



# Teacher Training and Professional Development: Addressing the Needs of Thai Educators in the 21<sup>st</sup> Century

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## Abstract

This paper examines teacher training and professional development in Thailand, addressing the evolving needs of educators in the 21st century. The rapid advancements in technology, shifting educational paradigms, and the need for student-centered learning demand a restructured approach to teacher training. Traditional teaching methodologies, which have long emphasized rote memorization, must be replaced with dynamic, inquiry-based, and technology-integrated pedagogical strategies. This study explores the gaps in Thailand's current teacher training programs, focusing on digital literacy, pedagogical innovation, and continuous professional development. It highlights the significance of lifelong learning for teachers and the necessity of aligning training curricula with international best practices. Additionally, the research underscores the role of mentorship, experiential learning, and interdisciplinary collaboration in improving teaching effectiveness. The findings advocate for a holistic, flexible, and culturally responsive professional development framework that empowers Thai educators to meet the challenges of modern education and enhance student learning outcomes.

**Keywords:** Teacher Training, Professional Development, Digital Literacy, Pedagogical Innovation, Lifelong Learning

## 1. Introduction

In a time marked by fast technology changes and shifting teaching methods, the growth of teachers needs a quick look-over, especially in Thailand's schools. The challenges of getting students ready for the 21st century require a move away from old teaching styles to more active, student-focused methods. As the world grows and changes what skills workers need and how culture views education, teachers in Thailand must adapt while staying true to key teaching principles. This paper will look at why structured teacher training and ongoing development programs are essential for giving Thai teachers the skills they need to improve student learning. By focusing on these programs, those involved can build a strong educational system that meets today's needs and future goals for teaching and learning in Thailand.

In the last few years, Thailand's education system has had many problems due to cultural and economic changes. The system has mainly focused on memorization and standard tests, which often do not help students gain critical thinking or practical skills needed for the global economy. The growth of diverse communities in places like southern Thailand shows the urgent need for a more inclusive education system. A recent case study indicates that faculty members see the value in culturally responsive leadership in schools, suggesting a need for different teaching methods to prepare teachers for diverse environments (Maitreephun et al.). Additionally, the reliance on foreign funding highlights the challenges of agency and control

in Thai schools (Carmody et al., 2017). This complex situation requires a review of teacher training and professional development to better serve the current needs of educators in Thailand.

In dealing with the challenges of today's education, strong teacher training and professional development programs are really important. In Thailand, quick changes in curriculum that focus on digital skills show that teachers need to adjust and use new technology in their teaching methods. The issues ICT teachers experience during these changes point out the critical need for continuous professional development; if they don't get enough support, teachers find it hard to choose the right resources and change their teaching methods, as shown by findings that show a lack of training and resources as major problems (Boonmoh et al., 2024). Also, re-training teachers is vital not just for current skills but also for encouraging a habit of lifelong learning among teachers, where they can develop and use metacognitive strategies (Coleman et al., 2016). Therefore, focusing on thorough professional development programs is essential for preparing Thai teachers to handle the changing needs of education in the 21st century effectively.

In looking at the main goals of this essay, it is important to discuss how good teacher training and professional development can really change the skills of Thai teachers. The use of problem-based learning (PBL) and improving information communication technology skills, shown in a study that indicates noticeable improvement in learning results, is an important part of modern education that this essay wants to focus on (Chardnarumarn et al., 2023). Additionally, including digital literacy in teacher education programs after the pandemic shows ongoing issues and needed changes, highlighting that continuous professional development should be a main concern (Boonmoh et al., 2024). By examining these structures, the essay hopes to give practical suggestions that not only fix current problems but also fit with the changing educational environment in Thailand. In the end, the objectives presented push for a strong and flexible method to teacher training that supports teachers and, in turn, enhances student learning results in the 21st century.

In looking at what Thai teachers need, a close look at the current teaching situation shows clear problems in teacher training and professional growth. The move to a new educational system, highlighted by curriculum changes from 2021 to 2023, underlines the need for teachers to gain digital skills and ICT knowledge that fit today's teaching demands (Boonmoh et al., 2024). However, without a clear plan for professional growth, teachers encounter big issues, such as limited resources and poor training, which make it hard for them to put these changes into action. Additionally, adding metacognitive strategies to teaching is important for encouraging lifelong learning—an important skill for doing well in the 21st century (Coleman et al., 2016). Therefore, strong professional development programs need to focus on continuous support and training, making sure that teachers are ready to deal with these issues and motivated to take them on, which will ultimately improve educational results for students throughout the country.

Good essay structure is important for making complicated arguments clear, especially when talking about teacher training and professional growth for Thai teachers in the 21st century. An organized essay should start with an introduction that outlines the main point and gives the reader a guide, followed by paragraphs that focus on specific topics like changing teacher education programs, using digital skills, and the problems teachers face, as shown by recent studies. For example, the need for ongoing professional growth is vital to tackle the gaps in current teacher practices and to help them deal with the changing education system, as noted by (Boonmoh et al., 2024). Lastly, a clear conclusion should bring together these ideas, supporting the claim that planned and organized strategies for professional growth can help Thai teachers succeed during ongoing changes in education, as highlighted in (Coleman et al., 2016).

## **1. The Current State of Teacher Training in Thailand**

Even with different government programs aimed at improving teacher training in Thailand, there are still big gaps in getting teachers ready for today's teaching needs. Historical reviews show that changes meant to move from teacher-focused to student-focused teaching have faced a lot of pushback from teachers, who often find it hard to adjust to new ways of teaching (Jivaketu et al., 2016). Moreover, a two-year study on professional development (PD) for primary science teachers in STEM education points out that although there are good training elements, regional factors affecting teacher performance do not vary much overall (Tientongdee et al., 2022). This points to deeper problems beyond local differences, indicating that the training systems may not meet the specific needs of teachers in various situations. Therefore, while there is a possibility for effective teacher training, it is crucial to re-evaluate the training methods and curricula to improve the skills of Thai educators and create a more flexible educational environment.

### **Historical context of teacher training programs**

The growth of teacher training programs shows how society and education ideas change over time. In the early 1900s, many programs were shaped by the progressive education movement, which focused on hands-on learning and putting students first. This change was meant to help teachers gain knowledge and also the real-world skills needed to create engaging classrooms. However, as seen in (Strohschen et al., 2018), university-level adult education programs started to develop due to the complicated needs of modern education, focusing on teamwork between different fields. This historical background is important for examining today's teacher training systems, especially for Thai teachers who are dealing with the challenges of the 21st century. Meeting these needs is essential as teachers face a more connected world, highlighting the need for flexible and useful professional training that recognizes and builds on earlier education changes.

### **Analysis of existing teacher training curricula**

The current teacher training programs, especially with changing educational trends, show a clear need for change to align with 21st-century teaching requirements. Traditional behaviorist approaches, as reported, often do not provide teachers with the metacognitive skills needed for promoting lifelong learning, revealing a significant shortfall in professional training ((Coleman et al., 2016)). In Thailand, new curriculum changes have pushed ICT teachers to integrate digital literacy, but they face major obstacles, such as poorly designed professional development options and lack of preparation for the teaching changes needed in a digital environment ((Boonmoh et al., 2024)). The existing programs frequently neglect the importance of continuous training that meets these changing demands, leading to educators feeling unprepared to use modern teaching methods. Therefore, a thorough evaluation and revamp of teacher training programs are essential to ensure that Thai teachers are ready to engage students in a more complicated and interconnected world.

### **Challenges faced by Thai educators in training**

Thai teachers face many problems preparing for the complex demands of teaching in the 21st century. These problems include outdated teaching methods and a lack of professional development. Even though there have been recent calls for new approaches, many Thai teachers still rely on traditional behaviorist methods, which limit how effective and innovative they can be in their teaching. Recent studies show that current training programs do not give teachers the skills they need in metacognition, which is important for encouraging lifelong learning in students (Coleman et al., 2016). Additionally, there is a significant shortfall in

training related to Technological Pedagogical and Content Knowledge (TPACK) for Thai educators. Teachers do not have enough resources or structured support to understand how to use technology effectively, which makes it hard for them to adapt to new learning settings (Nuangchalerm et al., 2020). Thus, solving these issues is crucial to updating education in Thailand and ensuring that teachers are well-prepared for their various roles.

### **Comparison with international teacher training standards**

Aligning teacher training programs with world standards is very important for improving education quality in Thailand, especially as the world of education changes. Current methods show a focus on old behaviorist techniques, which might limit the creation of new teaching methods necessary for 21st-century learning settings (Coleman et al., 2016). Global standards put greater importance on including Technological Pedagogical and Content Knowledge (TPACK), which offers a complete way to train teachers that combines subject knowledge, teaching strategies, and tech skills (Nuangchalerm et al., 2020). By using such frameworks, Thailand can develop a teaching staff that not only delivers lessons well but also uses various teaching methods and technology in the classroom. Therefore, matching Thai teacher training programs with these global standards would help educators build lifelong learning skills, ultimately enhancing student performance and preparing future generations for the challenges of a globalized world.

### **Stakeholder perspectives on teacher training effectiveness**

To talk about how good teacher training is, it's important to know what different people think, especially teachers, school leaders, and those who make education policies. Teachers often feel upset with training programs because they don't make it easy to apply what they learn in real classrooms. This shows a gap between professional development and the real challenges teachers face. As stated in (Ngoc et al., 2024), the lack of ability among teachers to create and assess hands-on activities shows this gap, showing that just attending training isn't enough to make teaching better. Meanwhile, administrators usually want to see results based on data; they look for proof that training makes a difference and helps schools improve. Research shows that all groups believe in the need for targeted training programs to fix specific issues, especially in analyzing situations and evaluating methods. This agreement among the involved groups highlights how important it is to have educated choices in teacher training to make sure teachers can handle the challenges of modern teaching, as noted in (Ann My Thai et al., 2009).

## **2. Professional Development Needs of Thai Educators**

Teachers in Thailand have an urgent need for professional growth that matches current educational trends and includes technology use in teaching. The common behaviorist approach found in many schools limits new teaching methods, highlighting the need for a change in professional development efforts. Recent discussions show that helping teachers develop metacognitive strategies can greatly improve student involvement and learning results, making it crucial for teacher training programs to focus on these changing demands (Coleman et al., 2016). Additionally, the Technological Pedagogical and Content Knowledge (TPACK) framework is becoming important for preparing teachers, encouraging a combined method for content, teaching, and technology (Nuangchalerm et al., 2020). This growth in professional development should not only cover new teaching methods but also promote a lifelong learning mindset, helping Thai teachers succeed in a changing educational environment. This way, we can make sure they are ready to face the challenges of teaching and learning in the 21st century.

### **Identification of key professional development areas**

When looking at what Thai teachers need in the 21st century, it's important to find and focus on main areas for professional development that fit current education demands. One important area is adding metacognitive strategies into teaching, which is discussed in the ongoing talks about how traditional behaviorist approaches are relevant today. Specifically, (Coleman et al., 2016) points out the need for a change in approach that addresses students' changing needs and promotes lifelong learning through understanding one's own learning processes. Additionally, using digital technologies in schools is very important. Using digital tools and games, as suggested in (Ann My Thai et al., 2009), can improve how educators teach while also building critical skills and resilience in students. Thus, professional development programs should not just cover teaching methods but also include digital skills and metacognitive strategies, ensuring that Thai teachers can succeed in a more complicated education environment.

### **The role of technology in professional development**

In the current digital education world, using technology in teacher training is necessary for teachers to be effective and adaptable. Old-fashioned teacher training often does not give educators the skills they need to handle fast-changing educational technologies. So, it is important to rethink teacher training programs to focus more on technology skills. Recent studies, like the one on teachers' experiences with digital literacy in Thailand, show there is a big need for ongoing, organized professional development that emphasizes the right use of ICT tools and teaching adjustments (Boonmoh et al., 2024). Additionally, the Technological Pedagogical and Content Knowledge (TPACK) framework highlights the importance of mixing tech knowledge with teaching methods in teacher training (Nuangchalerm et al., 2020). By supporting thorough, tech-centered professional development, schools can help teachers improve their teaching methods and create more engaging and innovative learning spaces for today's students.

### **Importance of continuous learning and skill enhancement**

In a time when technology is advancing fast and education is changing, it is very hard to ignore how important continuous learning and skill improvement are for teachers. In Thailand, teachers have big problems adding information communication technology (ICT) into their teaching, as shown in (Boonmoh et al., 2024). This research points out issues like low digital skills and not enough training. Therefore, ongoing professional development is crucial since it gives teachers the skills they need and helps them adapt to new teaching methods. Also, using new teaching styles, such as problem-based learning, can greatly improve students' ICT skills (Chardnarumarn et al., 2023). Thus, to get teachers ready for today's education demands, a clear plan for ongoing professional learning is necessary, which will help both their progress and better student results.

### **Cultural considerations in professional development programs**

The addition of cultural aspects in professional development programs is important for creating a good learning atmosphere for teachers. Many programs do not consider the cultural backgrounds of those involved, which can make it hard for them to engage and use new skills effectively. For instance, in international partnerships, like those suggested between American and Thai classrooms, cultural differences can affect how people communicate and work together (Hite et al., 2019). Also, recognizing varied cultural situations allows for the modification of teaching methods that align with local customs, improving the effectiveness of training overall. Researchers say that when programs include cultural understanding, they help not just with academic success but also with personal growth, as teachers learn to manage and blend these differences into their teaching styles (Ann My Thai et al., 2009). Therefore,



focusing on cultural aspects in professional development is not just a side issue; it is an essential part that can lead to deeper and longer-lasting educational outcomes in Thailand.

### **Impact of professional development on student outcomes**

The link between professional development and student results is being seen as very important for making education better. Good professional development programs that use new teaching methods help boost student learning. For example, research highlights the need to go beyond old behaviorist approaches and adopt methods that focus on metacognitive strategies, which help students learn for life (Coleman et al., 2016). This change means teachers need thorough training to gain the skills they need for successful implementation. In addition, studies from various settings have shown that using problem-based learning (PBL) in teaching not only improves teacher skills but also greatly benefits student outcomes. One study found a significant rise in ICT skills among computer science students after using a well-structured PBL strategy (Chardnarumarn et al., 2023). Therefore, focusing on strong professional development is crucial for giving teachers the expertise they need to boost student academic achievement in the 21st century.

## **3. Innovative Approaches to Teacher Training**

Teacher training needs to change to match what is needed in the 21st century, requiring new methods that focus on critical thinking and thinking about one's own thinking. Traditional behaviorist models have been the main focus in education, which usually put more weight on memorization than on deep understanding and real-life application. Therefore, to develop skills for lifelong learning, it is important to add metacognitive approaches into teacher training programs, as recent studies suggest that educators should change their teaching styles (Coleman et al., 2016). Additionally, the rise of digital technology has greatly changed the education environment, making it essential for the curriculum to prepare teachers to use digital tools in their teaching methods. This is backed by findings that look at how digital games can improve not just academic success but also health, showing that interactive learning settings can engage students better ((Ann My Thai et al., 2009)). By adopting these new training methods, educators in Thailand can create a more thoughtful and flexible teaching style, which will improve educational results in a fast-changing world.

### **Integration of experiential learning in training programs**

Bringing experiential learning into teacher training programs is essential for creating adaptable and effective teachers in Thailand's changing education system. By focusing on hands-on, inquiry-based methods, these programs can improve engagement and understanding for educators, helping them link theory to real-world application. Studies show that teachers who have Technological Pedagogical Content Knowledge (TPACK) can better use technology in their lessons, which boosts inquiry-based learning outcomes in science (2024). Additionally, a recent study found that although teachers are good at planning experiential activities, there are still significant gaps in their ability to analyze contexts and process information (Ngoc et al., 2024). This highlights the need for specific professional development programs to fill these gaps. Therefore, creating a culture of ongoing improvement through experiential learning not only supports and empowers teachers, but also enhances student experiences, which is vital for achieving the education goals of the 21st century in Thailand.

### **Use of online platforms and resources for training**

The use of online platforms and tools in teacher training is becoming very important for improving teaching practices today. These digital resources help teachers access many

educational materials and encourage collaboration among educators through networking. Moreover, online training can meet the various needs of learners, especially in a diverse place like Thailand. Recent studies show that using creative methods like problem-based learning can greatly improve teachers' skills; for example, problem-based learning (PBL) models have led to better information communication technology skills among Thai university students ((Chardnarumarn et al., 2023)). Plus, using digital games for professional development is thought to help with skill learning and knowledge retention, which results in better teacher performance and student results ((Ann My Thai et al., 2009)). Combining digital resources with training methods is crucial for getting Thai educators ready for today's challenges.

### **Collaboration with international educational institutions**

Working together with schools from other countries is an important chance for Thai teachers to improve how they teach and grow professionally. Teaming up with global partners helps share new teaching ideas and tools, especially when it comes to using technology in lessons. For example, during the recent changes in the curriculum from 2021 to 2023, Thai universities had a hard time effectively bringing in ICT and digital skills (Boonmoh et al., 2024). By joining forces with top international schools, teachers can get important training that focuses on using these technologies practically, thus filling knowledge gaps and creating a more flexible teaching setup. Also, joint efforts can help create focused professional development programs that take local situations into account while using global best practices (Ann My Thai et al., 2009). Therefore, forming international partnerships not only makes the professional environment better for Thai teachers but also helps improve student learning results in the 21st century.

### **Mentorship and peer support systems**

Good mentorship and peer support systems are very important for helping educators grow professionally in Thailand, especially with changing educational needs. The ongoing reforms, like the Teacher Competency Standards Framework in Burma, show that structured mentorship can greatly improve teacher skills and responsibility (Chan et al., 2021). By setting up networks that promote collaboration and shared learning, new teachers can gain from the experiences and knowledge of their peers, which leads to better teaching methods and higher student success. Additionally, programs that let educators choose their own paths for development encourage control and ownership in their professional growth, highlighting the need for tailored learning environments (Chan et al., 2021). These systems not only create a helpful environment that supports ongoing improvement but also meet the various needs of educators dealing with the challenges of 21st-century teaching. Thus, putting money into mentorship and peer support systems is vital for building a strong and capable teaching workforce in Thailand.

### **Case studies of successful innovative training programs**

Training programs for educators that are new and helpful tend to use active learning methods and respond to changing educational needs. For example, using metacognitive strategies in teacher training is a new way to help teachers promote lifelong learning in their students. This change moves away from traditional behaviorist approaches and highlights the importance of adapting teaching methods over time. Also, using problem-based learning (PBL) in teaching, as shown in a study with Thai university students, shows that combining information communication technology skills can improve overall learning results (Chardnarumarn et al., 2023). Looking at these examples shows that new training programs can improve teachers' skills and help them create more engaging and adaptable classrooms, which helps the education system as a whole. Therefore, ongoing research and development of

these programs are essential for improving professional development in Thailand's classrooms for the 21st century (Coleman et al., 2016).

#### **4. Policy Recommendations for Enhancing Teacher Training**

To create a strong educational environment, it is important that policy plans focus on complete teacher training programs that deal with the changing challenges of modern teaching. Building teamwork among teachers in schools can greatly improve their involvement in professional development (PD) opportunities (Nguyen et al., 2022). Also, making sure PD content matches real classroom needs and using context-based analysis can boost teaching effectiveness, as shown by the gaps in teachers' skills to plan and assess hands-on activities (Ngoc et al., 2024). By making PD seen as useful—highlighting clear results like better student performance—policies can encourage hesitant teachers to join in. Moreover, tackling practical issues like time and funding for PD efforts will support a culture of ongoing growth and a commitment to learning for educators. These suggestions aim to establish a lasting framework for teacher training that ultimately leads to a better education for students in Thailand.

##### **Government initiatives to support teacher training**

Educational reform in Thailand needs strong government efforts to improve teacher training for better education quality. Good teacher training programs are important to give teachers the skills needed to handle today's teaching challenges. Studies show that effective educational changes often come from policies that consider local needs ((Buckler et al., 2018)). For example, the Thai government's focus on modern learning tools, technology, and new teaching methods is key to changing how teachers teach in the classroom. In addition, research from the TRIAMPAT school group shows that good school management and well-structured curriculum design affect student success directly ((Ditsuwan et al., 2022)). Therefore, extensive government efforts that focus on ongoing professional development are not just helpful but necessary for building a skilled teaching workforce ready to face the challenges of the 21st century's educational environment in Thailand.

##### **Role of educational institutions in reforming training programs**

In today's changing school environment, it is very important to fix training programs in schools. As schools deal with challenges from the global situation and varied needs of students, moving away from a focus on behavior to one that promotes self-awareness and teamwork is necessary. This change aligns with findings that show innovative leadership is key to maintaining quality in education. For example, leaders of successful public schools in Thailand have shown that building a learning community and focusing on professional development are crucial for effective training results (Hamad et al., 2018). Additionally, improving teacher training needs a comprehensive approach that includes various teaching styles and supports teachers in continuous learning, as discussed in recent educational conversations (Coleman et al., 2016). In the end, schools must focus on changing their programs to create leaders who can support these important changes for the benefit of teachers and students alike.

##### **Funding and resource allocation for teacher development**

Teacher training and professional development effectiveness relies a lot on enough funding and good resource use, which are often ignored in talks about education reform. Without enough money, efforts to improve teachers' skills and teaching methods, like those for new digital learning needs, may not succeed. For example, the DL4D project examines how learning analytics can improve educational fairness and quality in developing areas (AGUERREBERE Cecilia et al., 2018). If funding for thorough and ongoing professional training is not made a priority, schools could continue to support unfairness and weaken the



chances for new educational advancements. Additionally, factors that affect education quality in vocational settings highlight how important resource management and leadership are for effective teacher training (Chongcharoen et al., 2017). So, focused investments in teacher development not only help teachers but are essential for building strong educational systems in Thailand and elsewhere.

### **Establishing partnerships with private sector organizations**

To improve how teachers are trained and developed, it is important to form partnerships with private businesses. These partnerships can offer useful resources like funding, new technologies, and industry knowledge, all of which are important for developing teaching innovations. For instance, having industry involvement can help bring digital games into the classroom, possibly boosting students' academic performance and health outcomes, as highlighted in related research (Ann My Thai et al., 2009). Additionally, by collaborating with private companies, vocational schools can gain strong leadership and better resource management practices, which are key factors that affect the quality of education (Chongcharoen et al., 2017). These partnerships not only help align educational goals with what industries need but also give teachers practical tools and methods to improve their teaching. In the end, involving the private sector can narrow the gap between theory and actual practice, making sure that educators in Thailand are ready to handle the challenges of the 21st century.

### **Monitoring and evaluation frameworks for training effectiveness**

Having strong monitoring and evaluation systems is very important to judge how well training programs work for teachers in Thailand. Weak systems usually provide weak information about how training affects teachers' ability to use digital tools and teaching methods. For example, programs may suggest new ways to use technology in the classroom, but without proper evaluation, it's hard to measure how much teachers actually improve (Minh et al., 2024). Past research shows that many teacher training programs in Thailand have not kept up with modern teaching practices, which causes some teachers to resist (Jivaketu et al., 2016). Therefore, creating detailed evaluation standards can help those in charge and teachers get the information they need to see what training parts work well and what needs changes. By creating a flexible training environment based on ongoing feedback, the professional growth of Thai teachers can be better aligned with the needs of present-day education.

## **5. Conclusion**

In summary, the changing needs in education require a careful look at how we train and develop teachers in Thailand. As the curriculum starts to include more technology and new teaching methods, using programs that involve problem-based learning (PBL) can really improve teacher skills, shown by gains in information communication technology competency (ICTC) among students when using these methods (Chardnarumarn et al., 2023). Additionally, using digital tools, such as games, has been noted to help improve student learning and support overall well-being (Ann My Thai et al., 2009). Therefore, it is essential to have a detailed plan that merges traditional teaching methods with modern digital tools to ensure teachers have the skills they need for the classrooms of today. This diverse training method not only meets the current needs of educators but also helps them create a flexible and engaging learning atmosphere that can handle the challenges of a more complicated education system.

When looking at the current state of teacher training and professional growth for educators in Thailand, several important points come up that show the need for change. One major theme is the requirement to include technology, especially after the COVID-19 pandemic exposed weaknesses in traditional teaching methods. For example, moving to online education

showed both the benefits of blended learning and its downsides, which stresses the need for a training system that helps teachers with good online interaction skills (Dusita Sirisakpanich, 2022). Also, adding robotics into lessons has been recognized as a way to develop important 21st-century skills in students. However, issues like poor integration into current curriculums and a lack of training options stop these new teaching methods from being used effectively (Aurini et al., 2022). These observations push for a focused approach that redesigns teacher training to include both new technologies and modern teaching practices.

The ongoing need for teacher development in Thailand is very important, especially with fast changes in technology and curriculum. Recent discussions about educational approaches, like those in (Coleman et al., 2016), show that traditional behaviourist methods can limit teachers' ability to meet new teaching requirements. This issue is especially clear when we think about how digital skills need to be part of teacher training programs, a need that became obvious during the pandemic, as noted in (Boonmoh et al., 2024). Without special training that focuses on these changing needs, teachers might find it hard to use new methods that are crucial for creating a modern learning space. Therefore, educational organizations must focus on thorough training and support systems, making sure teachers have not only the right skills but also the confidence to rethink their teaching methods, which will improve the overall quality of education in the country.

In the fast-changing world of education, all parties must come together to improve the quality of teacher training and ongoing professional development, especially for Thai teachers dealing with challenges of the 21st century. The need for a strong, changing approach is highlighted by recent results that point out important administrative factors affecting education quality, like transformational leadership and managing resources (Chongcharoen et al., 2017). Stakeholders, which include school leaders, policymakers, and educational institutions, should work together to offer focused training that not only gives teachers teaching skills but also builds a culture of ongoing improvement. Also, as digital learning plays a bigger role in education practices, learning analytics can provide information on effective teaching methods, helping stakeholders to make decisions based on data to tackle regional education gaps (AGUERREBERE Cecilia et al., 2018). By focusing on this united effort, we can make sure Thai teachers are prepared to handle the needs of today's students, which will improve the educational environment for everyone.

The growth of the Thai education system is very important for meeting today's global needs and improving student results. As recent talks about education changes show, old ways that rule the system must be broken down to support new teaching methods that focus on metacognition and lifelong learning (Coleman et al., 2016). This change needs a lot of money to retrain teachers, making sure they have the skills to create a more engaging and relevant learning space. Also, using digital technologies in teaching offers a chance to boost students' academic success and wellness. These improvements need teamwork between government bodies and schools to build research partnerships that look into these digital areas (Ann My Thai et al., 2009). In the end, adopting a new way of training teachers and helping them grow professionally will not only meet the needs of 21st-century educators but also get Thai students ready to compete globally.

In the 21st century, teachers need to handle new technology and changing teaching styles. There is a clear move toward more teamwork in learning environments, which requires teachers who can not only share information, but also encourage critical thinking, creativity, and flexibility in students. This job goes beyond what was done in the past; teachers must now also act as guides, advisors, and lifelong learners. Using a mix of resources, like online tools and various subjects, leads to a better education that prepares students for a more connected world. Additionally, ongoing training is crucial for teachers to have the skills needed to deal with new educational issues and different student needs. In the end, the future of education

depends on committed professionals who focus on constant improvement, new ideas, and teamwork, ensuring they are effective in helping students succeed and creating positive social changes in this changing environment.

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