



## Strengthening Mothers' Community Engagement for Independent Learning in Dusun Kepetingan

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| Article Info  | Abstract  |
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| <b>Article History</b><br>Received: 8 <sup>th</sup> April 2026<br>Revised: 3 <sup>th</sup> May 2026<br>Published: 14 <sup>th</sup> May 2026 | <i>This community service program aims to strengthen mothers' community engagement in fostering independent learning among children in Kepetingan Hamlet, Sawohan Village, Sidoarjo Regency. Educational challenges in this area include limited parental involvement, low literacy and numeracy skills, and declining children's motivation to learn, particularly due to geographical isolation and low educational backgrounds of parents. Recognizing mothers as primary caregivers and first educators at home, this program focused on empowering mothers to actively support their children's learning processes. The program employed a Participatory Action Research (PAR) approach, involving mothers in all stages of the program, including problem identification, planning, implementation, reflection, and evaluation. Key activities included parenting education, literacy and numeracy training, science learning through simple experiments, and workshops on creating educational media using locally available and recycled materials. The results indicate a significant improvement in mothers' confidence, knowledge, and participation in guiding children's learning at home. Children also demonstrated increased motivation and engagement in independent learning activities. Furthermore, the establishment of a community-based learning forum (Sie Pendidikan) strengthened collaboration among mothers and ensured program sustainability. Overall, this program demonstrates that empowering mothers through community-based and participatory approaches can effectively cultivate a sustainable culture of independent learning at the family and community levels.</i> |
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### INTRODUCTION

Education plays a central role in improving human resources and shaping sustainable community development. However, in many rural and remote areas, educational challenges persist due to limited access, low parental educational background, and minimal involvement of families in children's learning activities. These conditions are evident in Dusun Kepetingan, Sawohan Village, Buduran District, Sidoarjo Regency, an area with difficult road access and limited educational support at the household level. In this community, many mothers have a relatively low level of formal education, which affects their ability to assist children with schoolwork. As a result, children often experience declining motivation, weak literacy and numeracy skills, and inconsistent study habits.

The majority of parents' education in Kepetingan hamlet is elementary to middle school. This is one of the causes of parents' lack of knowledge regarding strategies for assisting children with learning. Apart from that, the majority of parents in Kepetingan hamlet only hand over their children's education to school even though the first milestone in a child's education

is in the family environment. Parents in Kepetingan hamlet believe that education at school is enough for their children. The majority of parents in Kepetingan hamlet think that learning must always use books or other reading materials, in fact, enjoyable learning does not always rely on books as a medium. Because of this, children feel bored and are not interested in studying at home. Parents also feel emotional pressure when accompanying their children's learning, which makes children uncomfortable when studying at home. These challenges indicate that the core issue faced by the community is the lack of parental, particularly maternal, involvement in home-based learning. Previous research shows that parental engagement significantly shapes children's academic outcomes and mediates the home environment's influence on achievement (Gu et al., 2024). Parental involvement in literacy activities at home has a more significant long-term impact on children's reading abilities than formal instruction at school (Sénéchal & Lefevre, 2022). Low parental knowledge and guidance often result in inadequate learning support, which contributes to children's poor academic performance (Ahmed et al., 2021). Parental and community support plays a major role in increasing student motivation, engagement and learning outcomes in rural schools (Putra Darma & Apriani, 2024b). Therefore, the primary problem prioritized in this program is the limited capacity of mothers to support and encourage children's independent learning at home. This priority is justified because mothers function as the primary caregivers and first educators, and increasing their involvement is expected to have a direct and sustainable impact on children's learning behaviours. Parental involvement in literacy and numeracy activities at home significantly increases children's academic readiness and helps bridge understanding of learning that occurs at school (Susperreguy et al., 2020).

Research by (Kale et al., 2024) discusses parental involvement in independent learning-based learning activities in early childhood. The research results show that parents play a role in accompanying children's assignments, learning activities at school, and learning activities at home. Research (Putra Darma & Apriani, 2024) confirms that parental support has an important influence on children's motivation and learning engagement in rural schools. Research on parent empowerment shows that strengthening the role of parents can help assist children's learning at home (Airlanda et al., n.d.). Although various studies have discussed parental involvement in supporting children's learning, most research still focuses on the context of formal schools, playgroups, or the relationship between parents and educational institutions. Previous research has not studied much about how maternal involvement is built through a participatory community empowerment approach, especially in supporting a culture of independent learning in remote residential areas.

The selection of this priority issue is supported by the conceptual framework of community engagement and independent learning. Community engagement emphasizes participatory collaboration, reflective dialogue, and shared responsibility between community members and facilitators (Wanje et al., 2025). Mothers' associations serve as effective learning communities where members share experiences, develop knowledge, and work collectively toward solutions (Wenger, 1999). In the context of Kepetingan hamlet, this approach is important because the low involvement of parents in their children's learning process indicates that learning support at home has not been optimally formed. This condition causes children to still depend on teachers at school and are not used to learning independently in the family environment. Therefore, maternal involvement through community empowerment is seen as a relevant strategy for building a culture of independent learning for children in remote residential areas. In line with this concept, the concept of independent learning according to (Aitken & Balapumi, 2012) is a learning process in which learners independently direct, control, and regulate their learning by being proactive, self-motivated, and resourceful in using available resources to monitor and achieve their learning goals. Self-directed learning enables individuals to identify learning needs, set goals, choose strategies, and evaluate outcomes

(Loyens et al., 2008). Empowering mothers with the knowledge and practical skills needed to guide literacy and numeracy activities aligns with these theoretical principles.

Based on this framework, this article was written to find out how to implement community based strategies that empower mothers to actively participate in educational activities, as well as to describe the involvement of mothers' groups in supporting children's independent learning in Kepetingan hamlet, so the community service program "Strengthening Mothers' Community Engagement for Independent Learning in Dusun Kepetingan" was developed. The program aims to enhance mothers' understanding of child development, improve their skills in creating simple and engaging learning media from locally available materials, and build their confidence to support children's learning. The expected benefits include increased maternal awareness and creativity, strengthened community learning networks, and the development of a sustainable culture of independent learning within families and the wider community.

## **METHOD**

The implementation method for this community service program was developed using a participatory and collaborative approach to address the educational challenges experienced by mothers in Dusun Kepetingan, Sawohan Village, Buduran District, Sidoarjo Regency. The primary issue identified was the limited parental engagement, particularly among mothers, in supporting their children's learning at home. To address this problem, the program offered solutions in the form of literacy and numeracy training, workshops on child-centered learning strategies, and activities for creating simple educational media using recycled or locally available materials. These activities were designed to strengthen mothers' understanding of effective home-based learning practices and to promote active involvement in their children's daily study routines.

### **Participant :**

The Participant were 10 mothers based on the following criteria, residing in Dusun Kepetingan, having school-aged children, and willingness to actively participate in all program stages. Initially, 15 mothers were invited, but only 10 consistently participated throughout the program.

### **Data Collection :**

Participation observation sheets to monitor mothers' engagement, daily reflective field notes documenting activities and responses, and semi-structured interviews with 10 mothers to explore their experiences and perceptions.

### **Data Analysis :**

The methodological approach adopted was Participatory Action Research (PAR). PAR is a process of researchers and participants working together to examine a problematic situation or action to change it for the better (Kindon, Pain, & Kesby, 2007). which emphasizes collaboration between facilitators and community members at every stage of the process problem identification, planning, implementation, reflection, and evaluation. This approach ensures that the community is not merely the object of the program but an active subject who determines and sustains the outcomes. PAR has been widely used in community development and parental engagement programs because it builds a sense of ownership, promotes behavioral change, and ensures sustainability (Jauhari & Taufiqurrohmah, 2024). PAR functions as a catalyst for social change that places communities not as objects of research, but as researchers of their own problems to create sustainable solutions (Baum et al., 2006). Participatory Action Research (PAR) enables democratic knowledge transfer, where communities not only receive information but also create practical solutions that fit their local context (Vaughn & Jacquez, 2020). Through this approach, mothers were encouraged to participate directly in decision making, skill-building, and reflective discussions regarding their role in supporting children's

learning. The data was then analyzed using descriptive quantitative percentage techniques according to Suharsimi Arikunto on (Khairum et al., n.d.2024) with the formula:

$$P = \frac{f}{n} \times 100\%$$

Note:

P = percentage

F = frequency of scores obtained

N = maximum number of scores.

The implementation procedures were organized into several stages.

### 1. Problem Identification

#### (Preliminary Observation and Needs Assessment)

In the first week of December, the problem identification stage is carried out. This stage involved initial visits, interviews, and informal discussions with mothers to identify specific learning challenges, household educational constraints, and expectations toward home-based learning support. This activity was carried out at the RT head's house, attended by 1 community figure, the PKK head and a PKK representative. The results of these interviews showed that parents had limited ability to accompany their children to study at home. Parents feel that children do not like studying accompanied by their parents, while parents feel that facing their children studying will cause emotions if the children are not able to understand their parents' intentions well. The next problem is that there are no tutoring institutions available in Kepetingan hamlet so that the children's learning process only revolves around school. The lack of parents' awareness toward the importance of learning assistance and lack of knowledge regarding interesting learning strategies for children are the reasons for the decline in children's interest in learning, resulting in a decline in children's literacy and numeracy abilities. That is why the partner's needs are identified, namely how to be a fun learning companion for children with interesting learning strategies for children.

### 2. Planning

#### (Designing the Intervention Together)

In the second week, the activity planning process was carried out, this activity was attended by the PKM team, supervisor lecturers and all PKK mothers accompanied by RT authority. This phase aims to introduce the program objectives and present learning issues and expectations. In this phase, the team and partners hold discussions to find solutions to the problems raised. Through joint discussions it was agreed that the solution to the problems faced was to conduct training on interesting learning strategies by the PKM team

### 3. Action

#### (Implementing Workshops/Training and Learning Activities)

During the third week to the seventh week, the participants received material on basic literacy and numeracy development, child-centred learning methods, and simple strategies for creating engaging learning activities at home. Facilitators introduced examples of low-cost learning media and demonstrated their use. The PKM-PM team provided hands-on mentoring, assisting mothers in applying the newly learned techniques and creating educational media from available materials.

### 4. Observation

#### (Monitoring Participation and Learning Progress)

This stage is carried out in every training process. This stage also included monitoring mothers' participation and providing motivational support to encourage consistent involvement

## 5. Reflection

### (Joining Evaluation of Outcomes and Challenges.)

reflective discussions assessed changes in mothers' engagement, children's learning motivation, and the practicality of the learning media created. Feedback gathered from participants was used to formulate recommendations for further improvement.

## 6. Replanning

### (Improving and Sustaining the Next Cycle.)

This phase identified the strength and gaps. It also presented suggestion for future community learning initiatives.

The program was implemented over two month period, from Desember 2024 to January 2025, in Dusun Kepetingan, Sawohan Village, Buduran District, Sidoarjo Regency. Activities were conducted in several community spaces, including the local TPQ, community halls, and outdoor areas used for experiential learning sessions such as outbound literacy activities.

## RESULT AND DISCUSSION

### 1. Implementation Community Based Strategies

#### a. Applying a Participatory Action Research (PAR) approach in empowerment



Figure 1 PAR Process

The community service program implemented in Kepetingan hamlet has successfully implemented a community-based strategy that focuses on empowering mothers as the main actor in supporting children's learning. This strategy is realized through a Participatory Action Research (PAR) approach, which allows mothers to be actively involved in every stage of program implementation, starting from problem identification, activity planning, to program evaluation. PAR focuses on collaboration between researchers/activators and the communities to be served. PAR emphasizes that people are not just objects but also subjects who will become agents of change in their own communities.

In the initial stages of PAR, mothers are encouraged to be able to convey problems, obstacles and needs in accompanying their children to study at home. Through this session, women and girls can discuss together as equals between community members and the PKM Team. They were able to identify specific problems such as a lack of understanding of interesting learning strategies for children, limited media used for learning, and lack of access to get out of the village were also among the contributing factors. Based on the needs that have been identified, they are then converted into program goals prioritized by the community itself

In this process, we not only express problems but also look for joint solutions regarding the problems that occur. Based on the results of the joint discussion, it was agreed that the solution to solving the problem was to carry out parenting outreach, literacy and numeracy training, and create simple learning media. Through socialization, literacy-numeracy

training, and training in making educational media from simple materials, mothers gain direct experience in applying learning methods that suit children's characteristics.

This community-based approach strengthens mothers' involvement because they feel valued as subjects who determine the success of the program, not just beneficiaries. The participatory approach through PAR has been proven to increase mothers' sense of ownership and responsibility for the sustainability of the program. This active involvement not only strengthens the role of mothers in supporting children's learning, but also fosters collective awareness of the importance of the role of family and community in education. Thus, this program contributes positively to strengthening the culture of independent learning in society.

#### **b. Holding parenting and literacy and numeracy training**



*Figure 2 Literacy and Numeracy Training*

Childcare training integrated with literacy and numeracy learning is carried out to increase mothers' understanding of child development and basic learning skills. Training sessions provide mothers with practical strategies to help children with reading, writing and arithmetic at home. As a result, mothers reported increased confidence in guiding their children's learning without relying entirely on formal education. The training carried out is as follows:

##### **1) Literacy training in reading and writing**

Reading and writing literacy training focuses on increasing mothers' ability to accompany children in reading and writing activities. The training material includes letter recognition, simple word formation, and reading aloud techniques that can be applied in daily activities. Apart from that, mothers are taught how to use simple reading materials and local media as a means of stimulating children's literacy.

Through reading and writing literacy training, mothers show an increased understanding of the stages of development of children's reading and writing abilities. Mothers become more confident in guiding their children to study independently at home without having to always depend on teachers or formal educational institutions. Consistent assistance from the mother also has a positive impact on children's interest and motivation to learn.

##### **2) Training in arithmetic operations**

Arithmetic operations training is provided to improve children's basic numeracy skills through parental assistance. The material presented includes the introduction of numbers, simple addition and subtraction, division and multiplication, as well as the application of counting concepts in daily activities, such as counting objects around the house. This contextual approach makes it easier for mothers to teach mathematics concepts in a fun way and does not burden children.

Apart from arithmetic operations, material on units of length and units of weight is also provided in the training to equip mothers to assist their children's learning. Apart from

material on arithmetic operations, this training also includes an introduction to units of length and units of weight as part of strengthening basic numeracy skills. This material is provided to equip mothers with an understanding of measurement concepts that can be applied in daily activities, such as measuring the length of objects at home or weighing food ingredients. With a contextual and practical approach, mothers are expected to be able to accompany children in understanding mathematical concepts in a more real and meaningful way, so that the learning process becomes easier to understand and more enjoyable for children.

### 3) Training in the science of changing the shape of objects

Apart from literacy and numeracy, science training on changes in the shape of objects is also carried out to enrich the knowledge of mothers and children. In this training, mothers are introduced to simple science concepts through practical experiments using materials that are easily found in the surrounding environment. This activity not only increases mothers' understanding of basic science concepts, but also encourages children's curiosity and builds active and exploratory learning habits at home.

#### c. Using local media and simple materials as learning tools.



*Figure 3 Using Local media and simple materials*

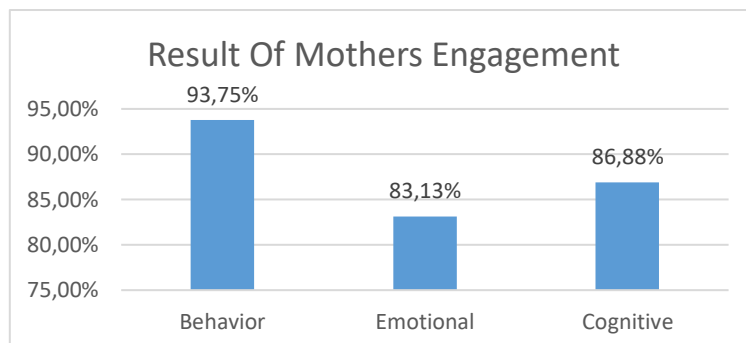
The use of local media and simple learning materials also plays an important role in the success of this program. Learning tools are adapted from locally available resources, such as everyday household items and other interesting learning media. This approach not only reduces reliance on expensive educational tools, but also shows that meaningful learning can occur using simple and familiar materials. The use of educational teaching aids from recycled materials not only reduces educational costs, but also stimulates the creativity of educators and children in understanding abstract concepts concretely (Wahyuningsih et al., 2020). In line with research conducted by (Royani & Tjahyaningsih, 2025) shows that the use of recycled materials in learning can increase students' engagement and fine motor skills as well as foster creativity and awareness of sustainability from an early age. As a result, mothers are more motivated to imitate learning activities at home, supporting the concept of independent learning.

In the reading and writing literacy material, mothers are taught to use used cardboard as a teaching medium to make letters which are then arranged into words. In this simple material, children can arrange letters into words. This media is not only easy to make and cost effective, but also encourages children's active involvement in the process of learning to read and write through playing while learning. Mothers are also taught that every object can be used as a reading medium, such as writing on children's food packaging.

In the arithmetic operations material, learning is carried out using objects available around the house, such as plastic cups and marbles, as counting tools. Mothers use this media to introduce the concepts of addition, subtraction, division, multiplication and grouping numbers in a concrete way. This approach helps children understand the concept of numeration better because they can see and practice counting objects directly.

Meanwhile, in science material about changes in the shape of objects, learning is carried out through simple and safe direct practice. The mothers were invited to demonstrate examples of changes in form, such as wax melting when heated, water evaporating, and water freezing into ice. This activity provides real learning experiences for children, increases curiosity, and helps mothers understand that science learning can be done simply by using materials found in the surrounding environment.

d. Impact of the Program on Mother's Involvement in Learning Assistance



The results of observations of 10 participants showed that the Strengthening Mothers' Community Engagement for Independent Learning program had a real positive impact on the involvement of mothers and children in the learning process. This improvement supports the theory of independent learning, where guided facilitation from parents enables children to become more autonomous learners. Mothers shifted from directive teaching to facilitative guidance, encouraging children's problem-solving and critical thinking skills.

In general, maternal involvement is in the very good category, with achievements of behavioral aspect is 93.75%. It can be seen from the mother's consistent presence in every empowerment activity and showing active participation in discussions and training activities in sharing knowledge, involvement in making and using simple learning media, as well as accompanying children in learning activities at home. Increasing children's involvement in independent learning activities cannot be separated from positive habits formed through the mother's active role. Mother shows consistency by always being present at every training activity, as well as actively participating in discussion groups and various activities carried out. Apart from that, mothers are also involved in making and using simple learning media that supports children's learning processes at home. Continuous assistance when children are learning makes the learning process more focused and enjoyable. These habits gradually form a conducive learning environment at home, thereby encouraging children to be more independent and have initiative in their learning activities. These findings align with the concept of self-directed learning, where external support gradually leads to internal motivation.

The success of this program was also realized through the formation of an active and independent mother learning forum. This forum not only functions as a forum for regular meetings, but has been transformed into a strategic collaborative space for the process of discussion, coordination and in-depth reflection on all children's learning activities in the Kepetingan hamlet environment. The existence of this forum significantly strengthens communication links between mothers. In it, sustainable peer support is created, where mothers who have already mastered learning assistance strategies can guide other mothers. This consistent emotional and technical support is very important to maintain collective motivation, especially in facing new challenges in the increasingly dynamic school curriculum for children.

The existence of this learning forum is a strong indicator of program sustainability. By establishing an established coordination system, various learning initiatives and educational

discussions are guaranteed to continue beyond the period of formal intervention from the community service team. This forum acts as a root that keeps the spirit of literacy and numeracy alive, so that Kepetingan hamlet has strong organizational capital to face educational problems in the future. Through this forum, the PKM program has succeeded in changing the community's dependence on outside parties into community-based independent learning. This mother's learning forum has now become a permanent platform for residents to continue to innovate, share resources, and collectively maintain the quality of their children's education. This transformation proves that empowerment that targets local institutional aspects is much more effective in ensuring long-term sustainability than simply providing material assistance.

From the emotional aspect, the achievement is 83.13% and categorized in good condition. This is shown through the mother's enthusiasm during the activity, the mother shows an enthusiastic attitude towards the program by always looking for material or learning strategies to apply to the training. Apart from that, the mother also begins to show an open and confident attitude in participating and practicing the training material. The emergence of a sense of ownership of community learning programs, as well as concern for children's learning processes. The success of this program was also realized through the formation of an active and independent learning forum for mothers. Mothers show an enthusiastic attitude during the learning process, and have a strong sense of ownership of the program being implemented.

The existence of this forum significantly strengthens communication between mothers. This creates sustainable peer support, where mothers who have mastered learning assistance strategies can guide other mothers. This consistent emotional and technical support is very important to maintain collective motivation, especially in facing new challenges in the increasingly dynamic school curriculum for children. Based on the results of post-training observations and evaluations, mothers now show a higher level of self-confidence when practicing training and accompanying their children in learning. They no longer feel hesitant in providing explanations or guiding children when they face learning difficulties. The role that was originally only as a supervisor has now become an active learning facilitator, where the mother is able to create an interactive learning environment within the family.

The existence of this learning forum is a strong indicator of program sustainability. By building an established coordination system, various learning initiatives and educational discussions are guaranteed to continue beyond the period of formal intervention from the community service team. This forum is the root that revives the spirit of literacy and numeracy, so that Kepetingan hamlet has strong organizational capital to face educational problems in the future. Through this forum, the PKM program succeeded in changing the community's dependence on outside parties into community-based independent learning. This mothers' learning forum has now become a permanent forum for residents to continue to innovate, share resources, and together maintain the quality of their children's education. This transformation proves that empowerment that targets local institutional aspects is much more effective in ensuring long-term sustainability than simply providing material assistance.

In the cognitive aspect, maternal involvement is in the very good category with an achievement of 86.88%. This can be seen from the mother's understanding of the literacy and numeracy strategies that have been taught. Apart from that, the mother is also able to apply independent learning strategies when accompanying her child to study at home using simple, homemade learning media. These achievements show that the participatory learning approach implemented is able to produce parents' understanding of literacy and numeracy strategies. The implementation of this service program has produced a series of concrete results that show the strengthening involvement of the mothers' community in supporting independent learning in Kepetingan hamlet. Through a series of structured and participatory training, the mothers succeeded in gaining in-depth insight into adaptive learning methodology. The training material is not only theoretical, but is focused on mastering simple but very effective ways to

stimulate reading, writing and arithmetic (calistung) skills in the family environment. The use of teaching aids based on objects around the house is one of the innovations adopted, so that literacy and numeracy activities are no longer considered a rigid academic burden, but rather enjoyable daily activities for children.

Strengthening literacy and numeracy at the family level is the basic capital in overcoming the learning loss phenomenon that often occurs in remote areas. With an adequate understanding of learning strategies, mothers in Kepetingan hamlet are now able to monitor their children's learning achievements independently. This creates a strong synergy between formal education at school and informal education at home, thus contributing to improving the quality of human resources in the village in the long term, which is demonstrated by children starting to have the initiative to learn independently without being completely dependent on teachers.

The final result of this outcome, the creation of independent learning in the mother community, is proof of the success of the knowledge transfer from the service team. Strengthening community involvement is not just an administrative outcome, but constitutes substantial social change. Armed with strong literacy and numeracy strategy skills, the community of mothers in Kepetingan hamlet is now ready to become the main pillar in producing a smart generation through an education-conscious family environment.

## 2. Describe the Mothers' Association Involvement

### a. Consistency of mother's attendance and participation in each training session.



Figure 4 Mother's attendance and participation in training session

The involvement of the Mothers' Association emerged as the main factor that ensures the sustainability and success of learning activities at service locations. As the main pillar in the social structure of the family, the collective participation of mothers provides a strong foundation for program implementation. This support is not only administrative, but also emotional and operational, ensuring that each learning agenda can run according to the predetermined schedule. Field results show very consistent attendance levels throughout the program. Attendance data reflects stable participation rates, with mothers showing a high commitment to attending every training session. This consistency proves that the learning program has become a priority for the local community, creating a conducive and mutually supportive learning atmosphere between participants.

Mothers' active participation in training sessions goes beyond mere physical presence. During the learning process, dynamic two-way interaction occurs, where participants actively ask questions, share experiences, and engage in practical simulations. This collaborative spirit shows that the learning method applied has succeeded in triggering curiosity and the desire to progress, which ultimately increases the effectiveness of knowledge transfer from the service team to the community.

This high level of attendance and enthusiasm is a strong indicator of positive public acceptance of the programs offered. This reflects that the materials and approaches used are relevant to the immediate needs of residents. The trust given by the Mothers' Association to the program organizers becomes valuable social capital, facilitating the integration of new values in parenting and family education in that environment. In depth, this phenomenon reflects the increasing awareness of mothers regarding the vital role they play in their children's educational future. They realize that education does not only occur at school, but starts at home through the guidance of educated parents. By strengthening their own capacity through this training, mothers are building a long-term investment in the quality of human resources in their community, while ensuring the sustainability of the learning culture at the family and village level.

**b. Mothers play a role in discussions, activity planning and evaluation.**



*Figure 5 Mother's discussion activity*

Mothers are not only present as passive audiences, but actively contribute as main contributors in group discussions, activity planning and periodic evaluation sessions. In each discussion, a rich dialectical space is created where mothers share real experiences, domestic challenges, and best practices related to assisting children's learning at home. This exchange of information allows for a peer learning process, which is often more effective in changing mindsets than just unidirectional instruction. Their contribution in the activity planning stage is the main key in maintaining the relevance of the program to the local wisdom context. By involving mothers in preparing the training schedule, the program can adapt to the specific needs of families in the region. This involvement ensures that the material presented is not purely theoretical, but is truly applicable and answers real problems faced by parents in educating children in their respective environments.

During the in-depth discussion session, the mothers openly explained various obstacles, ranging from limited understanding of school subject matter to strategies for motivating children who were starting to get bored with learning. This practice of sharing experiences strengthens social ties between residents while building a solid support system at the community level. Furthermore, active involvement in evaluation sessions has a significant impact on continuously improving program quality. Honest input from mothers helped the research team to identify gaps or deficiencies in the implementation of activities, such as session lengths that needed to be adjusted or the need for more visual props. This participatory evaluation ensures that the program does not just stop as a temporary project, but has a self-improvement mechanism that is driven directly by the needs of the benefit users.

Overall, this involvement created a strong sense of ownership among the mothers towards the learning program. When they feel their voices are heard in planning and evaluation, commitment to maintaining program sustainability naturally increases. This transformation from participant to driver is an indicator of the success of community service, where the independence of the local community is formed through empowering the role of the mother as the main educator in the family.

### c. Mother accompanies child in learning activities at home



*Figure 6 Mother's accompaniment at home*

In the context of informal education, mothers play a very crucial central role in accompanying children during learning activities at home. The mother's presence is not just as a supervisor, but as a facilitator who bridges the school curriculum with the child's understanding. Through intensive assistance, learning is no longer felt as a burden for children, but as part of meaningful daily interactions. The interactions that occur during the learning process create quality moments of closeness, where children feel fully cared for and supported. This supportive learning environment provides a safe space for children to explore their abilities without fear of making mistakes. When children feel supported, they tend to be more willing to take on challenges and try to solve problems independently. This sense of self-confidence grows because children feel they have a stable support system, so they do not easily give up when facing learning obstacles. This shows that the mother's role at home is very effective in forming the character of a lifelong learner in children.

One of the interesting findings in this observation is the change in approach taken by mothers, from giving direct instructions to providing guidance. Instead of just giving answers or dictating children's work, mothers are now using more questioning techniques and giving small directions that trigger children's reasoning power. This guidance approach is very important to stimulate the ability to think critically and solve problems independently, so that children truly understand the concept of the lesson and not just memorize the final results. The success of mothers in implementing this guidance method is clear evidence of the effectiveness of the educational program that has been provided previously. By positioning themselves as learning partners, mothers have created an empowering education system at the family level. It is hoped that the continuation of this type of mentoring can become a solid foundation for the progress of children's education in the future, where learning independence becomes the main asset in facing the challenges of an increasingly complex era.

### d. Establishment of *Sie Pendidikan* as a forum for children's learning

A strategic step in efforts to sustain this program is realized through the formation of *Sie Pendidikan*, a community-based forum specifically designed as a forum for children's learning. With the existence of *Sie Pendidikan*, learning activities no longer depend entirely on external

initiatives, but are managed independently by residents, which reflects a significant level of community empowerment. According to (Morowane & Marishane, 2024) This forum functions as a dynamic collaborative space for mothers to coordinate various learning agendas systematically. This centralized coordination at the community level ensures that limited resources can be utilized optimally for the benefit of all children in the neighborhood, without anyone being left behind.

In addition, Sie Pendidikan is a center for exchanging or sharing educational resources. Mothers can lend each other reading books, learning modules, and educational technology devices that each family may not have individually. In the end, the formation of Sie Pendidikan succeeded in strengthening social capital in the community through increasing trust, networks and norms of mutual cooperation. This forum functions as an ongoing platform that ensures learning activities continue to run independently even though the duration of the formal service program has ended. With an established structure, Sie Pendidikan is transformed into a pillar of community resilience that is able to adapt to future educational challenges, creating an inclusive and sustainable learning ecosystem. This reflects the success of PAR in fostering community ownership and long-term impact

### **Challenges and Limitations**

The results of program implementation show that an empowerment approach based on community participation has a positive impact on mothers' involvement in supporting children's learning at home. However, these results cannot be separated from the various challenges encountered during the activity implementation process. This program only involved 10 participating mothers with a relatively short implementation duration, namely around two months, so that changes in behavior and the sustainability of the program's impact could not be observed in depth in the long term. Apart from that, not all mothers can participate in activities consistently because some participants still have to divide their time between family activities and other work. Some mothers also initially felt less confident when accompanying their children to study because of their limited understanding of learning strategies that were appropriate to their children's needs. Another obstacle is the difficulty of internet access in Kepetingan hamlet, which makes mothers lag behind in terms of the latest information regarding interesting learning for children.

The findings of this research indicate that a community-based participatory approach is able to increase maternal involvement in supporting children's learning. However, this involvement does not occur instantly because it is influenced by social conditions. Some mothers still have difficulty dividing their time between household work and assisting their children's learning. This shows that the success of empowerment programs does not only depend on the training provided, but also on social support and the sustainability of learning communities in society.

However, the active involvement of mothers in every stage of the activity shows that the participatory approach is able to build a sense of ownership of the program and increase awareness of the important role of the family in children's education. Therefore, the discussion of program results is focused on two main aspects, namely implementation community-based strategies and describing the mothers' association involvement in supporting the culture of independent learning in Kepetingan Hamlet.

## **The Impact of The Program on Dusun Kepetingan**

### **1. Long Term Improvements In Family Based Learning Culture**

The impact of this service program is the birth of a family-based learning culture that is deeply internalized in Kepetingan hamlet. This program does not just provide technical intervention, but has succeeded in triggering a paradigm shift where learning activities are no

longer seen as isolated school activities, but have become part of daily life and routine. This phenomenon shows that education can be integrated into interactions between parents and children at home. In the long term, strengthening the role of mothers as supporting pillars of education is the main catalyst for creating supportive learning.

Mothers in Kepetingan hamlet are now more proactive in creating a literate home atmosphere, where learning assistance is carried out consciously and in a planned manner. This awareness is a form of empowerment that allows parents to actively monitor, direct and celebrate every process of their children's educational development without having to always rely on school instructions. Society is starting to realize that the effectiveness of formal education will be difficult to achieve without synchronization with the learning values instilled at home. Success in reconstructing this educational parenting style is a strategic achievement of the program, because the learning culture that has been formed becomes a solid foundation for the sustainability of the quality of human resources in Kepetingan hamlet in the future.

## **2. Kepetingan hamlet is more independent in the field of education**

The final results of this program show that there is educational independence at the hamlet level. Society has succeeded in breaking down the stigma that places teachers as the sole authority and main educator in a child's learning ecosystem. On the contrary, currently there is a critical awareness of the urgency of the role of parents and elements of society as equal partners in the learning process. This transformation marks a shift from dependence on formal institutions towards a more independent and participatory educational model. Through collective action and organized involvement, the women's group in Kepetingan hamlet succeeded in positioning itself as an agent in maintaining the sustainability of educational initiatives. The sustainability of this initiative proves that empowerment that focuses on increasing women's capacity is able to create a positive impact on educational development in remote areas.

This formed independence strengthens community resilience to various educational challenges in the future. When people have sovereignty over their own learning process, they will not be easily swayed by limited access or formal facilities. This creates a solid foundation for long-term development, where inclusive education is no longer just a discourse, but a reality carried out collaboratively by all levels of the community. The independence of education in Kepetingan hamlet ultimately became a prototype for the development of community-based inclusive education. By placing civic engagement at the heart of every program, this initiative not only improves technical literacy and numeracy skills, but also community dignity and self-confidence. This success confirms that sustainable educational progress can only be achieved when society realizes that the future of the next generation is a moral responsibility that must be fought for together through consistent collective collaboration

## **CONCLUSION**

The community service program in Kepetingan Hamlet succeeded in strengthening the role of mothers as the main educators in the family through a community involvement approach based on Participatory Action Research (PAR). Implementation of parenting, literacy, numeracy and science training using local media and simple materials has been proven to increase mothers' understanding, skills and confidence in accompanying children to learn independently at home. The results of the program show an increase in active participation by mothers, the formation of a more supportive pattern of learning assistance, as well as increased motivation and independence in children's learning. The formation of a community learning forum (Sie Pendidikan) is an important factor in maintaining program sustainability and strengthening a family and community-based learning culture. Overall, this program

emphasizes that empowering mothers through a participatory and collaborative approach is able to create educational independence at the community level, as well as the program becoming a strategic model in developing family-based education in other rural areas with similar conditions.

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