

ENGLISH SONG WITH CREATIVE MOVEMENT OF TOTAL PHYSICAL RESPONSE AS LEARNING MATERIAL OF STEAM EDUCATION IN ANIMATION VIDEO FOR YOUNG LEARNERS

Danti Pudjiati, Ninuk Lustyantje, Herlina, Muchlas Suseno

¹STKIP Kusuma Negara, Jakarta, Indonesia

^{2,3,4}Universitas Negeri Jakarta, Indonesia

Email: dantipudjiati_9906921004@mhs.unj.ac.id

Abstract

Song is considered to be an effective and successful pedagogical tool for children to learn English all over the world. Children are suggested to move creatively while singing to support English acquisition. Practicing movement provides positive effect to children growth and development as well. Therefore, the objective of this study was to create English songs regarding to STEAM education combined with creative movement of total physical response in the context of teaching English as a foreign language for young learners. Successive Approximation Model of research and development (R&D) was conducted in this investigation by conjoining quantitative and qualitative methods (mixed method). Data were gathered through written report of assessment sheet, observation and interview. Quantitative data were collected by assessment sheets in percentage values from experts while qualitative data derived from observation in kindergartens and interview with a teacher and a headmaster. The results revealed that the three songs entitled “Animal’s Sound, Shape is Everywhere, and Yes, 1 2 3” were confirmed to be practicable as teaching material in early childhood education. This was proved by the average result of validation data, showing that all indicators, i.e. English lyric, song, creative movement, audiovisual production and implementation obtained feasible criteria, above 81.25%. The observation showed that children would like to move while singing those songs and the interview concluded that the music and creative movement were useful for children in learning. This implied that though these songs children can improve their understanding about STEAM education in an interesting of art activity.

Keywords: Children’ Educational Songs, Creative Movement, Total Physical Response, STEAM, English for Young Learners.

INTRODUCTION

Nowadays most schools of ECE (early childhood education) already introduce English to young learners to prepare them in facing more challenge in worldwide business. In general, the method of learning English for children that is extensively applied is singing due to its high achievement for the learning result (Mutiah et al., 2020; Palupi et al., 2019; Sya & Helmanto, 2020). Singing with music generates a learning environment that is free from anxiety and at the same time serve learning objectives through fun activities and is proven to offer many benefits (Kumar et al., 2022). One of benefits is pronunciation practice. Early childhood is expected to have

good language pronunciation skills for the sake of language proficiency. Understanding pronunciation will make it easier for them to improve their listening and speaking skills as a foundation for mastering reading skill.

The use of songs in learning language is well-known as a pedagogical tool. Through singing students can practice various language skills and competences such as listening, speaking, reading, vocabulary mastery, understanding sentence structure and identifying pronunciation (Palupi et al., 2019). Particularly, singing also helps students to improve listening skill because they rehearse to listen to several forms of intonation and rhythm. The ability to recognize the types of intonation and rhythm is important for language learners to hone their emotions in communication in order to avoid misunderstandings. Other than that, (Hamilton & Murphy, 2023) stated that songs can be stored in short-term and long-term memory which leads students to gain more benefits. If students listen to a song that is appropriate to what they are learning, it will be automatically kept in their brain so that it has pedagogical value and has a significant impact.

Commonly, English children's songs for educational purpose do not exceed of eight syllables for one line and lyrics are often repeated to show an essential part. This repetition helps them to increase the acquisition of new vocabulary. In addition, such songs arrange simple sentence structures that make it easier for children to recognize and understand the lyrics. Educational songs should be (1) in line with the learning topic, (2) interesting for both children and teachers, (3) in a cheerful atmosphere with moderate tone, not too high or low, (4) in harmony between the lyrics and melodies which is suitable for children characters, (5) used simple sentences in consideration English as a foreign language (Latif et al., 2014). Apart from this, when students learn English through singing with music they have an opportunity to develop multiple intelligences, for example verbal-linguistic, music-song and intrapersonal. This statement also in agreement with (Sinaga, 2022; Winangsit & Sinaga, 2020) who clarified that children songs application have positive impacts toward children, namely training gross motor skills, improving self-confidence and developing cognitive and language as well.

Creative movement method is an effort to improve children's kinesthetic skills that encourage the ability to communicate in English due to the acquisition of language proficiency. According to (Sila & Lenard, 2020) the creative movement method or commonly known as dance has been widely used for language learning. Creative movement is confirmed to speed up the process of children's understanding of the learning process, especially to improve vocabulary achievement of the foreign language. The reason is when a child forgets a certain word and the teacher or a friend makes the move, it helps him to remember and mention that utterance (Masturah et al., 2018). More importantly, children's self-confidence can be increased through mastery of kinesthetic skills (Jakobsen, 2022; Shin, 2017). Being able to move is an imperative for children growth and development in a respectable appearance.

When teachers include creative movement in teaching, it will engage more parts of the brain to activate. Kinesthetic learning involves all natural behaviors in the left and right hemispheres of the brain. (Leandro et al., 2018) argues that dance or creative movement is a central role in integrating the body, artistic, intellectual, creative and social. Children experience some the

elements of dance such as movement, space, time, energy and dynamics, and visual relationships with their bodies and this creative movement naturally involves verbal communication. Moreover, (Payne & Costas, 2021) distinguished the value of creative movement in terms of socio emotional, physical, embodied, transferable, arts-based and cognitive learning.

STEAM (science, technology, engineering, art, and math) is suggested to be taught since early childhood. In early childhood the foundation of STEAM is built thoroughly through playing (Lange et al., 2022). Essentially, STEAM is practical activities that children do in daily basis, for examples by observing numerous shapes in their environment, constructing forts made of cardboard boxes, playing a role play of “buying and selling” like to show transaction in the market, pouring numerous of liquids, filling and emptying containers in various sizes, and mixing a variety paint colors for creating a new color (Siantajani, 2020). Additionally, song and music are also related to STEAM skills because early experience with the creative arts can support cognitive development and enhance self-esteem (MARWIYAH, 2022). It is an emphasis that teachers should use STEAM in early childhood in terms of two aspects, namely learning materials and environments (Lindeman, 2014). It means the usage of learning materials should in line with children’ growth and a learning environment created for children must be meaningful.

Although STEAM Education allows teachers to convey STEAM in many kinds of creative ways of learning, there are still some teachers who cannot perform STEAM teaching appropriately (DeJarnette, 2018; Jamil et al., 2018). This is possibly as result of in short supply on learning materials that can be mentioned by teachers. The lacking of resources have conceivably caused weaknesses of STEAM education among teachers (Awang et al., 2020). However, teachers are able to explore in more creative way to introduce STEM idea by promising activities like blocks construction, clay handling, melodramatic games, drawing, singing and dancing (Lindeman et al., 2013).

To fill that void, therefore, the objective of the study is to produce STEAM songs with creative movement used as a teaching material to teach English in the form of animation video. Such kind of video is chosen because it is successful in facilitating the language learning process and is also liked by most of children (Brame, 2016; Guo et al., 2014) duration of video is less than 3 minutes since children characteristic has difficulties to focus on the learning for a long time. Moreover, they are easily to get boredom and have a short time span of concentration (Purwanti, 2020)

Method

This research and development employed successive approximation model (SAM). It was initiated by Michael Allen (Allen & Sites, 2012). This model consists of three steps, namely preparation, iterative design and iterative development. First, preparation was the most important point because it served as a basis for the next stage with two main components i.e. information gathering and SAVVY Start. Researchers were assisted by school principal and teachers to collect information regarding to (1) the content of song lyrics, (2) English vocabulary to be introduced, and (3) the composition of music. The vocabulary referred to STEAM elements as an elaboration

of Kurikulum Merdeka for ECE and joyful music rhythms to meet children character who like to move. Then, it created a creative movement that functions as a help for understanding English learning by following the principle of total physical response (TPR) and also implemented Fundamental Movement Skill (FMS). At the SAVVY stage, researchers with an aid by the teachers worked hand in hand to produce the design of English songs based on the needs in which finally we came to the decision that they are three songs to be composed.

Second, iterative design means after three song designs were completely created, it continued by the next three important steps i.e. (1) reviewing the designs, (2) obtaining feedback, and (3) producing prototypes which took place over and over again. Reviews for designs that have been invented were discussed in the field of English teaching, music composition, creative movement and audio-visual. The feedback was taken into consideration. Furthermore, if the design is certain to fulfill the requirements, then a prototype is constructed. These three steps can be repeated up to 3 times until it reaches the most ideal form of prototype.

Third, iterative development included (1) developing teaching materials of English songs with creative movement in animation video, (2) conducting trials and (3) evaluation. After the prototype was completely designed then it would be developed. These three steps were a cycle which could be repeated up to 3 times before the final product is launched to users.

The whole steps were analyzed qualitatively by means of data collection. This collection was accomplished through (1) written report from validation sheet, (2) observation, and (3) interview. We collected quantitative data in the form of validation sheets accomplished by experts in percentage values (McCusker and Gunaydin, 2015). Assessment was completed by some experts in their fields, to be exact Dr. Kusrin, M.Pd, Dr. Vera Yulia Harmayanthi M.Pd and Dr Audi Yundayani, M.Pd. Five assessment aspects were measured to validate the three STEAM songs of 25 indicators, i.e. English lyric with 7 indicators, song with 5 indicators, creative movement with 6 indicators, video display with 4 indicators and implementation with 3 indicators.

We observed the implementation of final product in two kindergartens namely Raudhatul Athfal Al Hasanah V at Jalan Basuki RT 005/RW 02 Kelurahan Cilangkap, Kecamatan Cipayung, Kota Jakarta Timur, Daerah Khusus Ibukota Jakarta and Raudhatul Athfal *Nurul Rohmah at Jalan Masjid Al Khoirot No. 21 RT3/RW 7 Kelurahan Jati Mekar, Kecamatan Jatiasih, Kota Bekasi, Jawa Barat*. We noticed children response during watching these song videos in relation to learning English of STEAM education. People from those kindergartens were interviewed by using thematic analysis to examine the data denoting teachers' insight about STEAM songs as an English teaching material. The interview was transcribed and then the meaning unit was evaluated (Bryman, 2016).

RESULT AND DISCUSSION

The Application of SAM Model

Three stages were carried out to generate English STEAM songs for children. In preparation phase researchers and teachers of ECE discussed about the quantity of song lyrics creation and

English vocabulary to be put in the songs. We composed three songs entitled “Animal’s Sound, Shape is Every Where and Yes, 1 2 3” with simple sentences and easy vocabulary.

“Animal’s sound” is used to recognize kinds of animal names and sounds which are straightforwardly found in their environment. This song has relation to the science knowledge. “Shape is Everywhere” can be utilized to familiarize about various shapes which are often seen in children life. It has connection to the engineer field. Likewise, “Yes, 1 2 3” has function to introduce the concept of mathematic, i.e. numbers 1 up to 10. Principally, the vocabulary of these songs holds three considerations, namely easy, simple and meaningful. The approach of present STEAM by means of song is a kind of art activity (MARWIYAH, 2022).

Through these three songs, children actually learn English of understanding STEAM education in a pleasurable way. They have opportunity to broad their intelligence about types of sentences indirectly. Most of the lyrics are repeated in order that children are able to memorize them in relaxed condition which leads in very short time they can sing along. Moreover, we used question and answer sentences in “Animal’s Sound” and “Shape is Everywhere” to invite children critical thinking that strengthen the learning of 21 century (Halimah, 2020; Muhali, 2019).

Furthermore, the song in conjunction with music is composed using (1) a timbre of a kid sound, (2) a dynamic of encouraging children to explore their imagination, (3) a fast tempo to make children move happily and more enthusiastic, (4) a modest and repeated rhythm for an easy listening, (5) a moderate melody, (6) a simple of music structure, and (7) a harmony of modern and traditional of music instrument (Purhanudin, 2022). Angklung sound as an indigenous music instrument from West Java was introduced in “Yes 1 2 3” to promote Indonesian rich culture in terms of appreciation the local wisdom (Chen et al., 2022).

We conclusively invented a prototype after gaining some feedbacks in iterative design stage. There was a correction of lyric in term of diction, grammar and type of sentences so that it is suitable to be used as a material for teaching English to young learners. It remained an improvement of song’s tempo and rhythm dealing with the creation of creative movement. It was the most difficult portion and hardest one because it should reach a harmony as a whole between the rhythm of song and movement for learning language.

We emphasized on the animation features for generating pictures which aims at attracting students’ attention in iterative development phase. The features were the quality of visualization, the vivid color, the size of the lyrics written at the lowest part of the screen and highlighted the vocabulary to explain. Then, a trial was administered to figure out their practicality as a learning material in the form of song in animation video. This animation video provided opportunities for children to understand learning content quickly and the learning process can be carried out anywhere and anytime because it is supported by technology, information and communication devices.

The Music Sheets

The music composition lasted from 1.12 minutes up 2.17 minutes and composed by the help of Oktovialdi. The reason was children take a limited time span to concentrate in studying language

(Lee & Lin, 2015). The purpose of composition was children can easily follow the song and feel joyful when learning language using song in the classroom (Destiana & Andhiarini, 2020). We tried to implement the musical elements such as tone notation, harmony, melody, rhythm, measure, scale and tempo related with children' characters (Wulandari et al., 2021). Particularly, the tone form in song elements is not able to be seen except it is able to be heard. Tone means a sound with regular vibration and to write the tone, the symbol of notation, namely. *do, re, mi, fa, so, la, si, do* is used. Such notation denotes the two of tone characteristics, namely high low and short long.

The color of tone can be signified by notation because people may recognize, read, write and sing a song through its notation. Two types of notations are number and block. Number notation is a system of written song using number symbols (Putra et al., 2019). However, all of these three STEAM songs were written in block notation and the selection of tones was the range of tones *do, re, mi, fa, so, la, si, do* octave or frequently signified to one-octave tone space to accommodate the children ability to sing.

Animal's Sound

We recorded the real sound of animal in this song to provide the genuine experience of science for children. This song introduced four real animal sounds which were already familiar for them, explicitly duck, cat, dog, and goat. Subsequently, children imagined the sound of horse, bird, snake and mouse because the lyric used a question (do you know...?). A boy sung this song. Additionally, sound of Sasando as a traditional musical instrument was introduced in this song.

ANIMAL'S SOUND |

The image shows a musical score for a song titled "ANIMAL'S SOUND". The score is written on a single staff with a treble clef and a key signature of one sharp (F#). The lyrics are: "Wek wek wek is a duck voice. Miaw miaw miaw is a cat voice. Gukgukguk is a dog voice. Mbek mbek is a goat voice. Do you know what's a bird sound? Do you know what's a snake sound? Do you know what's a horse sound? Do you know what's a mouse sound?". The score is divided into four systems, with measure numbers 11, 17, and 23 indicated at the beginning of the second, third, and fourth systems respectively. The notation consists of simple rhythmic patterns corresponding to the lyrics.

Figure 1 The Block Notation of Animal Sound

This song was begun and ended with na...na...na...and du...du...du...to draw students' attention by producing such kind of voice variation. They were four shapes to be recognized by children, namely circle, triangle, square, and rectangle as a basic engineering knowledge. Those shapes were explained clearly with the objects. It had two kinds of voice, namely a woman and some children who acted as a teacher and students to make a question and answer for promoting an interesting interaction. This was the longest song since it lasts more than 2 minutes.

SHAPE IS EVERYWHERE

The image shows a musical score for a song titled 'Yes 1 2 3'. The tempo is marked as quarter note = 60. The score consists of nine staves of music, each with lyrics underneath. The lyrics are: 'Na na na na na na na na na na na na na na na na Du du du du du du', 'What is the shape of a ball? cir - cle cir - cle What is the shape of a box?', 'square - square square - square What is the shape of a door oh rec-tang-le', 'Na na na na na na na na na na na na na na na Du du du du du du', 'What is the shape of a sand-wich? tri-ang-le tri-ang-le What is the shape of a cush-ion?', 'square - square square - square What is the shape of a cell phone? oh rec-tang-le', 'Na na na na na na na na na na na na na na na Du du du du du du', 'What is the shape of a full moon? cir - cle cir - cle What is the shape of a chess-board?', 'square - square square - square What is the shape of a lug - gage? oh rec-tang-le', and 'Na na na na na na na na na na na na na na na Du du du du du du'.

Figure 2 The Block Notation of Shape is Everywhere

Yes 1 2 3

This song was the shortest one and last in 1.12 minutes with cheerful and energetic rhythm. It was exceptionally simple and many repetitions of number which is well-known for children. The word 'yes', 'yes', 'yes' was mentioned at the beginning of the song which is very memorable in the eye of both children and teachers. A boy sang this song.

YES 1 2 3



Figure 3 The Block Notation of Yes 1 2 3

Creative Movement of Total Physical Response

In creating creative movement, we applied the principle of Total Physical Response (TPR) and FMS because TPR relates to language teaching while FMS has connection with basic movement skills. This FMS involves stability or non-loco motor such as static or dynamic loco motor balance such as jumping, running, and walking on tiptoes, and object control skills such as catching, throwing and kicking a ball (Laure, 2023). FMS in early childhood is very important to perform because by training such movements children can grow and develop appropriately based on their stages of growth. This FMS had a relation to physical literacy, namely the ability to have motivation, self-confidence, physical competence, knowledge and understanding that emphasizes one's values and responsibilities for activities throughout his life (Payne, 2021). Furthermore, creative movement for three STEAM songs was divided two stages, i.e. introduction and essential movement with the information about the benefit of such movement.

Animal's Sound

The main idea of creative movement in this song was to imitate the animal appearance, namely duck, cat, dog, goat, horse, snake, bird and mouse. Such movements were depicted so that both children and the teacher can reproduce them in an easy way. The movements also had benefit for children growth physically and cognitively.

The initial movement provided a benefit to train children coordination because they walked in place with their body straight, looking forward and took one step to the right while clapping their hands to the left. The benefit of main activity was to practice verb and noun visualization through movement consisted of four parts. First, children took a step to the right and left with their arms bent and make a move like a duck flapping its wings and followed to demonstrate cat claws. Next, they go forward and backwards four counts diagonally and both hands are up to demonstrate

a dog paw movements and wave next to the ears to show a goat. Then, they took 3 steps forward and backward with left hand on waist. Both hands go up and down to visualize a horse and swing to imitate a snake moves. Lastly, they took 3 steps forward and backward with left hand on waist. Both hands visualize a bird flies and mouse-like movements.

Shape is Everywhere

Creating an intended shape with the hands was the primary thought of creative movement in this song. Children learned several basic shapes around them which should be known, namely circle, rectangle, square, and triangle. Apart from this, children were invited to move their hands and body to duplicate the objects being mentioned as ball, box, door, sandwich, cushion, cell phone, full moon, chess board and luggage. Each phase of movements was explained to illustrate children's move.

The initial movement provided a benefit to train children basic non-loco motor movements' coordination because they stood and cross their arms in front of their chest and put their hands beside their body. The main activity had a benefit to practice verb and noun visualization through movement which was divided into eight. First, children took two steps to the right and left with both hands did a rolling motion followed by a pushing hand movement. Second, they performed V step with hands like holding a ball in front of the chest. Both hands visualize round objects and a box in front of the chest. Right hand was knocking and opening the door and both hands make a rectangle. Third, they took two steps to the right and left with both hands do a rolling motion followed by a pushing hand movement. Fourth, they clapped hands to envisage the form of a sandwich and both hands make a triangle then depict a sleeping person using a pillow followed by making a square. Fifth, they performed V step by moving the right hand as if someone was making a phone call and both hands create a rectangular. Sixth, they took two steps to the right and left with both hands do a rolling motion followed by a pushing hand movement. Seventh, they took three steps to the right and left then both hands visualize full moon of a round and walked as if playing chess then make a square. Finally, they took three steps to the right and left. The right hand pretended to pull a suitcase and visualize a rectangle

Yes 1 2 3

This song mainly used fingers movement to show the number mentioned, namely number 1 up to 10. The goal was to entertain children while learning number in English. Likewise, models moved their hands to form a sign of love and miss to explain the verb 'love' and 'miss' so that children can understand them effortlessly.

The initial movement offered a benefit to strengthen children's leg muscle because they bended the legs slightly and patted the both thighs and clap the hands. The benefit of main activity was to practice verb and noun visualization by moving into three parts. Firstly, children bended the knee, the right hand clenched to form the L letter and moved up and down. The left hand was on the waist and showed the fingers from one to ten (repeated twice). After that, they moved one step to the right and left and the arms bent at the sides of the body. Palms faced forward and form

the symbol of love above the head (repeated twice). Lastly, they moved two steps to the right with the position of the arms bended beside the body and palms faced forward. Then took one step to the right and left and both hands were pulled overlapping on chest (repeated twice).

Animation Video

We developed different background for each animation video regarding to learning topic. Three points to be considered were pictures, the vivid color, the font and size of English words as the lyric. Therefore, it also used different size, font, color to highlight the title and the lyric were written in capital letters. The emphasis was the element of visual should consistent with children's characters namely, cheerful, friendly and energetic because they are highly motivated to study through song in the form of audiovisual (Adisti, 2022). As a consequence, it needs more creative application in visual design to attract audience.

Animal's Sound

The surroundings of this song were out door to encourage children learn about science and the situation was in a bright sunny day to arise positive energy. It represented the description of animal in real look. The diverse color was applied to indicate dissimilar information in the form of running text which is truly song lyrics. Additionally, all capital letters were employed so that children do not feel difficulty in recognizing alphabets.



Figure 4 The Visual of "Animal's Sound"

Shape is Everywhere

The setting of this song was near a pond in a clear day in order children can feel an impression of fresh atmosphere. The dominant color was soft blue to make a contrast view with the text. The objects related to their shapes were described and we applied different color of text to facilitate children identify the letters. Subsequently, there was a frog on the left side and a beaver on the right of screen with one purpose to make children feel more responsive.



Figure 4 The Visual of "Shape is Everywhere"

Yes 1 2 3

The school building was the setting of this song because it can create an intimate nuance in children' eyes. The visual looked very bright indicating a contented and spirited influence for audience. The sun and the cloud were shown in a kindly way. Then, dissimilar color was applied to signify the symbol of number and the written in capital letters.



Figure 5 The Visual of “Yes 1 2 3”

The Results of Validity Test

Products of these songs had been validated by English language experts to clarify their feasibility in the context of teaching English to young learners. This was carried out to attain suggestions and recommendations from knowledgeable parties in order these songs perform eligibility to meet the standards requirement. The measurement of validation consisted of five aspects, namely English lyric, music composition, creative movement, video display and implementation.

A feasibility test was conducted in the procedure of a validity test with the concern of experts who completed scores in the validation sheet (Creswell & Creswell, 2017). Such score was presented according to the validation rubric, which ranges from 1 to 4. Subsequently, the instrument of validation sheet by experts was examined using the formula as follows.

$$P=f/N \times 100\%$$

Description:

P = Analysis of responses

f = Score achieved

N = Maximum total score

After achieving percentage results of the validation test, it was converted into the expert assessment criteria. There are four criteria suggested by (Sugiyono, 2013), namely (1) very feasible of 81.25% - 100%, (2) feasible of 62.50% - 81.24%, (3) fairly feasible of 43.75% - 62.49%, and (4) not feasible of 25.00% - 43.74%. The average score of three songs from three experts were categorized as very feasible because both songs “Animal’s Sound” and “Yes 1 2 3” was 92 % and “Shape is Everywhere” was 88%. The aspect of implementation gained the highest average score of 95% and video display had the lowest average score of 87%.

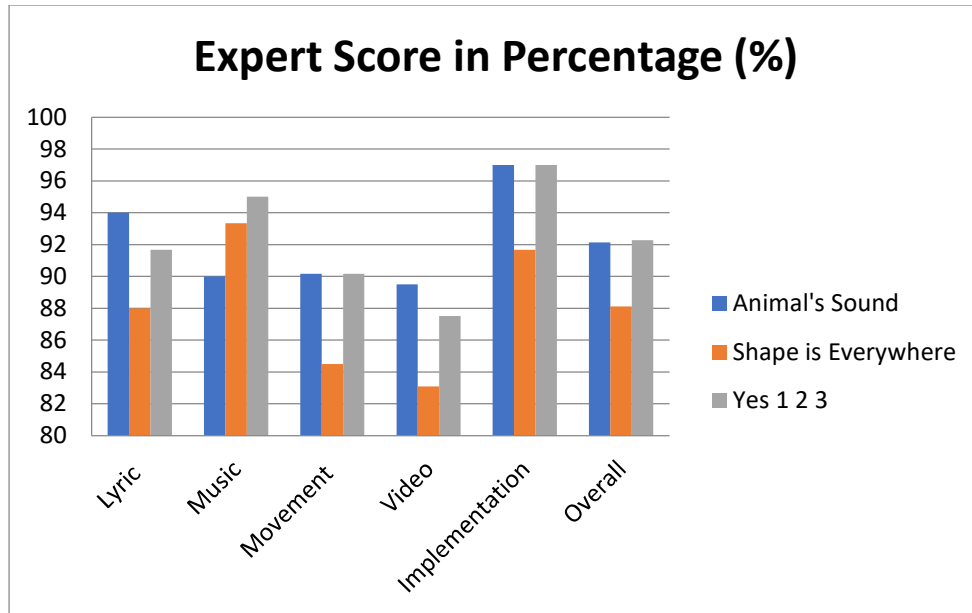


Figure 6. The Validation Result

The Implementation of The Songs in Kindergarten

The implementation was managed in two kindergartens. First, it was in Monday, 21st August 2023 at RA Nurul Rohmah and participated by 12 girls and 9 boys. Second, it was in Wednesday, 23rd August 2023 at RA Al Hasanah V and participated by 22 girls and 20 boys, 4 teachers and one headmaster. All children listened to three songs more than once and the process of implementation was recorded.



Figure 7 Children Performance

This implementation had a goal to observe two issues of children ability to sing and move in relation to learn English of STEAM education with song. Song assisted learners to study language in free anxiety atmosphere (Kasap, 2023) and teachers acknowledged that music has great contribution to learn foreign language (Kirby et al., 2023).

Table 4. Song Implementation

Title song	In Nurul Rohmah		In Al Hasanah	
	Ability to Sing	Ability to Move	Ability to Sing	Ability to Move

Animal's Sound	A lot of students sang this song.	Most of children moved their hands and bodies spiritedly.	Most of children sang happily which were dominated by boys' voice.	All of the children moved their bodies, hands and feet to follow the movement through video.
Shape is Everywhere	The majority of children did not sing.	All of the children tried to move hands to create the shapes.	Part of the students cannot sing well.	The majority of children moved their hands to make the shapes.
Yes 1 2 3	Half of children sang favorably.	Almost of children move their body and fingers cheerfully.	Nearly all children sang this song awfully loudly.	Most of children moved their bodies and hands while singing.

Teacher interview revealed three concerns of song implication, i.e. (1) characteristic of the lyric, (2) the music composition, and (3) the creative movement. The teacher from RA Nurul Rohmah with initial (AS) told us that according to her the lyric of three songs were sung very fast and the pronunciation was not clear therefore children had difficulty to sing as well as the teacher. She suggested that for beginning the lyric should be sung more slowly. In contrast, RA Al Hasanah's headmaster with initial (NH) explained that the lyric of "Animal's Sound" and "Yes 1 2 3" were easy and suitable to teach for children of 4 and 5 years old. Children sang happily and some of them even practice singing loudly. "Shape is Everywhere" were a little bit difficult because of unfamiliar words, such as sandwich, cushion, luggage and chess board therefore it can be taught to children older than 5 or 6 years old.

AS described that all music were interesting to be listened to and children really felt joyful. NH clarified that the best music was "Shape is Everywhere" because it automatically invited listener to move their parts of body. "Animal's Sound" and "Yes 1 2 3" were good at music creation as well for children.

AS confirmed that the creative movement of these three songs were outstanding because all of children were pleased to imitate the movement of models easily. Meanwhile, NH clarified that the creative movement supports children in learning language that is why such movement is needed to strengthen children memory about the words. All of the creative movements of these songs were meaningful and children can follow them undoubtedly.

CONCLUSIONS

Referring to the results and discussion, these songs can be used as a teaching material in introducing English to early childhood education. The creation of these songs was conducted by implementing successive approximation model consists of three stages, namely preparation,

iterative design and iterative development. Through this model, these songs are designed with creative movement of total physical response in the form of animation video. The element of music such as lyrics, rhythm and notation are adjusted to the characters of children.

The result of validation confirmed that these three STEAM songs are evidenced to be effective because the acquisition of a feasibility of score above 81.25% (very feasible). The accuracy of test results was evaluated using 23 indicators. Three experts came from the academic community conducted validation. The observation proved that children can sing those songs and teachers' interview revealed that these songs had positive impacts for children ability to learn English and facilitate them with fun activities, namely music and creative movement. This study will be expected to continue in applying of a wider scope to reinforce the STEAM education for children in relation to interesting activities and discuss for parents' involvement as well.

ACKNOWLEDGMENT

We would like to thank Research Program of Universitas Negeri Jakarta for supporting this research financially.

REFERENCES

- Adisti, A. R. (2022). Investigating the use of YouTube as virtual teaching medium in ELT among non-English students. *ELT Forum: Journal of English Language Teaching*, 11(1), 1–9. <https://doi.org/10.15294/elt.v11i1.48676>
- Allen, M. W., & Sites, R. (2012). *Leaving ADDIE for SAM: An agile model for developing the best learning experiences*. American Society for Training and Development.
- Awang, Z., Yakob, N., Hamzah, A., & Talling, M. M. (2020). Exploring STEAM teaching in preschool using Fred Rogers approach. *International Journal of Evaluation and Research in Education (IJERE)*, 9(4), 1071. <https://doi.org/10.11591/ijere.v9i4.20674>
- Brame, C. J. (2016). Effective Educational Videos: Principles and Guidelines for Maximizing Student Learning from Video Content. *CBE—Life Sciences Education*, 15(4), es6. <https://doi.org/10.1187/cbe.16-03-0125>
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Chen, Z., Liu, Y., & Wei, D. (2022). Research on the Integration Path of Local Music Culture and Music Education in Local Colleges and Universities—Taking Baoding College as an Example. *Creative Education*, 13(12), 3794–3800. <https://doi.org/10.4236/ce.2022.1312241>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- DeJarnette, N. K. (2018). Implementing STEAM in the Early Childhood Classroom. *European Journal of STEM Education*, 3(3), 18. <https://doi.org/10.20897/ejsteme/3878>
- Destiana, E., & Andhjarini, R. M. (2020). Buku Ajar Pendidikan Musik Anak Usia Dini. *Umsida Press*, 1–104.

- Guo, P. J., Kim, J., & Rubin, R. (2014). How video production affects student engagement. *Proceedings of the First ACM Conference on Learning @ Scale Conference*, 41–50. <https://doi.org/10.1145/2556325.2566239>
- Halimah, H. (2020). Critical Literacy Approach in the teaching of literary appreciation using Indonesian short stories. *Indonesian Journal of Applied Linguistics*, 10(1), 84–94. <https://doi.org/10.17509/ijal.v10i1.24992>
- Hamilton, C., & Murphy, V. A. (2023). Folk pedagogy? Investigating how and why UK early years and primary teachers use songs with young learners. *Education 3-13*, 1–22. <https://doi.org/10.1080/03004279.2023.2168132>
- Jakobsen, I. K. (2022). *Multimodality and literacy practices in English: Exploring the role of multimodal texts in English language teaching in Norway*.
- Jamil, F. M., Linder, S. M., & Stegelin, D. A. (2018). Early Childhood Teacher Beliefs About STEAM Education After a Professional Development Conference. *Early Childhood Education Journal*, 46(4), 409–417. <https://doi.org/10.1007/s10643-017-0875-5>
- Kasap, S. (2023). THE IMPACT OF MUSICAL SKILLS ON FOREIGN LANGUAGE ANXIETY. *European Journal of English Language Teaching*, 8(2), 1–16. <https://doi.org/10.46827/ejel.v8i2.4737>
- Kirby, A. L., Dahbi, M., Surrain, S., Rowe, M. L., & Luk, G. (2023). Music Uses in Preschool Classrooms in the U.S.: A Multiple-Methods Study. *Early Childhood Education Journal*, 51(3), 515–529. <https://doi.org/10.1007/s10643-022-01309-2>
- Kumar, T., Akhter, S., Yunus, M. M., & Shamsy, A. (2022). Use of Music and Songs as Pedagogical Tools in Teaching English as Foreign Language Contexts. *Education Research International*, 2022, 1–9. <https://doi.org/10.1155/2022/3384067>
- Lange, A. A., Nayfeld, I., Mano, H., & Jung, K. (2022). Experimental effects of a preschool STEM professional learning model on educators' attitudes, beliefs, confidence, and knowledge. *Journal of Early Childhood Teacher Education*, 43(4), 509–539. <https://doi.org/10.1080/10901027.2021.1911891>
- Latif, M., Zubaidah, R., & Afandi, M. (2014). *Orientasi Baru Pendidikan Anak Usia Dini: Teori dan Aplikasi*.
- Leandro, C. R., Monteiro, E., & Melo, F. (2018). Interdisciplinary working practices: can creative dance improve math? *Research in Dance Education*, 19(1), 74–90. <https://doi.org/10.1080/14647893.2017.1354838>
- Lee, L., & Lin, S.-C. (2015). The impact of music activities on foreign language, English learning for young children. *Journal of the European Teacher Education Network*, 10(0), 13–23.
- Lindeman, K. W., Jabot, M., & Berkley, M. T. (2013). The Role of STEM (or STEAM) in the Early Childhood Setting. In *Learning across the early childhood curriculum* (Vol. 17, pp. 95–114). Emerald Group Publishing Limited. [https://doi.org/10.1108/S0270-4021\(2013\)0000017009](https://doi.org/10.1108/S0270-4021(2013)0000017009)
- Marwiyah, M. I. A. (2022). *Analisis Pembelajaran Steam (Science, Technology, Engineering, Art, And Mathematics) Untuk Menanamkan Keterampilan 4c (Communication, Collaboration,*

- Critical Thinking And Problem Solving, Dan Creativity And Innovation) Pada Anak Usia Dini*. Dissertation. Universitas Islam Negeri Sultan Syarif Kasim Riau.
- Masturah, S. N., Handini, M. C., Hartati, S., & Yetti, E. (2018). Improving English Language Ability of Children Aged 4-5 Years Old by Using Creative Dance. *JETL (Journal Of Education, Teaching and Learning)*, 3(1), 17. <https://doi.org/10.26737/jetl.v1i1.455>
- Muhali, M. (2019). Pembelajaran Inovatif Abad Ke-21. *Jurnal Penelitian Dan Pengkajian Ilmu Pendidikan: E-Saintika*, 3(2), 25. <https://doi.org/10.36312/e-saintika.v3i2.126>
- Mutiah, S. D., Nakhriyah, M., HR, N. H., Hidayat, D. N., & Hamid, F. (2020). The Readiness of Teaching English to Young Learners in Indonesia. *Jurnal Basicedu*, 4(4), 1370–1387. <https://doi.org/10.31004/basicedu.v4i4.541>
- Palupi, W., Hafidah, R., & Karsono, K. (2019). SONG AND MOVEMENT AS MEDIA OF EARLY CHILDHOOD LANGUAGE DEVELOPMENT. *Early Childhood Education and Development Journal*, 1(1), 12. <https://doi.org/10.20961/ecedj.v1i1.33020>
- Payne, H., & Costas, B. (2021). Creative Dance as Experiential Learning in State Primary Education: The Potential Benefits for Children. *Journal of Experiential Education*, 44(3), 277–292. <https://doi.org/10.1177/1053825920968587>
- Purhanudin, M. S. V. (2022). *Buku Ajar Seni Musik Anak Usia Dini Untuk Mahasiswa Pendidikan Islam Anak Usia Dini*. IAIN SALATIGA.
- Purwanti, R. (2020). Pembelajaran Bahasa Inggris Untuk Anak Usia Dini Melalui Metode Gerak dan Lagu. *Jurnal Ilmiah Potensia*, 5(2), 91–105. <https://doi.org/https://doi.org/10.33369/jip.5.2>
- Putra, A. D., Putra, I. E. D., & Ferdian, R. (2019). Pengembangan Modul Pembelajaran Teori Musik Pada Prodi Pendidikan Musik Fakultas Bahasa Dan Seni Universitas Negeri Padang. *Musikolastika: Jurnal Pertunjukan Dan Pendidikan Musik*, 1(1), 30–40. <https://doi.org/10.24036/musikolastika.v1i1.15>
- Shin, J. K. (2017). Get up and Sing! Get up and Move! Using Songs and Movement with Young Learners of English. *English Teaching Forum*, 55(2), 14–25.
- Siantajani, Y. (2020). Loose Parts Material Lepas Otentik Stimulasi PAUD. *PT Sarang Seratus Aksara*.
- Sila, A., & Lenard, V. (2020). The Use of Creative Movement Method in Teaching Foreign Languages to Very Young Language Learners. *European Journal of Social Science Education and Research*, 7(1), 15. <https://doi.org/10.26417/ejser.v7i1.p15-27>
- Sinaga, S. S. (2022). Children’s Trilingual Songs (Indonesian, English, and Javanese) as Media for Strengthening the Diversity Character of Elementary School Students. *Harmonia: Journal of Arts Research and Education*, 22(2), 392–404. <https://doi.org/10.15294/harmonia.v22i2.41585>
- Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D*.
- Sya, M. F., & Helmanto, F. (2020). Pemerataan Pembelajaran Muatan Lokal Bahasa Inggris Sekolah Dasar Indonesia. *DIDAKTIKA TAUHIDI: Jurnal Pendidikan Guru Sekolah Dasar*, 7(1), 71. <https://doi.org/10.30997/dt.v7i1.2348>

- Winangsit, E., & Sinaga, F. S. S. (2020). Esensi Pendidikan Musik Berbasis Industri Budaya di Tengah Pandemi Covid-19. *Prosiding Seminar Nasional Pascasarjana (PROSNAMPAS)*, 3(1), 989–995.
- Wulandari, R., Muthmainnah, M., & Hayati, N. (2021). Kemampuan Cipta Lagu pada Guru Taman Kanak-Kanak se-Yogyakarta. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(3), 1540–1548. <https://doi.org/10.31004/obsesi.v6i3.1273>