Desain Kasus Tunggal. *Jurnal Pendidikan Anak Usia Dini* , *51* (1), 165–178. https://doi.org/10.1007/s10643-021-01284-0

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Cheung, SK, Siu, T.-SC, & Caldwell, MP (2022). Kemampuan Matematika di Usia Sangat Muda: Kontribusi Kualitas Hubungan dengan Orang Tua dan Guru melalui Kemampuan Bahasa dan Literasi Anak. Jurnal Pendidikan Anak Usia Dini . https://doi.org/10.1007/s10643-022-01338-x

Cortés Loyola, C., Adlerstein Grimberg, C., & Bravo Colomer, Ú. (2020). Guru anak usia dini menciptakan lingkungan belajar multiliterasi: Munculnya proses berpikir desain spasial. Keterampilan Berpikir dan Kreativitas,36,100655. https://doi.org/https://doi.org/10.1016/j.tsc.2020.100655

Hidayah, A. (2023). Implementasi Pembelajaran Berbasis Proyek dalam Kegiatan Sains bagi Anak Usia Dini pada Kelompok B di TA-TK Al-Azhar Syifa Budi Solo Tahun Ajaran 2022/2023. Skripsi. IAIN Surakarta.

Lestari, G. D., Widodo, W., Yusuf, A., & Widyaswari, M. (2023). Implementasi Komunikasi Positif dalam Meningkatkan Motivasi Belajar Anak Usia Dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini

Lestari, M. P., Rahmawati, I. Y., & Muttaaqin, M. A. (2024). Implementasi Pertanyaan Pemantik untuk Menstimulasi Kemampuan Berpikir Logis Anak Usia Dini. Jurnal Riset Golden Age PAUD UHOLuluk, H. H. (2023). Ini yang Wajib Diperhatikan dalam Pembelajaran Bahasa pada Anak Usia Dini.

Kusumawardani, et al. (2024). Implementasi Pertanyaan Pemantik untuk Menstimulasi Kemampuan Berpikir Logis Anak Usia Dini. Jurnal Riset Golden Age PAUD UHO

Mercer, N., Hennessy, S., & Warwick, P. (2019). Dialog, berpikir bersama, dan teknologi digital di ruang kelas: Beberapa implikasi pendidikan dari serangkaian penelitian berkelanjutan. Jurnal Internasional Penelitian Pendidikan , 97 , 187–199. https://doi.org/https://doi.org/10.1016/j.ijer.2017.08.007

Suningsih, T., Anugrah, S. D., & Putri, N. I. (2024). Penggunaan Media untuk Mengenalkan Bahasa Inggris pada Anak Usia Dini: Literature Review. Jurnal Tumbuh Kembang: Kajian Teori dan Pembelajaran PAUD

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License