Analysis of Learning Evaluation in Kindergarten Pertiwi 2 Penambongan with Kirkpatrick Model

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Abstract. Early childhood education is a very basic stage so it is necessary to provide various activities that can develop various aspects of development including cognitive, language, social, emotional, physical, and motoric (Anderson, 1993). Pertiwi 2 Penambongan kindergarten has various excellent programs, including: character & morals education, loose part learning, outing class, peak topic activities. Character and morals education through the habit of reading and reciting Qur'an, congregational Dhuha prayer, memorizing *doa & hadiths*, daily prayers, Asmaul Husna, and Arabic language introduction. The aim of this research is evaluating the quality of learning implementation at Pertiwi 2 Penambongan Kindergarten with Kirkpatrick Model. The respondents were teachers, students, and parents. Data were collected using quetionnaires, interview, observation, and documentation. Data analysis with quantitative descriptive analysis. The result obtained are 1) students' reactions showed that the implementation of learning in Pertiwi 2 Penambongan Kindergarten was in very good criteria with a percentage of 83.7%. 2) student learning in very good criteria with a percentage of 88.15% 3) the behavior of students shows in very good criteria with a percentage of 81.15%. 4) the result of the implementation of learning in Pertiwi 2 Penambongan Kindergarten on sufficient criteria with a percentage of 68.8%. As a conclusion, the implementation of learning in Pertiwi 2 Penambongan Kindergarten is very good, but learning outcomes are influenced by several factors. One of them is family factors. Therefore, synergy between teachers and parents is needed so that the education that has been implemented at school can be maximized.

Keywords: evaluation; kindergarten learning; kirkpatrick model

INTRODUCTION

Education at an early age is a very fundamental stage that needs to provide various activities that can develop various aspects of development including cognitive, language, social, emotional, physical, and motor (Anderson, 1993). Therefore, the use of fun and playful learning methods is needed so that children are stimulated in learning and can explore the world around them.

In early childhood education activities, creativity can be enhanced by a creative learning environment that can raise new questions in children. Children should also be given new opportunities to solve problems. Creating learning activities that can stimulate children's creativity by creating a new idea/product can also stimulate children's creativity, one of which is by using creative and innovative learning resources or media. By utilising the environment as a learning resource, educators will be more creative to develop potential, shape character, improve critical thinking skills, and children's creativity abilities to express their experiences in real form, foster perception, and foster a healthy creative mind (Rohmalina, 2017).

Pertiwi 2 Penambongan Kindergarten is one of the kindergartens located at Jalan kenanga Raya Perumnas Penambongan Complex, Purbalingga District, Purbalingga Regency. The kindergarten has various excellent programmes, including: character & ethics education, loose part learning, outing class, peak topic activities. Character and ethics education is carried out through reading and reciting habits, dhuha prayers in congregation, memorising letters & hadiths, daily prayers, asmaul husna, and introduction to Arabic.

Loose parts are open materials, can be separated, can be assembled, combined, arranged, moved and the components can be used alone separately or combined with other materials Haughey (in (Siantajani, 2020). The purpose of learning loose parts is that children will become more creative because they are free to disassemble the loose parts provided according to their imagination. According to (Safitri, 2021) by playing loose parts, children become accustomed to being creative using materials that are simple, easy to obtain, and do not speak to children and the environment. Komara and Rohmalina (2023) also stated that the application of loose parts media

can increase children's creativity, creative and innovative thinking in making works using materials in the environment.

Outing class is learning that takes place outside the classroom. Outing class activities aim to broaden learners' horizons through direct experience in the surrounding environment. Visits to museums, exhibitions, nature field studies, and visits to government agency offices (e.g. firefighters) for professional recognition are examples of outing class. Outing classes that have been conducted at Pertiwi 2 Penambongan Kindergarten include visits to the fire station, post office, and agricultural areas. Outing class makes a significant contribution to early childhood social emotional development (Fasya & Alwi, 2025). With these excellent programmes, it is expected that various aspects of development including cognitive, language, social, emotional and physical aspects of children can develop.

In this context, the researcher will measure the impact on these aspects with the Kirkpatrick Model. Kirkpatrick (2008:21) divides four levels of the research model known as 'Kirkpatrick's Four Levels' namely: 'Level 1) reaction, Level 2) Learning, Level 3 Behaviour, and level 4 Result. These four steps are the sequence for evaluating a programme. The Kirkpatrick model has demonstrated its effectiveness in various studies including evaluating technical training programmes (Nurhayati, 2018), Hajj health inspector training (Fauziah, 2021), and teaching practice programmes for education students (Sari and Solichin, 2023). The ability to reflect on programme effectiveness, identify areas for improvement, and measure participant satisfaction has been demonstrated by this model.

In the context of non-formal education, the Kirkpatrick model has been used to evaluate the Paket B equivalency learning programme, with positive results on reactions, learning progress, behaviour change and overall outcomes (Hapsari and Shofwan, 2023). The flexibility and usefulness of the Kirkpatrick model is highlighted in assessing various educational initiatives and provides valuable insights for programme improvement. In its implementation, the Kirkpatrick model has the challenge of measurement subjectivity especially at Level 1 (Reaction) as it relies on observation and perception. In addition, parental involvement is also an important factor as children's behaviour and learning outcomes are influenced by the home environment.

The Kirkpatrick model has been widely used in adult training contexts. However, there are still some gaps in the evaluation of learning in kindergarten. Kirkpatrick's research in kindergarten conducted by (Innayah, 2020) showed that the Gelari (Gerak Lagu Anak Ceria) audio media applied at Laboratori Pedagogia Yogyakarta Kindergarten was 1) learner reactions at 83% criteria, 2) learning at 76% criteria, 3) behaviour at 50% criteria, and results at 70% criteria. Overall research using Kirkpatrick's four levels to evaluate learning programmes in kindergarten is limited. Particularly on level 3 (behaviour) and level 4 (outcomes). Level 3 (behaviour) represents long-term changes in children's behaviour in different environments (e.g. at home), and level 4 (outcomes) measures the long-term impact of the program on school readiness or overall child development.

A further issue regarding research gaps is that there is no research on the impact of kindergarten learning programmes using the Kirkpatrick model over a longer period of time that aims to observe changes in behaviour and tangible outcomes. There has also been no comparison of the effectiveness of different kindergarten learning programmes using the Kirkpatrick model to identify best practices.

To address these issues and gaps, the solution offered is to apply an adaptive and flexible Kirkpatrick model to fit the characteristics of early childhood and in accordance with learning in kindergarten. For example, at level 1 (Reaction) observations are made on children's facial expressions and participation. Facial expressions and child participation can be relevant indicators rather than questionnaires. Involvement of multiple stakeholders by involving teachers, parents and even children themselves as data sources so that a more holistic picture of the data obtained. Utilisation of technology to collect data from parents to make it more efficient, and mixed research design to get rich and comprehensive data.

The urgency of this research cannot be overlooked. A comprehensive evaluation can increase the accountability of kindergarten programmes, inform decision-making for managers and policy makers, and identify areas for improvement and optimisation of child development. This research is also expected to contribute to the development of theory and good practice in measuring the impact of learning in kindergarten.

The purpose of this study is to evaluate and analyse the quality of learning implementation in Pertiwi 2 Penambongan Kindergarten. 1) Identify children's reactions to the learning programme at Pertiwi 2 Penambongan Kindergarten (Level 1), 2) Measure the level of learning achieved by children after attending the learning program in kindergarten, including knowledge, skills, and attitudes (Level 2), 3) Analyse changes in children's behaviour in the context of daily learning, both in the kindergarten environment and at home as an impact of the learning program, 4) determine the results or long-term impact of the learning program on children's holistic development and school readiness (Level 4).

This research is expected to have several benefits, both for science and society. For science, this research will enrich the repertoire of knowledge about the application of the Kirkpatrick model in the context of kindergarten education. For the society, this research will help improve the quality of learning in kindergarten, support children's development through more effective programmes, provide transparent information for parents, and help formulate better education policies, especially in kindergarten.

METHODS

This study is evaluative research that aims to evaluate and analyse the quality of learning implementation in Pertiwi 2 Penambongan Kindergarten. The Kirkpatrick model will be used in conducting the learning evaluation. The Kirkpatrick model consists of Reaction, Learning, Behaviour and Result. The reaction level measures learners' satisfaction with the learning process. The learning level measures learners' understanding of the material. The behaviour level measures positive behaviour due to learning, and the result level measures the positive impact of learning on children's development. Respondents in the study were kindergarten teachers, kindergarten students, and guardians. The main data was collected using observation sheets. The overall score obtained from the observation results obtained through filling out the instrument will be determined by the percentage. Determination of the percentage of each indicator is obtained using the following formula.

The supporting data were questionnaires given to parents, documentation, and interviews. In this study, researchers used google forms to collect data from parents. quantitative and qualitative methods will also be used in this study. The quantitative method is used in the observation sheet by teachers and parents, while the qualitative method is used in the interview session. This aims to make the data obtained more accurate. In addition, the researcher also asked the teacher to recall the child's development in the past year. This was done to find out the changes in learners over one year.

Observation sheets are used at each stage and are carried out by teachers and researchers. Questionnaires and interview guidelines will be used to measure from the parents' perspective as secondary data. Data analysis is done by quantitative descriptive analysis.

Percentage score of each indicator

$$= \frac{\text{number of scores of each indicator}}{\text{Maximum number of scores}} \times 100\%$$

The following is a table of conversion guidelines according to Arikunto (2016)

Table 1 Conversion Guidelines according to Arikunto (2016)

Percentage level	Criteria
80-100	Excellent
70-79	Good
60-69	Fair
50-59	Deficient
0-49	Very deficient

RESULTS AND DISCUSSION

The research results found are as follows:

Level 1 Reaction

Evaluation of reactions aims to find out the level of student satisfaction with the learning process. Kirkpatrick (2008:27) measured reactions are important for several reasons. Firstly, it can provide feedback to evaluate the programme as well as comments and suggestions for improvement. Second, it lets participants know that the trainer is there to help them with their work and needs feedback to determine how effective they are. Thirdly, reaction sheets provide quantitative information about the programme so that it can be used to establish performance standards for future programmes.

The sources of data from the reaction level are teachers and parents. Teachers are given an observation sheet to measure learner satisfaction related to several indicators. Meanwhile, parents are given several questions related to the

indicators at the reaction level.

Evaluation of reactions in the implementation of learning in Pertiwi 2 Penambongan Kindergarten is divided based on three indicators in terms of students' activeness in activities, showing cheerful and enthusiastic faces, and answering questions or following instructions.

Table 2 Kirkpatrick Model Level 1 Percentage based on Teacher Observation

Model	Level 1		
Kirkpatrick	I1	I2	I3
Percentage	55.55	97.78	97.78
Total Percentage		83.7	

The average acquisition score of the three indicators related to the reaction component of students in the implementation of learning in Pertiwi 2 Penambongan Kindergarten with an achievement level of 83.7% and including very good criteria. Thus it can be concluded that the reaction component is well done because students are satisfied with learning at Pertiwi 2 Penambongan Kindergarten. Rahma, Kustiono, and Setiawan (20213) state that loose part learning media can make children feel happy and not bored, thus increasing creativity and making children free to express and can trigger to solve problems.

Figure 1. Learning with loose media.

This was reinforced by the interview results which stated that learners seemed happy when telling stories about activities at school. Representatives of respondents interviewed all stated that 'their children feel happy with various learning activities at school'. So based on the results of teacher observations and questionnaires of parents of students, the results of the reaction to the implementation of learning in Pertiwi 2 Penambongan Kindergarten are in the good category.

Evaluation of the reaction aims to determine the level of satisfaction of students with the implementation of learning in Pertiwi 2 Penambongan Kindergarten. Evaluating reactions is the same as measuring customer satisfaction. Learning will be effective, if participants react well. If not, they will not be motivated to follow the learninglimited experience in academic publishing, and financial constraints for journal submissions. This assessment provide the foundation for designing and mentorship programs to target these specific issues.

Level 2 Learning

The level of learning measures the learners' level of understanding of the material. According to Kirkpatrick (2008:22), there are three things that are taught in training programmes:

knowledge, attitudes and skills. Learning needs to be evaluated because without learning, there is no change in behaviour. The purpose of learning is to increase knowledge, as stated by Kirkpatrick (2008:50). Comparison of results before and after learning can show the changes that occur.

The sources of data for the learning level are teachers and parents of student. Data is in the form of students' level of understanding of the material with several indicators. Learning evaluation in Pertiwi 2 Penambongan Kindergarten is divided into three indicators in terms of additional knowledge, attitude changes, and additional skills. The average acquisition score of the three indicators related to the learning component obtained an achievement level of 88.15% and included very good criteria. Thus it can be concluded that the learning component at Pertiwi 2 Penambongan Kindergarten runs well and smoothly.

Based on the interview results, learners at home have shown additional knowledge. The use of new words learnt at school is also used at home. However, for Arabic language material, not all learners want to repeat it at home. This is because Arabic is not their daily language and is still limited to an introduction when taught at school. In addition, not all parents also understand Arabic even though they have been given guidance regarding all the material taught, especially Arabic.

Evaluation of learning is important because without learning no change in behaviour occurs. The purpose of learning is to increase knowledge. Learners in participating in learning at Pertiwi 2 Penambongan Kindergarten have been able to recognise colours, shapes and numbers in concept understanding. While in motor skills, learners are able to cut, paste, and draw. For language skills, learners can speak clearly and name objects. Therefore, to measure the effectiveness of learning in Pertiwi 2 Penambongan Kindergarten, these three aspects need to be measured. Without a change in attitude, improvement in knowledge, and improvement in skills, learning at Pertiwi 2 Penambongan Kindergarten is said to have failed.

Table 3. Kirkpatrick Level 3 Model Percentage Table based on Teacher Observation

Kirkpatrick Model	Level 2		
	I1	I2	I3
Percentage	84.4	86.67	93.3
Total Percentage		88.15	

Figure 2. Image Introduction to Arabic language materials

Level 3 Behavior

The behavioural level measures positive behaviour as a result of learning. Kirkpatrick (2008:23) reveals that behaviour is defined as the extent of behavioural change due to participants following the training programme. The evaluation in this study focuses on learners' independence, learners' social attitude, and learners' discipline in the context of the students' personal relationship with friends and teachers at school and in the family environment.

Changes in learners' behavioural levels can be seen from how learners can complete their own tasks, are able to share and cooperate and are disciplined in following the rules both at school and at home. The evaluation of behaviour focuses on learners' behaviour when they are at school and at home. The behaviour in question is the behaviour of learners who have a direct relationship with learning activities at school. So what you want to know in this evaluation is how far the change in attitude, improvement of knowledge, and or addition of skills of learners. Is the change in attitude, improvement in knowledge, and or addition of learners' skills implemented in

the school environment and home environment.

This component of behaviour change is investigated through observation sheets given to teachers and parents with indicators of learner independence, learner social attitudes, and learner discipline. The behaviour change component is an advanced evaluation of the learning component that discusses changes in attitudes, improvements in knowledge, and or the addition of students' skills both at school and at home. From the evaluation stage of the behaviour change component, the results obtained with an achievement level of 81.5%. Thus it can be said that the behaviour level is very good. One of the unique characteristics of children shown at this level is that they increasingly show interest in friends, namely children begin to show to cooperate and relate to their friends (Khairi, 2018). This goes hand in hand with the increasing age and development of children.

Table 4. Kirkpatrick Level 3 Model Percentage Table based on Teacher Observation

Kirkpatrick	Level 3		
Model	I1	I2	I3
Percentage	82.2	86.67	75.5
Total Percentage		81.5	

In line with teacher observations, based on the results of interviews, when at home learners also experience some behavioural changes such as cleaning up their own toys when they finish playing, being able to wear their own clothes, eating by themselves, and even being easy to direct or regulate.

Level 4 Result

The outcome level measures the positive impact of learning on children's development. Kirkpatrick (2008:25) asserts that outcomes can be defined as the final results that occur because participants follow the programme. In this research, learners follow various learning activities conducted at Pertiwi 2 Penambongan Kindergarten. Evaluation of results in the fourth level is focused on the final result because students have participated in various learning activities at Pertiwi 2 Penambongan Kindergarten. The existence of improved learning outcomes, increased knowledge, and improved skills are categories of the final results of learning. The final evaluation also involves parental observation to see the final results of learners when at home. The following is the explanation.

Evaluation of learning outcomes in Pertiwi 2 Penambongan Kindergarten is divided based on two indicators, namely motor, language, cognitive and socio-emotional development and readiness to participate in learning activities in elementary school. The average acquisition score of the two indicators related to learning at Pertiwi 2 Penambongan Kindergarten obtained an achievement level of 68.8% and included sufficient criteria. The percentage of 68.8% is students with the achievement category 'developing very well', 13.3% of students with the category developing as expected, and 15.5% with the category starting to develop, and 2.22% have not developed. This is due to several factors such as differences in age and the length of time students participate in learning at Pertiwi 2 Penambongan Kindergarten. These factors need to be further researched.

Different results were shown based on questionnaires given to parents. From parents' observations, 95.83% of parents stated that students showed positive changes in language, motor and social skills. One of the learning activities that support positive changes in students is outing class. Outing class contributes significantly to the social-emotional development of early childhood (Fasya and Alwi, 2025).

Table 5. Kirkpatrick Level 4 Model Percentage Table based on Teacher Observation

Model	Level 4	
Kirkpatrick	I1	I2
Percentage	68.8	68.8
Total Percentage		68.8

Figure 4. Outing Class Activity Outing Class Activity

The habituation of learning to recite the Koran, praying dhuha, prayer and dhikr in congregation also has an impact on students. Based on interviews, students have begun to get used to reciting the Koran and praying when at home. Spiritual development is highly dependent on the family environment, especially parents, habituation and the food eaten. Therefore, teachers and parents should provide a conducive environment for children and provide halal food (Mulyasa, 2012).

The results of the final evaluation are influenced by many factors. Likewise, in this study, the results of the final evaluation were in the moderate category because there were many influencing factors and there were some influences that could not be measured. Not all effects of a programme can be measured and it also takes a long time (Ambiyar & Muharika, 2019). Therefore, level 4 evaluation is more difficult than the evaluation at the previous level.

CONCLUSION

Learning in Pertiwi 2 Penambongan Kindergarten with various excellent programs shows that 1) the reaction of students shows the implementation of learning in Pertiwi 2 Penambongan Kindergarten is in very good criteria with a percentage of 83.7% 2) student learning in Pertiwi 2 Penambongan Kindergarten is in very good criteria with a percentage of 88.15% 3) student behaviour shows the implementation of learning in Pertiwi 2 Penambongan Kindergarten in very good criteria with a percentage of 81.15% 4) the impact or results of the implementation of learning in Pertiwi 2 Penambongan Kindergarten in sufficient criteria with a percentage of 68.8%. In conclusion, it can be stated that the implementation of learning in Pertiwi 2 Penambongan Kindergarten is very good. Therefore, synergy between teachers and parents is needed so that the education that has been implemented at school can be maximised.

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REFERENCES

Ambiyar, & Muharika. (2019). *Metodologi Penelitian Evaluasi Program.* Bandung: Alfabeta.

Arikunto, S. S. (2010). *Penelitian Tindakan Kelas.* Jakarta: Bumi AKsara.

Fasya, L. A., & Alwi, I. M. (2025). Kegiatan Outing Class Sebagai Sarana Pengembangan Sosial Emosional Anak Usia DIni Di TK Mardi Luhur. *Arzusin: Jurnal Manajemen dan Pendidikan Dasar, 5*(2), 787-802.

Fauziah. (2021). Pendekatan Model Kirkpatrick sebagai Evaluasi Pembelajaran Diklat Petugas Pemeriksa Kesehatan Jamaah Haji Provinsi Riau. *Edumaspul: Jurnal Pendidikan, 5*(2), 446-456.

Innayah. (2020). Evaluasi Keberhasilan Penerapan Media Audio Gelaria (Gerak Lagu ANak Ceria) dalam Meningkatkan Fisik Motorik Pada Anak di TK Laboratori Pedagogia Yogyakarta. *Jurnal Teknodik.*

Khairi, H. (2018). Karakteristik Perkembangan Anak Usia DIni dari 0-6 tahun. *Jurnal Warna, 2*(2), 15-28.

Kirkpatrick, D. L. (2001). Kirkpatrick's Four Level. Diambil kembali dari http://lib.gen.org/The Kirkpatrick Four Level/ pdf

Komara, H. W. (2023). Media Pembelajaran Loose Part dalam Meningkatkan Kreativitas Anak Usia Dini. *CERIA (Cerdas Energik Responsif Inovatif Adaptif), 6*(5), 491-498.

Mulyasa, H. (2012). *Manajemen PAUD.* Bandung: Rosdakarya.

Nurhayati, Y. (2018). Penerapan Model Kirkpatrick untuk Evaluasi Program Diklat Teknis Subtantif Materi Perencanaan Pembelajaran di WIlayah Kerja Provinsi Kepualaun Riau.

Andragogi Jurnal Diklat Teknis, VI(2), 170-187.

Rahma, B. A. (2023). Penerapan Merdeka Belajar dengan Media Berbahan Loose Part pada Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia DIni., 7*(4), 3991-4001.

Rohmalina, R. (2017). 3R "(Reduce, Reuse, Recycle) sebagai Inovasi Pembelajaran PAUD dalam Menyongsong Indonesia Bebas Sampah di PAUD SIAGA Kota CImahi. . *Tunas Siliwangi: Jurnal Program Studi Pendidikan guru PAUD STKIP Siliwangi Bandung, 2*(2), 43-53.

Safitri, D. L. (2021). Penerapan Media Loose Part untuk Kreativitas Anak Usia 5-6 Tahun. *Kiddo: Jurnal Pendidikan Islam Anak Usia DIni, 2*(1), 40-52.

Sari, V. B. (2023). Evaluasi Model Kirkpatrick pada Program Praktek Pembelajaran Lapangan Sebagai Penguatan Profesionalisme Mahasiswa Keguruan. *Jurnal Ekonomi Pendidikan dan Kewirausahaan, 11*(1), 37-50.

Siantajani, Y. (2020). *Loose Parts Material Lepasan Otentik Stimulasi PAUD.* Semarang: Sarang Seratus Aksara.