Teachers' Learning Empowerment for Enhancing Students' Positive Thinking Skills

Chanphen Dokmai^{1,*}, Wirot Sanrattana¹ & Phrasrivajiravati²

¹Mahamakut Buddhist University, Isan Campus, Khon Kaen Province, Thailand

*Correspondence: Mahamakut Buddhist University, Isan Campus, Khon Kaen Province, Thailand. Tel: 66-89-416-2224 E-mail: Katae23323@gmail.com

Received: February 20, 2025 Accepted: March 4 2025 Online Published: March 14, 2025

doi:10.5430/wje.v15n1p53 URL: https://doi.org/10.5430/wje.v15n1p53

Abstract

This research introduces an innovative initiative titled "Online Self-Training Program for Empowering Teachers' Learning to Strengthen their Students' Positive Thinking Skills." The program aims to enhance teachers' professional development and promote positive thinking skills among students. 1. Enhancing Teachers' Knowledge: The first component focuses on providing educators with a thorough understanding of positive thinking skills through well-structured learning modules based on authoritative literature. Topics include the definition, significance, and practical strategies for fostering positive thinking in the classroom. 2. Applying Knowledge for Student Success: The second component enables teachers to implement the acquired knowledge to enhance students' positive thinking skills. A rigorous one-group pretest-posttest experimental design was employed, involving eight teachers and 26 students. The findings are significant, with the program meeting the established criteria of 90/90 and showing marked improvement in post-test scores. This confirms the initiative's effectiveness as a valuable resource for educational settings. Ultimately, this program fosters a culture of positivity and resilience among students.

Keywords: empowering the teachers' learning and positive thinking skills, strengthen students' positive thinking skills

1. Introduction

1.1 Significance of Research Problem

Thailand's 20-year national strategy (2018-2037) decisively mandates an overhaul of the learning process to match the demands of the 21st century, with a steadfast emphasis on enhancing learners' skills and instilling an unwavering desire for lifelong learning. This initiative necessitates the creation of a transformative learning system that transforms educators' roles, elevates the efficiency of educational management, and establishes a robust framework for lifelong learning aimed at achieving international academic excellence. The strategy firmly commits to developing future educators and directly assessing the impact of educational advancements on learners (Office of the Secretary of the National Strategy Committee, 2018).

Moreover, the 13th National Economic and Social Development Plan (2023-2027) unequivocally acknowledges the substantial progress in human capital development across all age groups. It demands a relentless pursuit of education quality at every level through elevated educational standards, innovative learning methodologies, technology incorporation, and exemplary educational models. Consequently, educational institutions must embrace greater independence and accountability to society, allowing for a more responsive and adaptable approach to education management.

Despite these advancements, the imperative remains to cultivate additional skills related to cognitive development. Education systems must forge stronger connections to real-life scenarios, as many youths continue to question their effectiveness. Seizing opportunities for knowledge development that align with multiple intelligences and promoting a positive attitude toward education is critical. This strategy is essential for enhancing critical thinking, fostering personal growth, and empowering innovative initiatives (Office of the National Economic and Social Development

²Mahamakut Buddhist University, Nakhon Pathom Province, Thailand

Council, Office of the Prime Minister, 2022).

Positive thinking is a powerful tool that enables individuals to overcome challenges and attract positive outcomes. Worawathanachai (2021) highlighted that developing positive thinking can significantly enhance one's potential for success and facilitate personal growth. Positive education focuses on identifying and nurturing each student's strengths, emphasizing the importance of emotional and social skills. This involves training teachers to design engaging activities for individual assessment and practical learning experiences.

Research indicates a strong correlation between positive teaching methods and students' well-being, with happier children showing increased engagement in their education. As noted by Vourinen (2019), one of the key responsibilities of educators is to help students discover and leverage their strengths. Ackerman (2018) offers several strategies for fostering positive thinking in students: 1. Reduce dependency on traditional testing as the primary assessment method, opting for more natural and varied evaluation techniques. 2. Incorporate personalized narratives on report cards that emphasize each student's unique strengths and interests. 3. Focus on recognizing and celebrating students' successes and strengths. 4. Devote a significant portion of teaching time to developing skills related to "learning how to learn." 5. Foster a positive learning environment, encouraging students to visualize successful outcomes before completing tasks. 6. Implement a reward system to consistently promote a positive classroom atmosphere. By integrating these approaches, teachers can enhance their students' positive thinking skills, leading to more fulfilling and successful learning experiences.

Given the importance of positive thinking skills in our daily lives, we are motivated to explore a variety of literature focused on this topic. This includes examining definitions, the significance of positive thinking, inspirational quotes, characteristics, development guidelines, steps for enhancement, and assessment methods. By synthesizing this knowledge, we aim to create educational innovations through an online self-training program designed for teachers. This program will enable educators to enhance their understanding and capabilities in fostering students' positive thinking skills across diverse dimensions. Ultimately, the goal is for teachers to effectively apply the insights gained from this training to benefit their students.

1.2 Objectives

This research successfully developed an online self-training program, "Empowering the Teachers' Learning to Strengthen their Students' Positive Thinking Skills," utilizing a robust Research and Development (R&D) methodology. The program comprises two key projects: 1) The first is dedicated to enhancing teachers' knowledge of positive thinking skills through meticulously crafted learning modules. These modules are based on a comprehensive review of reputable literature presented as articles from various esteemed sources. This initiative covers essential components, including the definition and importance of positive thinking skills, motivational quotes to inspire these skills, key characteristics that exemplify positive thinking, practical development guidelines, clear steps for cultivation, and reliable assessment methods. 2) The second project empowers teachers to effectively apply the learning outcomes from the first project to cultivate positive thinking skills in their students. This strategic approach equips educators with the vital skills and insights needed to instill a positive mindset in their students, significantly advancing their educational achievements.

1.3 Research Hypothesis

As stated in the research objectives, this study utilized a Research and Development (R&D) methodology to create an online self-training program. The focus was on reviewing pertinent literature in "articles" from credible individuals and organizations, which were subsequently compiled into Learning Modules designed to enhance teachers' knowledge. This structured approach allows teachers to learn before applying their newfound insights to benefit their students. The research followed a sequence of steps represented as R1D1 and RiDi, and various researchers have effectively implemented similar methodologies in their studies. For example, Kromthamma and Supakicco (2023) conducted research entitled "Empowering Teachers' Learning to Develop Students' Inspirational Skills," demonstrating educational innovations' effectiveness. Similarly, Thammabut and Thacha (2023) focused on "Enhancing Teachers' Learning to Develop Students to Become Successful Students," while Kratumnok and Phrakhrusutheejariyawattana (2024) explored "Empowering Teachers' Learning to Strengthen Students' Teamwork Skills." Each of these studies supports the validity and practicality of the research hypothesis.

The findings of this research support the hypothesis that the online self-training program, "Empowering the Teachers' Learning to Strengthen their Students' Positive Thinking Skills," effectively enhances both teachers' and students' positive thinking skills. The evaluation of the two projects demonstrated significant improvements. 1. For Project 1, which focused on developing teachers' understanding of positive thinking skills, the results showed that the

experimental group achieved scores meeting the standard criteria of 90/90. Additionally, their post-experiment scores were statistically significantly higher than their scores from before the experiment. 2. In Project 2, aimed at enhancing learning outcomes by strengthening students' positive thinking skills, the evaluation indicated that the average score of students in the experimental group after the intervention was significantly higher than their pre-experiment scores. These outcomes suggest that the program prepares teachers to foster positive thinking in their students and directly results in improved positive thinking skills among students, reinforcing the importance of such educational innovations.

1.4 Literature Review

This research decisively harnessed advancements in digital technology and the extensive availability of modern knowledge on the Internet in the 21st century. We actively sought out and utilized a wealth of information on positive thinking skills from numerous reliable sources across the globe. The knowledge acquired was systematically presented in the form of credible articles, meticulously selected to meet the specific needs of this study. Rather than rely on quantitative research that often focuses solely on identifying variables or indicators, our approach prioritized a thorough literature review that aligned with and addressed our research objectives.

Therefore, in the study of literature related to positive thinking skills in this research, we examined the perspectives of experts from various regions of the world, presented through articles on numerous topics, including: 1. Definition of Positive Thinking Skills: Insights from Woods (2019), Davis (2020), Keeton (2021), Cherry (2022), Waters (2022), and Sasson (n.d.) shed light on what constitutes positive thinking skills. 2. Importance of Positive Thinking Skills: The significance of these skills is discussed by Waters (2022), Sarkhedi (2020), Bhandari (2022), Cherry (2022), Smith (2022), and Srivastava (2022). 3. Inspirational Quotes: Contributions from Antimaximalist (2020), Amaresan (2021), and Chandel (2022) provide motivational quotes that can help enhance positive thinking skills. 4. Characteristics of Positive Thinking Skills: This aspect is explored by Nawalkha (2017), Ackerman (2018), Blank (2018), Eatough (2021), Davis (n.d.), Sasson (n.d.), and Walker (n.d.), outlining key traits associated with positive thinking. 5. Development Approaches: Various views on developing positive thinking skills are discussed by Ackerman (2018), Greene (2020), Bhandari (2022), Cherry (2022), Chui (2022), Macdonald (2022), Nelson (2022), and Wong (2022). 6. Stages of Development: The stages involved in developing positive thinking skills are explained by Ingram and Wisnicki (1988), O'Kane (2015), Abdelrahim (2017), Mind Tools (n.d.), and Te Hononga Akoranga Comet (n.d.). 7. Assessment of Positive Thinking Skills: Assessment strategies are analyzed using the insights from Ingram and Wisnicki (1988), O'Kane (2015), Abdelrahim (2017), Mind Tools (n.d.), and Te Hononga Akoranga Comet (n.d.).

This thorough review of expert opinions will decisively guide the development of the online self-training program focused on empowering teachers and enhancing students' positive thinking skills. By analyzing relevant literature across various subjects, we assert that converting this content into structured learning modules will equip teachers with a comprehensive understanding, enabling them to apply these insights to their students effectively.

The concept of "development approaches" is paramount among the critical topics explored. This encompasses "principles, concepts, techniques, methods, and activities" to provide teachers with innovative strategies to cultivate positive thinking skills. While some of these approaches may already be known, it is undeniable that many still need to be utilized in light of the rapid changes in the 21st-century educational landscape. By actively engaging with these new strategies, educators can significantly enhance their teaching methods and better prepare their students for the challenges. Therefore, we synthesized "development approaches" from the study results of the views of Ackerman (2018), Greene (2020), Bhandari (2022), Cherry (2022), Chui (2022), Macdonald (2022), Nelson (2022), and Wong (2022) mentioned above, totaling 51 approaches as follows:

- 1) Shift from traditional testing to diverse, organic assessment methods.
- 2) Emphasize the importance of effort in learning.
- 3) Highlight individual strengths and interests in report cards.
- 4) Encourage reading books of personal interest alongside standard materials.
- 5) Recognize and celebrate student accomplishments.
- 6) Allow for a slower learning pace for comprehensive understanding.
- 7) Dedicate time to teaching "learning how to learn" skills.
- 8) Centralize questioning in the learning culture.

- 9) Offer students choices in subjects and extracurricular activities.
- 10) Incorporate inquiry-based and project-based learning methods.
- 11) Create authentic and relevant learning experiences.
- 12) Help students build pathways to success.
- 13) Be a positive role model.
- 14) Foster a supportive learning environment.
- 15) Help students visualize success in various scenarios.
- 16) Remove negative language from student dialogues.
- 17) Assist in transforming negative thought patterns.
- 18) Be an ardent supporter of students.
- 19) Implement a rewards system to create positivity.
- 20) Build a positivity stockpile for tough times.
- 21) Practice mindfulness and meditation.
- 22) Reframe thoughts for a positive perspective.
- 23) Cultivate a welcoming environment with smiles.
- 24) Foster optimism in challenging situations.
- 25) Keep a gratitude journal to acknowledge the positives.
- 26) Visualize a prosperous future for yourself and your students.
- 27) Focus consistently on strengths.
- 28) Reflect on thoughts regularly.
- 29) Regularly write in a gratitude journal.
- 30) Use positive self-talk for confidence and resilience.
- 31) Approach each day with positivity.
- 32) Engage in exercise for mood enhancement.
- 33) Seek inspiration from uplifting media.
- 34) Surround yourself with positivity.
- 35) Maintain an open mindset to new ideas.
- 36) Rewire pessimistic thoughts for a healthier outlook.
- 37) Accept current situations while striving for improvement.
- 38) Find unique meanings and purposes in life.
- 39) Avoid toxic positivity; acknowledge challenges while seeking solutions.
- 40) Spend time in solitude for self-reflection.
- 41) Measure and track progress.
- 42) Affirm that change is possible.
- 43) Refuel and re-energize as needed.
- 44) Seek support from the right individuals.
- 45) Redirect stress into productive outlets.
- 46) Volunteer to contribute to your community.
- 47) Practice self-compassion and kindness towards yourself.
- 48) Offer sincere compliments to foster support.
- 49) Recognize and challenge negative thoughts.

- 50) Question your internal dialogue and affirm positivity.
- 51) Focus on your journey, not comparisons with others.

2. Research Methodology

2.1 Research Concept and Procedures

This research adopted the Research and Development (R&D) Methodology to develop educational innovations according to the perspective of Sanrattana (2023), who emphasized "Bringing up-to-date knowledge in the 21st century from various perspectives of reliable individuals or agencies to create Learning Modules to be used to develop teachers first and then apply the learning outcomes to practice with students according to the concept of 'Knowledge and Action are Power.' However, it did not end with teacher development according to the concept of 'Knowledge is Power' popular in the 20th century." The research steps in the R1D1.... RiDi format were as follows:

R1D1 Process: The literature related to positive thinking skills was thoroughly studied, focusing on several key topics: 1) definition, 2) importance, 3) inspirational quotes, 4) characteristics, 5) development guidelines, 6) development steps, and 7) evaluation. These topics were approached from various perspectives, drawing on articles authored by reputable individuals or organizations. This comprehensive review facilitated the creation of seven targeted learning modules designed for teachers' professional development.

R2D2 Process: Based on the findings from R1D1, the original online self-training program was developed, which includes two main projects. The Teacher Learning Development Project first incorporates the seven learning modules established in the earlier step. The second project, Teachers Lead Learning Outcomes to Enhance Positive Thinking Skills in Students, encompasses multiple areas for in-depth exploration: 1) Definition of positive thinking skills, 2) Summary of the definition, 3) Importance of positive thinking skills, 4) Inspirational quotes for enhancing these skills, 5) Characteristics indicative of positive thinking, 6) Guidelines for developing positive thinking skills, 7) Steps for development, 8) Assessment methods for positive thinking skills, 9) Student assessment forms, 10) Visual aids for enhancing skills, 11) Self-evaluation forms for teachers regarding their implementation, 12) Evaluation forms on the selection of development steps, and 13) Reflection forms for teachers on their performance. More information regarding the program's characteristics in Thai can be found at https://shorturl.at/U34bF.

R3D3 Process: To ensure the accuracy, appropriateness, and overall usefulness of the online self-training program, the researcher conducted Focus Group Discussions with teachers at schools outside the experimental research area in two distinct phases. The initial phase, "Preliminary Field Testing and Revision," involved feedback from five teachers at one non-experimental research school. In the second phase, "Main Field Testing and Revision," insights were gathered from ten teachers at another non-experimental research institution.

R4D4 Process: Two sets of instruments were created for the experimental research to evaluate the program's effectiveness: 1) a teacher learning outcome test and 2) a student positive thinking skills assessment form. The research methods section will elaborate on details about these tools.

R5D5 Process: The effectiveness of the online self-training program titled "Empowering the Teachers' Learning to Strengthen their Students' Positive Thinking Skills" was rigorously tested through experimental research, utilizing a One Group Pretest-Posttest Design in a specifically randomized educational setting. The experimental group consisted of 8 teachers and 26 students engaged during the second semester of the 2024 academic year. The research was carried out in two phases: firstly, one month was dedicated to the Teacher Learning Development Project, followed by a two-month focus on the Teachers Bringing Learning Outcomes to Practice with Students Project.

The above Procedures of the Research and Development (R&D) Methodology are illustrated briefly in Figure 1.

R1D1 Process: Exploring the literature on positive thinking skills, looking into its definition, importance, characteristics, development, and evaluation.



R2D2 Process: From the findings, developing an online self-training program with two parts: The Teacher Learning Development Project with seven modules and a project aimed at helping teachers enhance students' positive thinking skills.



R3D3 Process: Conduct focus group discussions with teachers outside the main research area to ensure the program's accuracy and relevance.



R4D4 Process: After reviewing the learning module content to determine the appropriate content, two evaluation tools were created to measure the program's effectiveness.



R5D5 Process: Doing experimental research on the program to test its effectiveness using a One Group Pretest-Posttest Design in a randomized educational setting.

Figure 1. The Procedures of the Research and Development (R&D) Methodology

2.2 Research Tools

The Teacher Learning Outcome Test was designed as a 4-choice multiple-choice assessment based on the Cognitive Domain, aligned with the levels of Bloom's Taxonomy, which includes remembering, understanding, applying, analyzing, evaluating, and creating (Krathwohl, 2002). The quality of this test was evaluated in two phases: In the first phase, five educational experts assessed the Content Validity using the Indexes of Item-Objective Congruence (IOC) method as proposed by Rovinelli and Hambleton (1977). The analysis revealed that all items in the test met the intended measurement criteria, as the IOC values surpassed the acceptable threshold of 0.50 (Chaichanawirote & Vantum, 2017). In the second phase, the quality of the test was further examined by administering it to 30 teachers from a different school not involved in the experimental study. The data analysis produced the following results: 1) All items had an Index of Difficulty within the acceptable range of 0.20 to 0.80 and exhibited adequate Power of Discrimination, with values ranging from 0.20 to 1.00. 2) The KR-20 value, indicating the test's reliability coefficient, was higher than the standard criterion of 0.70. 3) The overall difficulty of the test was established as 24.33. These findings indicate that the Teacher Learning Outcome Test is a robust tool for measuring the educational outcomes related to teachers' learning.

The Assessment of Students' Positive Thinking Skills utilized a 5-level rating scale: the most, much, moderate, minor, and most diminutive. It was developed based on findings from various researchers, including Nawalkha (2017), Ackerman (2018), Blank (2018), Eatough (2021), Davis (n.d.), Sasson (n.d.), and Walker (n.d.). The assessment also incorporated insights from the studies of Ingram and Wisnicki (1988), O'Kane (2015), Abdelrahim (2017), Mind Tools (n.d.), and Te Hononga Akoranga Comet (n.d.). To ensure its quality, the assessment underwent two phases of evaluation. In the first phase, content validity was assessed by five educational experts, and the analysis revealed that all questions achieved an item-objective congruence (IOC) value greater than 0.50. This finding confirmed that the questions were suitable for their intended purpose. Reliability, or internal consistency, was established in the second phase by administering the assessment to 30 students from a different school, which was not part of the experimental area. The analysis indicated that the Alpha Coefficient of Reliability for the entire assessment tool was equal to 0.85. Furthermore, when evaluated in different aspects, Positive Interpersonal Traits, Positive Intellectual Traits, and Positive Intellectual Traits yielded reliability coefficients of 0.86, 0.85, and 0.90 respectively. All these coefficients exceeded the acceptable threshold of 0.70, as George and Mallery (2003) established.

2.3 Data Analysis

For the standard criteria of 90/90, data were analyzed based on the definition provided by Yamkasikorn (2008). The first "90" indicates the percentage of the average score achieved by the entire group of teachers. In contrast, the second "90" represents the percentage of teachers who passed the evaluation criteria across all objectives. To analyze

the effectiveness of the educational innovation, mean scores from pre-and post-tests were compared using the dependent t-test, assessing the significance of the improvements in scores following the program's implementation.

3. Results

This research adopted an R&D methodology, focusing on synthesizing knowledge from diverse perspectives of credible individuals and organizations to develop Learning Modules to enhance teacher skills. The process begins with the teachers' development, followed by practicing these learned skills with students. This approach aligns with the concept that "Knowledge and Action are Power," moving beyond the outdated notion of "Knowledge is Power" prevalent in the 20th century. The research framework, structured as R1D1.... RiDi reinforces our belief that this initiative will yield practical educational innovations aligning with the research hypothesis. The results from the research operation found that the created educational innovations had research results according to the research hypothesis as follows:

3.1 Results of Testing the Research Hypothesis No. 1

After the experimental research according to the project for the development of teachers' learning about positive thinking skills in the R5D5 step, it was found that 1) the eight teachers in the experimental group had an average score from the post-experimental test equal to 274 points, calculated as 95.14 percent of the total score of 36 points, which was by the first 90 standard criteria, and 2) 97.92 percent of the teachers in the experimental group were able to pass the test according to all objectives, which was by the last 90 standard criteria.

In addition, from the comparison of the average scores from the learning outcomes test of teachers before and after the experiment, it was found that the eight teachers in the experimental group had an average score from the pre-test of 29.13 with a standard deviation of 1.55 and an average score from the post-test of 34.25 with a standard deviation of 1.04. When analyzed using the Dependent t-test, it was found that the scores from the post-test were significantly higher than those from the pre-test at a statistical level of 0.05, as shown in the data analysis results in Table 1.

Table 1. Compare the Mean Scores from the Teacher Learning Achievement Test Before and After the Experiment Using a Dependent T-Test

Testing	Sample size	Mean	Standard Deviation	t
Pre-test	8	29.13	1.55	8.72*
Post-test	8	34.25	1.04	

^{*}Significant at (p<0.05)

The findings from the research hypothesis test indicate that the "Teacher Learning Development Project" is effective and meets the necessary criteria for success. Given these positive results, this project can be confidently expanded and implemented within the target population, allowing for broader educational enhancements and professional growth among teachers.

3.2 Results of Testing the Research Hypothesis No. 2

After the experimental research, the project involving teachers applying learning results to practice with students in the R5D5 step was executed. A total of 26 students in the experimental group were asked to evaluate themselves using the "Student Positive Thinking Skills Assessment Form." The evaluation results are presented as mean and standard deviation values for pre- and post-experiment cases, categorized overall and by each aspect. The detailed findings are shown in Table 2 below:

Table 2. Mean and Standard Deviation of the Results of the Evaluation of Positive Thinking Skills of Students Before and After the Experiment, Overall and in Each Aspect

Characteristics that Domonstrate Expected Positive Thinking Skills of	Evaluation results			
Characteristics that Demonstrate Expected Positive Thinking Skills of Students	Pre-test		Post-test	
Stateme	$\overline{\chi}$	S.D.	$\overline{\chi}$	S.D
Positive Interpersonal Traits				
1. I am happy with my appearance.	3.31	1.44	4.35	0.89
2. I am kind.	3.81	1.02	4.65	0.56
3. I have leadership.	3.27	1.34	3.92	1.16
4. I am caring and compassionate towards others.	3.54	1.03	4.42	0.95
5. I have courage.	3.65	1.02	4.54	0.65
6. I am responsible.	3.38	1.06	4.31	0.93
7. I get along well with people.	3.73	1.22	4.42	0.81
8. I am friendly to strangers.	3.92	1.09	4.12	0.95
9. I even compliment strangers.	3.65	1.38	4.42	0.64
10. I motivate people around me with positive words.	3.23	1.21	4.04	1.08
11. I am honest with myself and others.	3.62	1.10	4.15	0.88
12. I can adapt to different situations.	3.46	1.27	4.50	0.71
13. I work well in a team.	3.65	1.32	4.65	0.56
14. My life is running smoothly.	3.69	1.09	4.38	0.80
Positive Intellectual Traits				
15. I view failure as an opportunity to learn, as part of life, and as a profit.	3.46	0.90	4.50	0.76
16. I use my senses/consciousness in my life.	3.38	1.02	4.85	0.46
17. I focus on problem solving.	3.58	1.03	4.58	0.50
18. I am initiative, reflective, conscientious, and efficient	3.35	0.89	4.73	0.53
19. I do not dwell on the problems and difficulties that occurred in the past.	3.50	1.14	4.77	0.43
20. I have a good vision for the future.	3.19	1.44	4.35	0.85
21. I handle conflict effectively.	3.42	1.06	4.65	0.69
22. I am committed to achieving the organization's goals.	3.23	1.42	4.73	0.45
23. I don't give up when problems arise.	3.62	1.27	4.85	0.37
24. I dare to express my opinions with confidence.	3.65	1.02	4.77	0.51
Positive Emotional Traits				
25. I accept things that are beyond my control.	3.96	1.15	4.69	0.68
26. I am happy to be alive.	4.08	1.09	4.81	0.49
27. I have a sense of humor.	3.62	1.17	4.81	0.40
28. I am optimistic.	3.23	1.14	4.62	0.70
29. I accept different opinions.	3.12	0.99	4.62	0.64
30. I am grateful for the kindness you have given me.		1.10	4.50	0.71
31. I am happy with the success of others.	3.46	1.14	4.54	0.65
32. I accept what I get and do not express anger.	3.27	1.28	4.54	0.71
33. I am flexible.	3.38	1.27	4.88	0.43
34. I like a challenge.	3.50	1.33	4.58	0.58
35. I feel comfortable with my life.	3.27	1.34	4.85	0.37
Total	3.51	0.22	4.55	0.24

Table 2 shows the results of evaluating students' positive thinking skills to consider the effectiveness of educational innovation. It reveals that the overall mean score from the pre-experiment evaluation was equal to 3.51 with a standard deviation of 0.22 while the mean score of the post-experiment assessment was equal to 4.55 with a standard deviation of 0.24 When analyzed using a Dependent t-test, it was found that the post-experiment evaluation score was significantly higher than the pre-experiment evaluation score at a statistical level of 0.05, as shown in the data analysis results in Table 3.

Table 3. The Mean Scores of Students' Self-Assessments Before and After the Experiment Were Analyzed Using a Dependent t-test

Evaluation	Sample size	Mean	Standard Deviation	t	
Pre-test	26	3.51	0.22	18.92*	
Post-test	26	4.55	0.24		

^{*}Significant at (p<0.05)

The findings derived from the rigorous research hypothesis test provide compelling evidence supporting the initiative titled "Teachers' Project Leads Learning Outcomes to Enhance Students' Positive Thinking Skills." This initiative is not merely an educational strategy; it has been meticulously crafted to engage teachers actively in ongoing professional development. By doing so, it aims to equip educators with a diverse array of effective strategies and resources designed to bolster the cognitive and emotional well-being of their students.

Drawing parallels to the previously successful "Teacher Learning Development Project," which has demonstrated considerable effectiveness in similar contexts, this new initiative is primed for successful implementation within the designated target populations. The encouraging results obtained thus far indicate a strong opportunity to significantly improve students' positive thinking skills.

At its core, this initiative emphasizes the importance of teacher empowerment and the adoption of innovative educational practices. By fostering an environment conducive to growth, educators can help students cultivate critical traits such as resilience, optimism, and a growth mindset—essential for their overall personal development and long-term success.

Through comprehensive and sustained training programs and ongoing support for educators, this initiative is poised to lay a solid foundation for transformative impacts on students' learning experiences. Such interventions enhance academic performance and contribute to the formation of well-rounded individuals equipped to navigate the complexities of life beyond the classroom. Ultimately, by investing in our educators, we are simultaneously investing in the future of our students, ensuring they have the tools necessary to thrive both academically and emotionally.

4. Discussion

This research successfully established an online self-training program, "Empowering the Teachers' Learning to Strengthen their Students' Positive Thinking Skills," employing a robust research and development (R&D) methodology. The program comprises two significant projects: 1) The first is to advance teachers' comprehension of positive thinking skills through meticulously designed learning modules. These modules are crafted from a thorough analysis of credible literature and presented as articles authored by recognized experts and organizations. They comprehensively address various facets of positive thinking skills, including definitions, relevance, key characteristics, developmental guidelines, and evaluation methods. 2) The second project empowers teachers to effectively apply the insights gained from the first project, thereby enhancing the positive thinking skills of their students. This initiative ensures that theoretical knowledge is effectively translated into practical application within classroom environments, fostering real change and impact.

In conducting this research, the research team recognized the critical importance of online learning in today's digital technology landscape. This approach ensures widespread access to diverse learning and self-development opportunities. E-learning platforms, training videos, and comprehensive online support networks are key components of this method, often termed web-based learning, e-learning, computer-assisted instruction, or internet-based learning (Maddison & Kumaran, 2017). This approach is not just beneficial; it is genuinely transformative, empowering educators to continuously enhance their skills and effectively meet the dynamic educational needs of their students.

Online learning grants learners unparalleled control over their educational journey, particularly regarding time and location (Swerdloff, 2016). This approach offers numerous advantages that are imperative in today's fast-paced world, including Increased flexibility in scheduling, the ability to learn at an individualized pace, significant cost savings compared to traditional classroom environments, opportunities to create customized learning experiences, enhanced communication with instructors, immediate access to essential documentation, broader access to diverse programs and resources, development of critical technical skills, improved self-motivation and critical-thinking capabilities, and a broader perspective and the opportunity for stress-free learning. These benefits are vital for modern learners, facilitating the acquisition of career-enhancing skills and fostering a sense of purpose, all while accommodating various personal learning styles (EHL Insights, n.d.; The Indeed Editorial Team, 2022).

In addition, we assert the importance of the concept "Knowledge and Action is Power," which supersedes the outdated notion of "Knowledge is Power." This progressive approach demands a research plan centered on "bringing knowledge to practice" and ensures that teachers continuously develop alongside their students. Empowering teachers to learn is a critical first step, enabling them to effectively apply their knowledge in the classroom. Teachers are pivotal in the educational process due to their direct interaction with students. By prioritizing the professional growth of teachers, we will undoubtedly drive significant improvements in student outcomes, establishing an educational environment that actively fosters positive thinking skills and cultivates a culture of lifelong learning. Teachers are indispensable in transforming students' learning behaviors. As recognized by the University of the People, they are the most vital members of society. They serve as role models, offer unwavering guidance, and dedicate themselves to empowering young people through education. By instilling a strong sense of purpose in children, teachers lay the foundation for their success as future citizens and ignite their drive to excel. The children of today are undoubtedly the leaders of tomorrow, and teachers play a critical role in equipping them for the challenges ahead. This research firmly emphasizes the empowerment of teachers as an essential strategy to boost their motivation, enhance problem-solving skills, and foster student empowerment. These components are necessary for significantly improving learning outcomes for every student (O'Sullivan, 2015). By prioritizing the professional development of teachers, we will create an environment where they can effectively inspire and instill positive thinking skills in their students, thereby cultivating a more dynamic and effective learning atmosphere.

The overall picture was that this research emphasized online learning in the era of digital technology society, bringing knowledge into practice and developing teachers so that teachers can continuously develop with students. Successful development is believed to start with the crucial person having good knowledge. This viewpoint will make the practice successful. According to the view of Toppr (n.d.) asserts that the more knowledge we acquire, the greater the power we possess. Knowledge is crucial for personal and professional development and serves as a pathway to success. It enriches us in various ways, with one of its most valuable contributions being an improved understanding of ourselves and those around us.

Furthermore, it empowers us to make informed decisions in different situations. In today's fast-paced world, lacking education and the power of knowledge makes it difficult to achieve success or keep up with life's rapid changes. Our focus on these critical concepts has led us to confidently assert that the results of our research have fulfilled the stated objectives. We have successfully developed an educational innovation titled "Online Self-Training Program for Empowering Teachers' Learning to Strengthen Their Students' Positive Thinking Skills," which meets the effectiveness criteria outlined in our research hypothesis. This achievement aligns with the findings of previous studies, such as Saysin and Dhammapissamai (2023) on "Developing Teachers to Enhance Students' Effective Teamwork Skills" and Srikongpan et al. (2024) on "Empowering Teachers' Learning to Develop Students' Design Thinking Skills." Therefore, the educational innovations we have produced are ready for immediate dissemination to the target population of 6,882 schools under the Office of the Basic Education Commission nationwide, ensuring widespread benefits.

5. Conclusion and Recommendations

The research and development methodology employed in this project has successfully met its established objectives. The educational innovations resulting from this study are now poised for effective dissemination among the target population, ensuring that they can be leveraged for considerable benefits. By implementing these innovations, educators will be equipped to enhance their capacity to cultivate positive thinking skills in students, thereby contributing to a more enriching and impactful educational experience. This approach fosters individual growth and establishes a more dynamic and engaging learning environment.

The application should contemplate the following considerations:

- 1. Strategies for Effective Online Learning: According to Rivera (2022), several strategies can enhance the online learning experience:
 - Establish a conducive learning environment.
 - Schedule regular assignment reviews.
 - Facilitate virtual peer interactions.
 - Employ 'chunking' techniques to divide tasks into manageable segments.
 - Heighten interest in the subject matter.
 - Ensure tasks are personally meaningful.
 - Encourage visualization of mastering the subject.
 - Promote independent problem-solving skills.
 - Prioritize self-care.
 - Demonstrate compassion toward others.

These strategies can significantly enhance students' educational experiences and skill development.

2. The utilization of inspirational quotes can be an effective method for fostering positive thinking skills. For instance, the quote "Your mind is powerful. Life will change when you fill it with positive thoughts" underscores the importance of maintaining a positive mindset. Mahatma Gandhi's assertion, "Keep my word positive. Words become behaviors... values become destiny," serves as a reminder of the influence that thoughts and words exert on actions and outcomes. The Dalai Lama stated, "To carry a positive action, we must develop a positive vision," which highlights the necessity of envisioning positivity to manifest it in one's life. Additionally, Pat Riley noted, "If you have a positive attitude and strive to give your best effort, you will overcome immediate problems and be prepared for greater challenges," emphasizing how perseverance and positivity equip individuals for future obstacles. These quotes have the potential to inspire a positive mindset, thereby encouraging resilience and personal growth.

References

- Ackerman, C. (2018, July 5). *Positive mindset: How to develop a positive mental attitude*. Retrieved from https://positivepsychology.com/positive-mindset/
- Amaresan, S. (2021, April 29). *Ten creative ways to keep a positive attitude no matter what.* Retrieved from https://shorturl.asia/NjVcy
- Antimaximalist. (2020, February 29). Forty-seven positive thinking quotes that will help you think positively. Retrieved from https://shorturl.asia/VPAHp
- Bhandari, S. (2022, January 16). What is positive thinking? Retrieved from https://shorturl.asia/270EJ
- Blank, C. (2018, December 5). *The characteristics of a positive attitude*. Retrieved from https://classroom.synonym.com/the-characteristics-of-a-positive-attitude-4892157.html
- Chaichanawirote U., & Vantum, C. (2017). Evaluation of content validity for research instrument. *Journal of Nursing and Health Sciences*, 11(2), 105-111.
- Chandel, S. (2022, August 29). One hundred motivational positive thinking quotes to brighten your day. Retrieved from https://shorturl.asia/cSzvq
- Cherry, K. (2020, February 25). What is positive thinking? Retrieved from https://shorturl.asia/wYJ2q
- Chui, A. (2022, June 16). Fifteen tips for maintaining a positive attitude every day. Retrieved from https://shorturl.asia/4U0Dr
- Davis, D. (n.d.). *Positive qualities: Discover 100+ positive character traits*. Retrieved from https://shorturl.asia/kBdZ2
- Davis, T. (2020, December 3). What is positive thinking in psychology? 9 Thought-provoking findings. Retrieved from https://shorturl.asia/DU7x4
- Eatough, E. (2021, November 8). How (and why) to cultivate a positive mental attitude. Retrieved from https://shorturl.asia/eadtX

- EHL Insights. (n.d.). Eleven advantages of online learning. Retrieved from https://bit.ly/42eJPDv
- George, D., & Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th ed.). Boston: Allyn & Bacon.
- Greene, L. (2020, August 17). Proven ways to develop a positive mindset—And why it matters. Retrieved from https://www.psycom.net/positive-thinking
- Humaida, A. I. (2017). Self-efficacy, positive thinking, and gender difference are predictors of academic achievement in Al Jouf University students in Saudi Arabia. *International Journal of Psychology and Behavioral Sciences*, 7(6), 143-151. https://doi.org/10.5923/j.ijpbs.20170706.01
- Ingram, R. E., & Wisnicki, K.S. (1988, March 22). Assessment of positive automatic cognition. Retrieved from https://shorturl.asia/nT1ax
- Keeton, D. (2021, August 30). The power of positive thinking. Retrieved from https://shorturl.asia/Zt4p2
- Krathwohl, D. R. (2002). A Revision of Bloom's taxonomy: An overview. *Theory Into Practice*, 41(4), 212-218. https://doi.org/10.1207/s15430421tip4104_2
- Kratumnok, P., & Phrakhrusutheejariyawattana. (2024). Empowering teachers' learning to strengthen students' teamwork skills. *World Journal of Education*, *14*(2), 1-11. https://doi.org/10.5430/wje.v14n2p1
- Kromthamma, M., & Supakicco, P.S. (2023). Empowering teachers' learning to develop students' inspirational skills. *World Journal of Education*, 13(2), 31-40. https://doi.org/10.5430/wje.v13n2p31
- Macdonald, K. (2022, March 16). How to develop a positive attitude in 6 easy steps. Retrieved from https://shorturl.asia/ZHjVa
- Maddison, T., & Kumaran, M. (2017). *Literature review of online learning in academic libraries*. Retrieved from https://bit.ly/3z3SFql
- Mind Tools. (n.d.). Are you a positive or negative thinker? https://shorturl.asia/hRgzU
- Nawalkha, A. (2017, February 12). Why positive thinking builds six character traits you need for success. Retrieved from https://shorturl.asia/nksXg
- Nelson, C. E. (2022, August 17). Seven tips to encourage a positive attitude in students. https://shorturl.asia/RnmXZ
- Office of the National Economic and Social Development Council, Office of the Prime Minister. (2022). National Economic and Social Development Plan No. 13 (2023-2027). *Royal Gazette*, *139* (258d). 1-149.
- Office of the Secretary of the National Strategy Committee. (2018). National Strategy 2018-2037. *Royal Gazette*, 135(82a). 1-61.
- O'Kane, G. (2015, August 15). Thirteen questions to test your positive thinking. Retrieved from https://shorturl.asia/A6UmO
- O'Sullivan, C. (2015, October 5). What is teacher empowerment? Retrieved from https://www.adaptemy.com/what-is-teacher-empowerment/
- Rovinelli, R. J., & Hambleton, R. K. (1977). On the use of content specialists in assessing criterion-referenced test item validity. *Dutch Journal of Educational Research*, 2, 49-60.
- Sanrattana, W. (2023). Research in educational administration: Concepts, practices and case studies (5th ed.). Bangkok: Thiphawisut.
- Sarkhedi, B. (2020, August 18). *It is important to have a positive attitude in life*. Retrieved from https://shorturl.asia/0HM5x
- Sasson, R. (N.D.). Skills for achieving success, positivity, and inner peace. Retrieved from https://www.successconsciousness.com/
- Saysin, S., & Dhammapissamai, P. (2023). Developing teachers to enhance students' effective teamwork skills. *World Journal of Education*, *13*(2), 1-11. https://doi.org/10.5430/wje.v13n2p1
- Smith, E. (2022, March 25). Benefits of positive thinking: How it helps your mental health. Retrieved from https://shorturl.asia/ke0Za
- Srikongpan, S., Phrakhrusutheejariyawattana, & Suksen, A. (2024). Empowering teachers' learning to develop students' design thinking skills. World Journal of Education, 14(2), 151-162.

- https://doi.org/10.5430/wje.v14n2p151
- Srivastava, T. (2022, April 12). Positive thinking: How to do it. Retrieved from https://shorturl.asia/WbjdR
- Swerdloff, M. (2016). Online learning, multimedia, and emotions. In S. Y. Tettegah & M. P. McCreery (Eds.), *Emotions, technology, and learning* (pp. 155-175). Academic Press. https://doi.org/10.1016/B978-0-12-800649-8.00009-2
- Te Hononga Akoranga Comet. (n.d.). A positive attitude questionnaire. Retrieved from https://shorturl.asia/FMcil
- Thammabut, B., & Thacha, W. (2023). Enhancing teachers' learning to develop students to become successful students. *World Journal of Education*, *13*(3), 13-23. https://doi.org/10.5430/wje.v13n3p13
- The Indeed Editorial Team. (2022, November 9). What is self-learning? (And benefits and tips for improving). Retrieved from https://uk.indeed.com/career-advice/career-development/self-learning
- Toppr. (n.d.). Essay on knowledge for students and children. Retrieved from https://www.toppr.com/guides/essays/essay-on-knowledge/
- University of the People. (n.d.). Why teachers are important in society- Why teachers matter. Retrieved from https://www.uopeople.edu/blog/the-importance-of-teachers/
- Vourinen. K (2019). Positive thinking. Seeds of prosperity in restructuring Thai education. Retrieved from https://www.eef.or.th/250-2/
- Walker, O. (n.d.). *Characteristics and traits of a positive mindset: 6 Examples*. Retrieved from https://shorturl.asia/6eP52
- Waters, S. (2022, April 12). *Improve your life with a new outlook: 10 Benefits of positive thinking*. Retrieved from https://shorturl.asia/PdCrz
- Wong, A. E. (2022, August 31). How to develop positive thinking. Retrieved from https://shorturl.asia/1L7JE
- Woods, L. (2019, September 23). 3 Scientific studies that prove the power of positive thinking. Retrieved from https://shorturl.asia/AljeB
- Worawatanachai, P. (2022). Positive thinking. Journal of Humanities and Social Sciences, Bansomdejchaopraya Rajabhat University, 16(2). 190-223.
- Yamkasikorn, M. (2008). How to use efficiency criterion in media research and development: The difference between 90/90 standard and E1/E2. *Education Journal Burapha University*, 19(1), 1-16.

Acknowledgments

I want to express my gratitude to the Doctor of Education Program in Educational Administration faculty. And the teachers who participated in the group discussion to assess the accuracy and usefulness of the learning modules utilized in the online self-training program. Additionally, I want to thank the teachers and students in the experimental group for their involvement in testing the program. Furthermore, my appreciation extends to the measurement and evaluation experts who scrutinized the research tools and the teachers and students who engaged with these tools. Your contributions have been invaluable.

Authors contributions

As an Ed.D. student, Chanphen Dokmai has a comprehensive role in conducting research, which encompasses various critical steps. These include identifying the research problem and topic, reviewing existing literature, clarifying the issue, defining essential terms and concepts, determining appropriate research methodologies, conducting field research, collecting data, interpreting the data, and summarizing the research findings. This process culminates in writing research articles that contribute to academic knowledge.

Throughout this journey, Chanphen is supported by Associate Professor Dr. Wirot Sanrattana and Assistant Professor Dr. Phrasrivajiravati, who serve as thesis advisors. Their responsibilities include ensuring the quality of the research by taking on multiple roles: acting as director, facilitator, adviser, guide, critical evaluator, source of freedom, supporter, friend, manager, and examiner. They provide valuable insights and support both in the research process and in writing research articles.

Funding

Not applicable.

Competing interests

We want to certify and confirm that there are no relevant financial or non-financial competing interests to report.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.