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The Effectiveness of Using Learning Device Information Systems in Preparing Learning Plans

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ABSTRACT: The importance of the ability to develop lesson plans requires educators to be able to understand and master learning content as well as understand various ways to complete it. The learning device information system (SIPP) as one of the results of technology is here to help educators complete this task. The purpose of this study was to demonstrate the effectiveness and efficiency of SIPP in developing learning plans in early childhood education. The research was conducted using a quantitative approach, with descriptive statistical analysis presented in the form of a frequency distribution table. The questionnaire was distributed using a Likert scale, which contains items regarding goal achievement, quality, output, and user response as indicators of effectiveness and contains items regarding the use of time, cost, effort, and use of paper materials as indicators of efficiency. The results showed that the four indicators of effectiveness were met with an average score of 385.8. Efficiency which includes four indicators achieves an average score of 19.3. The availability of components in templates that are adjusted to the applicable provisions and can be used automatically allows users to complete their tasks in a relatively faster time. The availability of components in templates that are adjusted to the applicable provisions and can be used automatically allows users to complete their tasks in a relatively faster time. The conclusion is that SIPP is very effective and efficient for preparing lesson plans so that it can facilitate and save the teacher's time in completing the task.

Keywords: learning device information; early childhood education, lesson plan

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1 INTRODUCTION

The initial step before the learning process takes place is to develop a learning plan (Kemdikbud, 2015), which is carried out by educators or teachers in an early childhood care and education institution. Developing lesson plans can serve as a reference for teachers to carry out learning activities so that they are directed and systematic (Munawaroh et al., 2019), as well as an important road map that guides the teacher before the implementation of learning (Ndihokubwayo et al., 2020). Careful planning is needed so that the implementation of learning runs effectively (Marading (2019). Learning devices are useful for clearly describing learning activities so that the objectives can be achieved optimally (Fatmawati et al., 2019). With a lesson plan, teachers do not have to worry about going out of objectives, the scope of material, teaching and learning strategies, or out of the default evaluation system (Febriana, 2019). On the other hand, without careful planning, learning activities will not be as expected (Saparahayuningsih et al., 2020).

Learning plans are prepared using learning approaches and models that suit the needs, characteristics of children, and local culture. Learning models include group learning models based on activity angles, group learning models based on security activities, learning models based on areas (interests); and a center-based learning model. Regarding the daily learning plan, it is divided into two models, namely tables and narratives. The difference between the two is that in the table model there are indicators and activities; while in the narrative model, there are opening activities, core activities, and closing activities. But for other content, such as themes and sub-themes, core competencies and basic competencies, as well as assessments, there are similarities.

There are still many ECE institutions that do not have lesson plans. Some of the reasons are teachers do not understand how to develop lesson plans (Fitria & Rohita, 2019). Some of the reasons are the teachers' educational background that is not a university degree (Rohita, Fitria dan Haryadi, 2018) (Munawaroh et al. (2019) (Sum & Taran (2020), and their initial profession as housewives (Hendarwati et al., 2017). Other reasons are: 1) the 2013 curriculum has never been socialized because they located in a remote area; (2) the 2013 curriculum has not been spread out evenly and the teachers' level of understanding varies; (3) difficulties in dividing core competencies (CC) and basic competencies (BC) in the semester program while making learning materials, and (4) have no experience arranging lesson plans according to the 2013 curriculum, it is quite difficult to develop themes (Pamungkas et al., 2016).

Given the importance of preparing lesson plans, it is necessary to make various efforts that can be easier for the teacher to understand what must be done and make it easier for the teacher to establish the lesson plan. One of them is by utilizing technology. It has been proven before that by making the most out of technology and information systems, various jobs in various fields are easier to do and faster to complete.

Regarding the preparation of lesson plans, the existing application is the E-Rapot (ERA) application in the form of Microsoft Excel from Erlangga (Arza, 2019). But nothing has been made in the form of an information system. SIPP is a form of application for preparing lesson plans in early childhood education that are made by utilizing an information system (Rohita, Haryadi, Fitria, dan Bustan, 2019). Through SIPP, all data is stored safely on the internet which later can be accessed anywhere and anytime. SIPP can be practiced using devices such as laptops, computers, cellphones, iPads, and more that can be connected to the internet. However, it is not yet known whether SIPP as a tool is quite effective and efficient in preparing lesson plans, especially in ECE institutions.

Based on this, research is needed which can show that SIPP as one of the tools designed to develop lesson plans has effectiveness and efficiency in its use. So that early childhood educators can use it and strengthen the ability of educators to complete one of the tasks in learning. Thus, this study aims to determine the level of effectiveness and efficiency of SIPP as a tool for preparing lesson plans.

2 THEORETICAL STUDY

2.1 *Learning Device Information System or SIPP*

An information system is an organized combination of people, hardware, software, communication networks, and data resources that collect, transform and disseminate information within an organization (Yakub, 2012), consisting of Brainware, data, and procedures for carrying out input, process, output, storage, and control that change the source and become information (Membara et al., 2014). The use of information systems has many benefits in various fields of life (Kaleb et al., 2019; Koloay et al., 2014; Meliana et al., 2020; Nugroho, 2015; Parsaorantua et al., 2017; Prananda & Datu, 2016), including in kindergarten which is an information system to facilitate the preparation of reports for Operational Assistance for the Implementation of ECCE (Machmuddah & Suhartono, 2019).

System Develop Live Cycle (SDLC) and Unified Modeling Language (UML) form the basis for designing SIPP. Both are languages used to define, visualize, develop, and document software systems (Abdurohman et al., 2010). The programming language PHP (Hyper Text Preprocessor) with the CodeIgniter framework is also used. PHP is a server-side script added to HTML, with a working system that starts from a browser request on a web page. Then the browser identifies the desired page and conveys all the relevant information needed by the web server. This process allows users to access various applications anywhere and anytime, which is also one of the advantages of web-based applications (Irviani & Setiawan, 2017). The site address for SIPP is www.sippkom.sipp-tk.com.

2.1.1 *Information System Effectiveness*

Effectiveness means the success of something by the goals to be achieved (Humaedi, 2015)(Astriani (2018), which describes how far the target can be achieved in quality and

is oriented toward the output produced (Suratini et al. 2015), as well as the response of the information system users (Apriyansyah et al. (2018). The quality of the information system is defined as the characteristics that users want from an information system (Salsabil & Arfa, 2019) so that it is chosen by users themselves to help achieve a goal. This can be seen from (1) Usability; (2) Availability; (3) Reliability; (4) Adaptability; (5) and Response time (Salsabil & Arfa, 2019).

Relating to the output produced, an information system is said to be effective if the output contains the required components. In terms of lesson planning in kindergarten, the component weekly learning implementation plans (RPPM) must contain institution identity, the BC chosen, teaching materials, and activities to be provided (Suryana & Rizka, 2019). While the components contained in the daily learning implementation plans (RPPH) are: (1) RPPH identity; (2) Learning materials in the RPPM; (3) habituation activities; (4) tools and materials; (5) Opening; (6) Core; (7) Closing; and, (8) Assessment plan (Fitria et al., 2019).

As for user response, the effectiveness of the information system can be seen from indicators of users' ability, satisfaction, and benefits of using the information system. According to Apriyansyah et al. (2018): (1) Ability of SIPP Users: can be seen from the user's educational backgrounds, skills in using computer technology, the number of training that have been attended, as well as the number of applications that have been used related to preparing lesson plans; (2) SIPP User Satisfaction: measured from the time and frequency the users want to utilize the information system; (3) Advantages of SIPP Users: seen from how effortless it is in making lesson plans, users can rely on them to make appropriate lesson plans in the form of complete components, thus doing it more quickly. If all objectives have been achieved, then the effort is called effective. The purpose of the information system is the final result that the system wants to achieve for a long period (Sudjiman & Sudjiman, 2018).

2.1.2 *Information System Efficiency*

Efficiency is the proper and precise effort that has been carried out in doing things that can reduce the waste of time, cost, and effort (Dindayani et al., 2019; Mudjiyanto, 2018; Mulyono, 2018), and paperless (Purwanto, 2017). Paperless means reducing paper usage, not eliminating the usage (Ningrum & Puspasari, 2015). It certainly provides benefits for anyone. Using paperless can reduce the use of filling cabinets (Afeanpah, 2017), minimize procedures, better work management, facilitate work coordination, better institutional image, and increase work efficiency (Mulyono, 2018).

2.2 *Early Childhood Education Lesson Plan*

The lesson plan is the process of preparing various learning decisions and organizing activities to be carried out including events, situations, and atmosphere to achieve learning objectives in the form of predetermined competencies (Wahyuni & Berliani, 2018; Susilo et al., 2016; Fitria et al., 2019). Preparation of learning plans before the actual learning activities is useful for (1) Supporting the successful implementation of

learning; (2) Directing the teacher to prepare the necessary tools and materials; and (3) Directing teachers to build attitudes, knowledge, and skills that children are expected to have (Fatmawati et al., 2019). It can also make learning interactive, inspiring, fun, and challenging, motivating students to play an active role, and providing opportunities for students to be creative and independent according to their interests and talents (Febriana, 2019).

Learning planning at the ECCE level is divided into annual programs, semester programs, weekly programs, and daily programs (Suryana & Rizka, 2019). Weekly programs are an activity plan that will be carried out by ECCE institutions in one year (Masnipal, 2018), to achieve predetermined educational goals (Susilo et al., 2016). Semester programs, it is a learning program that contains themes that are recorded sequentially and systematically, the time allocation required for each theme is divided into semester 1 and semester 2 (Susilo et al., 2016). The themes in one semester will be developed into sub-themes or sub-sub-themes, and there are defined competencies to be achieved in each (Suryana & Rizka, 2019), and the themes determined will be around the children's section (Sum & Taran, 2020). Weekly programs are structured for one week of learning containing projects that will be developed into learning activities (Kemdikbud, 2015). While daily programs are a reference for managing learning activities in one day which is subtracted from weekly programs. Daily programs are made no later than one day before learning is carried out (Masnipal, 2018).

3 METHOD

3.1 *Research Method*

Quantitative research with a descriptive approach was chosen as the research design. The situation studied is the level of effectiveness and efficiency of the use of SIPP in preparing learning plans in ECCE institutions. The method was chosen to be able to describe the level of effectiveness and efficiency of the existence of SIPP, in preparing lesson plans, as stated by Supriyatna and Maria (2017) and Salsabil and Arfa (2019).

3.2 *Sampling*

Participants were determined by the type of probability sampling drawn through purposive sampling based on the criteria of ECE institutions that have participated in socialization and used SIPP in preparing lesson plans, totaling 32 respondents from 13 ECE institutions in the Depok and Jakarta areas. The aim is to obtain accurate information regarding the effectiveness and efficiency of SIPP in arranging lesson plans and be able to provide responses that are by their real experiences (Creswell & Clark, 2017). In addition, because the Depok and Jakarta areas have easy access (Creswell & Creswell, 2018), it became one of the considerations (Remler & Ryzin, 2015).

3.3 *Data Collection*

3.3.1 *Questionnaires*

Data collection was carried out using a questionnaire. The statements contained in the questionnaire relate to indicators of the effectiveness and efficiency of an information system and are measured using a Likert scale. To avoid biased answers, neutral alternative answers are omitted. So that the respondent's answer will lead to a positive or negative response. Response bias is the tendency of some people to answer various questions in the same way (usually answering neutrally) because they are lazy to read questions (Neuman, 2018), which cannot describe the actual conditions of the respondent's (Saifuddin, 2020). The interval scale is formed from the number 1 (lowest) and number 4 (highest) with a total of 4. Then, the interval scale for respondents' answers at the level of effectiveness is 115(4-1)/4 = 86,25 rounded up to 86. While the interval scale of respondents' answers at the efficiency level is 6(4-1)/4 = 4,5 rounded to 5. So that the criteria for assessing respondents' answers are obtained (see Table 1).

Table 1. Criteria for Assessment of Respondents' Answers

Effectiveness Criteria		Efficiency Criteria	
Very Effective	374 – 460	Very Efficient	22 – 24
Effective	288 – 373	Efficient	17 – 21
Ineffective	202 – 287	Inefficient	12 – 16
Very Ineffective	115 – 201	Very Inefficient	6 – 11

3.3.2 *Interview*

Data collection techniques were also carried out by interviewing research subjects to strengthen the findings that were still lacking from the questionnaire technique. Interviews were conducted using a mobile phone recorder and an interview guide that referred to indicators of the effectiveness and efficiency of SIPP in preparing lesson plans. Interviews were conducted with all respondents.

3.3.3 *Documentation*

The data collected using the documentation is the output resulting from the use of SIPP. Data is obtained by downloading the results of filling out the SIPP in the form of RPPM and RPPH. The download results are used as a comparison of the output produced before and after using SIPP.

3.4 *Data Analysis Techniques*

Data were analyzed using descriptive statistics including average prices (mean), median (Md), mode (Mo), and percentages presented in the form of a frequency distribution table (Wahab et al., 2021) to obtain information regarding the level of effectiveness and efficiency of SIPP. In addition to presenting in the form of numbers, data will also be shown in the form of narrative results from interviews with research subjects to strengthen the research findings.

4 RESULT AND DISCUSSION

4.1 *Result*

4.1.1 *SIPP Effectiveness*

The following is a presentation of research results based on each effectiveness indicator (see Table 2).

Table 2. The results of the SIPP effectiveness questionnaire

Variable	Indicator	Weight	Frequency	Score	%
SIPP Effectiveness	Goal Achievement	4	252	1.008	48,7%
		3	351	1.053	50,8%
		2	5	10	0,5%
		1	0	0	0%
	Use of SIPP	4	268	1.072	51,7%
		3	325	975	47%
		2	13	26	1,3%
		1	2	2	0,1%
	Availability of SIPP	4	197	788	58,6%
		3	182	546	40,6%
		2	5	10	0,7%
		1	0	0	0%
	Reliability of SIPP	4	87	348	41,3%
		3	157	471	55,9%
		2	12	24	2,8%
		1	0	0	0%
	Adaptability of SIPP	4	44	176	54,5%
		3	46	138	42,7%
		2	3	6	1,9%
		1	3	3	0,9%
	SIPP Respond Time	4	19	76	37,3%
		3	41	123	60,3%
		2	1	2	1%
		1	3	3	1,5%
	SIPP Output	4	437	1.748	58%
		3	412	1.236	41%
		2	14	28	0,9%
		1	1	1	0,1%
	Data Results of SIPP Facilitating the Arrangement of Lesson Plans	4	25	100	47,4%
		3	33	99	46,9%
		2	6	12	5,7%
		1	0	0	0%
	Reliable to Achieve Goals Accurately	4	83	332	39,9%
		3	155	465	55,8%
		2	18	36	4,3%
		1	0	0	0%
	Accelerate the Making of Lesson Plans	4	26	104	48,6%
		3	34	102	47,7%
		2	4	8	3,7%
		1	0	0	0%

Table 3. Used Applications/Software

Response	Frequency	%
Microsoft Word	26	81,3%
Microsoft Excel	0	0%
ERA from Erlangga	6	18,8%
Total	32	100%

Table 4. SIPP Period of Use

Response	Frequency	%
1 week of lesson	6	18,8%
1 theme of lesson	9	28,1%
1 semester of lesson	6	18,8%
1 year of lesson	11	34,4%
Total	32	100%

Table 5. SIPP Frequency of Use

Response	Frequency	%
Every <4 days in a week	13	40,6%
Every 4 days in a week	9	28,1%
Every >4 days in a week	10	31,3%
Total	32	100%

4.1.2 *SIPP Efficiency*

There are 6 questions in the questionnaire for the effectiveness variable. The following is a presentation of research results based on each efficiency indicator.

Table 6. Difference of Time in Making Lesson Plans

Respondents experience the acceleration of time in making RPPM using SIPP	2 respondents (6,3%)
Respondents experience the acceleration of time in making RPPH using SIPP	2 respondents (6,3%)
Respondents experience the acceleration of time in making RPPM and RPPH using SIPP	21 respondents (65,6%)
Respondents do not experience the acceleration of time in making RPPM and RPPH using SIPP	7 respondents (21,9%)

In preparing the plan, it was discovered that there were obstacles that were felt by 7 respondents so that they did not experience acceleration: (1) The internet network was unstable and not all colleagues were good at using computers so they needed to teach them; (2) Determine CC-BC to make materials up to activity plans; (3) When making RPPM, there were many components that needed to be elaborated; (4) Difficulty in filling out the SIPP due to using a cell phone; (5) How to operate the computer; (6) Entering a lot of data takes time; (7) Not used to using it and the many stages of completing SIPP.

Table 7. The result from Questionnaires for SIPP Efficiency

Aspect	Indicator	Weigh	Frequency	Score	%
SIPP Efficiency	Low Cost	4	252	1.008	48,7%
		3	351	1.053	50,8%
		2	5	10	0,5%
		1	0	0	0%
	Effortless Move	4	268	1.072	51,7%
		3	325	975	47%
		2	13	26	1,3%

	1	2	2	0,1%
Paperless	4	197	788	58,6%
	3	182	546	40,6%
	2	5	10	0,7%
	1	0	0	0%

4.2 *Discussion*

It is known that 50,8% of respondents' answers agreed that SIPP can help achieve the goal of arranging lesson plans. This is due to the completeness of the RPPM and RPPH components produced by the SIPP (Suryana & Rizka, 2019) so that the goal of making SIPP can be achieved in the long-term (Sudjiman & Sudjiman, 2018). Regarding the use of SIPP, 51,7% of respondents' answers strongly agreed that SIPP makes it easier to make lesson plans. This is the opinion of Salsabil and Arfa (2019). One of the conveniences felt by users is supported by the features in SIPP which agree with the components that must be in the lesson plan, both RPPM and RPPH, including the features for filling in themes, days/dates, and CC-BCs that are based on the 2013 Curriculum. This means that the features in SIPP comply with users' needs. From that, the availability of features in SIPP, which is an indicator of the effectiveness of the information system (Poon in Ahmad & Pambudi, 2014; Salsabil & Arfa, 2019), has been fulfilled.

Even so, SIPP developers must continue to evaluate and update to be able to provide features that suit users' needs. Because these features need to keep up with the times and changes in the applicable curriculum. Ahmad and Pambudi (2014) stated that to create an information system that is expected by users, it is necessary to evaluate and improve. The results of the interviews with the respondents will be input for the development of SIPP, which among other things proposes to add school characteristics. In addition, updating the system needs to be done to make existing performance effective and efficient (Sari & Prasetiawati, 2020). SIPP can also be relied on in making lesson plans that are correct, complete, precise, and by the provisions and regulations. Thus, the teachers can easily make lesson plans accordingly and reduce errors (Yusuf et al., 2021). SIPP can also adapt to users' plans such as adding data, editing data, and deleting data. This shows that one indicator of the quality of an information system, the one that can adapt to users' desires (Salsabil & Arfa, 2019), has been fulfilled.

Providing clear logos/images for features to add, edit, and delete data, makes SIPP easier to use. Such as adding data is indicated by a plus logo (+) or the words "add data". Meanwhile, editing data is indicated by a logo with a pen image. As well as to delete data indicated by a logo with a trash bin. The existence of a logo can represent messages or information (Sijabat et al., 2021). Furthermore, in this study what is meant by the logo representation is information about a feature, so that the appearance of it is not only in the form of words but can also be in the form of a logo. The logo as part of the SIPP design is provided to make it easier for users to adjust, what they need. As stated by Baker El-Ebiary, et.al. (2020) that poor management information system design is an obstacle to the successful management of institutions in Nigeria. SIPP can respond to users'

commands in a short time and load pages quickly. Some of the obstacles that occur related to loading are the internet data network (signal quality or network type) and the use of various hardware devices on the internet such as the type of modem or router (Himawan, 2019). However, all respondents often accessed SIPP while at school. So, the router used is the same, as well as the speed of response to users' commands. In addition, all respondents experienced the same SIPP page loading speed.

Regarding output, it is known that 58% of respondents strongly agree that SIPP can produce output that contains learning planning components in complete and neat conditions to reduce errors in making lesson plans. So that it can also be said that SIPP, which utilizes technology, makes it easier for educators to complete their tasks (Afendi, 2019). Regarding SIPP users, 53,1% of them were undergraduates and only 28,1% of respondents graduated from high school graduates. This has an impact on the agility and comprehension of respondents regarding their understanding of using computers and the absence of obstacles in transferring said knowledge. Not many questions were asked by respondents in each section described. So, the use of SIPP can be done optimally. Hendarwati et al. (2017) wrote that the educational background of respondents that only graduated from high school affected their ability to arrange the lesson plan, which made them less skilled. Teachers who do not have an undergraduate education background had difficulties in transferring the abilities regarding the arrangement of lesson plans according to the 2013 curriculum (Rohita, Fitria, & Haryadi, 2018).

Even though they have the skills to use a computer, 46,9% of them assess their ability to be at the intermediate level. At this level, a person can understand the use of the internet and computers but the activity of using them is not more frequent than in the expert-level (Beny et al., 2019). In addition, one's expertise in using a computer arises from self-judgment about one's abilities (Astuty & Chandra, 2016). Where a person's computer skills to perform tasks related to information technology can affect the level measurement of effectiveness in an information system (Setyowati & Respati, 2017).

The ability to use a computer is based on their activities in participating in training. The training that 46,9% of the respondents participated in was for Technical Guidance on The Main Data of Educators, Microsoft Office (Word, Excel, PPT), Literacy, SPSS, Companion Teachers, Online Mode, *I Can Do* Applications, Video and Photo Editing, PowToon Video Animation and Games PPT Training. By participating in training, teachers will acquire the knowledge and skills needed for the work (Niati et al., 2019; Rafael et al., 2021), competencies that are relevant for the successful running of a teacher's career (Rahman et al., 2011), bring higher confidence, as well as creating greater efficiency and effectiveness and improving performance (Oyitso & Olomukoro, 2012). Participating in training is becoming increasingly important given the increasingly fierce competition. This is also said by Kahn, et.al. (2011), that in a competitive business world, the most important factor is training and development and it becomes indispensable especially to cope with changing demands in the world of teaching (Adnan & Bataineh,

2014). This shows that the training and socialization that the researchers have provided to respondents have had a positive impact on the understanding and ability of SIPP users.

The desire to use SIPP is an indicator of the effectiveness of an information system (Apriyansyah et al., 2018). Based on the results of interviews, 34,4% of respondents want to use SIPP for a period of 1 year of study. This shows that user satisfaction is as expected. According to Chai in Setyowati and Respati (2017), users who are satisfied with the performance of an information system tend to use the information system longer. Therefore, the longer the period, the more satisfied the user will be in using the SIPP information system. Regarding usability, availability, and adaptability, SIPP can fulfill them. There are various features available that teachers need to develop lesson plans. They are customized with guidelines regarding the preparation of ECCE Learning Implementation Plans published by the Directorate of Early Childhood Care and Education Development (Wahyuni, Yuliantina, & Ritayanti, 2015). The existence of the same features as the guidebook can lead to perceptions for teachers that SIPP will facilitate lesson planning so that it will produce perceptions about the benefits of the information system itself (Ahmad & Pambudi, 2014).

SIPP is said to be reliable. From 55,8% of respondents' answers, it was shown that they agreed that SIPP could be relied on to achieve the right goals with complete lesson planning components. The benefits obtained by almost all these users are also directly proportional to the quality of the information system. Especially on the reliability sub-indicator because they both discuss information systems that can be relied upon to help the users' work. The impact of this is that teachers can make lesson plans easily according to the regulations and reduce errors. This is in congruence with the opinion of Yusuf et al. (2021) that an application is needed to facilitate and reduce errors.

The promptness in completing the task of arranging lesson plans has been admitted by respondents. With the time available, the teacher can prepare media, tools, resources, and the learning environment more optimally. However, with SIPP, activities for preparing tools and materials do not need to wait until the next day, but at that time after the completion of the RPPH or one week earlier at the same time as the completion of the RPPM using SIPP. When learning starts, the teacher only needs to look back at what has been prepared beforehand. Burhan & Herman (2019) claimed that good time management skills are needed so that all activities can run well.

An information system is said to be efficient if the time, cost, and effort spent are relatively less or shorter (Dindayani et al., 2019; Mudjiyanto, 2018; Mulyono, 2018). Expenditures that can be saved from using SIPP are purchasing pens, ledgers, correction fluids or tapes, paper, printing ink, photocopying, and binding. Savings in terms of costs will directly have an impact on saving in terms of paper use because RPPM and RPPH do not need to be printed or written by hand on paper. For some respondents, additional staff is needed to make the RPPM and RPPH more detailed by describing each part of the column. Regarding this matter, the respondents need to practice being able and accustomed to making RPPM and RPPH in detail in their elaboration. Because according

to Munawaroh et al., (2019) based on the National ECCE Standards and the 2013 ECCE Curriculum, teachers are required to be able to describe ECCE learning programs, so that the more detailed the elaboration of the lesson plan, the easier it will be for the teachers to know what to do in detail when they want to teach.

5 CONCLUSION

The importance of the ability to prepare lesson plans needs to be accompanied by the ability to utilize information technology and systems, which can make work easier to do and more quickly completed. With SIPP which has proven to be very effective and efficient, it is hoped that early childhood educators can use it in preparing lesson plans. Through SIPP, the resulting lesson plan is not only better because it has been equipped with a template containing various features that are by the minimum content that must be in the lesson plan but also faster. Several auto-linked sections avoid redundant work in preparing lesson plans. Such as the theme and sub-theme selected in the weekly lesson plan section will automatically be listed in the daily lesson plan section. Including other content, such as core competencies and basic competencies, as well as activities that can be chosen to be carried out every day. The minimum amount of time needed to complete the preparation of lesson plans is expected to increase teacher readiness in teaching because there is still time to prepare various other things needed in the learning process including innovative media.

Even though SIPP has proven to be very effective and efficient, changes in policy direction need to be considered and considered so that SIPP can be by existing needs and demands so that educators can still use it. One of the policy changes is related to the existence of an independent curriculum. The learning plan in the independent curriculum is divided into two choices, namely the learning implementation plan includes RPPM and RPPH as well as the form of teaching modules. And, the development of SIPP can be done, among other things, by providing features for making teaching modules.

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