



Strategies of secondary schools for teaching effectiveness development based on the concept of student growth

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Abstract

The aims of this study were to: (1) analyze the strengths, weaknesses, opportunities, and threats facing secondary schools in developing teaching effectiveness based on the concept of student growth; and (2) develop strategies of secondary schools for teaching effectiveness development based on the concept of student growth. 258 Thai secondary schools were selected by stratified random sampling as samples, with 516 informant teachers participating. The study revealed the following strengths, weaknesses, opportunities, and threats: (1) regarding teaching effectiveness, the strengths were expertise in the knowledge of teaching, engaging and analyzing student learning processes, and executing an effective classroom, whereas weaknesses were in encouraging a desirable learning environment, and exerting the use of appropriate instructional methods; technology provided opportunities, whereas economic, political and socio-cultural factors were the threats; (2) regarding teacher development, the strengths lay in supervision, evaluation and coaching, whereas mentoring and training were the weaknesses. Five strategies were: (1) enhancing a desirable learning environment; (2) planning appropriate instructional methods; (3) redesigning classroom management; (4) establishing approaches to monitoring student learning processes with engagement and analysis; and (5) advancing the effectiveness of knowledge.

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Introduction

Global education reformers and education managers have considered reducing summative academic performance assessments in order to focus more on each student's academic development and growth in

the classroom to determine 21st century student characteristics (Xinhua, 2021), conforming to Thailand's education management principle that every student can learn and grow; students are regarded as the most important individuals. The educational management process must encourage students to develop themselves naturally and to their full potential (National Education Act, 2019), as well as to improve and demonstrate academic progress in the event of student growth.

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The term “student growth” refers to the change in students’ learning outcomes, both in academic progress and as a parallel to the students’ desirable characteristics in society while in class with the teacher (Illinois Principals Association [IPA], 2017). Student growth is also an indicator of future achievement and a key factor in students’ long-term successes in terms of work and future career (Ruzek et al., 2015; Public Schools of North Carolina, 2020). Establishing student growth, on the other hand, is dependent on the teacher, who is the key to compelling students to change, develop, and progress in their learning (Texas Education Agency [TEA], 2017).

Thus, an effective teacher will enhance student learning, leading to academic progress, namely “student growth” and goal achievement (Howard, 2013). It can be said that student growth reflects the teacher’s teaching effectiveness (TEA, 2017). Thailand’s new teacher development policy has now focused on improving teacher quality, and secondary school teachers are seen as covering a period of high learning potential for students, as well as acquiring essential life skills and soft skills to influence future society. The challenge is that Thailand’s teacher development program has been misguided in failing to recognize secondary school development needs for teaching effectiveness based on the concept of student growth (Education Council, 2019; Wongnate, 2015). Teacher development has not been precisely focused on establishing and enhancing teaching effectiveness, such as teacher behavior and teaching and learning management processes; these are necessary if secondary school teachers are to develop in order to perform and exhibit effective teaching, allowing student growth to emerge. Teacher development primarily focuses on the knowledge base, with an emphasis on teaching skills and instructional methods expertise (Education Council, 2015, 2019; Ministry of Education [MOE], 2020; Wongnate, 2015). The aim is to prepare students to master a large amount of information for the high-level test without focusing on developing desirable characteristics. This causes many secondary school students to drop out at this point due to the prospect of a high-stakes assessment, society’s negative traits, or academic difficulty, which lowers their confidence in their ability to learn (Office of the Education Council [ONEC], 2020).

Consequently, the purpose of this study is to present strategies for secondary schools to develop teaching effectiveness based on the concept of student growth. Educators and policymakers should employ these strategies, taking them into account when developing secondary school teachers’ effectiveness in teaching and encouraging student growth. The strategies would

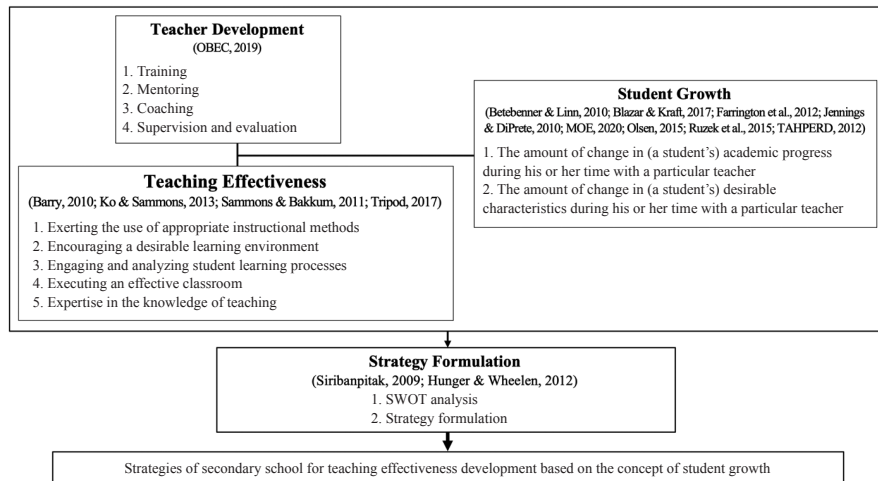
significantly enhance implementation and teaching effectiveness (Hanushek, 1992; Sanders et al., 1997). Teachers’ knowledge, skills, expertise, and desirable behaviors will eventually develop, resulting in changed and increased work efficiency in related fields and having a direct impact on students, significantly contributing to their change and growth (Lachlan-Haché & Castro, 2015; MOE, 2020).

Objectives

1. To analyze the strengths, weaknesses, opportunities, and threats facing secondary schools in developing teaching effectiveness based on the concept of student growth
2. To develop strategies of secondary schools for teaching effectiveness development based on the concept of student growth

Conceptual Framework

This study is influenced by Barry (2010), Ko and Sammons (2013), Sammons and Bakkum (2011), and Tripod (2017). The teaching effectiveness framework is structured as follows: (1) exerting the use of appropriate instructional methods; (2) encouraging a desirable learning environment; (3) engaging and analyzing student learning processes; (4) executing an effective classroom; and (5) expertise in the knowledge of teaching. In parallel, the emergence of the student growth framework reveals both the amount of change in (a student’s) academic progress, and desirable characteristics during his or her time with a particular teacher (Betebenner & Linn, 2010; Blazar & Kraft, 2017; Farrington et al., 2012; Jennings & DiPrete, 2010; MOE, 2020; Olsen, 2015; Ruzek et al., 2015; Tennessee Association for Health, Physical Education, Recreation and Dance [TAHPERD], 2012), which examine the relationship between student learning outcomes and teacher effectiveness. The teaching effectiveness development accommodated by a teacher development method is employed, as it is considered a basic practice any school can adapt and alter to suit the school environment for the improvement of the teacher’s teaching effectiveness and the teacher’s ability by gaining knowledge, skills, and personal characteristics consisting of (1) training, (2) mentoring, (3) coaching, and (4) supervision and evaluation (Office of the Basic Education Commission [OBEC], 2019). Moreover, strategy formulation relies on guidance from Siribanpitak (2009) and Hunger and Wheelen (2012), including (1) SWOT analysis and (2) strategy formulation.



Literature Review

The proposal linking student growth to teaching effectiveness can be traced back to 2001 and 2004, when the United States declared the “No Child Left Behind” Act to reduce gaps in learning among students. Since then, the act has been expanded with drastic new changes in the way learning is measured among students (Olsen, 2015). The benefits of student growth can be traced through this modification of the teaching process, in which the teacher compares each student’s results to their learning outcomes at the beginning of the teaching period. The concept of student growth posits that each student’s growth results in a different level of learning development in both academic outcomes and, in parallel, desired characteristics (Ruzek et al., 2015). In addition, desired characteristics can have a significant impact on a student’s learning development. A study found that students who enroll with the desired characteristics already in place will be able to develop their potential and comprehend the learning process. Consequently, these students tend to develop deep learning behaviors in terms of ability to connect and synthesize the new learning experience, other experiences learned, and surrounding behaviors with prior knowledge. This results in their future ability and efficiency in driving success at work (Burroughs et al., 2019; Jennings & DiPrete, 2010; Ruzek et al., 2015).

Additionally, student growth can be used to determine and evaluate a teacher’s effectiveness (McCoach & Colbert, 2010). Effective teaching causes the emergence and modification of academic outcomes and desired student behaviors (Jennings & DiPrete, 2010). Therefore, it is crucial in policy implementation and among teacher-training organizations, to execute and investigate the

development of both student growth and teacher effectiveness collectively as a paradigm of the efficacy of education. (Jennings & DiPrete, 2010; TAHPERD, 2012).

As teaching effectiveness represents the process of delivering knowledge, skills, and attitudes to encourage students’ significant development (Oyededeji, 2019), teaching is aimed at ensuring students achieve significant learning; therefore, when teachers utilize these values of teaching and deliver them to students (Ogunyemi, 2000), it is known as effective teaching or teaching effectiveness (Dash & Barman, 2016). According to Barry (2010), Sammons and Bakkum (2011), Ko and Sammons (2013), and Tripod (2017), the nature of teaching effectiveness can be referred to as the teacher: (1) exerting the use of appropriate instructional methods to stimulate students’ commitment to learning, helping them to understand content and to be able to solve problems until they develop the learning process; (2) encouraging a desirable learning environment that is conducive to learning; (3) engaging and analyzing student learning processes to enable students to appropriately integrate and synthesize learning-related information until they can develop themselves in the field of learning to meet expectations and raise their academic achievement; (4) executing an effective classroom by ensuring discipline, respect, and good behavior among students, and supervising the students to ensure that they are diligent in their assigned work; and (5) acquiring expertise in the knowledge of teaching in order to enhance content concentration, clarity, and comprehension in student learning so that students can modify their behavioral skills. Thus, teaching effectiveness also contributes to higher quality educational management, as it improves students’ ability to learn, so they can achieve or develop academic outcomes. It can be argued that teaching is effective when it enables students to learn.

This approach to encouraging teacher effectiveness implements and validates the personnel development model of McClelland (1973), modified by Parry (1998), as a powerful tool to maximize people's potential to authentically improve knowledge (K), skills (S), and attitude (A), and to witness expected outcomes in the teacher after the development has been successful. In terms of accumulating and balancing KSA to maximize the high potential of teaching (Blanchard, 2007), the development model should consist of the broader areas of: (1) activity tasks, to develop the body of knowledge and needs of teachers, as well as enhancing the teaching experience in the actual classroom setting; (2) hands-on practical experience, to encourage teachers to participate in development activities, to collaborate with each other through a participatory and interactive learning process, and to solicit advice for enhancing teaching experience through coaching and mentoring throughout the program's development; (3) ongoing supervision and evaluation, to urge and encourage teachers to apply the development program's knowledge and experience to their actual teaching situations (Anderson, 2004; Darling-Hammond et al., 2017).

As administering a secondary school requires a number of processes, utilizing this process as a component strategy in a school's administration is regarded as a mandatory method to drive the school, as strategy guides the actions and goals of a school towards appropriate pathways and procedures to overcome challenges. This approach requires: (1) environmental analysis; (2) study and analysis of strengths, weaknesses, opportunities, and threats (SWOT analysis); (3) strategy formulation; and (4) strategy implementation (Hunger & Wheelen, 2012; Siribanpitak, 2009).

According to the aforementioned observation of teaching effectiveness development and strategy, strategies of secondary schools for teaching effectiveness development based on the concept of student growth should be covered by and integrated with all of the aforementioned processes—training, mentoring, coaching, supervision, and evaluation—which are the significant methods for teaching effectiveness development in order to develop knowledge, skills and attitudes, thereby promoting the effectiveness of teachers and the growth of students.

Methodology

The study employed a multiphase, mixed-method design consisting of qualitative and quantitative research conducted in three phases. Phase one: to determine the conceptual framework, the study was drawn from qualitative techniques. Content analysis was performed to gather

details illustrating the conceptual framework along with questionnaire of the study. The content validity of the conceptual framework and questionnaire was subsequently verified using connoisseurship with five experts selected by purposive sampling in teaching effectiveness development, student development, and strategy formulation. Phase two: to analyze strengths, weaknesses, opportunities, and threats, a questionnaire was drawn on quantitative techniques and divided into four sections representing four dimensions of teaching effectiveness development based on the concept of student growth. Section 1 addresses general information about the participants, followed by a checklist evaluation. Section 2 discusses the internal factors contributing to the current and desired secondary school development needs for teaching effectiveness based on the concept of student growth. Section 3 discusses external factors such as political, economic, socio-culture, and technological. (A 5-point Likert scale presented in two tabular forms was employed in section 2 and section 3. All indicators were rated from 1 to 5, with 1 being strongly disagree and 5 being strongly agree. Section 4 presents suggestions for the study. Samples were 258 Thai secondary schools selected by stratified random sampling from 42 secondary educational areas comprising five regions according to the size of the school in four sizes, both urban and suburban, at 95 percent confidence level. The data were derived from two informant teachers from each school, 516 teachers in total. The Modified Priority Needs Index ($PNI_{Modified}$) in Wongwanich, 2015 and SWOT analysis were employed for the strategy formulation. Phase three: to develop strategies, two stages of connoisseurship were drawn on qualitative techniques performed using content analysis and semi-structured focus group discussion with ten experts selected by purposive sampling in teaching effectiveness development, student development, and strategy formulation to verify the strategies subsequently.

Data Analysis

To obtain the data for phase one, the conceptual framework along with questionnaire were analyzed using content analysis and content validity. Connoisseurship was performed by the experts to review content validity of the conceptual framework and questionnaire. The calculated IOC values were 0.86–1.00. The reliability test of the questionnaire was 0.99 (Cronbach's alpha coefficient). For phase two, to analyze strengths, weaknesses, opportunities, and threats, data analysis from the questionnaire commenced in two different steps. First, descriptive statistics were analyzed using the Statistical Package for Social Science (SPSS version 22;

SPSS Inc., Chicago, IL, USA) to investigate and classify the relationship between teaching effectiveness and student growth, illustrating average and standard deviation. Second, the Modified Priority Needs Index ($PNI_{Modified}$) was subsequently used to classify the current and desirable needs of secondary school development for teaching effectiveness based on the concept of student growth, in the formulation of $PNI_{Modified} = (I-D)/D$, where I represents the desirable needs and D represents the current needs, indicating high and low according to the Needs Analysis level (Wongwanich, 2015). The data were subsequently used to analyze the strengths, weaknesses, opportunities, and threats facing secondary schools in developing teaching effectiveness based on the concept of student growth (SWOT analysis) for the guidelines for the strategies. Strategies were formulated from the previous needs-analyzed data and SWOT analysis finding, which resulted in the first drafting strategy. With its higher Priority Needs Index, Modified ($PNI_{Modified}$) data were categorized for the strategy, followed by the others repeatedly. In phase three, to develop strategies, experts performed both stages of connoisseurship. First stage, content analysis was performed followed by the second stage, a semi-structured focus group discussion to review the data and assess the feasibility and suitability of the first and second drafting strategy respectively. The second drafting strategies were revised for finalization and presented for implementation in the future.

Results

Strengths, Weaknesses, Opportunities, and Threats Facing Secondary Schools in Developing Teaching Effectiveness based on the Concept of Student Growth

Strengths, weaknesses, opportunities, and threats for secondary schools in developing teaching effectiveness based on the concept of student growth are illustrated in the following tables:

Table 1 Secondary school teaching effectiveness based on the concept of student growth

Student Growth	SWOT analysis	$PNI_{Modified}$	Rank
- The amount of change in academic progress			
- The amount of change in desirable characteristics			
Teaching Effectiveness			
Exerting the use of appropriate instructional methods	Weakness (W2)	0.1380	2
Encouraging a desirable learning environment	Weakness (W1)	0.1390	1
Engaging and analyzing student learning processes	Strength (S2)	0.1371	4
Executing an effective classroom	Strength (S3)	0.1372	3
Expertise in the knowledge of teaching	Strength (S1)	0.1350	5

Strengths, weaknesses, opportunities, and threats are obtained from a Priority Needs Index, Modified ($PNI_{Modified}$) data as follows: Table 1 illustrates that expertise in knowledge of teaching ($PNI_{Modified} = 0.1350$), engaging and analyzing student learning processes ($PNI_{Modified} = 0.1371$), and executing an effective classroom ($PNI_{Modified} = 0.1372$) are strengths, whereas weaknesses are encouraging a desirable learning environment ($PNI_{Modified} = 0.1390$) and exerting the use of appropriate instructional methods ($PNI_{Modified} = 0.1380$). Table 2 covers methods used by secondary school teachers to develop teaching effectiveness. It reveals, as strengths, supervision, and evaluation ($PNI_{Modified} = 0.137$) and coaching ($PNI_{Modified} = 0.140$), while weaknesses are mentoring ($PNI_{Modified} = 0.159$) and training ($PNI_{Modified} = 0.153$). Opportunities and threats lie within external factors affecting secondary schools for teaching effectiveness development based on the concept of student growth. The study reveals that technology ($PNI_{Modified} = 0.187$) offers the only opportunity, whereas economic ($PNI_{Modified} = 0.214$), political ($PNI_{Modified} = 0.206$) and socio-cultural ($PNI_{Modified} = 0.203$) are threats, as indicated in Table 3.

Table 2 Teacher development in secondary schools developing teaching effectiveness based on the concept of student growth

Teacher development	SWOT analysis	$PNI_{Modified}$	Rank
Training	Weakness (W2)	0.153	2
Mentoring	Weakness (W1)	0.159	1
Coaching	Strength (S2)	0.140	3
Supervision and evaluation	Strength (S1)	0.137	4

Table 3 External factors affecting secondary schools developing teaching effectiveness based on the concept of student growth

External factors	SWOT analysis	$PNI_{Modified}$	Rank
Political	Threat (T2)	0.206	2
Economic	Threat (T1)	0.214	1
Socio-cultural	Threat (T3)	0.203	3
Technological	Opportunity (O1)	0.187	4

Strategies of Secondary Schools for Teaching Effectiveness Development based on the Concept of Student Growth

The strategies are principally analyzed from the strengths and weaknesses of secondary school teaching effectiveness, based on the concept of student growth, along with the opportunities and threats presented by external factors—holistically considered—that affect the development; these have been sequenced using a Priority Needs Index and a Priority Needs Index, Modified (PNI_{Modified}) data range from 1 to 5. The strategies, which are accompanied by four methods of teacher development, are presented as five core strategies and 10 sub-strategies: (1) enhancing a desirable learning environment to increase teaching effectiveness; with two sub-strategies: (1.1) developing a desirable learning environment to support student growth in academic progress (1.2) developing a desirable learning environment to support student growth in desirable characteristics; (2) planning appropriate instructional methods to increase teaching effectiveness; with two sub-strategies: (2.1) planning appropriate instructional methods to support student growth in academic progress; (2.2) planning appropriate instructional methods to support student growth in desirable characteristics; (3) redesigning classroom management to increase teaching effectiveness; with two sub-strategies: (3.1) redesigning classroom management to support student growth in desirable characteristics; (3.2) redesigning classroom management to support student growth in academic progress, (4) establishing approaches to monitoring student learning processes, in an engaged and analytical manner, in order to increase teaching effectiveness; with two sub-strategies: (4.1) formulating an approach to monitoring student learning processes in an engaged and analytical manner, in order to support student growth in desirable characteristics; (4.2) formulating an approach to monitoring student learning processes in an engaged and analytical manner, in order to support student growth in academic progress; (5) advancing the effectiveness of knowledge; with two sub-strategies: (5.1) advancing the effectiveness of teacher's knowledge on student growth in academic progress; (5.2) advancing the effectiveness of teacher's knowledge on student growth in desirable characteristics.

Discussion

Strengths, Weaknesses, Opportunities, and Threats Facing Secondary Schools in Developing Teaching Effectiveness based on the Concept of Student Growth

According to the results of the Priority Needs Index, Modified (PNI_{Modified}), in terms of teaching effectiveness development based on the concept of student growth, (1) encouraging a desirable learning environment represents the greatest weakness in secondary schools developing teaching effectiveness based on the concept of student growth, indicating the need for the school's strategy to be implemented as it seeks to form relationships in the classroom, encouraging students to learn in a positive environment. The teacher should express optimism and foster a healthy classroom environment by promoting a supportive atmosphere, for example demonstrating empathy and being a good listener to students' needs, as well as by accepting students' individual differences and engaging them in inspirational dialogue (Barry, 2010; Ko & Sammons, 2013; Sammons & Bakkum, 2011); (2) Exerting the use of appropriate instructional methods is required, as this enables teachers to actively select approaches, teaching methods, and patterns of teaching practice in order to provide content that meets students' needs and learning objectives (Sammons & Bakkum, 2011; Tripod, 2017); (3) In executing an effective classroom, besides the aforementioned elements, teachers should thoroughly analyze and review classroom activities and practices (Barry, 2010; Ko & Sammons, 2013; Sammons & Bakkum, 2011), observe student behavior, and raise students' awareness of mutual respect in order for them to demonstrate desirable classroom behavior. In addition, teachers are expected to provide guidance and direction to ensure that all students actively participate in the learning process and activities (Tripod, 2017); (4) Student learning processes should also be engaged and analyzed, and should be thoroughly addressed during the learning process, both academically and mentally, through using appropriate formal and informal measuring platforms to track the process and outcomes of each student's learning, continuously reflecting on the students' results in order to motivate them to meet expectations and achieve higher academic achievement (Ko & Sammons, 2013; Sammons & Bakkum, 2011); (5) Expertise in knowledge provides the secondary schools the greatest strength in developing teaching effectiveness based on the concept of student growth, since society recognizes teachers as experts,

and expects them to live up to this. Therefore, the teacher must be competent in understanding the subject matter (Afe, 2003), curriculum, teaching methods, and use of professionally appropriate teaching materials, as well as presenting the content or activities accurately. This ensures that students will make progress in their learning, gain clarity on the subject matter or activities, and achieve their learning goals (Ko & Sammons, 2013).

In terms of teacher development: (1) mentoring is the greatest weakness, and should be taken as the priority method of developing teachers' effectiveness due to its method that emphasizes the relationship between two people, that is aimed at delivering and sharing valuable knowledge, experience, and advice. This includes significant drawing out of knowledge and ability in teaching through the interaction process, with support from experts to encourage teachers to engage in appropriate practice and self-development (OBEC, 2019). In line with Narintarangkul-Na-Ayudhaya (2018), teacher development should focus on the basic needs of the individual, focusing on development through new concepts in order to realize the greatest teaching potential and effectiveness of teachers. This must include not only the training-acquired knowledge, but also the mentoring system's experience in enhancing teachers' working and teaching skills. In addition to mentoring; (2) training is an important method for developing teaching effectiveness because it focuses on educating teachers in knowledge, skills, and attitudes. Without training, the development of teaching effectiveness cannot be effective or impactful; (3) Coaching is the one method that should be performed in conjunction with mentoring, as it is aimed at guiding and encouraging teachers to use and apply knowledge gained from the development program to promote student growth (OBEC, 2019); (4) Supervision and evaluation are, at the same time, useful methods to improve teaching effectiveness in terms of reflecting the results of development. They provide additional guidance and details for teachers during their development, as well as enhancing morale and glorifying motivation through rewards that can be manifested in a variety of formats and approaches to help teachers identify problems and reflect the results of their development. This facilitates the enhancement of strategy and effectiveness for success.

As for opportunities and threats from external factors facing secondary schools developing teaching effectiveness based on the concept of student growth, technology represents the only opportunity, while economic, political, and sociocultural factors are threats.

Current society faces challenges and change from economic problems, politics, and state policies, as well as from social conditions that have shifted and stepped into the digital realm, where technology has merged with lifestyle, social structure, activities, and interpersonal interaction, rapidly transforming the whole into a digital society (Ministry of Information and Communication Technology [MICT], 2016). Adopting and utilizing the potential of existing technology in the work process assists teachers in facilitating and enhancing their work, as well as staying abreast of new trends in the contemporary world in order to reduce threats to the growth of their students. As technology supports the previously mentioned teaching effectiveness practices and teacher development methods, these factors work authentically together to maximize teaching effectiveness in relation to the learning behavior of students; however, teaching effectiveness development based on the concept of student growth is required for the growth of students.

Strategies of Secondary Schools for Teaching Effectiveness Development based on the Concept of Student Growth

Strategy (1), enhancing a desirable learning environment to increase teaching effectiveness, and strategy (2), planning appropriate instructional methods to increase teaching effectiveness, are important, and need to be implemented in order for teachers to gain teaching effectiveness and contribute to student growth—both in the learning process and in their behavior while learning. The two strategies seek to foster a positive learning atmosphere for students so that they can ultimately comprehend and be inspired by the learning process, resulting in significantly improved academic performance. Enhancing a desirable learning environment to create a pleasant learning atmosphere, both physical and psychological, can involve building relationships between teachers and students, expressing communication skills, providing support and concern for students' current moods and learning circumstances, and demonstrating expectations as well as the reasons for those expectations (Ko & Sammons, 2013). Furthermore, offering compliments and rewards, and motivating students by providing them with extra attention and engagement has a psychological effect on them and enhances their learning in a favorable manner (Tripod, 2017). Such strategy aligns well with Afe (2003), who contends that a pleasant atmosphere for the learning process, in which teachers exhibit social and emotional stability, a love for children, and a positive work attitude, contributes to a healthy classroom environment for

both teaching and learning. In addition, according to Sammons and Bakkum (2011), teaching effectiveness in fostering a desirable learning environment will not only make students feel relaxed and at ease while learning, but will also inspire them to be enthusiastically interested in learning, and to demonstrate positive learning behaviors (Pawanutkulthorn, 2017). Students will be motivated to study, and to develop positive attitudes toward teachers and the learning process. Students will also be able to learn in a meaningful way and make steady progress, until they are able to build their abilities through learning and to manage academic stress (Dash & Barman, 2016). In addition, students can be empowered to achieve academic goals when their learning interests are attracted and maintained through the use of appropriate instructional methods and teaching processes. Teachers should employ a variety of teaching techniques and select high-quality instructional materials that effectively impart knowledge, skills, and attitudes. Additionally, it is necessary to demonstrate presentation skills by demonstrating an understanding of teaching methods relating to the content of instruction and the individuality of each student throughout the teaching and learning process. (Barry, 2010; Brooke, 2018; Phillips & Weingarten, 2013). In these ways, the student will be able to resolve any learning obstacles, resulting in further growth (Ko & Sammons, 2013).

In addition to taking effective teaching approaches, a teacher must be well versed in the nature of the content being taught in order to be effective. Consequently, strategy (5)—advancing the effectiveness of knowledge—cannot be ignored in order to develop and demonstrate the effectiveness of the body of knowledge. This strategy includes the ability to manage classes during teaching and learning, to display oneself as a flawless teacher, and to portray the character of being competent in the subject taught. This practice collaborates with strategy (3), redesigning classroom management to increase teaching effectiveness, which is important, and to encourage teachers to work more effectively in their respective fields, as described in the research of Barry (2010), Ko and Sammons (2013), and Sammons and Bakkum (2011). This strategy suggests having effective classroom management, conducting efficient daily operations, providing teaching and learning to the fullest extent possible, thus meeting learning objectives, supervising students to be diligent in their studies, showing compassion and concern for students in a classroom, and adopting the method of closely monitoring the behavior of students in learning. This ties in with strategy (4), establishing approaches to monitor student learning

processes in an engaged and analytical manner in order to increase teaching effectiveness, to utilize information for measuring processes and developments in students' learning in numerous ways suited to students' individual abilities. These result in enhanced academic outcomes among students over time as they follow the learning process. It can be said that advancing the effectiveness of knowledge is an important objective that must be incorporated into effective and appropriate classroom management to meet the needs of each student, as well as utilizing and integrating an evaluation process that can systematically assess a student's abilities. This can motivate students to learn and achieve more, whether in terms of academic performance or greater academic achievement, which are considered to be effective indicators of student growth (Brooke, 2018).

These findings are consistent with Afe's (2003) assertion that a teacher's teaching effectiveness has a significant impact on, and contributes to the achievement of, students' learning goals. Teaching effectiveness is also effective and related to the nature of teaching, or to the teacher's ability to transmit knowledge in content, lessons, or presentation skills. It includes the creation of a desirable atmosphere in learning, parallel to the interaction between teachers and students, focusing on student-centered teaching. It allows the student to participate in learning management as well as in the teacher's classroom management, by taking an active role (Tripod, 2017), and this is directly related to the learning behavior of students when they are happy with their studies. It results in the development of knowledge, skills, and better attitudes. Students can develop to their full potential, demonstrate a higher level of motivation, and acquire the ability to cope with persistent behavioral changes in life (Dash & Barman, 2016; Ogunyemi, 2000).

However, with the advent of modern technology, the technological factor has become an increasingly important component of the teaching, learning, and educational administration processes (Mano, 2019). Therefore, adapting and applying technology to the work process gives teachers the chance to expand and leverage their successful efforts. It will assist teachers in comprehending their students' emotions and learning settings for optimal student development and growth.

Conclusion and Recommendation

Developing secondary school teaching effectiveness based on the concept of student growth is a mission that must be planned with precise goals and time structure.

The implementation of the strategies in each aspect has to be determined in order to maximize the benefits of teacher development, thereby contributing more to enhancing the teaching effectiveness of teachers. In this regard, the development of secondary schools for teaching effectiveness based on the concept of student growth suggests that there is no limit to classroom-based teaching and learning. However, schools can extend the effect of learning beyond the classroom to fit the specific context of the school; they can fulfill the needs of teachers whose careers have developed alongside the use of modern technologies to adapt appropriately, providing them with the opportunity to develop skills, practice knowledge and acquire expertise in all areas. It is beneficial to one's self-development to simultaneously boost teaching effectiveness in relevant subjects and expand students' learning abilities to their utmost potential. Nevertheless, what else must be considered in the growth of teachers' teaching effectiveness, even though instructors have evolved and experienced significant changes in many areas of teaching effectiveness? The development that will result in a shift in the student's growth, as well as the student's advancement in academic success and desirable characteristics, must be monitored over time. Therefore, it is necessary for the secondary school administration to build trust between administrators and teachers by emphasizing the actual development of teachers' abilities rather than focusing on the report documents from the development. The administration must be prepared for a variety of obstacles that may arise as a result of the development and provide teachers with the resources they need to apply their newfound knowledge into classroom practice for student growth to emerge.

Research Implication

Further study and research should examine the pros and cons of this strategy. Because this study addresses the effects of technology, the next step is to develop ways to implement technology as part of the teaching effectiveness development program. Further research should also focus on innovation in teaching effectiveness in order to investigate the development of desirable student growth characteristics.

Conflict of Interest

The authors declare that there is no conflict of interest.

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