

## **The Childcare Center at Workplace: Observing (Monitoring) and Evaluation System to Support the Social Protection Program among Poor Children**

Zaifulasraf Ahmad, Suraya Yaacob

Advanced Informatics School –  
Universiti Teknologi Malaysia.

[suraya.yaacob@utm.my](mailto:suraya.yaacob@utm.my)

[asy\\_99@yahoo.com](mailto:asy_99@yahoo.com)

### **Article history**

Received:

2 July 2019

Received in revised form:

25 August 2019

Accepted:

30 September 2019

Published online:

3 October 2019

Zaifulasraf Ahmad,

[asy\\_99@yahoo.com](mailto:asy_99@yahoo.com)

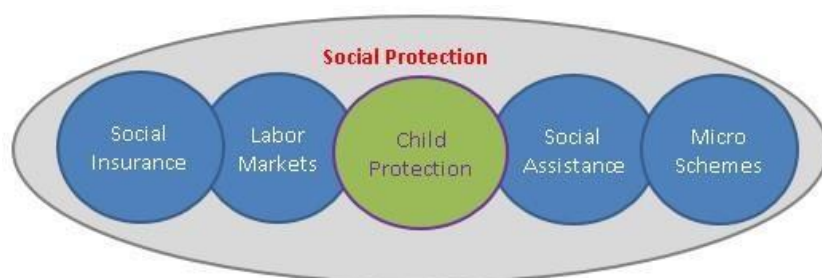
### **Abstract**

*This paper identifies the people's living standards issue by focusing in low-income family that contributes to the lack of awareness of childcare, education support and also the impact on children growth. The solution should be taken to solve the parent's incapability issue due to costly fees and the distance in order to send their children to pre-school or childcare. The awareness should be enhanced to society about the importance of pre-school education for children. The study proposes to establish the childcare center at workplace to overcome this issue whereby it need for cooperation from government with parent and their employers. The Childcare Center Observing and Evaluation System were suggested to monitor the performance of children and at the same time can attract the stakeholders to cooperate in realizing the childcare center at workplace. The research will help to raise the living standards of the low-income family by given the social protection for their children and at the same time can improve the productivity works among the parents.*

**Keywords:** Social Protection, Child Protection, Childcare Center, Poverty, Pre-Education

## 1.0 Introduction

Social protection is a policy or program designed specifically to reduce poverty. It is designed to decrease poverty by promoting an efficient labor market, reducing people exposure to risks, and enhancing their ability to protect themselves from harm and disruption / loss of income. Social protection is comprised of five major elements: (i) the labor market, (ii) social insurance, (iii) social assistance, (iv) microbased schemes and areas to protect the community and (v) child protection[1] as per figure 1.1. Countries with stronger social protection show lower levels of poverty and vulnerability and are more resilient in the face of social and economic change or shock.



**Figure 1.1** Social Protection Elements (ADB, 2003)

\*Corresponding author: [suraya.yaacob@utm.my](mailto:suraya.yaacob@utm.my)

Meanwhile, children are defined as persons under the age of 18 as defined in the Child Act 2001[2]. The Child Act 2001 is intended to protect children as strategies or measures to prevent and respond to neglect, abuse, violence, and exploitation of children[2]. Child neglect is such a continuous and serious failure to provide the basic physical, emotional and developmental needs such as health, education, psychological and emotional developments, nutritional intake, shelter and a safe living environment for children against the threats of all forms of danger which can threaten their lives[2], [3]. This study will focus on child protection elements whereby to promote the establishment the child care center or pre-school at the workplace. Providing day care in the workplace can have many benefits for Malaysian especially come from lower income family who both parent are must work and struggle to find the suitable place for their child care[3], [4],[5]. The benefit of child care center not only for family but also for the employers, including improving employee morale, lowering turnover and attracting a wider variety of applicants[5]. Employers who support the establishment of children's care center in workplace reflects their commitment to the triple bottom concept (social, environment and financial) and describe the attitude of being concerned about "human beings"[6]. However, financial sustainability and capacity limitations are challenges that must be addressed. They view social protection finance as a remix of public expenditure rather than a new expense. Although providing workplace day care can be seem as expensive, but with the initiative of government through TN50 grant[7], the collaboration and cooperation through government, private company (employer) or other non-government organization (NGO) can be achieved. Tax deductions and special incentives are provided to encourage the establishment of child care centers at workplace. Consequently, the child care grant that prepared by

government via TN50 is to help lower-income family to defray some of the cost of child care fees and to ensure affordability and accessibility of child care services to all that require the services. Study on child care center in the workplace and the support policy by the management has shown that both contributing to work and life balance and improve employee productivity[8]. The productivity is important element to increase the standard of living among poor family. This element is crucial to the competitiveness of the people themselves, where they will gain the full trust of his employer and in the meantime there is an increase in rank and salary when they perform the good work. The diagram as illustrated in figure 1.2 summarize the purpose of this study.

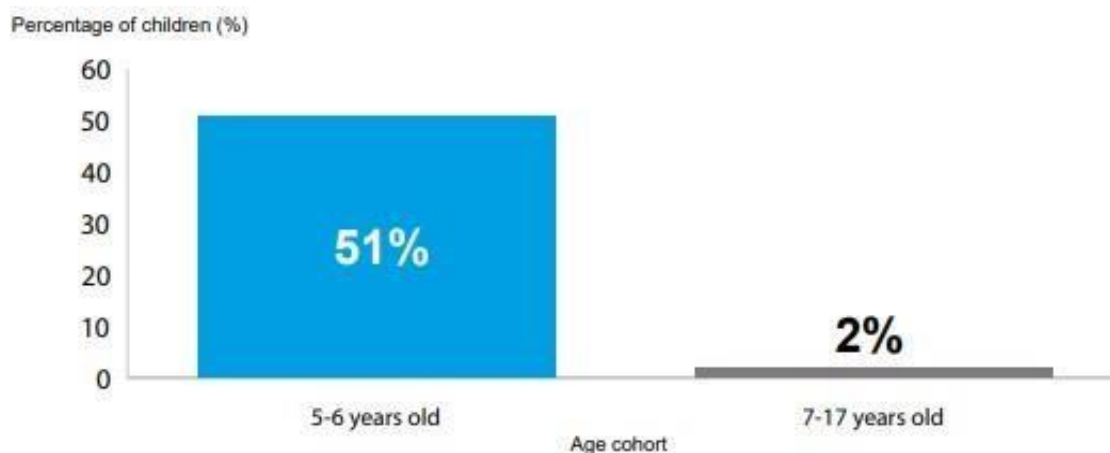


**Figure 1.2** The Diagram shows the Purpose of this Study

## 2.0 Working Background

In recent years, social protection has emerged as a major new focus in efforts to reduce poverty around the world[1]. Through income support and program designed to increase access to services (such as health, education and nutrition), social protection helps realize the human rights of children and families. Social protection strategies are also a crucial element of effective policy responses to adverse economic conditions, addressing not only vulnerabilities caused by current conditions but also strengthens preparedness to future uncertainty[1], [9]. Currently, a careless case involving parents against children is increasing[8], [2]. Although it is look normal by the general public about poor children left at home when parents work or even on the street especially in big town like Kuala Lumpur, it is actually can be serious when the case involves life, safety and welfare of the child. This is because parents are busy to support their everyday life especially from the poor family. Parents do not have the capability to send their children to a child care center or pre-school because they are unable to pay for high costs for fee and also the places of child care are far from home or their workplace. Based on report by UNICEF[7], 51% of children who are 5 and 6 years old are not attending pre-school as figure 2.1. The figure shows the high percentage of children who are not given the opportunity to get an early education. Pre-schools are important for children as they provide a place for them to know themselves, develop positive characters and increase selfesteem. If we notice that, children at this age have the curiosity, and will often

ask different things around them. Thus, to support their development thinking, we should teach them in proper way. The children can learn in many things at preschools, especially those related to selfregulation and self-awareness.

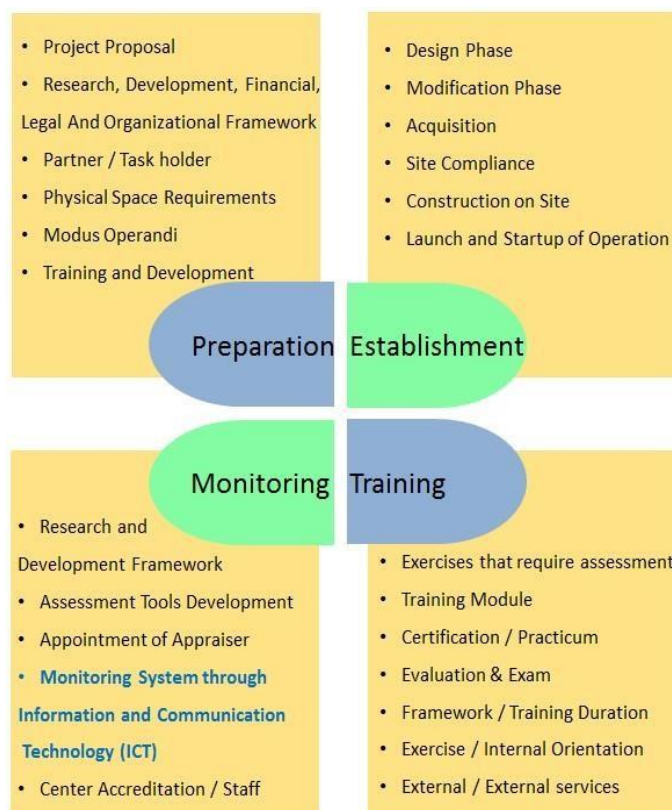


**Figure 2.1** Percentage of children not enrolled in school, by age cohorts (%) by UNICEF (2018)

## 2.1 Informatics Role

Since this study focusing on child care center at workplace to support the initiative from government through the TN50 grant, the proposed child care system has been designed to attract the employer, building owner and other agencies to cooperate in realizing and enhancing the child care system at workplace. As per integration solution and planning between UNICEF and SSM regarding the childcare center development, there are four (4) basic elements or steps to setting up a children's care center which is; (i) preparation, (ii) establishment, (iii) monitoring and (iv) training[6].

Based on the steps as illustrated in the figure 2.2, the study will focus on monitoring or observing system through Information and Communication Technology (ICT)[10], [11]. A system for observing and evaluating the services that offered by children care center must be planned[10]–[12], and all staff needs to be trained to implement the system. All children under the care center need a good education, environment safe and appropriate for stimulating and encouraging interactive positive. Managers or supervisors of child care centers responsible for their employees' performance. The implementation systems that can monitor and evaluate staff should be run to ensure the quality of care given. The web based system or apps will be decided to have all those elements (observing and evaluation) so all the people including children and parents has the access to their performance and will be made to improve the quality of childcare center.



**Figure 2.2** Four (4) Steps to Setting up a Children’s Care Center by UNICEF & SSM (2015)

**2.2 Childcare Center Observing (Monitoring) and Evaluation System Objective**

Record, analyze and use the information obtained through observation and assessment exercise are the important components in the evaluation process[10], [13] for ensuring continuous development planning. After assessment is conducted, the key-in records of the assessment need to be done, along with recommendations for improvement. Monitoring is an ongoing activity[10], [12], [14], compliance must be assessed and monitored with appropriate indicators. Evaluation (assessment), which is a process that allows monitoring practices considered in more details, should be carried out mainly on a very particular field in the care of children[13]. Observation and evaluation process that will be implemented in the system as per table 2.1;

**Table 2.1** The Process of Observation and Evaluation Process

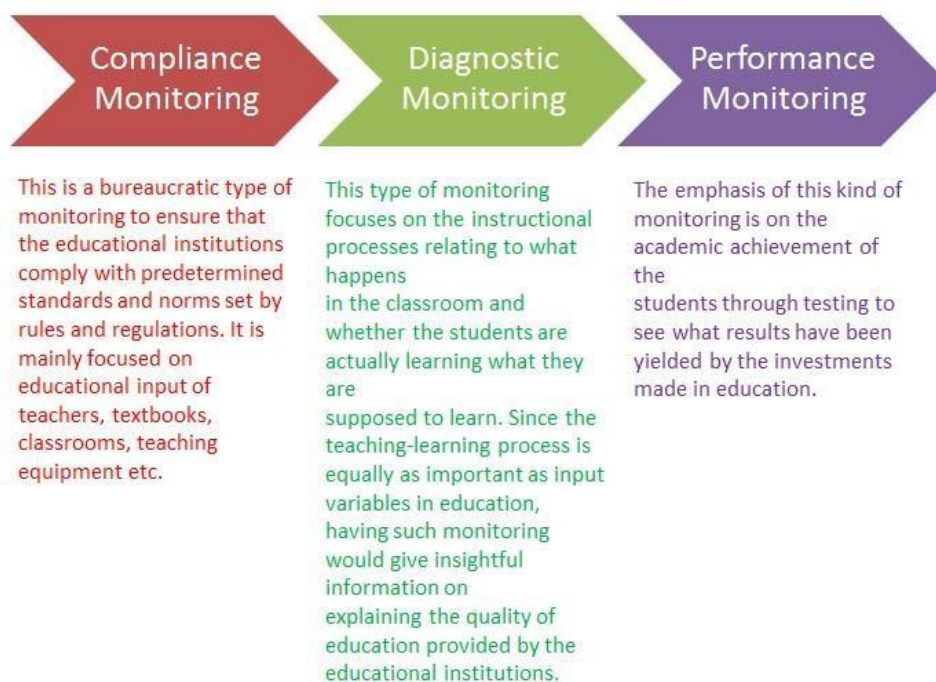
Target Group	Proses
Children	Observe and evaluate child progress with observe, hear and discuss, and collecting children's work.

Teacher	Observe and evaluate babysitters and other staff based on the role and their responsibilities.
Parents	Observe and assess parental involvement in support the development process of their children.

### 3.0 Literature Analysis

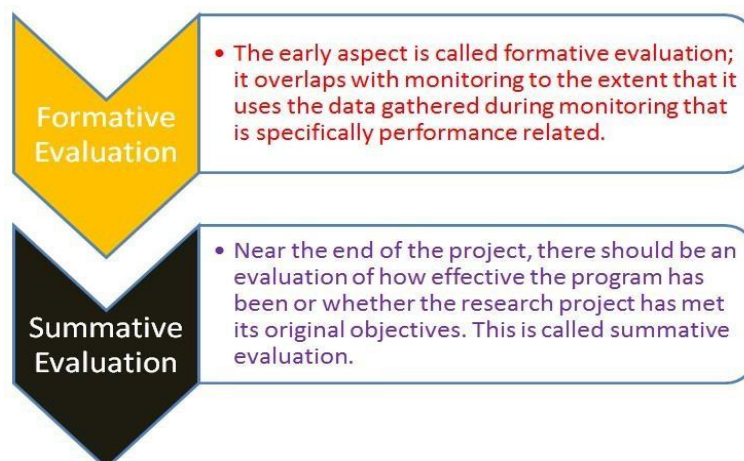
There are two important elements that related with the system; (i) observing or monitoring and (ii) evaluation. Based on UNESCO education research, they describe the monitoring as one of integral part of education process and the system or technology should involve on that to improve the quality of data and to reduce the time especially on collection, processing and analysis[12]. Many countries have invests in ICT for education purpose for example in e-learning platforms and mobile learning technologies. ICT can help in improving the quality of education by increase the motivation and engagement between student, teacher and parents. Moreover, ICT can help to facilitate the basic skills in learning and teaching process and also can enhance the teacher training. Emphasis on the use of ICT can contribute for more effective collection and utilization on observing (monitoring) and evaluation. There are three types of monitoring in education such as compliance, diagnostic and performance monitoring (as per figure 3.2) that can be used to review the quality of education especially for child care center [12]. The compliance monitoring was related with rules or regulation and the property of a material such as textbook, classroom and equipment. Diagnostic monitoring is focusing on the process in how the teacher-learning process was conducted in child-care center. Meanwhile, the performance monitoring is emphasis on the output which is the academic achievement or positive behavior from the children.





**Figure 3.1** The Monitoring Process by UNESCO Education (2016)

Meanwhile, the evaluation play the important aspect of education. In early childhood education, evaluation and assessment enables a teacher or educator to obtain information about a child, identify the effectiveness of learning, curriculum, administrators and identifying aspects that can be improved. Evaluation efforts can illustrate the effect of either teaching or learning on either positive or negative effects. This is because when the teacher knows the level of child development, the teacher will provide the appropriate follow-up action to ensure the children receive optimal education. The teachers can provide guidance activities or perform enrichment activities to diversify the existing skills of the students based on their performance. Consequently, studies will continue to be conducted to ensure that teachers understand the importance of formative evaluation in education in helping teachers see the progress of children continuously. The figure 3.2 (in the next page) shows that, there are two types of evaluation process that can be implemented in the system[12].



**Figure 3.2** The Evaluation Process by UNESCO Education (2016)

Consequently, the UNESCO via their research also classified 5(five) components of monitoring and evaluation systems as per table 3.1[12]. Each component has their own function or purpose whether in evaluation student performance or school resources management.

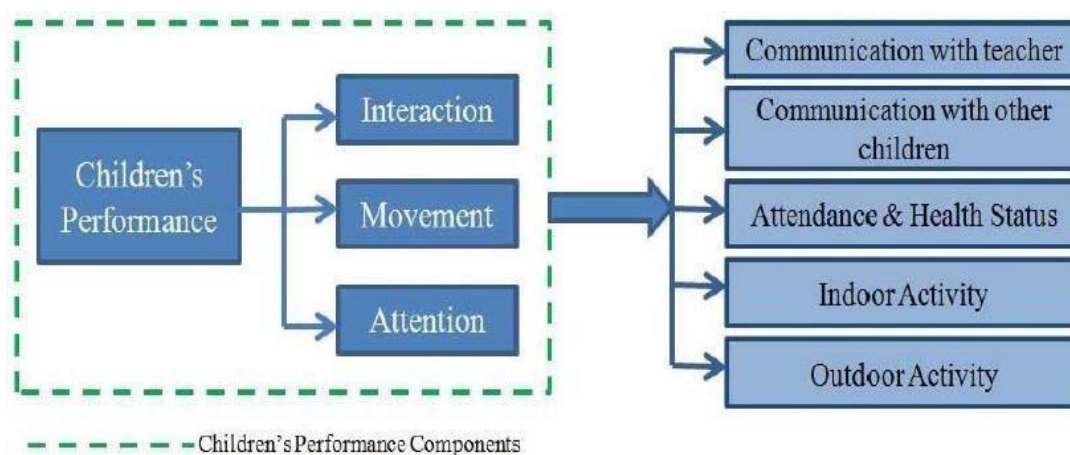
**Table 3.1** Components of Monitoring and Evaluation System by UNESCO Education (2016)

Components	Proses
School record keeping system	This aims to keep information at the school level. This typically includes data on students (school entrance, attendance, academic achievements etc.), teachers (individual profile of teachers), finance (school budget and expenses), and physical facilities (quantity and quality of school building, classrooms, furniture, equipment etc.). Usually information from such systems are consolidated and fed into other M&E systems, such as EMIS.
Statistical data system	Often called Education Management Information System or EMIS, this is designed to collect, compile, collate and analyse school level data (students, teachers, facilities, finance etc.) for policy and programme formulation, implementation and monitoring at different administrative levels.
Resource management systems	These could include (i) teacher management (or Teacher Management Information System TMIS), which is designed to support the management of teachers' recruitment and deployment, and (ii) financial resource management (or Financial Management Information System - FMIS), which conducts the transactions and monitors the financial status of education institutions.
Performance evaluation system	This includes (i) a School Inspection and Evaluation System which is carried out by the Ministry of Education to observe and inspect whether schools comply with the rules, regulations and standards set by the relevant authorities, and (ii) a Teacher Evaluation System whose function is carried out by relevant education institutions to evaluate the performance of teachers.



Parents	This can include (i) an Examination System designed for the purpose of certifying or selecting students, usually covering the main subject areas in the school curriculum, and (ii) a Student Assessment System designed to provide an estimate of the achievement level in the education system as a whole at a particular age or grade level.
---------	---

Therefore, the performance assessment for early childhood has been discussed by previously and it is extensive topic for education improvement. The performance of children in pre-school is much influenced by their environment especially that involved with their feeling and learning environment. The previous study [15] found that there are three (3) components that related with the action of children at pre-school like interaction, movement and attention. Then it has been proposed that, to spread those components to another five (5) key elements such as (i) communication with teacher, (ii) communication with other children (iii) attendance and health status, (iv) indoor activity and (v) outdoor activity as per figure 3.3.



**Figure 3.3** The Children's Performance Measurement Framework Original Source by Zulkifli, Majid & Hassan (2016)

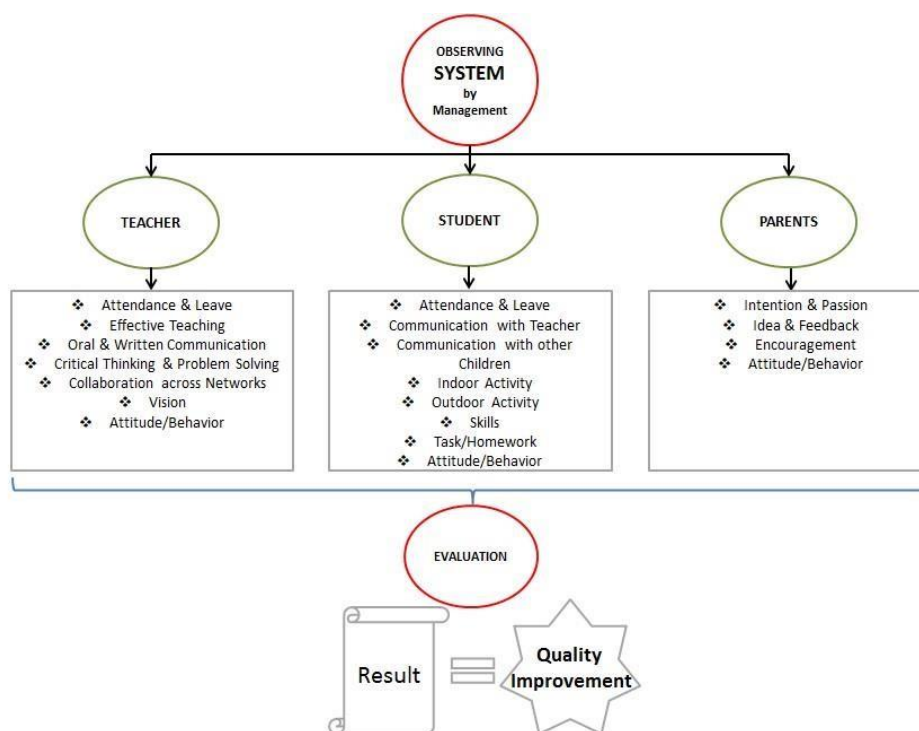
#### 4.0 Proposed Solution/Initiatives

Based on literature analysis, the study found that the observing and assessment or evaluation is important for early childhood education. The observation can help the teacher or guardian to better understanding the current strength and weakness for each child. It helps to track the development progress among them and identify any learning issues. After that, the assessment process will take part, whereby it will collect and review all the information from monitoring process to plan the educational activities to cater the current issue. The assessment will provide a record of growth in all developmental areas for example cognitive, physical, language, emotional and learning approaches. It can identify the children who may need additional support and determine if there is a need for intervention or support services. This assessment record using ICT is also a great tool to share with parents

for especially via online; web based or mobile apps. Then, they can follow their child's progress from other place at any time.

As a comprehensive approach, the proposed system also should have the monitoring and evaluation for teacher. The evaluation system should be developed to consist all the elements such as multiple forms data to guide to guide the creation goals, the tools that can support to create their planning plans, engage with professional person or expert to improve the knowledge and skill and to help them in set decision regarding any issue about educational aspects. The purpose is to make sure the teacher has easy accessibility to those system, to make sure the continuous process centered based on observation, collaboration and the feedback from others. Parental involvement in early childhood education brings many benefits to both children and the teacher. It helps their child for build the strong and positive attitude by give moral support and assist teacher to identify their current attitude, behavior, emotional and interest about learning process. Direct benefits include better academic results, improved attendance rates, and diligent completion of tasks. As a parent, it's important to fully understand the child's development and learning processes. This enables all the parties including teacher and parent to identify the strengths and weaknesses of the children and the support needed by them in daily learning activities. Based on that, the observation and evaluation parental involvement will be proposed to include in the system. Consequently, the propose solution of the system is to get the collaboration between student, teacher and parent to improve and sustain the learning process at childcare center or pre-school. Figure 4.1 showing the learning interaction between children, parent and teacher by previous study. The idea from those three (3) important elements; parent, teacher and student will be adopted and enhanced to make suitable with the proposed ICT system design[16].

Hence, the proposed system has been designed to observe and evaluate each of components under childcare center such as teacher, student and the parents. The collaboration and cooperation among them can improve the quality of earlyeducation. Each of them will be observed by different scope and view based on their responsibility. For an example, the student will be observed from their attendance, communication, activity involved, task given and also their attitude and behavior. All the result from the observing process will be recorded in the system with help or feedback from their teacher and parent. All the record then will be evaluated and analyzed to improve the quality of learning process. The observation and evaluation not only focus on student/children, but also among teacher and parent. It is important to make sure all of them play their responsibilities in improving the quality of preschool education at childcare center.



**Figure 4.2** Observing and Evaluation System for Pre-School

## 5.0 Conclusion

Nowadays, ICT plays a major role for the society and community such as to transform our lives, access for information and services, communicate by each other's and change the way we do the business. The implementation of ICT also can be an enablers or tools to support of poverty reduction. Meanwhile, this research was study about how the social protection program can be a solution to poverty and how the ICT can help to encourage the success of program. Based on previous research, the study found that the social protection was consist of five (5) main elements such as labor markets, social insurance, social assistance, micro scheme and child protection. However, this study is only focus on child protection element by providing a solution to children who come from low-income family and did not get the proper protection at their age. They also do not have the opportunity to get an early education at pre-school because of their parent can't afford to pay the education fee for them. Besides that, the parent also has difficulty to send their children because of the distance between workplace and childcare center. Providing day care in the workplace has been seem as the solution for this issue. There are some advantages and disadvantages to provide child care in the workplace. The advantages are the parent has not to worry where to send their children and at the same time their children also has the proper place to stay while the parent was working. Their child is cared for by someone who is associated with the parent's company. In addition, providing child care in the workplace can increased concentration and productivity on the job. The parent can give more attention on work and not elsewhere. Parents also able to check in on their child during a lunch break or when they free. The disadvantage is the cost can be issue, whereby the high cost of operating a full-service center on-site is needed. Furniture, rent, insurance,

materials and staffing costs can be overwhelming, but with supported by government through grant or tax exemption via TN50 initiative, it's possible to be done. Meanwhile, the system that can sustain the development goal and progress in pre-education level should be developed to convince and attract the interest from stakeholder. Hence, the proposed system has been designed to observe and evaluate each of components under childcare center such as teacher, student and the parents. The collaboration and cooperation among them can improve the quality of early education at childcare center and at the same time can attract the interest from stakeholder and also to get attention from the government.

## 6.0 References

- [1] ADB, "Social Protection," *Asian Dev. Bank*, p. 107, 2003.
- [2] Mohammad Ramzi Zakaria, "Kecuaian dan pengabaian kanak-kanak oleh ibu bapa: kedudukannya di bawah akta kanak-kanak 2001 dan prinsip syariah," *J. UUM*, vol. 19, pp. 37–49, 2015.
- [3] E. C. D. A. ECDA, "Guide to setting up a child care center," no. March, p. 9, 2015.
- [4] Meenakshi, "Importance of ICT in Healthcare," *IOSR J. Res. Method Educ.*, vol. 1, no. 4, pp. 03–08, 2013.
- [5] J. Willms Douglas, "Pre-School Kids Benefit from New Skills Assessments.," *Educ. Canada*, vol. 49, no. 5, p. 39 2009, 2009.
- [6] "TAMAN ASUHAN KANAK-KANAK," 2010.
- [7] UNICEF, *Children without play*. 2018.
- [8] I.-I. S. U. Pendidikan, "PENDIDIKAN MURID GELANDANGAN : CABARAN DAN IMPLIKASI," pp. 1–15.
- [9] A. Barrientos, "Social protection and poverty," *Int. J. Soc. Welf.*, vol. 20, no. 3, pp. 240–249, 2011.
- [10] D. A. Wagner and R. B. Kozma, "Core Indicators for Monitoring and Evaluation Studies in Icts for Education," *Monit. Eval. Ict Educ. Proj.*, no. November, pp. 1–17, 2005.
- [11] D. R. Amya, C. M. Onica, K. P. R. K. Umar, and R. S. A. B. Anu, "Smart Nursery Monitoring System using IoT," *Int. J. Innov. Technol.*, vol. 5, no. 4, pp. 651–654, 2017.
- [12] "Designing effective monitoring and evaluation of education systems for 2030 : A global synthesis of policies and practices," *UNESCO Educ. Sect.*, no. January 2016, 2016.
- [13] S. Hirsh, "Teachers and students benefit when evaluation focuses on learning and growth," vol. 35, no. 6, p. 2014, 2014.
- [14] A. G. F. O. R. Curriculum, *AND MONITORING AND How will we know what students have.* .
- [15] N. I. Zulkifli, R. A. Majid, and A. Hassan, "The Assessment of Children's Performance at Child Care Center," *Procedia - Soc. Behav. Sci.*, vol. 234, pp. 64–73, 2016. [16] M. Lerkkanen, "First Steps study as an example of First Steps study," pp. 1–2, 2017.