

# Development for Teachers' Learning to Enhance Prosocial Behavior for Students

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Received: April 17, 2024

Accepted: May 27, 2024

Online Published: June 16, 2024

doi:10.5430/wje.v14n2p140

URL: <https://doi.org/10.5430/wje.v14n2p140>

## Abstract

The Research and development (R&D) methodology was employed in this research to create an educational innovation, called "Online Self-Training Program for Development for Teachers' Learning to Enhance Prosocial Behavior for Students", which was effective according to the specified criteria. This online self-training program consisted of two projects: 1) the development project for teachers' learning, comprising six self-training modules for teacher development, and 2) the project for teachers applying learning outcomes to learner development, consisting of a self-training module used as a guideline for teachers. The results of the experimental research showed that the developed educational innovation was effective according to the research hypotheses. The results of the experimental research in the first project showed that the post-test scores of 13 teachers met the standard criteria of 90/90 and were significantly higher than their pre-test scores. The results of the experimental research in the second project also revealed that the post-test scores of 55 students who were the target group of the development were significantly higher than the pre-test scores. This indicates that the educational innovation, called "Online Self-Training Program for Development for Teachers' Learning to Enhance Prosocial Behavior for Students" has been confirmed in quality. Therefore, it can be disseminated and used to benefit both teachers and students who are the target population on a large scale.

**Keywords:** online self-training program, teachers' learning, prosocial behavior

## 1. Introduction

Prosocial behavior is a form of positive psychology that focuses on how people help each other out and do things for the greater good. It explores why some people feel a sense of personal responsibility to engage in prosocial behavior and how others use such behaviors to serve themselves. Prosocial behaviors are often divided into three categories: 1) proactive prosocial actions usually come out of self-interest, which tend to be status-linked and enhance the popularity of the person within a particular group; 2) reactive prosocial actions are performed in response to a situation; and 3) altruistic prosocial actions are actions that are meant to help others without asking for anything in return (Better Help Editorial Team, 2023).

Guiang-Myers (2019) suggested that teachers should engage in ways that promote socially desirable behaviors as follows: teach empathy, create a climate for social interaction, use positive reinforcements, establish a culture of kindness and gratitude, and equip students with the language of compassion.

Moreover, the Center for Excellence in Disabilities (n.d.) recommended ways to promote prosocial behavior such as providing feedback on progress towards reaching specific prosocial goals, practicing manners before going into the community, explaining rules and expectations of a new situation, and giving a reminder before that event, using social stories to prepare individuals for new situations, using code words as a reminder to follow rules in a concealed way that respects the person's dignity, role-playing what to do before participating in new or difficult situations, using social skills building apps, demonstrating and encourage helping behaviors, catching people being good and praise that behavior, and demonstrating random acts of kindness.

There are interesting views on prosocial behavior presented by scholars from various regions of the world. A variety

of perspectives addressing various aspects such as definitions, importance, characteristics, development guidelines, obstacles, and challenges in development and evaluation have been presented.

The perspectives on prosocial behavior in various aspects mentioned above have been considered by the research team as a valuable and useful body of knowledge in the R&D methodology for producing an educational innovation, called “Online Self–Training Program for Development for Teachers’ Learning to Enhance Prosocial Behavior for Students”. It is an educational innovation developed based on the concept of “knowledge and action are power”. Various perspectives on prosocial behavior in various aspects as mentioned earlier were employed as the guidelines for the development of teachers so that they can learn first. Subsequently, they will be stimulated and encouraged to apply the learning outcomes to develop students to enable them to develop prosocial behavior according to the specified indicators. The research team believes that the R&D methodology with the operational steps as discussed in the research methodology section will allow us to create an effective educational innovation as expected. As a result, it can be disseminated and used by the teachers and the students in secondary schools under the National Office of Buddhism Thailand, which is the target population of this research throughout the country. According to the principles of the R&D methodology, any developed innovation must be tested in the experimental research area which is representative of the population. If the experimental results show that the innovation is effective in meeting the established criteria, it can be disseminated and used with the population targeted in the research.

### *1.1 The Purpose of Research*

This research aimed to use the R&D methodology to create an educational innovation, called “Online Self–Training Program for Development for Teachers’ Learning to Enhance Prosocial Behavior for Students” which was effective according to the specified criteria. This online self-training program consisted of two projects: 1) the development project for teachers’ learning, comprising six self-training modules for teacher development, and 2) the project for teachers applying learning outcomes to learner development, consisting of a self-training module used as a guideline for teachers (see the program structure and other details in Figure 1).

### *1.2 Research Hypothesis*

The previous research which aimed to develop educational innovations for teacher development and subsequently encourage them to apply their obtained knowledge to student development yielded the results under the hypotheses of this research. These research studies were “Empowering Teachers’ Learning to Enhance Students’ Change Leadership Skills” by Praneetpolkrung and Supakicco (2023); “Empowering Teachers’ Learning to Develop Innovative Skills for Students” by Hatsanmuang, and Sanrattana (2023), and “Developing Teachers to Enhance Students’ Effective Teamwork Skills” by Saysin and Dhammapissamai (2023). Therefore, it is believed that this research can also produce an effective “Online Self - Self-training program for the Development of Teachers’ Learning to Enhance Prosocial Behavior for Students”. The following research hypotheses were defined.

- The development project for teachers’ learning: The posttest scores of the teachers meet the standard criteria of 90/90, and are significantly higher than the pretest scores.
- The teachers applying learning outcomes to learner development project: The posttest scores of the students who are the target group of the development are significantly higher than the pretest scores.

### *1.3 Literature Review*

As mentioned earlier, many knowledgeable scholars have suggested ways to promote prosocial behavior recognized by the research team as valuable knowledge that can be used to achieve the construct “Online Self–Training Program for Development for Teachers’ Learning to Enhance Prosocial Behavior for Students” according to the research objective. Therefore, more literature related to prosocial behavior was studied from the references in the following issues.

- Definition from the perspectives of Brown. (n.d.), Cherry (2020), Cummins (2020), Lynch (2021), and Thomas (2020).
- Importance from the perspectives of Bergin and Prewett (2020), Cherry (2021), Miles et al (2021), Parent Help Line. (n.d.), and Samynathan (2021).
- Characteristic from the perspectives of Cherry (2020), Cummins (n.d.), Eisenberg (n.d.), Poepsel and Schroeder (2017), Rodrigues, Ulrich, Mussel, Carlo and Hewig (2017.), and Siu et al (2012).
- Obstacles and ways to overcome obstacles from the perspectives of Cherry (2020), Jenkins and Fredrick (2020), and Zahn-Waxler and Schoen (2016).

- Development guidelines from the perspectives of Beachboard (2019), Cerin (n.d.), Cherry (2020), Classroom Website (n.d.), Cox (2017), Curletto (2019), Dewar (2020), Encyclopedia on Early Childhood Development (2016), Forensic Fundamentals (n.d.), Panepinto (2018), Scholarship (2019), Thomas (2020), and West Virginia University Center for Excellence in Disabilities (n.d.).
- Evaluation from the perspectives of Brazzelli et al (2018), Ernest (2018), Parenting Across Cultures (2018), Taylor (2020), and Torr ns and K rtner (2016).

According to the six issues mentioned above, the perspectives on “development guidelines” are important for teachers to use as the guidelines for enhancing students’ prosocial behavior because they demonstrate “principles/concepts/techniques/methods/activities”. The research team, therefore, synthesized the issues related to “development guidelines” from the perspectives of Beachboard (2019), Cerin (n.d.), Cherry (2020), Classroom Website (n.d.), Cox (2017), Curletto (2019), Dewar (2020), Encyclopedia on Early Childhood Development (2016), Forensic Fundamentals (n.d.), Panepinto (2018), Scholarship (2019), Thomas (2020), and West Virginia University Center for Excellence in Disabilities (n.d.) and fifty following approaches were obtained: 1) sharing, 2) turn-taking, 3) empathizing, 4) helping, 5) donating, 6) practice, 7) connect with kids, 8) volunteering, 9) be a positive role model, 10) donate time, 11) be consistent, 12) build a school community, 13) being emotionally supportive, 14) obeying society’s rules, 15) complying with social conventions, 16) teach pro-social behaviors, 17) active play, 18) one-on-one time, 19) train others to help you, 20) become informed, 21) become politically involved, 22) look to help the younger generation, 23) donate some of your services, 24) turn passion into action, 25) don’t ignore someone who’s in need, 26) model prosocial actions, 27) praise acts of kindness, 28) teach them when they are young, 29) modeling, 30) responsive and empathic care, 31) respect for nature, 32) tasks and chores, 33) say it like you mean it, 34) instead of donating money, donate items, 35) focus on positives, not punishment, 36) practicing gratitude in the classroom, 37) provide clear rules and expectations about behavior, 38) read books about friendship and relationships, 39) notice and label when the child engages in prosocial behavior, 40) set up classrooms in a way that emphasizes pro-social behavior, 41) encourage teachers to integrate values instruction in their classrooms, 42) assign students to play behavior exchange games, 43) avoid programs and content endorsing violent or anti-social behavior, 44) provide real-life examples of students who had negative or positive consequences resulting from their behavior, 45) pair older students with younger ones to develop caring communities, 46) connect with other stakeholders who can also provide positive reinforcement for students, 47) celebrate spontaneous acts of helpfulness and kindness, but pay attention to guidelines for effective praise, 48) make children feel secure — in life and their attachment relationships, 49) help kids practice prosocial behavior with these evidence-based activities, and 50) cooperating, (The detailed descriptions of each approach are provided in the online self-training module.)

## 2. Research Methods

### 2.1 Concepts and Process

The R&D methodology based on the concept of Sanrattana (2023), stating that “knowledge and action are power” was employed in this research. This concept led to the idea of doing this research: “Start with teacher development so that teachers can use the learning outcomes to further develop learners”. This research was conducted according to the following four steps.

**Step 1:** Conducting the literature review related to prosocial behavior in six issues (as presented in the topic of “Literature Review”) to obtain the content for constructing seven online self-training modules for teacher development, namely 1) definitions, 2) importance, 3) characteristics, 4) obstacles and ways to overcome obstacles, 5) development guidelines (principles/concepts/techniques/methods/activities) and 6) evaluation.

**Step 2:** Checking the quality of online self-training modules in two phases using focus group discussion. **Phase 1:** Preliminary Field Testing and Revision: It was carried out with 5 teachers from a school that was not the experimental area. **Phase 2:** Main Field Testing and Revision: It was conducted with 10 teachers from another school that was not in the experimental area.

**Step 3:** Construct two experimental research tools: 1) the teachers’ learning outcomes test and 2) the students’ prosocial behavior assessment form (details will be discussed in the topic of “Research Tools”).

**Step 4:** Testing the efficiency of the online self-training program according to the research hypotheses: “Online Self–Training Program for Development for Teachers’ Learning to Enhance Prosocial Behavior for Students” was experimented with using one group pretest-posttest in the school randomly assigned as the research area. The experimental group consisted of 13 teachers and 55 students in the second semester of the Academic Year 2023. The

research was divided into two phases: 1) one-month experimental research of the development project for teachers' learning and 2) 2-month experimental research of the project for teachers applying learning outcomes to learner development.

## 2.2 Research Tools

### 2.2.1 The Teachers' Learning Outcomes Test

It was a multiple-choice test with four options, which was used to measure the teachers' learning outcomes before and after the experiment of the teacher development project. The test was developed by the research team based on six issues, namely definitions, importance, characteristics, developmental guidelines, developmental processes, and evaluation of the cognitive domain, ranging from the lowest level to the highest level of cognitive skills: remembering, understanding, applying, analyzing, evaluating, and creating according to the Revised Taxonomy 2001 of Benjamin S. Bloom (Armstrong, 2010). This test was subjected to two phases of quality checking.

**Phrase 1: Verifying content validity:** The content validity of the test was checked by using the Indexes of Item-Objective Congruence (IOC) developed by Rovinelli and Hambleton (1977) by five experts in the fields of Curriculum and Instruction and Educational Measurement and Evaluation. It was found that the IOC values of all questions were higher than the criterion of 0.50 (Chaichanawirote & Vantum, 2017).

**Phrase 2: Checking quality:** The test was piloted with 30 teachers in a school that was not the experimental area. The analysis results were as follows. 1) All the test questions showed an index of difficulty within the range of 0.20-0.80 and a power of discrimination within the range of 0.20-1.00. The KR-20 value, indicating the reliability coefficient, was 0.86, which was higher than the criterion of 0.70. 3) The difficulty of the test was 65.46

### 2.2.2 The Students' Prosocial Behavior Assessment Form

It was an assessment using a 5-point rating scale, ranging from the highest, high, moderate, low, and the lowest. The assessment was constructed based on the characteristics of prosocial behavior presented by Cherry (2020), Cummins (n.d.), Eisenberg (n.d.), Poepsel and Schroeder (2017), Rodrigues, Ulrich, Mussel, Carlo, and Hewig (2017.) and Siu, Shek, and Law (2012) and the concepts of evaluating prosocial behavior of Brazzelli, Farina, Grazzani, and Pepe (2018), Ernest (2018), Parenting Across Cultures Website (2018), Taylor (2020), and Torr ns and K rtner (2016). This test was subjected to two phases of quality checking.

**Phrase 1: Verifying content validity:** The content validity of the assessment was examined by the method developed by Rovinelli and Hambleton (1977) by five experts in the fields of Curriculum and Instruction and Educational Measurement and Evaluation. The analysis results showed that the IOC values of all questions were higher than the criterion of 0.50, indicating that the questions in the students' prosocial behavior assessment form can be used for measuring the purposes (Chaichanawirote & Vantum, 2017).

**Phrase 2: Verifying reliability or internal consistency:** The assessment form was piloted with 30 students in a school that was not the experimental area to analyze the alpha coefficient of reliability using Cronbach's method. The analysis results revealed that the alpha coefficient of reliability of the entire assessment form was 0.83. When analyzing each dimension, the reliability coefficients of expression of views and ideas, social promoting behavior, expression of emotions, behavior of helping friends, and behavior of helping others/strangers were 0.72, 0.80, 0.94, 0.90, and 0.79, respectively. When comparing the obtained reliability coefficients to the reliability coefficient criterion of 0.70 or higher (UCLA: Statistical Consulting Group, 2016), they were higher than the specified criterion. This indicated that the items had relatively high internal consistency.

## 2.3 Data Analysis

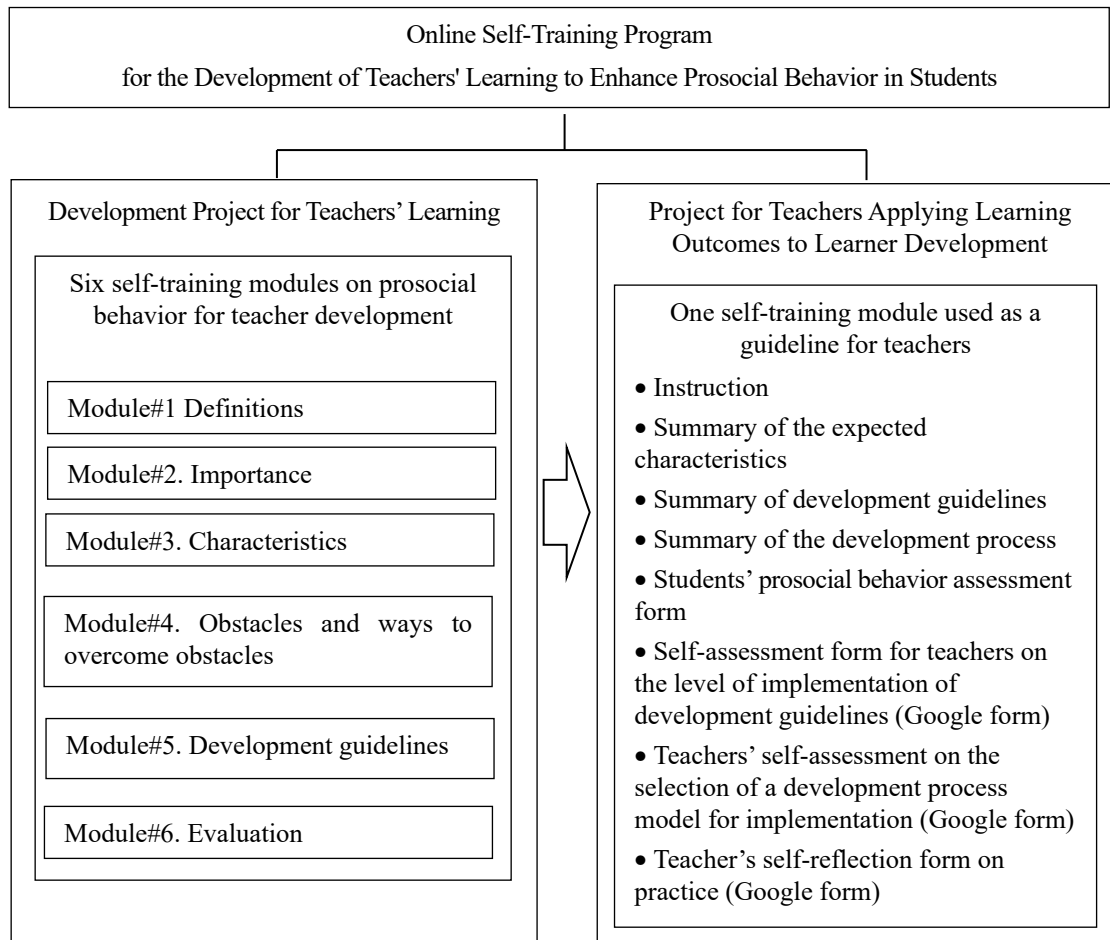
Data analysis was conducted in two cases. 1) The scores from the learning outcomes test of teachers after the experiment were compared with the standard criteria of 90/90, where the first 90 represents the percentage of the mean scores of all teachers obtained from the test and the second 90 represents the percentage of teachers passing the test for all learning objectives (Yamkasikorn, 2008). 2) T-test dependent was employed in the analysis to compare the pre-test and post-test scores

## 3. Results

### 3.1 Educational Innovation

This research constructed an educational innovation, called "Online Self-Training Program for Development for Teachers' Learning to Enhance Prosocial Behavior for Students", consisting of two projects that were carried out

consecutively, namely 1) *The Development Project for Teachers' Learning*, comprising six self-training modules for teacher development as follows: a) definitions, b) importance, c) characteristics, d) obstacles and ways to overcome obstacles, e) development guidelines, f) evaluation, and 2) *The Project for Teachers Applying Learning Outcomes to Learner Development*, consisting of a self-training module used as a guideline for teachers. It consists of the following issues: a) Instruction, b) Summary of the expected characteristics, c) Summary of development guidelines, d) summary of the development process, e) students' prosocial behavior assessment form, f) self-assessment form for teachers on the level of implementation of development guidelines (google form), g) teachers' self-assessment on the selection of a development process model for implementation (google form), and h) teacher's self-reflection form on practice (google form). The additional details are shown in Figure 1.



**Figure 1.** Online Self–Training Program for Development for Teachers’ Learning to Enhance Prosocial Behavior for Students

Note: Please see the original Thai modules from <https://shorturl.at/biWZ8>

### 3.2 Efficiency Test Results of Online Self-Training Program

#### 3.2.1 The experimental research results of the development project for teachers’ learning

The findings were consistent with the research hypothesis. The posttest mean score of the teachers was 33.15 points, equivalent to 92.09 % of the full score. In addition, 100 % of them passed all the learning objectives, which met the standard criterion of 90/90. 2) The mean score of the teachers after the experiment was significantly higher than before the experiment at the level of 0.05 as presented in Table 1.

**Table 1.** Mean of Teachers' Pre-test and Post-test Scores Using Dependent t-test

Testing	Sample size	Mean	Standard Deviation	t
Pre-test	13	23.23	3.09	
Post-test	13	33.15	1.82	24.83*

\*  $p < 0.05$ 

3.2.2 The experimental research results of the project for teachers applying learning outcomes to learner development

The results were found to follow the research hypothesis as presented through the analysis of the mean and standard deviation of the prosocial behavior assessment results of the students before and after the experiment in Table 2 and the results of the comparative analysis using the dependent t-test in Table 3.

**Table 2.** Mean and Standard Deviation of the Prosocial Behavior Assessment Results of the Students Before and After the Experiment

Characteristics of the prosocial behavior of students	Results			
	Pre-test		Post-test	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.
<b>Expression of views and ideas</b>	2.84	1.04	4.54	0.53
• I positively express my emotions and have social abilities and good self-control.	2.85	1.15	4.55	0.57
• I use more complex perspectives and focus more on values.	2.96	1.05	4.49	0.72
• I use my ability to make decisions based on the public interest.	2.75	1.16	4.49	0.63
• I try to consider other people's points of view.	2.89	1.08	4.55	0.77
• I understand the thoughts and feelings of others very well.	2.80	1.15	4.51	0.63
• I give more abstract and moral reasons.	2.80	1.10	4.64	0.70
<b>Social promoting behavior</b>	2.80	1.02	4.53	0.50
• I share and donate things to the society.	2.80	1.16	4.51	0.63
• I love volunteering for foundations to help society.	2.89	1.05	4.65	0.55
• I am socially responsible by not dropping rubbish on the ground in public places.	2.76	1.14	4.62	0.62
• I have improved my self-image to be accepted by society.	2.71	1.08	4.60	0.68
• I put the public interest above my own.	2.87	1.14	4.47	0.63
• I often help people who are in crisis or need it.	2.76	1.05	4.36	0.68
• I do not hesitate when someone asks for help that I can help with.	2.78	1.08	4.51	0.57
<b>Expression of emotions</b>	2.79	1.01	4.53	0.45
• I have a greater sense of moral duty in helping others.	2.80	1.10	4.49	0.60
• I am empathetic and emotionally attached to people in need.	2.71	1.08	4.40	0.60
• I understand the problem that the person is experiencing.	2.78	1.07	4.58	0.63
• I value the well-being of others.	2.82	1.16	4.67	0.55
• I enjoy being kind to others although I do not know them.	2.82	1.09	4.65	0.58
• I am always attentive and provide moral reasons to society.	2.80	1.04	4.40	0.60
<b>The behavior of helping friends</b>	2.83	1.04	4.54	0.43
• I am happy to help my classmates or co-workers in their activities.	2.80	1.10	4.62	0.59
• I regularly share what I have with my friends.	2.82	1.12	4.60	0.56
• I like to make my friends happy all the time.	2.85	1.10	4.44	0.63
• I can immediately sense my friends' discomfort even though they do not show it to me.	2.85	1.04	4.58	0.60
• I am glad to help my friends even though it is difficult for me.	2.85	1.10	4.49	0.66
• I try to cheer my friends up when they seem sad about the situations they have experienced.	2.76	1.17	4.51	0.57

Characteristics of the prosocial behavior of students	Results			
	Pre-test		Post-test	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.
• I voluntarily help my friends without being asked.	2.85	1.16	4.55	0.57
<b>Behavior of helping others/strangers</b>	2.91	1.05	4.55	0.44
• I do everything I can to help others avoid getting into trouble.	2.95	1.08	4.45	0.54
• I am willing to share with others the knowledge and skills I have without expecting anything in return.	2.80	1.13	4.60	0.56
• I am available for volunteer activities to help people in need.	2.91	1.13	4.55	0.60
• I help people I do not know even though it is difficult for me.	2.93	1.23	4.55	0.69
• I am dedicated to encouraging people who seem sad even though I do not know them.	2.85	1.22	4.53	0.57
• I participate in providing services at my school (such as student council or student government).	3.02	1.08	4.62	0.62
<b>Total</b>	2.83	1.01	4.54	0.43

Table 2, indicates that the average score from the prosocial behavior assessment of students after the experiment was higher than before the experiment, that is, the average score after the experiment was 4.54 (standard deviation was 0.43). the average score before the experiment was 2.83 (standard deviation was 1.01). When comparing with the dependent t-test, it was found that there was a statistically significant difference at the threshold of 0.05, as shown in Table 3.

**Table 3.** The Results of Data Analysis Comparing the Mean Scores of the Pre-test and Post-test of the Students Using a Dependent t-test

Evaluating	Sample size	Mean	Standard Deviation	t
Pre-test	55	2.83	1.01	11.81*
Post-test	55	4.54	0.43	

\* p < 0.05

#### 4. Discussion

The R&D methodology with one group pretest-posttest design in the final step was employed for conducting this research in the school that was randomly selected as the research area. There were 13 teachers in the experimental group and 55 students in the target group of the development. The purpose of this research was to test the effectiveness of the "Online Self-Training Program for Development for Teachers' Learning to Enhance Prosocial Behavior for Students", an educational innovation obtained from this research. The findings revealed that this developed educational innovation was effective and consistent with the research hypotheses in terms of the development project for teachers' learning and the experimental research project for teachers applying the learning outcomes to student development. It was found that the teachers' post-test scores met the standard criterion of 90/90 and were significantly higher than their pretest scores. The students' post-test scores were also significantly higher than their pretest scores. The findings of this research align with the findings of other studies using the R&D methodology with similar research design, namely "Empowering Teachers' Learning to Enhance Students' Change Leadership Skills" by Pranetpolkrung and Supakicco (2023); "Empowering Teachers' Learning to Develop Innovative Skills for Students" by Hatsanmuang and Sanrattana (2023), "Developing Teachers to Enhance Students' Effective Teamwork Skills" by Saysin and Dhammapissamai (2023), "Developing Teachers to Enhance Project Management Skills for Students" by Nukoonkan and Dhammapissamai (2023) and "Empowering Teachers' Learning to Develop Students' Inspirational Skills" by Kromthamma and Supakicco (2023).

In addition to testing the effectiveness of the developed educational innovation, additional knowledge from the teachers in the experimental group was also investigated, especially the knowledge gained from learning and reflection on actual implementation. Some interesting points can be discussed as follows.

Developing prosocial behavior for students (and the general public) is complex and difficult because many factors

affect students' decision to display their prosocial behavior. In some situations, students show prosocial behavior, but in other situations, they do not. This is consistent with Cherry (2020) mentioning these factors in Research on the Bystander Effect as follows. 1. Fear of judgment or embarrassment - People sometimes fear leaping to assistance only to discover that their help was unwanted or unwarranted. To avoid being judged by other bystanders, people simply take no action. 2. How other people respond - People also tend to look to others for how to respond in such situations, particularly if the event contains some level of ambiguity. If no one else seems to be reacting, then individuals become less likely to respond as well. 3. The number of people present - The more people who are around, the less personal responsibility people feel in a situation. This is known as the diffusion of responsibility. It also aligns with Jenkins and Fredrick's (2020) statement in Social Capital and Bystander Behavior in Bullying: Internalizing Problems as a Barrier to Prosocial Intervention that "School-aged youth may possess social capital and have the desire to help victimized peers, but there may still be barriers to engaging in prosocial behavior. Though bullying researchers have found that defenders tend to perceive social support and possess social skills, not all individuals who have these social capital resources will defend others. There are many potential explanations such as past victimization, fear of retaliation, the cost of helping, or mental health difficulties that interfere with social functioning. Barriers to helping have been explored by researchers who have manipulated many of these variables experimentally".

In addition, the development of prosocial behavior is also related to psychiatric disorders and psychological problems, as stated by Zahn-Waxler and Schoen (2016) that "Prosocial actions evoked by others' distress are often motivated by feelings of empathy/sympathy and a desire to alleviate their suffering. Under some circumstances, these feelings and actions can be maladaptive. Some psychiatric disorders and psychological problems are characterized, in part, by extremes of empathy, both surfeits and deficits that undermine the capacity to care for others healthily. The study of extremes can provide insights into processes associated with different forms of psychopathology".

Although the development of prosocial behavior for students in this research was complex and difficult, the teachers in the experimental group gave good cooperation and used their best efforts. As a result, the educational innovation called "Online Self-Training Program for Development for Teachers' Learning to Enhance Prosocial Behavior for Students" which was effective can be disseminated for wider use among secondary schools under the National Office of Buddhism.

## 5. Conclusion

From the results of the research, follows the research hypotheses set for both the cases "The Development Project for Teachers' Learning", and "The Project for Teachers Applying Learning Outcomes to Learner Development", it can be shown that educational innovations developed with R&D methodology with details of operations as mentioned in the research methodology section above. Including the use of the concept of "knowledge and action are power" in designing this research. By adopting various perspectives on prosocial behavior in various aspects as a guideline for teacher development in order to make learning a priority for teachers. Then stimulate and encourage teachers to use the learning results to develop students so that students develop prosocial behavior according to the specified indicators, resulting in effective educational innovations as expected. The educational innovations called the "Online Self-Training Program for Development for Teachers' Learning to Enhance Prosocial Behavior for Students" obtained from this research can then be disseminated for the benefit of teachers and students in schools that are the target population for this research throughout the country.

## 6. Recommendations

Regarding the application of this educational innovation in the target schools, the research team suggests that the schools must first encourage teachers to know and realize the importance of enhancing prosocial behavior for students to be inspired to put this educational innovation into serious practice. According to the synthesis of the views of Bergin and Prewett (2020), Cherry (2021), Miles et al (2021), Parent Help Line. (n.d.), and Samynathan (2021), it can be concluded that developing prosocial behavior is beneficial for creating positive energy, social acceptance, social connections, and relationships between teachers and students and students and students. It can also promote participation in learning, help students get to know each other, and become good friends. Students can have friends who provide support during stressful times. It is also beneficial for the "helpers" that are teachers. They will be healthy in many ways. It also helps reduce the risk of loneliness, alcohol drinking, and depression. Teachers can



practice kindness to reduce social anxiety increase self-esteem and be optimistic. It is also beneficial to all children in coping with new situations, including children with normal development, shy and aggressive children, children with learning disabilities, mental illness, or special needs, and children who are teased by others and left alone.

## References

- Armstrong, P. (2010). *Bloom's Taxonomy*. Retrieved from <https://t.ly/3ZqGj>
- Beachboard, C. (2019, December 11). *Promoting prosocial behaviors in the classroom*. Retrieved from <https://t.ly/4O6YJ>
- Bergin, C., & Prewett, S. (2020). *Focusing on positive behaviors benefits student well-being and achievement*. Retrieved from <https://t.ly/V7-V>
- Better Help Editorial Team. (2023, April 3). *An introduction to prosocial behavior*. Retrieved from <https://shorturl.at/qtyJQ>
- Brazzelli, E., Farina, E., Grazzani, I., & Pepe, A. (2018). *The child prosocial behavior questionnaire*. Retrieved from [https://t.ly/E\\_DL](https://t.ly/E_DL)
- Brown. (n.d.). *The basics of prosocial behavior*. Retrieved from <https://t.ly/kvD->
- Center for Excellence in Disabilities. (n.d.). *30 Ways to promote prosocial behavior*. Retrieved from <https://shorturl.at/eisM7>
- Cerin, S. (n.d.). *Prosocial behavior*. Retrieved from <https://t.ly/eWwA>
- Chaichanawiroe U., & Vantum, C. (2017). Evaluation of content validity for research instrument. *Journal of Nursing and Health Sciences*, 11(2), 105-111.
- Cherry, K. (2020, October 13). *The basics of prosocial behavior*. Retrieved from <https://t.ly/I2Dr1>
- Classroom (n.d.). *Activities to teach prosocial behavior to preschoolers*. Retrieved from <https://t.ly/hhbg>
- Cox, C. (2017, April 19). *3 Ways teachers can help children learn pro-social behaviors*. Retrieved from <https://t.ly/5a26N>
- Cummins, D. (2020, October 19). *Prosocial behavior: 4 Thought-provoking research findings*. Retrieved from [https://t.ly/i\\_w0r](https://t.ly/i_w0r)
- Cummins, D. (n.d.). *Prosocial behavior: 4 Thought-provoking research findings*. Retrieved from <https://t.ly/uRxs>
- Curletto, A. (n.d.). *How teachers can promote prosocial behavior in students*. Retrieved from <https://t.ly/VSyqm>
- Dewar, G. (2020). *Raising helpful kids: Tips for teaching generosity and kindness*. Retrieved from <https://t.ly/22BL>
- Eisenberg, N. (n.d.). *Prosocial behavior*. Retrieved from <https://t.ly/-wgL>
- Encyclopedia on Early Childhood Development. (2016, February). *Prosocial behavior*. Retrieved from <https://t.ly/ssz0U>
- Ernest, K. (2018, June). *Self-administered questionnaire*. Retrieved from <https://t.ly/UqLB>
- Forensic Fundamentals. (n.d.). *Pro-social modeling*. Retrieved from <https://t.ly/CTRW>
- Guiang-Myers, G. (2019, May 31). *Making prosocial behavior contagious: Simple steps for encouraging classroom behavior that benefits everyone*. Retrieved from <https://shorturl.at/uxA79>
- Hatsanmuang, N., & Sanrattana, W. (2023). Empowering Teachers' Learning to Develop Innovative Skills for Students. *World Journal of Education*, 13(2), 56-67. <https://doi.org/10.5430/wje.v13n2p56>
- Jenkins, L., & Feddrick, S. (2017). *Social capital and bystander behavior in bullying: Internalizing problems as a barrier to prosocial intervention*. Retrieved from <https://t.ly/7S54>
- 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>
- Lynch, M. (2021). *The basics of prosocial behavior*. Retrieved from <https://t.ly/UH5c>
- Miles, A., Andiappan, M., Upenieks, L., & Orfanidis, C. (2021, January 27). Using prosocial behavior to safeguard mental health and foster emotional well-being during the COVID-19 pandemic: A registered report protocol for a randomized trial. *PLoS One*, 16(1), e0245865. <https://doi.org/10.1371/journal.pone.0245865>

- Nukoonkan, C., & Dhammapissamai, P. (2023). Developing teachers to enhance project management skills for students. *World Journal of Education*, 13(1), 58-67. <https://doi.org/10.5430/wje.v13n1p58>
- Panepinto, J. C. (2018, November 25). *9 Ways for parents to promote prosocial behavior in early childhood*. Retrieved from <https://t.ly/MmpY>
- Parent Help Line. (n.d.). *Skill time is an easy-to-read booklet on teaching pro-social skills*. Retrieved from <https://t.ly/E7o4F>
- Parenting Across Cultures. (2018, July 26). *Prosocial behavior*. Retrieved from <https://t.ly/pBGL>
- Poepsel, D., & Schroeder, D. (2017). *Helping and prosocial behavior*. Retrieved from <https://t.ly/YpaJ>
- Praneetpolkrung, K., & Supakicco, P.S. (2023). Empowering teachers' learning to enhance students' change leadership skills. *World Journal of Education*, 13(3), 1-12. <https://doi.org/10.5430/wje.v13n3p1>
- Rodrigues, J., Ulrich, N., Mussel, P., Carlo, G., & Hewig, J. (2017, December 6). *Measuring prosocial tendencies in Germany: Sources of validity and reliability of the revised prosocial tendency measure*. Retrieved from <https://t.ly/6wBk>
- Rovinelli, R. J., & Hambleton, R. K. (1977). On the use of content specialists in the assessment of criterion-referenced test item validity. *Dutch Journal of Educational Research*, 2, 49-60.
- Samynathan, S. (2021, March 25). *How being kind can improve your health*. Retrieved from <https://t.ly/8t6Ub>
- Sanrattana, W. (2023). *Research in educational administration: Concepts, practices and case studies* (5th ed.). Thiphawisut.
- 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>
- Scholarship (2019, October 4). *Boost prosocial behavior with students and staff efficiently*. Retrieved from <https://t.ly/aTiNV>
- Siu, A., Shek, D., & Law, B. (2012, May 1). *Prosocial norms as a positive youth development construct: A conceptual review*. Retrieved from [https://t.ly/T\\_5I](https://t.ly/T_5I)
- Taylor, K. G. (2020). *Prosocial behaviors: The influence of authoritarian parenting style on adolescents' prosocial behaviors towards friends and strangers*. Graduate Theses, Dissertations, and Problem Reports, 7795. <https://doi.org/10.33915/etd.7795>
- Thomas, J. (2020). *What is prosocial behavior? psychology, definition, and examples*. Retrieved from <https://t.ly/lkSj>
- Thomas, J. (2020). *What is prosocial behavior? psychology, definition, and examples*. Retrieved from <https://t.ly/uUiCD>
- Torréns, M. G., & Kärtner, J. (2016). *The early prosocial behavior questionnaire*. Retrieved from <https://t.ly/O9M>
- UCLA: Statistical Consulting Group. (August 22, 2016). *What does Cronbach's alpha mean?* Retrieved from <https://bit.ly/3O1ySxK>
- West Virginia University Center for Excellence in Disabilities. (n.d.). *30 Ways to promote prosocial behavior*. Retrieved from <https://t.ly/RkjDd>
- 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.
- Yılmaz, D., & Kılıçoğlu, G. (2013). Resistance to change and ways of reducing resistance in educational organizations. *European Journal of Research on Education*, 1(1), 14-21. Retrieved from <https://t.ly/DwE0Q>
- Zahn-Waxler, C., & Schoen, A. (2016). *Empathy, prosocial behavior, and adjustment: Clinical aspects of surfeits and deficits in concern for others*. Retrieved from [https://t.ly/tv\\_Q](https://t.ly/tv_Q)

## Acknowledgments

We would like to thank the teachers who participated in the group discussion to review the accuracy and usefulness of the learning modules used in the online self-training program and the teachers and students who were the experimental group to try out the program. We would also like to thank the measurement and evaluation experts who

examined the tools used in the research and the teachers and students to try out the tools.

**Authors contributions**

Phra Nattawut Suchato was responsible for conducting every step of the research. Starting with studying research problems, designing research methods, creating innovations for use in research, conducting field research, summarizing results and reporting research results. Assistant Professor Dr. Phrakhrusutheejariyawattana provided advice and consultation. in the research process. Phra Nattawut Suchato drafted the manuscript and revised it. Assistant Professor Dr. Phrakhrusutheejariyawattana approved the final manuscript.

**Funding**

Not applicable

**Competing interests**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

**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**

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