

## COLLABORATIVE LEARNING STIMULATION TO ADDRESS LEARNING LOSS IN EARLY CHILDHOOD

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### Abstrak

Berkolaborasi dapat dikenalkan pada anak sejak dini. Pandemi Covid-19 memberikan dampak pada anak saat penerapan kebijakan Belajar dari Rumah. Hal ini karena tidak semua orang tua dapat memberikan stimulasi yang efektif. Hal ini karena perbedaan kemampuan orang tua dan kesulitan membagi waktu dengan kesibukan lainnya. Akibatnya anak usia dini banyak yang mengalami learning loss. Kegiatan Pengabdian ini ditujukan untuk melatih pendidik dalam memberikan stimulasi akibat *learning loss* di masa Pandemi. Melalui sosialisasi IPTEK dalam stimulasi anak diharapkan aspek perkembangan anak dapat diakselerasikan dan berkembang optimal. Hasil dari kegiatan ini menunjukkan bahwa kemampuan pendidik meningkat dalam mengoptimalkan berbagai aspek perkembangan anak, baik dalam aspek sosial, kognitif, bahasa, dan nilai moral.

**Kata Kunci:** Pembelajaran kolaborasi, *Learning Loss*, Usia dini.

### Abstract

Collaborating can be introduced to children from an early age. The Covid-19 pandemic has an impact on children when implementing the Study from Home policy. This is because not all parents can provide effective stimulation. This is due to differences in the ability of parents and difficulty in dividing time with other activities. As a result, many young children experience learning loss. This service activity is intended to train teachers in providing stimulation due to learning loss during the Pandemic. Through the socialization of science and technology in stimulating children, it is hoped that aspects of child development can be accelerated and develop optimally. The results of this activity indicate that the ability of teachers to increase in optimizing various aspects of children's development, both in terms of social, cognitive, language, and moral values..

**Keywords:** Collaborative learning, Learning Loss, Early childhood.

## 1. INTRODUCTION

Collaborative learning is already practiced in higher age classrooms. In the lower grades educators often stimulate it with cooperative learning. Children are accustomed to learning with their friends in a cooperative atmosphere. Both collaborative learning and cooperative learning are group-based learning. This learning involves social interaction with peers in completing activities. In collaborative learning and cooperative learning, the two are often used interchangeably. However, the difference between collaborative and cooperative lies in the role of educators in providing

opportunities for each group member in task completion. In cooperative learning, each group member's task is very clear, while in collaborative, although each member has their own duties and roles, all members have an equally important role in the success of the activity, so that the member's task becomes merged leading to the goal of completing the activity. In addition, in cooperatives the role of educators is very dominant than in collaborative learning. The activeness and role of each group largely determines the successful completion of activities (UNESCO-IBE 2013).

During the Covid-19 Pandemic in early 2020, the Indonesian government provided a policy of Learning from home, working from home and

worshiping from home for almost 1 year. When the first wave of Covid-19 entered Indonesia, it frightened the community which had an impact on all fields to move through mobilization activities. People are not ready to face new circumstances and have not been able to adapt to new life when Covid-19 comes. This also happens in the field of education, especially in early childhood education. This situation occurred until during the third wave of children still not optimally getting stimulation due to the pandemic. The pandemic has resulted in children losing learning stimulation because children cannot learn from school according to the planned stimulation and the expected learning experience is equally effective when stimulating children's development at school.

The policy of learning from home ultimately places parents having a strategic role in replacing educators when learning at school. In reality, every parent has a different ability to stimulate the development of their child. They have varying levels of education and socioeconomic status and unequal opportunities in educating children. Although parents or mothers are the main madrasah for their children, the shift in gender function positions mothers or parents who cannot stimulate their children optimally. Parents, especially mothers, are not only in charge of the internal affairs of the household that educate children, but also function the external affairs of the household, such as work and dividing socioeconomic roles.

In addition, not all parents have the same competence when educating their children at home. Different levels of education and types of backgrounds certainly make children who are forced to study from home not well stimulated. This causes children to lose learning opportunities, stimulation that suits children's needs.

Losing learning opportunities and getting stimulation for almost 2 years can have a serious impact (Kaffenberger 2020) on early childhood development (Vikram and Chindarkar 2020). When Covid-19 cases declined, the government provided a gap in various human activities, including in the field of education by conducting limited face-to-face learning. Educators need to catch up with the stimulation in various aspects of development that occurred during the pandemic in waves 1 and 2.

Therefore, educators need to do effective stimulation to be able to catch up on various developmental tasks at their age.

The target of this service is Early Childhood educators who are members of the Association of Early Childhood Educators (Himpaudi) in Serengan sub-district whose members consist of 11 Similar similar early childhood Education units Unit (SPS) institutions. There are still many SPS, Early childhood educators who do not have minimum education requirements as Early Childhood educators. Most of his educational background is still equivalent to vocational high school by attending training on parenting and early childhood education. Therefore, community service activities are needed to help partners in dealing with problems stimulating children to catch up with learning due to the pandemic.

This service activity is aimed at non-economic partners and focuses on early childhood education. This activity involved 20 participants from early childhood educators in Serengan and Banjarsari sub-districts of Surakarta. The SPS institution as the target of this service serves children of various ages, which is around 3-6 years. This of course needs more handling than early childhood institutions that have more specific services, such as Playgroups (KB) which mostly serve children aged 3-4 years, and ages 5-6 years are served in kindergartens (TK).

The type of age service that has a wide range, of course, has an impact on educators' attention to learning outcomes that meet their age needs. This is certainly not easy for SPS educators, most of whom started from Family Welfare Development (PKK) cadres, and not from early childhood education backgrounds.

Based on the analysis of the situation presented, the following problems can be identified: *First*, educators' understanding is lacking in the ability to stimulate children. This is because most of our educators have relevant qualifications as early childhood educators which results in a low understanding of educators about their fields, namely about early childhood growth and development and stimulation. So, it is expected that when educators have competence and a good understanding of child development growth and

stimulation can help and transfer *knowledge* to parents.

*Second*, the method carried out by educators is still conventional. In addition, child stimulation is less than optimal when learning from home, so it is necessary to intervene in presenting children's learning experiences that can accelerate child development. The variety of age services that exist has the consequence that educators need to understand effective stimulation so that all children's developmental needs are served in a group of learning groups in the classroom.

*Third*, the fact that the pandemic has an impact on children losing learning time during the learning from home policy. Therefore, learning innovation is needed to deal with learning delays due to the pandemic so that developmental tasks are not achieved optimally.

To overcome partner problems related to child development achievements and stimulation, service activities are carried out by socializing stimulation innovations through collaborative learning in overcoming *learning loss*. The service team conducts socialization activities in providing solutions to partner problems. The socialization carried out is related to the transfer of science and technology so that educators can implement learning stimulation for early childhood.

Collaborative learning for early childhood is an option in solving partner problems based on the results of previous research (Loes, Culver and Trolan, 2018; Sufa and Akhyar, 2020; Sufa, Akhyar and Yusuf, 2021). The implementation of collaborative learning depends on the child's willingness to interact with the environment, learn to communicate with peers. The key to successful collaborative learning is the role of educators who create active learning experiences according to children's educational needs and use appropriate strategies (Weinberger and Shonfeld, 2018). Children's social skills can be done by collaborative play (Jarvis, Newman and Swiniarski, 2014). Children's cognitive abilities are stimulated through problem solving (Tudge, Winterhoff, and Carolina 1993).

Collaborative learning is carried out in groups between 3 members (Portier, Friedrich, and Peterson 2019), which provides opportunities for

children to be open to different thoughts (Loes, Culver, and Trolan 2018), interact and learn to argue (Dovigo, 2016).

Through collaborative learning, various aspects of development can be stimulated. Language development can be stimulated by practicing communication, both receptive and expressive language. Children can be stimulated to express their feelings and thoughts and are open to learning to negotiate and argue. In addition, children learn to overcome differences of opinion, control emotions and cooperate with friends so that social aspects can be stimulated.

The cognitive aspects of children can be stimulated by problem-solving activities carried out together. Group members can exchange ideas and try out together. Therefore, educators need to provide problem-solving based activities according to the child's developmental age. When children interact with the environment and explore tools and play materials, children will train their psychomotor skills, both gross movements and fine movements.

## **2. METHODOLOGY**

This service activity was carried out at Himpaudi Serengan District which involved educators from 10 institutions. The design of this activity begins with a situation analysis of the initial condition of the partner. After the partner's problems can be identified, a series of activities are arranged to solve the partners' problems.

The next step is to prepare activities by coordinating with partners to plan service activities. Service materials are also prepared including procedures for implementing service activities. Figure 1 shows the flow carried out in this service activity.

Problem solving is carried out by doing service based on the results of previous research. The service team carries out activities as a solution as follows:

1. Take advantage of loose part media
2. Take advantage of the environment and friends who can provide scaffolding

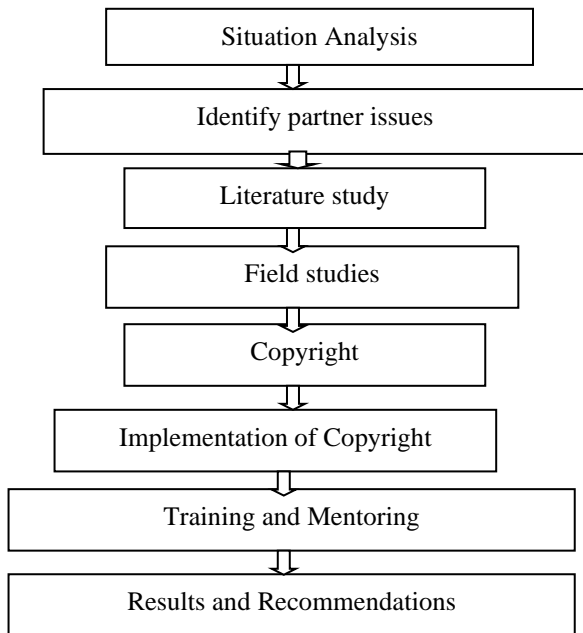


Figure 1. Steps of Community Service activities

After the solution to the existing problem has been determined, the next step is:

1. Conduct training on collaborative learning models with *loospart* media
2. Training on the implementation of STEAM learning with *loospart* media
3. Assisting stimulation in children during children's play activities with a collaborative approach through STEAM learning with *loospart* media
4. Provide tricks and tips and discuss the implementation of stimulation during mentoring.

### 3. IMPLEMENTATION OF ACTIVITIES

Himpaudi Surakarta is divided into 5 coordination areas in each sub-district in the city of Surakarta. The total number of early childhood institutions in the Surakarta area consists of 94 non-formal eraly childhood institutions. This service was carried out in Kadipiro and Serengan sub-districts of Surakarta. This service activity is a trial of the implementation of engineering so that when the results show positive things for child stimulation, it can be done on a larger scale, or take turns in the next service activity. Another consideration is the

expectation that partner schools will transfer the knowledge gained during the training.

Table 1. Himpaudi of Surakarta Institute Data

No	District	Sum
1	Laweyan	38
2	Serengan	18
3	Pasar Kliwon	25
4	Banjarsari	70
5	Jebres	43

The implementation of service is carried out in Banjarsari and Serengan sub-districts of one institution each. The institution is expected to provide knowledge transfer at PKG (Cluster of Activity Center of teacher) activities which are carried out once a month.



Figure 2. Discussion and Creation Collaborative learning

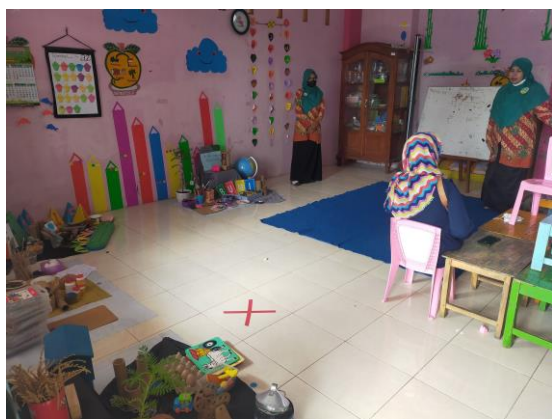


Figure 3. Mentoring and socialization of activities

#### 4. RESULTS AND DISCUSSION

The process that has been carried out in this service produces the following progress:

1. The ability of educators to stimulate children's growth and development

The ability of educators to stimulate the growth and development of children who have been dominant in *teacher centers* has adapted to become a *Student center*. Along with the concept of free play socialized by the government, it also brings a paradigm shift in education in stimulating children. Before dedication, teachers stimulate with formal and instructive-based learning styles. Teachers' understanding of child development and stimulation is lacking. The concept of play has not been implemented in classroom learning. Educators have not stimulated according to the characteristics and needs of children

After training, discussion and sharing and assistance in implementing learning based on the needs and character of students, there was a change in the pattern of stimulation which was originally a

teacher center to a student center. Instructive learning becomes constructive. Children are facilitated to explore the play environment and are asked to communicate what is learned in their play experience. Together with friends and educators construct concepts learned through play activities.

Stimulation has an important role in growth and development. The results of many studies discuss the effect of stimulation on cognitive development (Calatayud, Plo, and Muro 2020; Xiong, Deng, and Li 2020), socio-emotional development (Blair, McKinnon, and Daneri 2018), language development stimulated by media or communication use (Anitah and Akhyar 2017; Conscience et al. 2020).

#### 2. Methods that educators do

The method carried out before the implementation of activities is still dominant using children's work sheets, assignments and works. The child during this time must follow the path determined by the educator.

After the service activity, the teacher has a variety of learning methods. Teachers use the basis of problem solving in the learning process, and children and their friends are free to find solutions, solve problems through exploration activities, trial and error, and work together, collaborating to provide information and knowledge that is understood in a group. Learning that was originally predominantly individual-based turned into group learning. So that networking occurs, giving each other a foothold in constructing children's knowledge

There are many ways that educators can stimulate child development. For example, in introducing mathematical concepts, educators can introduce collaborative play (Sufa and Setiawan, 2020). This is also relevant to Parwoto's research using *Collaborative problem Based Learning* in playing computers in children (Parwoto, 2017). In addition, collaborative learning can also develop children's social-emotional skills (Ariin, Rohendi, and Istianti 2013).

Collaborative play can provide many benefits, such as improving negotiation skills (Hayward, Raine, and Hendry 2019), improving social skills (Jarvis, Newman, and Swiniarski 2014). Relevant collaborative learning with future needs, in the era

of globalization, which is to train children to collaborate (Eickhoff and De Costa 2018), not individually oriented. Through learning to collaborate, children learn to understand diversity, which is relevant to the era of globalization. Children become more open to differences (Loes, Culver, and Trolan 2018).

**Table. 2 Progress of Service Program Results**

No	Aspects	Pre	Post
1	The ability of educators to stimulate	81 % Teacher center	73% Student center
2	Methods used by teachers	85% Individually Based	67% Collaborative play
3	Completion of developmental tasks	65% According to Achievements	86% According to achievements

3. Learning after the pandemic

The pandemic that requires social *distancing* has an impact on children's social development. In addition, stimulation does not run effectively due to several obstacles that occur. Parents who do not have the ability to stimulate children because of their competence or because of other obstacles, which vary resulting in children experiencing loss of learning opportunities and effective stimulation in achieving their developmental tasks.

Therefore, innovative efforts need to be made so that the *learning loss* that occurs during the pandemic can be covered immediately. Together with playmates, children can give each other *Scaffolding* and this stimulation will be effective and in accordance with the developmental needs and character of children who like challenges, explore the environment and like to socialize with peers.

Many factors cause *learning loss*, including poverty, malnutrition, and lack of stimulation at an early age with cognitive and economic lag later in life (Vikram and Chindarkar, 2020)

Covid 19 has had a devastating impact on UNICEF's record. The world is facing a decade that leaves the Sustainable Development Goals, and takes seven to eight years to recover. The quality of education is one of the investments that must be owned to improve the decline in skills and

knowledge due to Covid 19 (United Nations Children's Fund 2021). So learning innovation needs to be done to overcome learning loss during the Pandemic

During the pandemic, children lost their learning due to school closures and learning from home. The decision to study from home turned out to provide findings that students had no progress in learning. Learning from home has an impact on learning loss losses in areas that do not have good infrastructure in online implementation (Engzell, Frey, and Verhagen 2021)

Collaborative learning in early childhood education (PAUD) is applicable and relevant to the principles of PAUD education. In addition, through this collaborative-based play activity, children are given the right to play, explore and freedom in getting learning experiences so as to have an impact on optimal child stimulation in all aspects of development.

A series of mentoring activities in stimulating children through collaborative learning in Surakarta have been carried out well. On average, there is a 15% increase in the delivery of educator services in stimulating child development based on developmental needs. Educators stimulate by involving peers in the process, collaborating in providing stimuli as children learn through play. So it can be concluded that this activity is quite successful in achieving the goal.

However, there are several things that need to be considered, so that child stimulation can be done more optimally. Some of these things are: (1) Teacher creativity in creating learning that can stimulate children in solving problems through problem solving. (2) The ability of educators to trigger children to be able to build children in cooperation, collaboration during activities.

By looking at the current conditions of curriculum changes, to an “Merdeka” curriculum, the learning model through collaborative play is relevant to the needs of the development of the world of early childhood education today. This is an opportunity to overcome learning loss due to the pandemic.

Finally, there are some recommendations that can be done in the next service activities. Educators who receive training and mentoring can become

agents of change and mentoring for their peers and in the cluster. In addition, service activities can be expanded in other areas. This collaborative play learning model can also focus on various areas of development in early childhood, so that educators can provide appropriate stimulation in the field of stimulation.

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### **CONCLUSION**

This service activity aims to train educators in providing stimulation due to *learning loss* during the Pandemic. Through socialization of science and technology in child stimulation, various aspects of child development can be accelerated and develop optimally. The results of this activity show that the ability of educators increases in optimizing various aspects of child development, both in social, cognitive, language, and moral values. In addition, in the classroom children can do collaborate with his friends in play activities. So that many aspects of development can be stimulated such as, cognitive, language, moral values through interaction and problem solving with the group

### **RECOMENDATION**

This service activity can be expanded to other areas and educational units can transfer their knowledge to the cluster. This activity can also be carried out again by involving parents so that stimulation will be more optimal if there is relevance of stimulation at school and at home.

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