Enhancing the GROW syntax in GAARANTUNG: a study on the coaching model development in education

Yosua Damas Sadewo[1,2], Basuki Wibawa[1], Ivan Hanafi[1], Pebria Dheni Purnasari[2], Totok Victor Didik Saputro[2]

[1]Doctoral Program of Educational Technology Postgraduate, Faculty of Postgraduate Program, Universitas Negeri Jakarta, Jakarta, Indonesia
[2]Department of Primary Education, Institut Shanti Bhuana, Bengkayang, Indonesia

ABSTRACT

The selection process of a coaching model should be an initial consideration before conducting training activities. However, the limited availability of coaching models hinders the delivery of quality training programs. Therefore, it is necessary to have options for coaching models. This research aims to develop a goal, actual, alternative, plan, action, monitoring, and reflection based on blended learning (GAARANTUNG) a coaching model rooted in goal, reality, option, will (GROW) with the addition of action, monitoring, and reflection elements based on blended learning. The development of this coaching model is conducted by adopting the analysis, design, development, implementation, and evaluation (ADDIE) research and development concept, which involves three main steps: analysis, design, and development. The results of this research include the availability of a coaching model that meets the needs, including the incorporation of technological elements within GAARANTUNG. The GAARANTUNG coaching model is the improved version of the GROW coaching model, which only focuses on action planning, and the goal, reality, option, will-monitoring, evaluation (GROW-ME) coaching model, which lacks a description of coaching during action and does not include digital technology elements. The refinement of the syntax in GROW and GROW-ME to form GAARANTUNG is a crucial step in providing a coaching model that aligns with the needs and facilitates the implementation of training programs, specifically targeting the main needs of participants, including teachers and school principals.

Corresponding Author:

Yosua Damas Sadewo
Doctoral Program of Educational Technology Postgraduate, Faculty of Postgraduate Program
Universitas Negeri Jakarta
Rawamangun Muka Street, East Jakarta, Indonesia
Email: yosuadamassadewo_9902921035@mhs.unj.ac.id, yosua.damas@shantibhuana.ac.id

1. INTRODUCTION

Training programs have become a common activity for various institutions with the aim of refreshing knowledge, competencies, skills, and perception. Typically, these programs are given due to needs based on problems or due to changes in policies, regulations, or other updates that need to be conveyed to improve the quality of the institution. Not only in industrial institutions, training is also given in educational institutions [1], [2]. Furthermore, the rapid changes in the era have encouraged the need for mastery of new competencies that develop due to advances in digital technology. The impact of COVID-19 has also affected

the implementation and management system in education [3]. Previously, most activities in education were conducted face-to-face, but now almost all of them, including learning and training, are carried out online.

This paradigm shift has led to the need for human resources development in education since education has become one of the essential needs in life. In the early stages of industrial development, education was seen as part of the elite's life, but in today's industrial revolution era, education has become an essential need to support life [4], [5]. Another unavoidable condition is that education brings people to a higher level of life, and the reality that arises from this condition is that education plays a role in determining whether someone can obtain a decent job.

In Indonesia, this need has been strengthened by various policies implemented by various institutions in recruiting workers with minimal qualification standards in education. This need implies that the role of education will become increasingly important as the era develops. Furthermore, education also reflects the progress of a country. Countries with advanced education tend to be categorized as advanced countries as well [6]-[8].

This indicates that education is vital for improving the quality of human life. Therefore, every country strives to maximize its education sector. To achieve this, various policies are formulated in line with the current developmental conditions. The integration of digital technology in education has also been seen in several countries such as Indonesia, Chile, Kenya, Kyrgyzstan, and the United Arab Emirates [9]. This integration aims to equip learners as part of society to be ready to follow the progress of the times.

However, the implementation of digital technology in education has encountered numerous obstacles and challenges [10]-[12]. This is mainly due to the unpreparedness of human resources as agents in the field of education. However, education cannot deny the rapid development of digital technology. The unpreparedness of human resources is just one of the problems that arise from the transition from an analog to a digital paradigm. The current solution that has been observed is providing training for human resources as agents or drivers in education.

In Indonesia, education is divided into several levels: early childhood education, primary education, secondary education, and tertiary education. Digital technology adaptation is necessary at all levels. Therefore, the training provided should be in line with the needs and readiness of each level. In its development, the training provided cannot be considered perfect because the targeted outcomes of the training have not yet had a maximum impact [13], [14]. Although various training activities are held at each level, the measurement of their achievements is not apparent [15].

This situation makes it difficult to evaluate the success of the training and use it as a basis for further improvement. Moreover, the training activities seldom address the primary needs of teachers and school principals as educational agents. Field observations indicate that the training obtained by educational agents tends to be conducted with centralized instructions. This condition presents the two sides. On the one hand, it reflects the effort to equalize education because centralized training programs are implemented. However, on the other hand, the training activities often fail to address the specific needs.

Upon closer examination, training should be provided by first conducting a needs assessment and determining the training framework, but this has rarely been done. Furthermore, post-training evaluations are rarely conducted [16], [17]. This situation presents an opportunity to develop a training model that takes into account real needs and the specific conditions of each school.

So far, the most commonly used training model in education is the development of the goal, reality, option, and will (GROW) model. The GROW model was first introduced in 1992 [18]. This model focuses on the psychological aspect of individuals to improve the necessary abilities of an institution. In education, the improvement of the abilities of its agents is crucial for the development of education or at least for it to adapt to various changes. By analyzing the syntax of the GROW model, it can be understood that the ultimate goal is only focused on the action plan (will), and if the training stops at the plan, its impact will be limited [19]-[21]. Therefore, there needs to be additional stages such as evaluation, reflection, and follow-up. However, to date, no syntax fulfills these needs, and training activities that are expected to be carried out based on the main needs are still very rare. This can be seen from various training sessions that are focused on aligning perceptions with new policies.

Furthermore, the GROW model has not been associated with digital technology. This creates a development opportunity. In addition, coaching models based on blended learning are also very rare. Therefore, considering the needs and advancements in the field of education, where blended learning is no longer new, there needs to be continuity or alignment in enhancing the competencies of educators to implement blended learning-based teaching [22], [23].

Studies related to blended learning have been widely conducted, and the development of learning through blended learning has already been carried out, such as the implementation of flipped classrooms within blended learning [24], instructional design development with blended learning [25], studies on synchronous and asynchronous learning in blended learning [26] thus strengthening the competencies of students to face the developments of time [27]. These studies indicate that blended learning can be integrated

into various systems, including training systems. This goal can be achieved through training specifically provided to relevant stakeholders such as teachers, principals, and supervisors as educational agents [3], [28].

The development of the coaching model is based on observing the field conditions where post-service training for school principals is not based on needs and the implementation of blended learning is not optimal, so even though training activities have been widely attended, they have not had a significant impact [29]-[33]. Considering this, the development of the model adopts the concept of the GROW model by adding the elements of action, monitoring, and reflection based on blended learning, hereafter referred to as goal, actual, alternative, plan, action, monitoring, and reflection based on blended learning (GAARANTUNG). The name "GAARANTUNG" is derived from the essence of each activity contained in its syntax, which consists of planning, action, evaluation, and reflection with a rearrangement of the syntax in the GROW coaching model as its foundation, as well as incorporating blended learning elements into the training. This addition leads to a unified activity cycle that includes planning, implementation, implementation, results, and evaluation. Therefore, it is hoped that the development of GAARANTUNG can become an effective coaching model in optimizing the competencies of educational agents, including school principals and teachers. To ensure the consistency of research focus, the limitations of this research are carried out by examining several aspects, namely aspects of research objects related to training programs, learning quality, and accompanying factors; aspects of research subjects, namely principals and teachers; The specification of the location of the research review is an elementary school in the Indonesia-Malaysia border area: Bengkayang, West Kalimantan. The focus of this research is to support the purpose of this study, which is the development of coaching models specifically for educational areas that are arranged based on field conditions and needs so that they can have a more long-term impact on users and possibilities for further development in future research.

2. METHOD

This research aims to develop the syntax of the coaching model GROW into the GAARANTUNG coaching model, with a focus on the field of education. The research was conducted using the analysis, design, development, implementation, and evaluation (ADDIE) model development design, which consists of 5 stages: i) analysis, ii) design, ii) development, iv) implementation, and v) evaluation [34]. The analysis stage focuses on conducting a needs analysis to analyze the urgency of developing the syntax of the GAARANTUNG coaching model in the field of education. The needs analysis includes the main issues of the research topic studied through field documentation, and it is further supported by previous research findings. The design stage aims to design the development prototype of the GAARANTUNG coaching model with a focus on implementation in the field of education. This stage involves identifying the main issues and adapting them to the design prototype by the theories and identified problems. The development stage aims to develop the syntax or prototype of the GAARANTUNG coaching model. This stage includes the development of syntax, expert validation of the developed syntax, and improvements to the syntax based on expert assessments. This research has only reached the initial 3 stages: analysis, design, and development. The remaining two stages (i. e. implementation and evaluation) will be conducted in future research to further develop the GAARANTUNG coaching model. The steps involved in this development stage are presented in Figure 1.
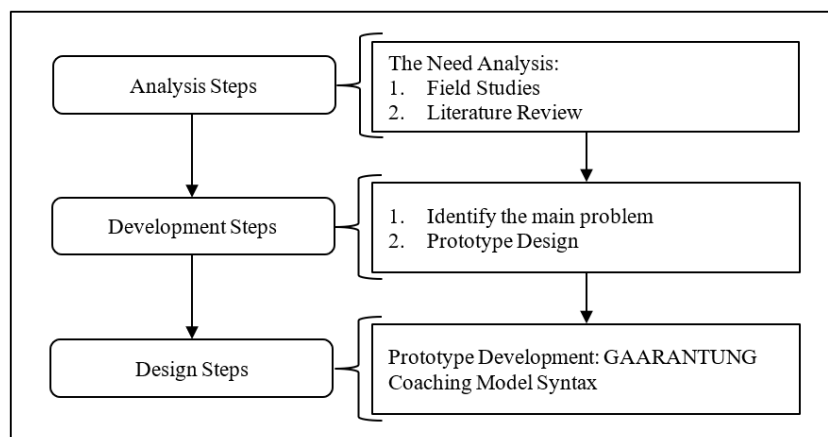

Figure 1. The steps of research design

3.   RESULTS AND DISCUSSION

The development of the GAARANTUNG coaching model, which is based on the concept of the GROW coaching model, is carried out by weighing the needs based on the field conditions, where the training activities encountered in the field have not been conducted based on needs. The tendency that occurs is that training is provided based on instructions from the government, making situational needs not fully accommodated. Although there have been studies discussing coaching models, the development of coaching models in the context of education specifically for teachers and school principals is still very rare. The three main steps in the process of developing the GAARANTUNG coaching model in this research ultimately result in a structured syntax with the hope of meeting the needs in the field. Detailed explanations for each stage are presented as follows.

3.1. Analysis stage

The analysis phase presents various studies based on field studies and literature reviews related to the importance of coaching models and the extent of their use in education. This stage is also conducted as a step to explore the development potential of coaching models. Coaching is a series of activities aimed at maximizing potential and increasing competence. This activity is often used when disseminating information, optimizing skills, and even improving specific competencies according to the focus and topics addressed. In general, in education, coaching activities are intended for educational agents to improve the quality of education through the optimization of potentials from the educational agents themselves, such as teachers, principals, educational practitioners, and other stakeholders involved.

Similar to the learning model, coaching also has various types of models. Coaching models can be defined as a clear and systematic way or strategy to support the success of an activity. Therefore, coaching models also have syntax or steps to guide and serve as guidelines for the implementation of an activity in achieving its objectives. The use of coaching models in education usually leads to technical assistance activities, workshops, or other mentoring activities with clear directions and goals. Through the literature review conducted, the GROW coaching model is widely used, especially in education.

The mapping results from the collection of 30 articles with research subjects of coaching models and education subjects show the potential of these coaching models in research. The results indicate that the development of coaching models itself is still very rare, especially when it comes to the use of technology in coaching models, and the development direction of coaching models still has opportunities. The relationship between the research objects of the 30 articles is depicted through mapping shown in Figure 2.
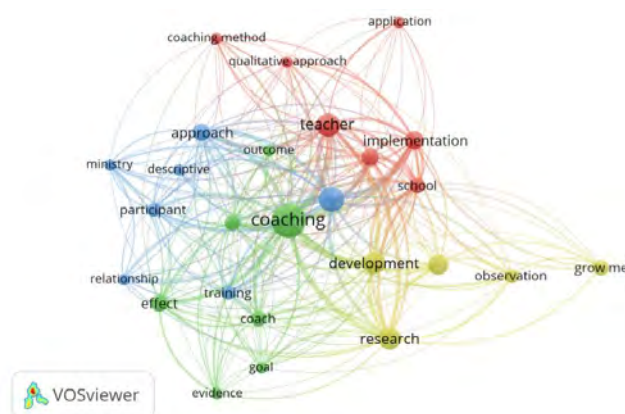

Figure 2. Matrix mapping of article analysis for development coaching GROW model

The GROW coaching model, which was developed in 1992, focuses on the area of psychology but does not rule out the possibility of being used in education [18]. The name of this model is an acronym for goal (setting targets or objectives), reality (self-assessment of current conditions and reasons), Options (identification of alternative solutions), and will (determining steps or actions). These steps are often seen in technical guidance that has been used, but they do not go as far as action-oriented activities or implementation of actions.

These steps are generally reflected in mentoring or training processes, particularly in Indonesia. This makes the stages in the GROW model somewhat familiar, but this model is not widely known even though it has been developed. From Figure 2, it can be observed that the development of the GROW model has been transformed into the goal, reality, option, will-monitoring, evaluation (GROW-ME) coaching model, and in

Indonesia, GROW has also been developed as *tujuan* (goal)*, identifikasi* (identification)*, rencana aksi* (action plan)*,* and *tanggung jawab* (responsibility) (TIRTA). However, both GROW-ME and TIRTA have not shown any support for implementing activities, so the training provided seems similar to the existing training, especially because GROW, GROW-ME, and TIRTA do not emphasize the use of technology [35], [36]. Looking at the original syntax of GROW, it is not impossible to integrate this coaching model with digital technology components. This technology aspect can be incorporated into the training process, by introducing the concept of blended learning, thereby giving the GROW development as a coaching model a new face that is more in line with the needs and advancements of the current era.

The concept of blended learning can be understood as an effort to integrate the advancements of innovation and technology by combining online and face-to-face systems to facilitate interaction between educators and learners [37]. In other words, blended learning is a combination of face-to-face learning and virtual learning (e-learning) [23], [38]. Therefore, blended learning requires the support and utilization of technological devices for the smooth implementation of learning activities [39]. Blended learning has not only been adopted in the learning process but also in coaching activities. This indicates that coaching also follows existing developments. This is why it is reasonable to include technological elements in coaching models, both in the implementation process and as supportive media.

Based on literature reviews, no coaching model that incorporates blended learning has been found. This presents an opportunity because blended learning has proven to facilitate the delivery of information in both learning [40]-[43] and training [44]-[48] contexts. This potential offers a great opportunity to provide a coaching model that can meet field demands. Unlike existing coaching models, the development of the coaching model we refer to as "GAARANTUNG" aims to provide a comprehensive approach to the training process so that training activities do not go to waste.

The GROW coaching model is not new, but it has not been widely known due to its limited use, especially in the field of education. Although some studies have used the GROW coaching model to enhance educators' competencies [33], [49]-[51], its application has been limited to the success of training programs. Without evaluation and follow-up, it is difficult to see the long-term impact of the intended improvement, especially to ensure that the increased competencies provide greater support in learning. To address this need, reflection, and follow-up are required to ensure that competency enhancement is sustainable and has a positive long-term impact.

The insights from several studies eventually led to the understanding that the development of a coaching model requires a solid foundation. After analyzing field needs and findings from various studies, and considering potential issues, the first step taken is to choose a foundational model to develop. In this case, the development is based on the GROW model. The rationale behind this choice is that the GROW model is flexible and can even be combined with blended learning. Existing research indicates that using the GROW model combined with technology elements such as Zoom, Google Forms, and Google Sites has been successfully implemented and had a positive impact on participants of training using this model [33], [45], [52].

However, previous developments of the GROW model lacked in-depth action, although there were monitoring and evaluation components, they could be performed without direct supervision from the coach. Conducting monitoring and evaluation without direct supervision can lead to less focused activities. Therefore, this research aims to enhance this process to ensure that training activities are well-directed and not fruitless.

Another consideration is the underutilization of technology emphasized in the coaching model syntax. This situation also presents an opportunity to introduce a coaching model that integrates blended learning. Thus, the development of the GROW coaching model is focused on action, monitoring, and follow-up activities combined with blended learning, called GAARANTUNG.

3.2. Design stage

The development of the GAARANTUNG coaching model is based on a review and analysis of the need for a coaching model. This determination is based on field observations as a form of situational analysis, reinforced by the results of literature analysis taken from relevant sources that are related to field needs. As outlined in the introduction and model development analysis sections, the use of a coaching model is necessary to maximize, maintain, refresh, and channel various competency innovations in educational agents. On the other hand, the issue of declining competencies also serves as a reason for the need for training or coaching. However, until now, the types of coaching models have rarely been highlighted, resulting in limited use of coaching models in training programs. Additionally, there is a lack of awareness about the various coaching models, and even the development of coaching models has not been emphasized in the field of education.

Fieldwork findings indicate that some training programs end at evaluation without any further action or in-depth monitoring of actions, leading to suboptimal optimization of participants' competencies. Considering this situation, it is crucial to conduct targeted training using an appropriate coaching model. Therefore, a literature review was conducted in the previous stage to determine the relevance and usefulness of coaching models for the existing training programs. The analysis of the literature review identified the GROW coaching model as one with the potential for development. However, conceptually, the GROW coaching model only focuses on planning and how to implement the plan, which is currently insufficient for the needs at hand. Furthermore, field observations show that the achievement scores for training in Bengkayang District, one of the districts in Indonesia located on the border with Malaysia, are relatively low. Measurement results of the achievement of training activities tailored to the needs of Bengkayang District, which has 17 sub-districts and 197 elementary schools analyzed, indicate low achievement. The achievement scores are presented in Table 1.

Table 1. Achievement of the Bengkayang District school principal and elementary teacher coaching activity assessment in 2022

No	Subdistrict	Number Analyzed	Principal and Teacher Coaching Score
1	Bengkayang	17	1.18
2	Capkala	8	1.63
3	Jagoi Babang	12	1.58
4	Ledo	16	1.50
5	Lembah Bawang	2	1.00
6	Lumar	8	1.25
7	Monterado	17	1.35
8	Samalantan	17	1.18
9	Sanggau Ledo	16	1.75
10	Seluas	13	2.23
11	Siding	7	1.29
12	Sungai Betung	8	1.25
13	Sungai Raya	6	1.00
14	Sungai Raya Kepulauan	13	1.62
15	Suti Semarang	6	1.33
16	Teriak	21	1.00
17	Tujuh Belas	10	0.90

Measuring scale: 1–3

Through further examination, it is evident that low participation in training programs also affects the competencies of educational agents such as principals and teachers. The low competencies of principals and teachers also have an impact on the quality of learning in their institutions. This condition can be seen in the low achievement scores and quality of learning. None among the 197 elementary schools in the Indonesia-Malaysia border area, specifically in Bengkayang, reached the maximum score. The low competencies and quality of learning are among the educational issues in Indonesia that require solutions, not just policy determination, but also tangible actions in the form of training programs. The low achievement indicates that the training provided so far has not had a long-term impact. The detailed scores for teacher competencies and quality of learning mentioned are shown in Table 2.

Table 2. Achievement of educator competency assessment and learning quality in Bengkayang Regency in 2022

No	Subdistrict	Number Analyzed	Educator Competence	Learning Quality
1	Bengkayang	17	1.41	0.65
2	Capkala	8	0.63	1.13
3	Jagoi Babang	12	1.58	0.67
4	Ledo	16	0.88	1.25
5	Lembah Bawang	2	1.50	1.50
6	Lumar	8	1.38	0.75
7	Monterado	17	1.53	0.50
8	Samalantan	17	1.59	0.82
9	Sanggau Ledo	16	1.25	0.87
10	Seluas	13	0.77	1.23
11	Siding	7	1.14	0.71
12	Sungai Betung	8	1.38	0.75
13	Sungai Raya	6	1.50	0.83
14	Sungai Raya Kepulauan	13	0.69	1.62
15	Suti Semarang	6	1.50	0.50
16	Teriak	21	1.62	0.71
17	Tujuh Belas	10	1.90	0.90

Measuring scale: 1–3

The low achievement in competencies and quality of learning indicates the need for improvement or optimization in these aspects. However, based on the available data, the training activities have not been tailored to the needs of principals and teachers. Therefore, there is a need for training programs that are suitable for their needs. Up until now, a truly suitable model has not been found.

Considering this issue, there is an opportunity to develop a model. By examining the results of field surveys and literature reviews, the GROW model has the potential to be developed by incorporating elements of digital technology to reflect the current model. Additionally, considering the primary needs in training, the process of reviewing results through action, evaluation, reflection, and follow-up is essential. Therefore, these stages should be considered as a unified syntax in the developed coaching model, which is referred to as GAARANTUNG.

3.3. Development stage

The development stage is the final stage in formulating the syntax of the developed model. It has been mentioned earlier that the model developed is called GAARANTUNG. The development of GAARANTUNG as a coaching model starts with a needs analysis. This analysis helps optimize abilities and competencies based on the main conditions experienced by individuals or groups in an organization.

The low experience of participating in training programs has an impact on the achievement of competencies and the quality of learning. This highlights the need for training activities with the appropriate coaching model. This need is used as the main benchmark to design the ultimate goal and address the problems or needs they are facing. The GROW model, consisting of goals, reality, options, and will, focuses on planning and stops at that stage. On the other hand, in GROW-ME, which includes Monitoring and Evaluation, monitoring and evaluation are carried out, but mentoring during the action stage and follow-up are not emphasized enough [18], [20].

To address this, the GAARANTUNG model includes implementation or action and follow-up in the reflection stage. This addition is necessary because educational institutions also need performance improvement, and monitoring and evaluation play a crucial role in that process. Action or implementation becomes an important part of the model as it describes the activity plan. It is a crucial step in working towards achieving the set goals. Action measures can be interpreted as a series of processes in training activities for competency improvement [53]. The specific actions can be adjusted to the participants' needs, taking into account their initial conditions. These actions are intended to lead to goal achievement.

Monitoring plays a role in reviewing and measuring whether the activities carried out by members or stakeholders in an organization are following the established standards and procedures. Monitoring can be defined as the systematic collection of data based on specific indicators to review the extent of performance and goal achievement [54]. This understanding implies that monitoring is the final step in a process before entering the reflection and follow-up stage. When related to the steps in the development of the training model in this research, monitoring is conducted as part of the evaluation, which includes observation, review, and measurement before ultimately assessing the achievement of the initially set goals. After the monitoring stage, it proceeds to the reflection and follow-up stage. This stage is also part of the evaluation phase. Evaluation can be defined as a systematic and objective assessment of a project, program, policy, regulation, and other ongoing or completed aspects, including design, implementation, and outcomes [54].

In the field of education, monitoring, and evaluation activities are often discussed. Monitoring and evaluation are considered crucial in determining the success of inputs, processes, and outputs. Therefore, many developments have been made in monitoring and evaluation systems to enhance the quality of educational institutions, especially in primary education [55]. Research by Cotton [56] argues that monitoring activities should not only focus on assessing student performance but also aim at evaluating teacher performance as one of the educational agents in training and further studies. Thus, the concept of GAARANTUNG encompasses the syntax goal, reality, options, plan, action, monitoring, follow-up, and integrated blended learning. The development from GROW to GROW-ME and eventually GAARANTUNG is based on the shortcomings of previous models, where the activities stopped at the planning stage without real action, resulting in a lack of impact [19]-[21]. Therefore, GAARANTUNG can address these shortcomings and maximize the syntax to include deeper reflective actions as mentioned earlier. An overview of the development of the coaching model from GROW to GROW-ME and GAARANTUNG is presented in Figure 3.

Every step in the GAARANTUNG syntax carries the meaning that training can provide benefits and will not be in vain if carried out considering the needs. The explanation of each step is as follows: *Goal* (Goal) is the first stage in this training. This stage involves activities to determine the ultimate goal to be achieved. To determine the goal, an initial needs analysis is conducted. This is done to ensure that the set goals are in line with the participants' needs, making the training effective; *Aktual* (Actual) includes monitoring the facts that have occurred. This stage reviews the constraints, barriers, and successes that have

been achieved. This is done to help develop success indicators; *Alternatif* (Alternative) involves the development of indicators for goal achievement. These indicators will be part of the monitoring and evaluation stage, facilitating the preparation of follow-up actions for further improvement. This stage can be designed using blended learning. If necessary, a pretest can also be conducted in this alternative stage to help determine the goal indicators; *Rencana* (Plan) becomes the planning stage because in this stage, action plans are developed. This stage discusses schedules, implementation, and duration required for implementation, as well as plans for monitoring and follow-up in the future. This stage can also be done using blended learning, with synchronous systems such as planning documentation recordings and asynchronous systems such as plan submissions; *Aksi* (Action), in the action stage, the implementation of the previously prepared plan is carried out according to the initial needs and predetermined goals. The action stage can also be combined with blended learning. The action stage consists of several activities, including material delivery, project work, and project implementation; *Monitoring* (Monitoring) is the stage where the actions that have been taken are measured and reviewed to what extent they align with the success indicators. This stage can also be combined with blended learning; *Tindak Lanjut* (Follow-up) is the final step in the developed training model. This stage is the evaluation and reflection stage. It involves the preparation of success, failure, and influencing factors, followed by the development of follow-up steps to improve the training process. The series of training activities are stored online so that participants can access them to review the competency enhancement training activities. Therefore, the follow-up stage also integrates blended learning in its implementation.
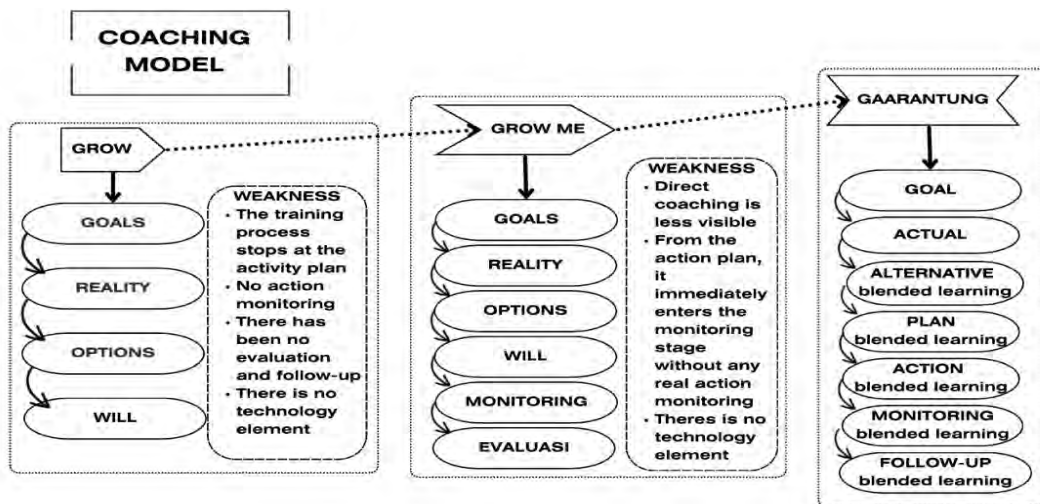
Figure 3. Coaching model syntax

A detailed overview of the GAARANTUNG syntax, which is an advancement of GROW and GROW-ME, reveals additional steps that were previously only present up to the Will [18] and evaluation stages but lacked monitoring or follow-up. The syntax included in GAARANTUNG provides a more comprehensive set of steps. Even though these stages are longer than before, they are intended to address the shortcomings of previous syntaxes and ensure that the training conducted can have a measurable long-term impact, thus avoiding wasteful training.

Therefore, GAARANTUNG is more suitable for large-scale programs that require long-term steps and a greater emphasis on quality improvement compared to purely informative training. The GAARANTUNG model is also designed to be further developed in broader fields with training targets that require assurance that the enhanced competencies have a long-term impact on the targeted organization. One of the highlighted features of GAARANTUNG is its blended learning implementation system, which is a mandatory requirement when choosing the GAARANTUNG coaching model. Hence, technological support is highly necessary when opting for this coaching model. However, this does not imply that the model is not suitable for traditional situations, but rather it aims to promote the use of technology in the training process while also providing future opportunities for flexible development in various conditions. The emphasis on the use of technology itself aims to target the unavoidable need for digitization, especially in the current era where digital technology is familiar and can be a part of education [57].

The results of this research can provide an overview that the training model is an important supporting factor for success in research. The selection of a training model needs to be carefully considered so that the set goals and targets can be achieved. Consistent with the findings of other research [58], the selection of a training model needs to be considered because the training model will provide guidance and directions for the implementation of the program to achieve the targets. Fundamental considerations can be made by examining the ultimate goal of the training. If the training is purely informative, a lightweight model can be chosen. However, if long-term training is needed, there should be stages and follow-up actions, which is what the GAARANTUNG coaching model offers. Additionally, it is important to ensure that the training not only focuses on the effectiveness of the model but also the optimization of competencies to make the training more useful.

On a broader scale, the development of this coaching model can be an alternative option for training models, especially in education, which currently has limited studies. Recent observations show that many educational institutions have undergone ineffective training. Therefore, the development of this model can be an alternative with more comprehensive and systematic stages. However, further research is needed to establish this training model as a broader solution, thereby enhancing the studies about the coaching model. The inclusion of additional steps in the syntax of this coaching model is an effort to provide a coaching model that can bring about significant changes and improvements in competencies, particularly for educational agents to enhance the quality of learning [59]. However, training is still necessary to maintain and optimize existing competencies. The development of this training model is expected to be an initial step as one of the solutions to the existing issues in education. The GAARANTUNG coaching model is recommended for education implementation because the study is limited to education, especially for teachers and elementary school principals. Therefore, use in other fields requires its review. The limitations of this study can be one of the opportunities for developing coaching models in different subject areas, and the findings in this study can be considered in developing training programs. Several aspects that need to be considered fundamentally are related to field needs, trainees' characteristics, and the training program's unique characteristics; where these aspects need to be analyzed to see their continuity with the chosen coaching model.

4. CONCLUSION

The selection of a coaching model needs to be considered to support the success of the training program. It is undeniable that sometimes it is difficult to choose a coaching model that suits the needs, considering that coaching models are rarely discussed, especially in the context of education. This is an opportunity to develop a coaching model that is in line with the needs and conditions in the field.

Based on the literature review and analysis of the situation, the main need for a training model was identified, and the potential was seen in the GROW training model. However, the existing GROW coaching model, including its development such as GROW-ME and TIRTA, has not been able to meet current needs. The technological aspect is still lacking, while digital technology has become a daily necessity and is increasingly integrated into everyday activities. Therefore, education, which is considered a platform for developing individual competencies and preparing future generations, also needs to be technologically prepared.

The problem arises when educational agents lack the necessary competencies, and it is also found that training often fails to target the needs, and the training models used do not have an impact. This condition prompted the development of the GAARANTUNG coaching model. The GAARANTUNG coaching model is an enhancement of the GROW coaching model, which only stops at action plans, and an extension of the GROW-ME coaching model, which does not yet include digital technology. The improvement of the syntax in GROW and GROW-ME to become GAARANTUNG is the initial step in providing a coaching model that is in line with the needs and facilitates the implementation of training activities that target the main needs of the training participants, including teachers and principals so that it can lead to the optimization of competencies that are still considered lacking. GAARANTUNG adds one option to the type of coaching model, especially in the educational realm. This model also provides an overview of systematic training steps that can support the achievement of a program, so that it can be taken into consideration in training programs.

REFERENCES

[1] D. W. Bertrand, "The practice of executive coaching to improve leadership capacity in academic deans at American higher education institutions," *Coaching*, vol. 12, no. 2, pp. 110–124, Jul. 2019, doi: 10.1080/17521882.2018.1545136.

[2] C. J. Cushion, A. Stodter, and N. J. Clarke, "'It's an experiential thing': the discursive construction of learning in high-performance coach education," *Sport, Education and Society*, vol. 27, no. 7, pp. 844–861, Sep. 2021, doi: 10.1080/13573322.2021.1924143.

[3] C. Huck and J. Zhang, "Effects of the COVID-19 pandemic on K-12 education: a systematic literature review," *Educational Research and Development Journal*, vol. 24, no. 1, pp. 53–84, 2021.

[4] I. A. P. Wogu, S. Misra, P. A. Assibong, E. F. Olu-Owolabi, R. Maskeliūnas, and R. Damasevicius, "Artificial intelligence, smart classrooms and online education in the 21st century: implications for human development," *Journal of Cases on Information Technology*, vol. 21, no. 3, pp. 66–79, Jul. 2019, doi: 10.4018/JCIT.2019070105.

[5] N. Aboobaker, "Human capital and entrepreneurial intentions: do entrepreneurship education and training provided by universities add value?," *On the Horizon*, vol. 28, no. 2, pp. 73–83, Mar. 2020, doi: 10.1108/OTH-11-2019-0077.

[6] P. Maneejuk and W. Yamaka, "The impact of higher education on economic growth in ASEAN-5 countries," *Sustainability (Switzerland)*, vol. 13, no. 2, pp. 1–28, Jan. 2021, doi: 10.3390/su13020520.

[7] Suharno, N. A. Pambudi, and B. Harjanto, "Vocational education in Indonesia: history, development, opportunities, and challenges," *Children and Youth Services Review*, vol. 115, pp. 1–8, Aug. 2020, doi: 10.1016/j.childyouth.2020.105092.

[8] J. Shaturaev, "Indonesia: superior policies and management for better education (community development through education)," *Архив Научных Исследований*, vol. 1, no. 1, pp. 1–10, 2021, [Online]. Available: https://www.researchgate.net/publication/357271101

[9] P. Pedro, F., Subosa, M., Rivas, A., & Valverde, "Artificial intelligence in education: challenges and opportunities for sustainable development," *Unesco*, 2019.

[10] B. M. Batubara, "The problems of the world of education in the middle of the COVID-19 pandemic," *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, vol. 4, no. 1, pp. 450–457, 2021, doi: 10.33258/birci.v4i1.1626.

[11] N. Almazova, E. Krylova, A. Rubtsova, and M. Odinokaya, "Challenges and opportunities for Russian higher education amid COVID-19: teachers' perspective," *Education Sciences*, vol. 10, no. 12, pp. 1–11, Dec. 2020, doi: 10.3390/educsci10120368.

[12] T. Sari and F. Nayır, "Challenges in distance education during the (COVID-19) pandemic period," *Qualitative Research in Education*, vol. 9, no. 3, pp. 328–360, Oct. 2020, doi: 10.17583/qre.2020.5872.

[13] B. Kutsyuruba and L. Godden, "The role of mentoring and coaching as a means of supporting the well-being of educators and students," *International Journal of Mentoring and Coaching in Education*, vol. 8, no. 4, pp. 229–234, Nov. 2019, doi: 10.1108/IJMCE-12-2019-081.

[14] A. N. Hakro and P. Mathew, "Coaching and mentoring in higher education institutions: a case study in Oman," *International Journal of Mentoring and Coaching in Education*, vol. 9, no. 3, pp. 307–322, Jun. 2020, doi: 10.1108/IJMCE-05-2019-0060.

[15] S. Seraj, "The challenges of personal tutoring in higher education: applying a coaching approach at a UK higher education institution," *International Journal of Evidence Based Coaching and Mentoring*, vol. 21, no. 1, pp. 85–98, 2023, doi: 10.24384/gyz9-fk22.

[16] J. Kinnunen and I. Georgescu, "Disruptive pandemic as a driver towards digital coaching in OECD countries," *Revista Romaneasca pentru Educatie Multidimensionala*, vol. 12, no. 2, pp. 55–61, 2020, doi: 10.18662/rrem/12.2sup1/289.

[17] G. Azanza, A. Fernández-Villarán, and A. Goytia, "Enhancing learning in tourism education by combining learning by doing and team coaching," *Education Sciences*, vol. 12, no. 8, pp. 1–16, Aug. 2022, doi: 10.3390/educsci12080548.

[18] J. Whitmore, *Coaching for Performance*. Fifth Edition: the principles and practice of coaching and leadership UPDATED 25th Anniversary Edition. Nicholas Brealey, 2010.

[19] K. M. Augestad, K. Butt, D. Ignjatovic, D. S. Keller, and R. Kiran, "Video-based coaching in surgical education: a systematic review and meta-analysis," *Surgical Endoscopy*, vol. 34, no. 2, pp. 521–535, Feb. 2020, doi: 10.1007/s00464-019-07265-0.

[20] A. Rahmat and M. Mirnawati, "Application of coaching model grow through knowledge andragogical content learning," *Digital Press Social Sciences and Humanities*, vol. 7, pp. 1–6, 2021, doi: 10.29037/digitalpress.47391.

[21] M. Musta'in, A. Rahman, and Restu, "Application of academic supervision of GROW model coaching to improve the ability to make learning modules using the flipbook maker application of motorcycle engineering competence teacher at SMK N 2 Binjai," in *Proceedings of the 5th Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2020)*, Paris, France: Atlantis Press, 2020, pp. 181–187, doi: 10.2991/assehr.k.201124.040.

[22] S. Suwannaphisit, C. Anusitviwat, P. Tuntarattanapong, and C. Chuaychoosakoon, "Comparing the effectiveness of blended learning and traditional learning in an orthopedics course," *Annals of Medicine and Surgery*, vol. 72, p. 103037, Dec. 2021, doi: 10.1016/j.amsu.2021.103037.

[23] M. Z. Iqbal, E. Mangina, and A. G. Campbell, "Current challenges and future research directions in augmented reality for education," *Multimodal Technologies and Interaction*, vol. 6, no. 9, pp. 1–29, Sep. 2022, doi: 10.3390/mti6090075.

[24] B. Wibawa and S. Kardipah, "The Flipped-blended model for STEM education to improve students' performances," *International Journal of Engineering & Technology*, vol. 7, no. 2.29, p. 1006, May 2018, doi: 10.14419/ijet.v7i2.29.14298.

[25] U. A. Chaeruman, B. Wibawa, and Z. Syahrial, "Development of an instructional system design model as a guideline for lecturers in creating a course using blended learning approach.," *International Journal of Interactive Mobile Technologies*, vol. 14, no. 14, pp. 164–181, 2020.

[26] U. A. Chaeruman, B. Wibawa, and Z. Syahrial, "Determining the appropriate blend of blended learning: a formative research in the context of spada-Indonesia," *American Journal of Educational Research*, vol. 6, no. 3, pp. 188–195, Mar. 2018, doi: 10.12691/education-6-3-5.

[27] H. Syakdiyah, B. Wibawa, and Z. Syahrial, "Flipped classroom learning innovation as an attempt to strengthen competence and competitiveness of students in the 4.0 Industrial Revolution Era," *Formatif: Jurnal Ilmiah Pendidikan MIPA*, vol. 9, no. 4, pp. 267–280, Jan. 2020, doi: 10.30998/formatif.v9i4.2929.

[28] M. Devine, R. Meyers, and C. Houssemand, "How can coaching make a positive impact within educational settings?," *Procedia - Social and Behavioral Sciences*, vol. 93, pp. 1382–1389, Oct. 2013, doi: 10.1016/j.sbspro.2013.10.048.

[29]   R. A. Thessin and C. Reyes, "Leading in urban contexts: how principal supervisors coach principals to lead improvement," in *International Encyclopedia of Education: Fourth Edition*, Elsevier, 2022, pp. 325–336, doi: 10.1016/B978-0-12-818630-5.05015-6.

[30]   P. Sahlberg and A. Stringer, "Coaching for professional learning of early career teachers," in *International Encyclopedia of Education: Fourth Edition*, Elsevier, 2022, pp. 144–152, doi: 10.1016/B978-0-12-818630-5.04011-2.

[31]   T. A. Glover, L. A. Reddy, and K. Crouse, "Instructional coaching actions that predict teacher classroom practices and student achievement," *Journal of School Psychology*, vol. 96, pp. 1–11, Feb. 2023, doi: 10.1016/j.jsp.2022.10.006.

[32]   E. T. Pas, C. A. Kaihoi, K. J. Debnam, and C. P. Bradshaw, "Is it more effective or efficient to coach teachers in pairs or individually? a comparison of teacher and student outcomes and coaching costs," *Journal of School Psychology*, vol. 92, pp. 346–359, Jun. 2022, doi: 10.1016/j.jsp.2022.03.004.

[33]   C. O. Okorie *et al.*, "Zoom-based GROW coaching intervention for improving subjective well-being in a sample of school administrators: a randomized control trial," *Internet Interventions*, vol. 29, p. 100549, Sep. 2022, doi: 10.1016/j.invent.2022.100549.

[34]   R. M. Branch, *Instructional design: The ADDIE approach*. New York: Springer, 2009, doi: 10.1007/978-0-387-09506-6.

[35]   M. Hanif, J. Widodo, J. Sutarto, and W. Wahyono, "Improving teacher capability through clinical supervision with the peer coaching grow me (PCGM) approach," *Advances in Business, Management and Entrepreneurship*, pp. 978–982, 2020, doi: 10.1201/9780429295348-207.

[36]   E. Utaminingsih and S. Ismaya, "MORTIRTA coaching-based academic supervision model," *Uniglobal of Journal Social Sciences and Humanities*, vol. 2, no. 2, p. 54, 2023, doi: 10.53797/ujssh.v2i2.9.2023.

[37]   M. Fazal, B. Panzano, and K. Luk, "Evaluating the impact of blended learning: a mixed-methods study with difference-in-difference analysis," *TechTrends*, vol. 64, no. 1, pp. 70–78, Jan. 2020, doi: 10.1007/s11528-019-00429-8.

[38]   M. Oliver and K. Trigwell, "Can 'blended learning' be redeemed?," *E-Learning*, vol. 2, no. 1, pp. 17–26, 2005, doi: 10.2304/elea.2005.2.1.2.

[39]   A. Larsson, A. Mabogunje, and A. Milne, "Distributed design teams : embedded one-on-one conversations in one-to-many distributed design teams : embedded one-on-one conversations in one-to-many," *Design Research Society International Conference*, pp. 1–11, 2002.

[40]   K. E. Weber, C. N. Prilop, and M. Kleinknecht, "Effects of blended and video-based coaching approaches on preservice teachers' self-efficacy and perceived competence support," *Learning, Culture and Social Interaction*, vol. 22, p. 100318, Sep. 2019, doi: 10.1016/j.lcsi.2019.100318.

[41]   L. D. Lapitan, C. E. Tiangco, D. A. G. Sumalinog, N. S. Sabarillo, and J. M. Diaz, "An effective blended online teaching and learning strategy during the COVID-19 pandemic," *Education for Chemical Engineers*, vol. 35, pp. 116–131, Apr. 2021, doi: 10.1016/j.ece.2021.01.012.

[42]   S. Mariam, K. F. Khawaja, M. N. Qaisar, and F. Ahmad, "Blended learning sustainability in business schools: role of quality of online teaching and immersive learning experience," *International Journal of Management Education*, vol. 21, no. 2, p. 100776, Jul. 2023, doi: 10.1016/j.ijme.2023.100776.

[43]   D. H. Tong, B. P. Uyen, and L. K. Ngan, "The effectiveness of blended learning on students' academic achievement, self-study skills and learning attitudes: a quasi-experiment study in teaching the conventions for coordinates in the plane," *Heliyon*, vol. 8, no. 12, p. e12657, Dec. 2022, doi: 10.1016/j.heliyon.2022.e12657.

[44]   N. Burnett, "E-coaching: theory and practice for a new online approach to coaching," *Coaching: An International Journal of Theory, Research and Practice*, vol. 11, no. 1, pp. 91–93, Jan. 2018, doi: 10.1080/17521882.2017.1348372.

[45]   J. A. Martenstyn and A. M. Grant, "An online, comparative effectiveness trial of mental contrasting with implementation intentions (MCII) versus solution-focused coaching (SFC) questions," *Coaching*, vol. 15, no. 1, pp. 60–84, Jan. 2022, doi: 10.1080/17521882.2021.1890166.

[46]   R. Gillespie and J. M. Amador, "Conversations about annotations during coaching cycles: Analysis of coaches' facilitation to support teacher participation," *Teaching and Teacher Education*, vol. 140, p. 104463, Apr. 2024, doi: 10.1016/j.tate.2023.104463.

[47]   L. S. Miller and H. W. More, "Training, coaching, counseling, and mentoring—helping officers grow and develop," *Effective Police Supervision*, pp. 281–321, 2018, doi: 10.4324/9781315400822-9.

[48]   H. Geißler, "E-Coaching – ein Überblick," in *Handbuch Schlüsselkonzepte im Coaching*, Berlin, Heidelberg: Springer Berlin Heidelberg, 2018, pp. 115–124, doi: 10.1007/978-3-662-49483-7_78.

[49]   M. Shelly, "GROWing your career conversations through coaching," *Foundation Years*, vol. 4, no. 1, pp. 47–48, Feb. 2008, doi: 10.1016/j.mpfou.2007.12.005.

[50]   J. Bishop, "An investigation into the extent and limitations of the GROW model for coaching and mentoring online: towards 'prosthetic learning,'" *Proceedings of the International Conference on e-Learning, e-Business, Enterprise Information Systems, and e-Government*, pp. 125–136, 2015.

[51]   A. A. Müller and S. Kotte, "Of SMART, GROW and goals gone wild – a systematic literature review on the relevance of goal activities in workplace coaching," *International Coaching Psychology Review*, vol. 15, no. 2, pp. 69–97, 2020, doi: 10.53841/bpsicpr.2020.15.2.69.

[52]   V. Libri, "Beyond GROW: in search of acronyms and coaching models," *The International Journal of Mentoring and Coaching*, vol. 2, no. 1, pp. 1–8, 2004.

[53]   J. Shachter, "Self-report and heart rate: examining the need for integrating measures of Japanese college entrance examination test anxiety," *Website: http://pansig. org/Facebook: https://www. facebook. com/JALTpansig*, p. 240, 2022.

[54]   J. Z. Kusek and R. C. Rist, *Ten steps to a results-based monitoring and evaluation system: a handbook for development practitioners*. World Bank Publications, 2004.

[55]   W. Lapanachokdee, "Development of the monitoring and evaluation system for the utilization of quality assessment results to enhance the quality of basic education institutions in Thailand," *Journal of Positive School Psychology*, vol. 6, no. 5, pp. 5341–5351, 2022, [Online]. Available: http://journalppw.com

[56]   K. Cotton, *School improvement research series educating for citizenship*. Wood 1988, 1994.

[57]   E. Korkmaz and H. S. Morali, "A meta-synthesis of studies on the use of augmented reality in mathematics education," *International Electronic Journal of Mathematics Education*, vol. 17, no. 4, pp. 1–21, Jul. 2022, doi: 10.29333/iejme/12269.

[58]   T. Somià, C. Lechner, and L. Pittaway, "Assessment and development of coachability in entrepreneurship education," *International Journal of Management Education*, vol. 22, no. 1, p. 100921, Mar. 2024, doi: 10.1016/j.ijme.2023.100921.

[59]   B. Ayçiçek, "Integration of critical thinking into curriculum: Perspectives of prospective teachers," *Thinking Skills and Creativity*, vol. 41, pp. 1–10, Sep. 2021, doi: 10.1016/j.tsc.2021.100895.

BIOGRAPHIES OF AUTHORS

Yosua Damas Sadewo 🆔 📇 SC ○ is a doctoral student at the Doctoral Program of Educational Technology Postgraduate, Universitas Negeri Jakarta, Indonesia, and a lecturer in the Department of Primary Education, Institut Shanti Bhuana, Indonesia. He focuses on teaching educational technology, e-learning, and ICT for learning. He can be contacted at email: yosuadamassadewo_9902921035@mhs.unj.ac.id.

Basuki Wibawa 🆔 📇 SC ○ is a professor at the Doctoral Program of Educational Technology Postgraduate, Universitas Negeri Jakarta, Indonesia. Basuki Wibawa received his PhD program from the Department of Educational Technology, Universitas Negeri Jakarta. He researches educational technology. These studies have been published in the International Journal indexing on Scopus, and Web of Science. He also has actively published these studies in the books. He can be contacted at email: bwibawa@unj.ac.id.

Ivan Hanafi 🆔 📇 SC ○ is a professor at the Doctoral Program of Educational Technology Postgraduate, Universitas Negeri Jakarta, Indonesia. Ivan Hanafi received his PhD program in Technical and Vocational Education at Universiti Putra Malaysia. He has been working as a Coaching Coordinator for the Technical Coaching Center, Siemens Indonesia Company. He was involved in providing consultancy services to the Ministry of National Education, Indonesia, and assisted the Terro-Technologist International Consultant in reviewing preventive maintenance and school-based management programs used in Junior and Senior Secondary Education. He researches the Technical Vocational Education and Coaching (TVET). He can be contacted at email: ivan.hanafi@unj.ac.id.

Pebria Dheni Purnasari 🆔 📇 SC ○ is a lecturer at Department of Primary Education, Institut Shanti Bhuana Bengkayang, West Borneo. She focuses on teaching the mathematical primary concept, educational strategy, educational assessment, and educational methodology. She researches primary education, educational strategy, assessment, and ICT for learning. She can be contacted at email: pebria.dheni@shantibhuana.ac.id.

Totok Victor Didik Saputro 🆔 📇 SC ○ is a lecturer at Department of Primary Education, Institut Shanti Bhuana, Bengkayang, West Borneo. He received his master's degree in the Department of Mathematics Education at Universitas Negeri Yogyakarta and his bachelor's degree in the Department of Mathematics Education at Universitas Sanata Dharma Yogyakarta. He focuses on teaching the mathematical primary concept, logic, educational methodology, and learning media. He researches mathematical literacy, learning media, and teacher competencies development. He can be contacted at email: totok.victor@shantibhuana.ac.id.