



BBGTK as an Agent of Educational Transformation: A Study on the Development of Teachers and Education Personnel in North Sumatra

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I. Introduction

Educational transformation is the most appropriate way to strive to improve the quality of human resources who are ready to face the challenges of the 21st century. Changes in the educational paradigm that emphasize learning must be centered on student readiness, educators' mastery of competencies, the use of digital technology, and character strengthening require continuous improvement of the quality of teachers and education personnel. Educational transformation is the process of changing one's way of thinking, point of view, and understanding through critical reflection on learning experiences. Transformative education must be able to encourage students and educators to build a new and more open, rational, and adaptive view of change (Mezirow, 1997). Thus, teachers no longer only play the role of delivering learning materials, but as facilitators, innovators, mentors, and agents of change in order to develop a learning ecosystem that is adaptive to the development of science and technology.

Educational institutions must develop into learning *organizations*, namely organizations that are constantly learning, adapting, and innovating in the face of environmental changes. Educational transformation occurs when all members of the organization have a common vision, collective learning ability, and a strong culture of innovation (Peter Senge, 2006). The transformation of education that is taking place globally has encouraged various countries to reform education to successfully improve the education system. The quality of teachers and education personnel as the main actors in the implementation of education greatly determines the transformation of education. Various research results show that the competencies possessed by teachers and education personnel have a very significant influence on the quality and outcomes of learning as well as the achievement of national education goals. Good education is not only able to produce graduates who have academic knowledge, but also be able to think critically, creatively, collaborate, communicate effectively, and adapt to changes that take place quickly and sustainably. Therefore, the competence of teachers and education personnel must be developed systematically, sustainably, and based on real needs in the field.

A successful organization is an organization that is able to learn continuously (*learning organization*). In the context of education, BBGTK can be seen as a learning organization that encourages teachers and education staff to continue to improve their competencies through training, mentoring, research, and sharing good practices (Senge, 2006). As part of the implementation of government policies, the Teachers and Education Personnel Center (BBGTK) has a strategic role as a Technical Implementation Unit under the Ministry of Primary and Secondary Education which is tasked with carrying out the development and

empowerment of teachers, school principals, other educators, and education personnel. Based on the Regulation of the Minister of Primary and Secondary Education Number 5 of 2025, BBGTK has the function of carrying out competency mapping, developing competency improvement models, developing learning media, implementing training, facilitation, supervision, monitoring, evaluation, and partnerships in the development of teachers and education personnel.

In North Sumatra Province, BBGTK has a very large service area with more than 18,000 education units, around 223,000 teachers, more than 29,000 education personnel, and more than 21,000 school principals. The breadth of the scope of these services reflects BBGTK's strategic position as an institution that plays a role in improving the quality of human resources in the field of education. In carrying out its functions, BBGTK not only organizes various education and training programs, but also carries out mentoring, building partnerships with various stakeholders, facilitating learning communities, and optimizing the use of digital technology to support the sustainable development of teacher and education personnel's competencies. These various efforts are part of BBGTK's strategy in encouraging an adaptive, innovative, and education-oriented transformation that improves the quality of learning.

The change in nomenclature from the Driving Teacher Center (BBGP) to the Teacher and Education Personnel Center (BBGTK) in 2025 not only reflects administrative changes, but also represents the strengthening of institutional functions and roles in the development of human resources in the field of education. These changes show an expansion of the organization's mandate that no longer focuses solely on teacher development, but also includes education personnel as an integral part of the education ecosystem. Through this institutional transformation, the government affirms its commitment to building a more integrated, collaborative, sustainable, and adaptive professional development system to the dynamics and challenges of education in the modern era.

Although various efforts have been made to improve the quality of teachers and education personnel, its implementation is still faced with a number of complex challenges. Competency gaps between regions, limited access to quality professional development programs, lack of optimal implementation of training results in learning practices in education units, low use of digital technology as a learning support, and ineffective monitoring and evaluation systems for competency development programs are some of the problems that still need attention. In addition, the diversity of geographical, social, cultural, and educational characteristics in North Sumatra Province requires a competency development model that is more contextual, adaptive, and oriented to the specific needs of each region. Thus, the development programs implemented are expected to not only be able to improve the competence of teachers and education personnel in general, but also relevant to the real challenges and needs in their respective educational environments.

Along with the rapid development of digital technology, artificial intelligence, *data-driven learning*, and the growing digital learning ecosystem, the paradigm of teacher professional development has undergone significant changes. These changes require a transformation in the strategy to improve the competence of educators to be more adaptive to the demands of 21st century education. Effective teacher professional development has five main characteristics, namely focusing on learning materials (*content focus*), involving active learning, supporting collaboration (*collective participation*), lasting for an adequate duration (*duration*), and providing continuous support (*coherence*). Therefore, BBGTK programs need to be designed based on these principles in order to be able to improve teachers' competence optimally (Desimon, 2009). The integration of these various approaches is expected to be able to strengthen the continuous learning process, systematically increase teacher capacity, and produce a more tangible impact on the quality of learning and learning outcomes of students in schools.

Various previous studies have tended to focus on evaluating the effectiveness of teacher training programs and the implementation of policies to improve educator competencies in part. However, studies that place BBGTK as an agent of educational transformation by reviewing institutional aspects, strategies for developing the competencies of teachers and education personnel, strengthening the professional learning ecosystem, and its contribution to improving the quality of education at the regional level are still relatively limited. These limitations are increasingly seen in the context of North Sumatra Province which has diverse

geographical, social, and cultural characteristics so that it requires a more contextual development approach. Thus, there is still a significant *research gap*, namely the lack of studies that integrate analysis of the strategic role of BBGTK, the implementation of competency development programs, and its impact on comprehensive education transformation. Therefore, this research is expected to fill this gap by providing a deeper understanding of the role of BBGTK as an agent of educational transformation in improving the quality of teachers and education personnel in North Sumatra Province.

Based on this description, research on **"BBGTK as an Agent of Educational Transformation: A Study on the Development of Teachers and Education Personnel in North Sumatra"** is important to be conducted. This research is expected to be able to provide an empirical overview of the strategic role of BBGTK in supporting educational transformation, identify factors that affect the success of teacher and education staff development, and formulate a more effective, adaptive, and sustainable development model in accordance with the demands of 21st century education. The results of this research are expected to make a theoretical contribution to the development of education management studies and teacher professional development, as well as policy recommendations for the government, BBGTK, local governments, and stakeholders in realizing quality and competitive education.

II. Research Methods

This research uses a qualitative approach with a case study design. The qualitative approach was chosen because the research aims to gain a deep understanding of the role of the North Sumatra Provincial Teachers and Education Personnel Center (BBGTK) as an agent of educational transformation in developing the competence of teachers and education personnel. Through this approach, researchers can explore policies, strategies, program implementation, supporting and inhibiting factors, as well as the impact of competency development carried out by BBGTK in a real context. According to Denzin and Lincoln (2018), qualitative research is an approach that is carried out in *natural settings* with the aim of gaining a deep understanding of a phenomenon based on the meaning built by individuals or groups who experience it. Meanwhile, Merriam and Tisdell (2016) explained that qualitative case studies are in-depth descriptions and analyses of a *bounded system*, such as organizations, programs, or institutions.

This research was carried out at the North Sumatra Province Teachers and Education Personnel Center (BBGTK). The selection of research locations was carried out purposively based on the consideration that BBGTK is a strategic institution responsible for the implementation of various policies for the development of teachers and education personnel set by the central government. As an institution that is the link between the transformation of national education in the development of teachers and education personnel and its implementation in the regions, BBGTK faces various dynamics of change related to improving teacher competence, educational transformation, strengthening collaboration between institutions, and developing the culture of learning organizations. This condition makes BBGTK a relevant context to examine the implementation of education policies from the perspective of change management.

The research subjects were selected using *the purposive sampling technique*, which is a technique of determining informants that is deliberately carried out based on certain criteria in accordance with the objectives and needs of the research (Patton, 2015). Informants are chosen because they are considered to have knowledge, experience, and direct involvement in the phenomenon being researched so that they are able to provide in-depth and credible information. The main informant in this study is the Head of the North Sumatra Province Teacher and Education Personnel Center (BBGTK). The election of the Head of BBGTK is based on his role as the leader of an institution that has the authority to formulate policies, coordinate the implementation of programs, and direct the development strategy of teachers and education personnel in the North Sumatra Province region. Thus, informants have relevant knowledge, experience, and information related to the implementation of education policies and organizational change processes that are the focus of research.

Data collection in this study was carried out through structured interviews. This technique was chosen because the research has a focus on studies, indicators, and conceptual frameworks formulated based on the

theory of education policy implementation and change management. Thus, the interview process can be carried out systematically in accordance with the research objectives that have been set. According to Cohen, Manion, and Morrison (2018), structured interviews are a data collection technique that uses a set of questions that have been systematically designed and compiled before the interview process is carried out. This approach allows each informant to obtain the same questions so that the resulting data is more consistent, directed, and easy to compare.

The interview guidelines in this study are systematically prepared based on a conceptual framework developed from theoretical studies and previous research results. The guidelines cover five main dimensions, namely: (1) *change awareness*, (2) *professional capacity development*, (3) *policy translation leadership*, (4) *collaborative governance*, and (5) *learning organization*). These five dimensions are used as a reference to explore in-depth information about the role of BBGTK in supporting educational transformation through the development of teachers and education personnel. In the dimension of awareness of change, the interview was directed to explore the informant's understanding of the dynamics of educational change, the factors that drive transformation, the challenges faced in its implementation, and the urgency of implementing various education policies. This dimension aims to obtain an overview of the organization's readiness in responding to changes in the strategic environment of education.

In the dimension of professional capacity development, the questions are focused on the strategies implemented by BBGTK in improving the competence of teachers and education personnel, including the implementation of training, mentoring, *coaching*, *mentoring*, strengthening the learning community, and the use of digital technology as part of sustainable professional development. In addition, the interview also explored the contribution of these various programs to improving the quality of learning and transforming education and the development of teachers and education personnel.

Furthermore, in the leadership dimension in translating policies, the interview aims to identify the role of BBGTK leaders in transforming national education into programs that are in accordance with the characteristics, needs, and challenges of education in North Sumatra Province. This dimension also examines leadership strategies in managing change and encouraging innovation in the organizational environment.

In the dimension of collaborative governance, the question is directed to explore the forms of partnerships and patterns of cooperation built by BBGTK with various stakeholders, such as local governments, education offices, universities, schools, professional organizations, and learning communities. The focus of the study on this dimension is to understand the contribution of collaboration between institutions in supporting the success of teacher and education personnel development programs.

As for the dimension of the learner's organization, the interview focused on BBGTK's efforts in building a sustainable learning culture, encouraging organizational innovation, managing knowledge (*knowledge management*), and strengthening institutional capacity to be able to adapt to changes and maintain the sustainability of educational transformation. Through these five dimensions, it is hoped that a comprehensive picture of BBGTK's strategy, process, and role as an agent of education transformation in North Sumatra Province will be obtained.

The interview process is carried out face-to-face with the main informant at a mutually agreed time and place. Before the interview was conducted, the researcher explained the purpose of the research, asked for the informant's consent, and guaranteed the confidentiality of the identity and information provided. The entire interview process is recorded using a voice recording device and supported by *field notes* to ensure no important information is missed. According to Merriam and Tisdell (2016), the use of recordings and field records is important to improve data accuracy and strengthen the interpretation process in qualitative research.

Data analysis was carried out using an interactive analysis model developed by Miles, Huberman, and Saldaña (2014). This model consists of three main stages, namely data *condensation*, data *display*, and *conclusion drawing and verification*. The data reduction stage is carried out by selecting, grouping, and simplifying the data from the interview results according to the focus of the research. At this stage, the

researcher conducts a *coding* process to identify themes related to the implementation of education policies and change management. The next stage is the presentation of data in the form of narratives, matrices, and relationships between themes to make it easier for researchers to understand the patterns that emerge from the data. Furthermore, the researcher conducts repeated conclusions and verifications to ensure that the resulting findings are truly supported by empirical data obtained from the field.

To ensure the validity of the data (*trustworthiness*), this study uses credibility techniques through *member checking*. This technique is carried out by reconfirming the results of the interview and the interpretation of the researcher to the informant so that the agreement between the meaning of the informant and the interpretation made by the researcher is obtained (Lincoln & Guba, 1985). In addition, the researcher also applies *persistent observation* by reviewing the data repeatedly to gain a deep understanding of the phenomenon being studied. This step is done to improve the accuracy, consistency, and validity of research findings.

Through the use of qualitative approaches, case study design, structured interview techniques, and systematic data analysis, this research is expected to be able to produce a comprehensive understanding of how change management takes place in the implementation of education policies in the development of teachers and education personnel in Riau Province. This methodological approach allows the research to reveal the dynamics of organizational change in depth while making an empirical contribution to the development of studies on the implementation of education policies and change management in the context of education.

III. Results and Discussion

Research Results

Based on the results of in-depth interviews with several employees of the North Sumatra Teachers and Education Personnel Training Center (BBGTK), this study found that the transformation of education in the development of teachers and education personnel does not take place as an administrative process that is linear and procedural. rather, it takes place as a process of organizational change that involves the transformation of ways of thinking, professional capacity, leadership patterns, collaborative networks, and organizational culture. These findings show that the success of educational transformation is not only determined by the quality of government-set regulations, but also by the organization's ability to manage change systematically and sustainably.

The first findings were obtained based on the results of observations and interviews with the Partnership Team, the Head of the Digital Transformation Division, and the BBGTK R&D team, it is known that this institution not only functions as a training provider, but also as a center for the development of educational human resources that integrates national policies with regional needs. This role is realized through the implementation of educational programs, training, mentoring, learning community development, and digital transformation in teacher professional development. These programs are designed to improve the competence of teachers, principals, school supervisors, and education personnel to be able to respond to the challenges of 21st century education.

The second finding shows that BBGTK North Sumatra implements various priority programs derived from national policies and regional development programs. The programs include: Teacher Professional Education (PPG); Teacher Competency Improvement Program; the Principal Candidate Program (BCKS); the School Superintendent of Schools (BCPS) program; Teacher's Learning Room (Teacher's Studio); Special Teacher Education; Tiered Training for Early Childhood Teachers; Career Development Program and Teacher and Education Personnel Awards; Coding and Artificial Intelligence (AI) training; deep learning training; inclusive education; English Teacher Education; Happy Math; Guidance and Counseling Strengthening Program. All of these programs are held through online, offline, and *blended learning*, so as to provide flexibility to participants according to regional conditions and program characteristics.

The third finding shows that the educational transformation strategy developed by BBGTK consists of several main approaches.1. Need-Based Competency Strengthening: BBGTK identifies the competency needs of

teachers before the start of the training program so that the material provided is in accordance with the development of national education policies and school needs. 2. Digital Transformation: The Digital Transformation Division develops various technology-based learning innovations through the use of Learning Management System (LMS), Teacher Studios, digital media, and Artificial Intelligence (AI) training to improve teachers' digital competence. 3. Continuous Approach: Competency development does not stop at the implementation of training, but continues through mentoring, learning communities, dissemination of good practices, and scanning to other teachers in their respective schools. 4. Strengthening Partnerships: BBGTK builds collaboration with local governments, education offices, schools, universities, professional organizations, and learning communities as part of the implementation of teacher development policies.

The fourth finding shows that the development of the Guidance and Counseling Program (BK) as a national priority program. The program began with national facilitator training which produced 69 teachers as national facilitators in North Sumatra Province. Furthermore, BBGTK held a regional facilitator training which was attended by 951 participants, with 833 participants declared passed. After participating in the training, each facilitator was in charge of scanning around 15 teachers consisting of subject teachers, classroom teachers, and BK teachers. This program aims to expand the implementation of guidance and counseling services in schools through a collaborative approach.

The main material developed is "7 Great BK Moves", which is designed to improve teachers' ability to handle psychological, social, emotional, and character development of students. This program is motivated by the increasingly complex challenges of education due to the development of digital technology, social changes, and the increasing need for student assistance services.

The findings of the study also show that there are still teachers who do not comprehensively understand the difference in roles between homeroom teachers and homeroom teachers. Therefore, BBGTK continues to develop advanced training so that all teachers have the same understanding of the implementation of guidance and counseling services in schools.

The fifth finding shows that the successful implementation of the BBGTK program is supported by the role of Widyaaiswara and Learning Technology Developers (PTP).

Widyaaiswara is responsible for the preparation of the training curriculum, delivery of materials, learning evaluation, and mentoring of trainees. Meanwhile, PTP plays a role in developing digital media, Teacher Studios, online learning systems, and learning technology innovations.

The collaboration of the two functional positions produces a training model that is more adaptive to the development of educational technology.

Overall, this study shows that BBGTK North Sumatra Province has carried out its function as an agent of education transformation through the capacity development of teachers and education personnel in a systematic, collaborative, and technology-based manner. This transformation is not only realized through the implementation of training, but also through mentoring, strengthening the learning community, developing digital learning, and program innovations that are responsive to current educational needs.

However, the effectiveness of the program is still influenced by various factors, such as teacher competency gaps, limited technological infrastructure, the breadth of service areas, and the lack of optimal monitoring and evaluation systems. Therefore, it is necessary to strengthen institutional strategies, increase collaboration with local governments and education units, use digital technology more widely, and develop a sustainable mentoring system so that the impact of the BBGTK program on improving the quality of education can be felt more evenly throughout the North Sumatra Province. education personnel.

Discussion

Peran Competency Development of Teachers and Education Personnel

The first findings show that BBGTK functions as a center for the competency development of teachers, principals, school supervisors, and education personnel through the implementation of education, training, mentoring, *coaching*, *mentoring*, and continuous professional development (*Continuous Professional Development*). This function aims to improve the pedagogical, professional, social, and personality

competencies of teachers in order to be able to face the dynamics of 21st century education. BBGTK sets indicators: Analysis of training needs; Implementation of education and training; Post-training assistance; GTK career development; Evaluation of competency improvement. These findings show that change awareness has a strategic position as an agent of educational transformation as well as the development of teachers and education personnel. Build an understanding of the urgency of the changes that must be made. This awareness serves as a psychological and organizational foundation that determines the level of acceptance of the expected change. Without awareness of change, policies tend to be understood as administrative obligations that must be fulfilled, not as organizational needs to improve the quality of education services.

The results of this study are in line with various previous studies that place the success of educational transformation determined by teacher capacity building, leadership, collaboration, and organizational culture change (Fullan, 2007, 2013) In the context of contemporary educational change, organizations are no longer enough to just carry out policies formally, but must be able to understand the fundamental reasons why educational transformation and change leadership are necessary. Therefore, awareness of change is the starting point that determines the effectiveness of the implementation of education policies.

These findings are also reinforced by research showing that educational transformation requires systemic changes involving teachers, leadership, technology, and educational governance (UNESCO, 2021). The current educational environment is characterized by changes that are taking place very quickly, both caused by technological developments, changes in the needs of students, and social dynamics that affect educational practices. In such a situation, education organizations will directly experience significant changes and tend to be more prepared to develop adaptation strategies than organizations that wait for changes to occur before taking action. In other words, change awareness allows organizations to move from a reactive approach to a proactive approach to managing change.

The results of this study are also in line with the OECD study (2020) which shows that the education system must develop teacher competencies to be able to face technological changes and future needs. Organizations that have a strong awareness of future challenges tend to be more successful when they are able to adapt to technological advancements.

In the context of digital transformation, the findings of this study are supported by research that shows that educational changes in the digital era not only require technological readiness, but also organizational culture and human resource readiness (Mifsud, 2022). Many educational transformation programs experience obstacles because organizations focus more on technical aspects than building awareness of the importance of change. As a result, technology is often only used as an additional tool without producing substantive changes in educational practices. The findings of this study show that BBGTK North Sumatra has carried out a strategic role as an agent of educational transformation through the development of the competencies of teachers, school principals, school supervisors, and education personnel. This role is realized through the implementation of various competency improvement programs that integrate training, mentoring, strengthening the learning community, and the use of digital technology to support sustainable improvement of the quality of education. These findings are also in line with BBGTK's institutional mandate in supporting GTK competency development through ongoing training, mentoring, partnerships, and educational services.

In addition, previous research has shown that improving the quality of education requires a culture of professional collaboration and a learning community of teachers (Hargreaves & O'Connor, 2018)). Various programs, such as Teacher Professional Education (PPG), Teacher Competency Improvement, School Prospective Principal Program (BCKS), School Supervisor Candidate Program (BCPS), Early Childhood Teacher Training, inclusive education, *deep learning*, *coding*, *Artificial Intelligence* (AI), GEMBIRA mathematics, and strengthening guidance and counseling services, show that BBGTK is not only oriented towards improving knowledge, but also on the development of professional competencies relevant to the needs of 21st century education.

Furthermore, research on the implementation of online, offline, and *blended learning training*, the use of Teacher Studios, the development of digital learning media, and the implementation of information technology in the process of teacher professional development. This approach shows that educational

transformation is not only realized through policy changes, but also through a change in the learning paradigm that is more adaptive, innovative, and technology-based.

However, the findings of this study provide a more in-depth perspective than various previous studies. Most previous research explains that changes in education are generally triggered by external factors such as policy reforms, globalization pressures, or technological developments. Instead, this study found that change awareness develops from the organization's ability to critically reflect on the gap between existing conditions and expected conditions in the future. Thus, change is not only understood as a response to external pressures, but as a result of an organizational learning process that allows the emergence of an awareness of the need for transformation.

From the perspective of change management theory, these findings reinforce the concept of *creating a sense of urgency* put forward in the organizational change model. Awareness of the need for change is the initial stage that determines the success of the implementation of change in the next stages. Organizations that are able to build a sense of urgency for change tend to have lower levels of resistance and higher levels of commitment to policy implementation. In contrast, policies implemented without awareness of change often result in only formal compliance without resulting in substantive changes in organizational practices.

Furthermore, the findings of this study broaden the understanding of the implementation of education policies by showing that awareness of change not only functions as a supporting factor for policy implementation, but also as a mechanism that shapes the meaning of policy itself. Education policy becomes more acceptable when it is understood as a solution to the challenges faced by the organization, not just an instruction that must be implemented

Agent Transformation of Innovation-Based Learning and Technology

The second finding shows that BBGTK plays a role in encouraging the transformation of the learning process through the development of educational innovations and the use of digital technology. This function is realized through technology-based learning training, *Artificial Intelligence (AI)*, *coding*, *deep learning*, *Learning Management System (LMS)*, Studio Guru, and various digital learning media that support improving the quality of learning. Indicators: Development of digital learning; Utilization of AI in education; Development of learning media; Strengthening teachers' digital literacy; Integration of technology in the teaching and learning process. These findings indicate that the success of the implementation of education policies is highly dependent on the professional capacity of teachers as the main implementers of policies at the school level. Policies formulated at the macro level will not result in significant changes if they are not followed by an increase in the capacity of the individuals responsible for translating these policies into learning practices. In this context, teachers are no longer positioned as *policy recipients*, but as change *agents* who determine the success of education policy implementation.

The results of this study are in line with various studies that affirm that teacher professional development is a strategic factor in the success of educational change. Effective professional development must be integrated with the needs of school changes, the needs of students, and the challenges faced in daily learning practices (Kennedy, 2019). Thus, professional development cannot be understood as an incidental training activity, but rather as a continuous learning process that supports the transformation of educational organizations.

The findings of this study are also supported by research showing that teacher involvement in *the Professional Learning Community (PLC)* contributes to increasing professional capacity and learning innovation ability (Admiraal et al., 2021). Through professional learning communities, teachers gain opportunities to share experiences, discuss learning challenges, and develop solutions collectively. This condition allows for a more contextual professional learning process compared to conventional training approaches that are often one-way and separate from real needs in the field.

In addition, a systematic study conducted by Vangrieken et al. (2022) shows that teacher collaboration has a significant influence on the effectiveness of implementing educational change. Teachers who work in collaborative environments tend to be more open to innovation, more receptive to change, and better able to integrate new policies into learning practices. These findings reinforce the results of research that professional

capacity development is not only related to the improvement of individual competencies, but also relates to the ability to build collective capacity through continuous professional interaction.

The results of this study also received support from the research of Prenger et al. (2021) which found that professional learning communities contribute to improving professional reflection, pedagogic competence, and teachers' ability to manage change. Teachers who are actively involved in the process of reflection and shared learning tend to have better ability to understand policy objectives and apply them in diverse learning contexts. Thus, professional development not only results in an improvement in technical skills, but also strengthens the adaptive capacity necessary in the face of educational changes.

In the face of the dynamics of educational change that is taking place at an accelerating, Asterhan et al. (2024) emphasized that *evidence-based professional development* plays an important role in increasing teachers' readiness to face educational transformation. Development programs that are prepared based on real needs in the field and supported by empirical evidence are considered more effective in strengthening teacher competence and improving the quality of education policy implementation than programs that are only oriented towards delivering materials or transferring knowledge alone. These findings are in line with the results of this study which shows that competency development in BBGTK North Sumatra Province is not only directed at improving professional knowledge and skills, but also at strengthening the ability of teachers and education staff to adapt to changes, utilize learning innovations, and solve various problems faced in educational practice.

Brown (2021) explained that the success of educational transformation is not only determined by the policies or programs implemented, but also by the organization's ability to build *professional capital*. The concept of *professional capital* refers to the integration of individual capacity, social capacity, and capacity to make professional decisions that together become the foundation for the creation of sustainable change. Educational organizations that have strong *professional capital* will be better prepared to face various challenges and uncertainties, better able to encourage innovation, and more effective in maintaining the sustainability of improving the quality of education in the long term. Thus, strengthening *professional capital* is one of the key factors in supporting the success of education transformation and improving the quality of educational organizational performance.

The findings of this study show that the development of teachers' professional capacity in BBGTK North Sumatra is not only directed at improving technical skills, but also at building collective abilities that enable teachers to adapt to changes in the educational environment. This condition shows that the implementation of education policies does not take place through a top-down instructional mechanism, but through a professional empowerment process that allows teachers to play an active role in translating policies into educational practices. In other words, the effectiveness of policies is not determined by the level of compliance with regulations, but by the ability of teachers to construct the meaning of policies in the context of learning they are facing.

When compared to the results of previous research, the findings of this study offer a more comprehensive perspective on the relationship between educational transformation and the professional development of teachers and education personnel. Various previous studies generally view professional development as one of the supporting factors for the success of educational transformation. However, the results of this study show that professional capacity development does not only play a supporting role as a supporting factor, but also becomes a core mechanism that connects policy with educational practices in the field. In other words, the implementation of education policy does not automatically result in changes in the learning process, but takes place through the process of strengthening the competence, knowledge, and professional capacity of teachers as the main implementers of policies. Therefore, the success of educational transformation is highly dependent on the effectiveness of professional development strategies that are able to increase teachers' readiness to translate and implement policies into quality learning practices.

This research positions BBGTK as an agent of educational transformation, not just as an institution that organizes teacher training. In contrast to most previous studies that focused more on training effectiveness, curriculum implementation, or partial competency improvement, this study comprehensively examines how

BBGTK carries out its strategic role as an institution that connects national education policies with implementation at the regional level through the development of teachers and education personnel.

The results of the analysis show that education transformation is essentially a process of strengthening *professional capital* that takes place continuously. The success of an education policy is not solely measured by the level of compliance with administrative aspects, but rather determined by its ability to increase the professional capacity of teachers as the main implementers of policies in the education unit. Strengthening this capacity allows teachers to be more adaptive in responding to changes, developing learning innovations, and facing various increasingly complex educational challenges. Thus, efforts to realize the implementation of effective education policies need to be balanced with adequate investment in the development of competencies and professionalism of teachers and education personnel. Therefore, in addition to focusing on the preparation of regulations, the government also needs to pay greater attention to strengthening the capacity of educational human resources as a key factor in realizing a sustainable education transformation.

Professional Learning Ecosystem Enhancer

The fourth finding shows that BBGTK functions to build a collaborative professional learning ecosystem through the formation of learning communities, the development of professional networks, the dissemination of best *practices*, and partnerships with various education stakeholders. This function aims to create a culture of *lifelong learning* for teachers and education staff. Indicators: Development of learning communities; Collaboration between teachers; Partnerships with education and higher education offices; Dissemination of learning innovations; Strengthening organizational learning culture.

The findings indicate that the concept of collaborative professionalism, which is a professional development approach that emphasizes collaboration between teachers as the foundation for improving the quality of education. Their research results show that professional development is more effective when it is built through a culture of mutual trust, shared responsibility, collective reflection, and sharing of good practices rather than just individual training. This model encourages the formation of a sustainable professional learning ecosystem and has a direct impact on improving the quality of learning (Hargreaves and O'Connor, 2018)

The research has relevance to the learning community, mentoring, and scanning program carried out by BBGTK is a form of collaborative *professionalism* implementation in building a professional learning ecosystem. The results of this study are in line with research that shows that the factors that influence the success of Professional Learning Communities (PLCs) in schools. The study found that the success of PLCs is influenced by supportive leadership, shared vision, a culture of collaboration, reflective dialogue, and active involvement of teachers in the professional learning process. PLC has been proven to be able to improve teacher competence while strengthening learning innovation in schools (Schaap and de Bruijn, 2018). Having relevance to the learning community facilitated by BBGTK is one of the strategies to build a collaborative learning culture and strengthen teacher professional development in a sustainable manner.

From the above description, it can be concluded that teacher professional development is the main mechanism for the implementation of education policies, not just a supporting factor. The success of the policy depends on the ability of the institution to build the professional capacity of teachers and education personnel.

The Role of Implementation and Strengthening of Education Policy

These findings show that BBGTK plays a role as a link between national education policy and its implementation at the regional level. This function is realized through policy socialization, program preparation according to regional characteristics, curriculum implementation facilitation, and assistance to education units in implementing various government priority programs. Indicators: Socialization of education policies; Curriculum implementation assistance; Adapting the program according to regional needs; Coordination with local governments; Monitoring the implementation of the policy.

The findings indicate that the biggest challenge in developing a teacher professional development ecosystem approach that places professional development as part of an ecosystem involving various stakeholders, such

as governments, schools, universities, professional communities, and technology providers. This study shows that an ecosystem-based approach results in professional development that is more sustainable, flexible, and relevant to the needs of teachers because it is built through collaboration and *value co-creation* (Falkner et al. 2018). This research has relevance to the role of BBGTK which integrates training, mentoring, digital transformation, learning communities, and cross-institutional partnerships as a strategy to build a professional learning ecosystem in North Sumatra Province.

The results of this study are in line with research that shows that a teacher professional development ecosystem that places professional development as part of an ecosystem that involves various stakeholders, such as the government, schools, universities, professional communities, and technology providers. This research shows that an ecosystem-based approach results in professional development that is more sustainable, flexible, and relevant to the needs of teachers because it is built through collaboration and shared value creation (Falkner et al., 2018)

Based on various previous researches, it can be concluded that strengthening the professional learning ecosystem is not enough to be realized through the implementation of training alone, but requires the integration of various components, such as professional collaboration, learning communities, supportive leadership, the use of digital technology, inter-institutional networks, and a culture of reflection and continuous learning. In the context of this research, BBGTK North Sumatra Province carries out this function through the implementation of training, mentoring, learning community development, digital transformation, and strategic partnerships that jointly form a development ecosystem

The Role of Monitoring, Evaluation, and Sustainable Development

BBGTK functions to monitor, evaluate, research, and develop all programs to improve the competence of teachers and education personnel. This function aims to ensure the effectiveness of the program, identify development needs, and produce policy recommendations for sustainable improvement of the quality of education. Indicators: Monitoring the implementation of the program; Evaluation of the impact of training; Educational research and development; Development of training models; Preparation of policy recommendations.

These findings show that the Monev formative model (individual mentoring) is more effective in changing the teacher's teaching paradigm than document-based summative evaluation (Rahmawati et al., 2022). This is in line with the opinion of Fullan (2016) who states that monitoring and evaluation in education transformation is not just a tool of bureaucratic control, but a reflective instrument that provides *real-time data* to correct policy directions and increase the capacity of teacher adaptation in the field.

The findings indicate that the biggest challenge is due to the geographical location and infrastructure in areas such as the Nias Islands and the interior of Bukit Barisan causing data bias in Monev which is based on a full digital platform (Siregar, 2024).

In line with the view (Fullan, 2016) that monitoring must function as a reflective instrument, the North Sumatra BBGTK in its role as a transformation agent should not be trapped in a mere administrative Monev. This is reinforced by findings (Rahmawati et al., 2022) which confirm that personal continuous mentoring is much more effective in changing the school ecosystem. Therefore, this research tries to map how the evaluation function carried out by the North Sumatra BBGP can bridge the inequality in the quality of teachers, especially considering the real challenges in the form of geographical disparities that have been identified by (Siregar, 2024) in the North Sumatra region.

Overall, these findings confirm that these five functions show that BBGTK not only plays a role as a training provider, but also as an agent of educational transformation that has a strategic function in developing educational human resources, encouraging learning innovation, strengthening collaboration between stakeholders, implementing education policies, and ensuring the sustainability of improving the quality of education through monitoring, evaluation, and research. Through these functions, BBGTK contributes to

realizing an education system that is adaptive, innovative, inclusive, and oriented towards improving the quality of learning and learning outcomes of students.

IV. References

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