

# The Collaborative Power of Teachers to Strengthen Student's Global Leadership Skills

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## Abstract

This research was a Participatory Action Research (PAR) methodology to implement the project “The Collaborative Power of Teachers to Strengthen Student's Global Leadership Skills in Na-ngiw Wittayasan School”, which is part of the Doctoral Program in Educational Administration's research program on 21st-century education, Mahamakut Buddhist University, Isan Campus with the concept of "Cooperative Action for Better Change". From the Planning, Acting, Observing, and Reflecting (PAOR) 2 cycles. Cycle one for each semester in the academic year 2022, with 25 teachers as research participants and 640 students in the development target group and the objectives were: 1) To change the level of practice of the research participants and The Global Leadership Skills of students to improve. From the comparison of 3 phases: before and after the practice in the 1st cycle and after the 2nd cycle practice. 2) To create learning from practice and 3) to gain knowledge from practice. The results of the research revealed that 1) there was a change for improvement, respectively, for the teachers who were research participants, the average scores from the performance assessment results were higher, respectively, from 2.92 to 3.06 and 4.00. As for the students who are the target group for development, the Global Leadership Skills assessment was also at a higher level, respectively, from 2.47 to 3.17 and 3.59. 2) The research team, the research participants, and Na-ngiw Wittayasan School gained much proficiency. 3) Generate knowledge from practice that demonstrates the cause-and-effect relationship of the applied driving force that results in a change. Including, resistance to change and how to overcome resistance to change which in this research is called “Na-ngiw Wittayasan School Model: The Collaborative Power of Teachers to Strengthen Student's Global Leadership Skills”

**Keyword:** 21<sup>st</sup> century education, global leadership skills, participatory action research, the collaborative power, Na-ngiw Wittayasan School

## 1. Introduction

Bishop Tyrrell Anglican College (n.d.) commented on the importance of leadership development for students “Leadership is a skill for life. It's important for students to experience leadership opportunities during their schooling, to learn the art of building relationships within teams, defining identities, and achieving tasks effectively. It also provides an opportunity to learn to identify and display effective communication and interpersonal skills”. Agreeable with Ray's (2015) view that “leadership building is a lifelong process” and “no one is born to lead” Therefore, this may begin to develop in students from early childhood.

In the transition from the 20th century to the 21st century, Sanrattana (2013) identifies many styles of leadership that emerged in the early 21st century, for example, charismatic leadership, strategic leadership, transformational leadership, transactional leadership, collaborative leadership, shared leadership, distributed leadership, democratic leadership, authentic leadership, servant leadership, positive leadership, appreciative leadership, integrated leadership, integral leadership, systemic leadership, synergistic leadership, super-leadership, compassionate leadership, enlightened or awakened leadership, prosaically leadership, ethical leadership, spiritual leadership, vigilant leadership, thought leadership, creative leadership, digital leadership, global leadership, transcendental leadership, dialogic leadership, educational leadership, school leadership, principal leadership, teacher leadership, and instructional leadership. Certainly, a leadership style that corresponds to the modern world. Globalization in the 21st

century as scholars have mentioned is indispensable: Global leadership is one of those leadership styles.

Global leadership is the processes and actions through which an individual influences a range of internal and external constituents from multiple national cultures and jurisdictions in a context characterized by significant levels of task and relationship complexity. It is a leadership style that is significant to the Globalization world Globalization Several things are as follows: enables people to lead in complex, cross-border, multicultural environments, builds and coordinates culturally diverse and geographically dispersed teams, integrates national and host cultures, leverages cultural diversity and reduces cross-cultural inefficiency, and achieves sustainable growth and profitability while contributing to people's overall well-being, and works with difficulties of being flexible and adaptable as they broaden their global footprint. (European Academy for Executive Education. (n.d.)

Especially in the business of the 21st century, global leadership skills are needed, Sandler (2019) said: as cultural and business complexity increases so does the demand for developing global leadership skills. Today's global business executives need more than just good management skills, they must be able to understand and adapt to the cultural and regulatory requirements of different countries—and to economic ecosystems that work differently than they do in the domestic marketplace. This is the duty of education to focus on developing students in today's classrooms with global leadership skills to become valuable human resources, both social and business in the future.

As mentioned at the beginning that "No one is born to lead" and "Global leadership is a skill for life" that can be developed. If you search on the Internet, you will find that there are many ideas for developing global leadership skills, as Bramwell (2020) said. What skills do global learners have in common? as follows: 1) has a strong sense of who they are; 2) can direct their own learning; 3) have accumulated a reservoir of life experience from childhood survival tactics to adult social skills and communication strategies; 4) develops their learning by upskilling or reskilling; 5) views challenges as problems and solutions; 6) is interested in the immediate application of knowledge; and 7) is internally motivated, rather than externally, to learn. And Korver (2020) mentioned On-the-job global leadership development: 1) embed learning in primary education; 2) adopt a new global leadership model, or add global dimensions to the existing model; 3) build immersion leadership simulations; 4) add global action learning projects to programs; 5) use globally-specific executive coaching; and 6) how to align & sustain development. Including, the European Academy for Executive Education (n.d.) 5 steps to develop global leadership skills: 1) define goal & goal-required competencies; 2) pre-assessment of leaders & evaluation of current abilities; 3) create individual goals; 4) post-assessment; 5) create a supportive action plan to achieve goals.

Thus, the importance of leadership can be developed in individuals as early as school age. The importance of global leadership skills, both social and business, for the modern world. Globalization in the 21st century has many aspects. Including the opinions of knowledgeable people who give suggestions to be used as a guideline for developing Global Leadership Skills in a variety of ways causing the research team to come up with ideas to operate in the project. "The Collaborative Power of Teachers to Strengthen Student's Global Leadership Skills in Na-ngiw Wittayasan School Starting by studying literature related to the development of Global Leadership Skills more broadly and deeply. Especially from articles that are presented on the Internet. What the research team saw came from the perspectives of knowledge from various countries, and to be used for the benefit of project operations. "The Collaborative Power of Teachers to Strengthen Student's Global Leadership Skills in Na-ngiw Wittayasan School". Starting by studying literature related to the development of Global Leadership Skills more broadly and deeply. Especially from articles that are presented on the Internet. What the research team saw came from the perspectives of knowledge from various countries, and to be used for the benefit of project operations. (Sanrattana, 2018). This belief is confirmed by the research of Uttamadhammo and Phrakrusutheejarawattana (2021), Thawinwong and Sanrattana (2022), and Soipimai and Sanrattana (2023) that focus on research by review literature from articles available on the Internet, including the same PAR methodology was used.

## 2. Objectives of the Study

The purpose of this research is to carry out the project "The Collaborative Power of Teachers to Strengthen Student's Global Leadership Skills in Na-ngiw Wittayasan School", which is part of the Doctoral Program in Educational Administration's 21st century education research series, Mahamakut Buddhist University, Isan Campus by using the PAR methodology, in this research, the focus of this research is on the study of academic perspectives that are regarded as explicit knowledge about strengthening Student's Global Leadership Skills with a wide variety of issues and perspectives. And to integrate with the view that is considered tacit knowledge from the previous experience of the research participants. According to the principle that "Theory and practice should be interwoven, and for this reason, it is useful to think of the process as braiding a rope where the two aspects are continually connected

together” (Flinders University, 2022), expectation results from development as follows: 1) Changes for the better, both expected and unexpected; 2) Learning from practice within the research team, the research participants, and the school; and 3) Knowledge that is grounded theory from practice.

### 3. Review of the Literature

As mentioned in the objectives of the research, this research focuses on the study of academic perspectives are regarded as explicit knowledge about strengthening Student's Global Leadership Skills with a wide variety of issues and perspectives. And to integrate with the view that is considered tacit knowledge from the previous experience of the research participants. The research team studied the academic perspectives on 6 issues as follows: 1) The definition of Global Leadership Skills from the point view of Global Integration (n.d.), Global Leadership Magazine (n.d.), IGI Global (n.d.), and The Filipina Women’s Network (n.d.). 2) The significance of Global Leadership Skills from the point of view of Caligiuri and Tarique (2009), Gregersen, Morrison, and Black (1998), Hogan Assessments (2011), Melancon (2012), Ray (2015), and Saylor Academy. (2012). 3) Characteristics representing Global Leadership Skills from the point of view of Alcocer (2018), Asia Society (n.d.), EF Educational Tours (2018), Manise and Wagner (2019), Observations (n.d.), Oxfam Education (n.d.), Sharkey (2016), Singmaster (2018), Son (2016), Talwar (2020), World Strides, Inc. (n.d.), and Zielinska (2019). 4) Global Leadership Skills development guidelines that are principles, concepts, techniques, methods, or activities from the point of view of Armitage (2011), Barb (n.d.), Bird (n.d.), Confederation of Danish Industry (n.d.), Dimitriadis (n.d.), Goodman (n.d.), Gregersen et al. (1998), Hanna (2012), Korver. (n.d.), Maclachlan (2018), Oxford University Press (2019), Rockson (2014), Saunderson (2016), Sphika (2017), Sunita (n.d.), and Talwar (2020). 5) The process of developing Global Leadership Skills from the point of view of CMOE (n.d.), Hall (2015), McDonald (n.d.), Riggio (2015), and The Bridgespan Group (n.d.). and 6) Evaluating Global Leadership Skills from the Perspective of Copenhagen Business School (n.d.), LSIS Learning and Skills Improvement Service (n.d.), and ThaiJO (2003).

From the results of the study, academic perspectives are regarded as explicit knowledge in the above 6 issues. It is considered that the view on the development of Global Leadership Skills as a principle, concept, technique, method, or activity is important. Because it will allow research participants to see new developments that are more diverse. Therefore, it can be concluded that there are 39 academic development guidelines as follows:

- Can direct their own learning
- Is interested in the immediate application of knowledge
- Good negotiator
- Relate the concepts to the local community
- Overseas experience
- Views challenges as problems and solutions
- Humility
- Cautious honesty
- Is internally motivated, rather than externally, to learn
- Become astute with surroundings
- Contribute
- Deep self-awareness
- To cultural diversity
- Lifelong curiosity
- Global strategic thinking
- Seek diversity-minded candidates
- Identify global leadership competencies
- Present students with real-world scenarios and ask them to identify possible issues or problems. by positioning students as problem seekers and problem finders we are encouraging them to think critically when they are identifying needs and opportunities
- Target the use of executive coaching to achieve global leadership objectives
- Build immersion leadership simulations
- Use globally-specific executive coaching

- Use summarizing strategies regularly
- Choose talent selection and assessment tools to provide feedback and insight into global developmental needs
- Support students to develop criteria for success for their design projects and use these to evaluate and improve the designs and solutions they develop
- Has accumulated a reservoir of life experience from childhood survival tactics to adult social skills and communication strategies
- Working in diverse contexts with people who are different from oneself, individuals need to be able to accurately perceive and learn
- Provide open-ended design challenges to encourage creativity
- Add constraints to design challenges to encourage students to come up with new ideas and alternative ways to solve problems
- Develops their learning by upskilling or reskilling
- Cultivate curiosity
- Global collaboration and project team leadership
- Executive coaching for global leadership
- Think-pair-share
- Develop a class question wall with student-generated questions to guide their thinking when they are designing
- Know what competencies and behaviors are needed to achieve business outcome
- Provide opportunities for students to work collaboratively on solving real-world problems
- Provide opportunities for students to work on collaborative projects where each student takes responsibility for an aspect of a larger group project
- Encourage students to provide constructive feedback to help other students improve their designs
- Encourage students to come up with as many ideas as they can before selecting an idea for a designed solution.

#### 4. Research Design

##### 4.1 *The Level of Action Research and the Chosen Form of Research*

Carr and Kemmis (1992) Action research is divided into three levels: 1) Technical Action Research has an important concept, that is, the researcher acts as an outside expert who brings ideas, plans, or projects that they have developed or created for research participants to act on. 2) Practical Action Research. There is an important concept that the research participants have more participation with the researcher and does not take their ideas, plans, or projects to follow the first model. But acts as a consultant and is a person who stimulates, sets issues, and directs thinking, practice, observation, and reflection. 3) Emancipatory Action Research or popularly called Participatory Action Research has an important idea that the researcher in the research with the research participants in a way that is a collaboration that has equal status.

In this research, the Participatory Action Research (PAR) methodology is based on the results of Sanrattana (2018) from the article of Arhar, Holly and Kasten (2001), Carr and Kemmis (1992), Coghlan and Brannick (2007), Creswell (2008), James et al. (2008), Kemmis and McTaggart (1992), McTaggart (1991), McTaggart (2010), and Mills (2007) It was found that PAR methodology is a research paradigm under the concept of critical social science theory or pragmatism. But using a participatory approach between the researcher and the research participants in a way that collaboration from the Planning, Acting, Observing, and Reflecting (PAOR) phase in a spiral cycle that continues without end. And to affect the improvement of practice and living conditions or life for the better.

##### 4.2 *Trustworthiness and Ethical Considerations*

PAR Methodology has been used in this research with the ten principles adhered to 1) Context-specific 2) Diversified skills 3) Change-oriented 4) Action-oriented 5) Listening to feedback from all participants 6) Analyzing, critiquing, and self-assess 7) Awareness of potential Expertise and being a stakeholder from people within the community themselves. 8) Learn from the action and both successful and unsuccessful. 9) Having a record of all research participants 10) Leading to practice or sustainable development.

The 10 principles of ethics adhere to 1) Responsibility for confidentiality. 2) Participants have equal access to information. 3) Research direction and expected outcomes arise from decision-making. 4) Participants participate in research The research process design is the most. 5) There is a consultation. 6) Observations or examinations of

documents for other purposes must be given prior permission. 7) Results will remain visible and open to others. 8) Do not infringe copyright on other people's writings or opinions. 9) Researchers must demonstrate the nature of the research process from the outset. 10) Research participants influence their work, but those who do not wish to participate Participants must recognize and respect their individual rights.

The 10 roles of the researcher are as follows: 1) be a teacher 2) be a leader 3) be a good listener 4) be a planner 5) be a designer 6) analyst 7) synthesizer 8) be an observer 9) be a result reporter 10) Be a promoter, supporter, and facilitator.

#### 4.3 The Cycle of Action, the Process Model, and Activities

As mentioned above, PAR Methodology is a participatory research methodology between the researcher and the research participants in a way that collaboration has equal status from the Planning, Acting, Observing, and Reflecting (PAOR) process in a spiral cycle that continues without end. But because in this research, there is a limitation on the duration of the course. The researchers set up 2 cycles in this research, one for each semester in the academic year 2022, with the implementation of each cycle and each step as follows:

##### Practical cycle 1

**Step 1: Preparation** there are 3 activities: 1) clarify research methodology for research participants to know and understand. And the decision to participate in the research is voluntary according to the ethical consideration. *“The investigator must make known to the research participants the nature of the research process and its benefits from the outset, and Those who wish to participate must be recognized and respected for their individual rights.”* 2) Design guidelines for working together according to the ethical consideration. *“Enabling research participants to participate in the design of the research process”* and *“there was a consultation and the recommendations were agreed upon by all parties.”* 3) Lesson Learned according to the principle *“Analyze, Criticize and Evaluate Yourself”* and *“Learn from Action both successful and unsuccessful. And there is a systematic collaborative learning process.”*

**Step 2: Planning** there are 4 activities: 1) Brainstorm to find answers that are tacit knowledge from research participants. *“If you want to Strengthen Student’s Global Leadership Skills in Na-ngiw Wittayasan School, what and how should you do?”* 2) The research team presents academic development guidelines that are explicit knowledge from the relevant literature studies to the research participants according to the principle of *“participants research access to information.”* 3) Brainstorming to integrate *“Tacit knowledge + Explicit knowledge”* to form an action plan that will lead to the implementation of the principle of *“listening to opinions from all research participants”* and according to the ethical consideration. *“There was a consultation and the recommendations were agreed by all parties.”* The results of the Action Plan resulted in 49 development guidelines for use in research as shown in Tables 1, and 4) Lessons Learned according to the aforementioned principles.

**Step 3=Acting** there are 4 activities: 1) Prepare 2 sets of assessment forms to be used in 3 phases, i.e. before and after the implementation in the 1st cycle and after the implementation in the 2nd cycle according to the ethical consideration *“Research Direction and Expected Outcomes come from the majority decision.”* As follows: a) the research participants' self-assessment on the level of implementation of the 49 development approaches, and b) the Student's Global Leadership Skills. 2) A pre-implementation assessment in Cycle 1 was performed using a) the participant's self-assessment on the level of implementation of the 49 development approaches, and b) the Student's Global Leadership Skills. 3) the Implementation of the action plan. According to the principles *“A specific context – The Wide of Skills – The Change - Aim for Action to Achieve Results - Lead to the Sustainable Development”* and according to the ethical consideration, *“Participants have an influence on the research.”* 4) Lesson Learned from what was mentioned above.

**Step 4: Observing** is collecting data from various activities and practices by using an observation form, an in-depth interview and group discussion, examining/record or journal, maps, audiotapes, videotapes, artifacts, field notes, etc. According to the principle of *“records of all subjects' activities and practices are maintained”* and taking into account the ethical *“observation or examination of documents for other purposes with prior permission”*.

**Step 5=Reflecting** there are 3 activities: 1) Assessment after practice in Cycle 1, using a) Self-assessment of the research participants on the level of implementation of the 49 development guidelines and b) Student's Global Leadership Skills. 2) Reflect on the performance by brainstorming together to reflect on the performance from every step in the 1st cycle. According to the principle. *“Listen to opinions from all research participants - Analyze, Criticize and Self-Evaluation - Learn from Actions Both successful and unsuccessful - A systematic collaborative learning process.”* According to the ethical consideration *“The visible outcome and accepted others' feedback”*. In

this performance reflection activity, the researchers used Kurt Lewin's Force-Field Analysis (Lunenburg and Ornstein, 2000) to know what the driving force used to cause change. To figure out what the driving force used to cause change and what extent did the propulsion cause the expected change. Also, what resistance has happened and from those resistant to change what approaches are suggested to increase the efficiency of the drive? And reduce the resistance to those changes or reduce them. In order to use the results to plan the action in step 6. It may be to improve the existing propulsion to be more efficient or seek new efficient propulsion instead. Or that can adjust both the original drive power and just get a new driving force. 3) Take off lessons according to the principles mentioned before.

### Practical cycle 2

**Step 6: Planning** there are 2 activities: 1) create the Operational Plans and 2) lesson learned.

**Step 7: Acting** there are 2 activities: 1) follow the operational Plans and 2) Lesson Learned

**Step 8: Observing** These are collected information from various activities. And using an observational model In-depth interview or group interview, check form and record as in Practical Cycle 1 has done.

**Step 9: Reflecting** there are 3 activities: 1) Assessment after practice in Cycle 2 by using a) self-assessment of the research participants' level of implementation of the 49 development approaches, and b) Student's Global Leadership Skills. 2) Reflect on performance by brainstorming together and reflecting on the performance from every step in cycles 2 and 3) Lesson Learned

**Step 10: Conclusion** by bringing the results of observations, interviews, inspections, recordings, evaluations, lesson transcripts. Including the reflection of the results in step 5 and step 9 came together in a seminar between the research team and the research participants. In order for the research results to be validated by the research participants in a manner known as Member Checks according to Creswell (2008), Willis (2007), Locke (2001), Leedy and Ormrod (2001) and according to the principle of "*Specific Context - Listen to opinions from all participants - Analyze, Criticize and Evaluate yourself - Learn from actions both successful and unsuccessful - A systematic collaborative learning process.* According to the ethical considerations: "*There was consultation. #And suggestions are agreed upon by all parties*" and "*Results will remain visible and open to others' comment*".

#### 4.4 Research Setting and Focus Target Group

Research areas are defined for the convenience of researchers, and also about the research team's potential and voluntary cooperation from the research participants, at Na-ngiw Wittayasan School, with 25 teachers as research participants and 640 students as the target group for development.

#### 4.5 Research Instruments

##### 4.5.1 Research Instruments for Collecting Qualitative Data from Each Activity

The research team has considered using it as appropriate and according to the situation from the concept of Mills (2007) as follows: 1) an observation form, 2) an in-depth interview and group discussion, and 3) examining, record or journal, maps, audiotapes and videotapes, artefacts, field notes, etc.

##### 4.5.2 A Self-assessment Form of the Research Participants on the Level of Implementation of the 49 Development Approaches

The research team and the research participants created them to order the research participants self-assess their performance in 3 stages, i.e. before and after the 1st cycle performance and after the second cycle performance, in the form of a 5-rating scale: *the most, very, neutral, a little, and the least* (Table 1) This assessment form is not used for content validation by experts and is not used to try out with the sample group to determine the Alpha Coefficient of Reliability. Since the questionnaire in the assessment is a development line that is the joint intention of the research team and the research participants from the brainstorming results to integrate such "Tacit knowledge + Explicit knowledge" in the planning stage of Cycle 1.

##### 4.5.3 A Self-assessment Form of Student's Global Leadership Skills

The research team and the research participants created from the results of the characteristics of global leadership skills from the point of views: Alcocer (2018), Asia Society (n.d.), EF Educational Tours (2018), Manise and Wagner (2019), Observations (n.d.), Oxfam Education (n.d.), Sharkey (2016), Singmaster (2018), Son (2016), Talwar (2020), World Strides, Inc. (n.d.), and Zielinska (2019). And the study concept of assessing Student's Global Leadership Skills from the point of view from: Copenhagen Business School (n.d.), LSIS Learning and Skills Improvement Service (2003), and ThaiJO (2003). This assessment is on a 5-rating scale: *the most, very, neutral, a*

*little, and the least.* There are 30 questions. (Table 2) It has been used to verify Content Validity by means of Indexes of Item-Objective Congruence (IOC): Rovinelli and Hambleton (1977) By 5 experts in Educational Administration and Educational Measurement and Assessment. It was found that all questions had an IOC value exceeding the specified criteria, which was 0.50, indicating that the questions in this assessment were agreeable with the development objectives from Chaichanawirote & Vantum (2017) Then, this assessment was taken to a try-out at another school that was not the research site. By using 30 students as a sample to determine Cronbach's alpha or coefficient alpha, is a reliability coefficient that provides a method of measuring internal consistency of tests. It was found that the overall reliability coefficient was 0.89, then classified by side, found that the Deep Self-Awareness aspect was 0.87, the Effective Communication aspect was 0.80, the Sensitivity to Cultural Diversity aspect was 0.85, the Lifelong Curiosity aspect was 0.89 and The Big Picture Perspective aspect was 0.84. Consider comparing the reliability coefficient with the specified criteria, which is equal to or greater than 0.80 (UCLA: Statistical Consulting Group, 2016), found that higher than the specified criteria indicates that the items have relatively high internal consistency.

#### 4.6 Data Collecting and Data Analysis

The research team and the research participants have a duty to collect data at all stages using the aforementioned tools in accordance with the principles. *“There is a record of all co-researchers on their activities and practices.”* Quantitative data from both self-assessments were analyzed using Descriptive Statistics: Mean and Standard Deviation. The Qualitative Data Section is actual data obtained from observations, interviews, and recordings. There are data analysis processes as follows: 1) Checking the completeness of the data and whether it meets the desired objectives or not. 2) Check the credibility of the information and whether it matches the actual situation or not. By comparing the recorded results of each person and comparing the recording results from using different data collection models. 3) The presentation of information in the form of a thick, critical description in a storytelling manner based on factual and neutral manner with evidence accompanying the description such as numbers, values statistics, tables, graphics, photographs, and direct quotes/verbatim or informative dialogues that point to various sentiments about the same issue that may support or conflict with each other.

## 5. Findings

The research team would like to present the research results according to the research objectives as follows: 1) Changes that occur both expected and not expected. In the case of expected change, the research participants' self-assessment of the 49 development approaches was considered. And from the results of the Student's Global Leadership Skills assessment compared in 3 phases, which are before and after the implementation of the 1st cycle and after the 2nd cycle of practice 2) learning from the practice that occurred within the research team, the research participants, and the school, and 3) the knowledge that is grounded theory is gained from practice.

### 5.1 Expected Outcomes

#### 5.1.1 Expected the Research Participants Apply the 49 Development Guidelines to Higher Practice than before

From the evaluation of the level of implementation of 49 development guidelines of 25 the research participants in 3 phases: before and after the performance of the 1st cycle and after the 2nd cycle of implementation, it was found that there were better changes. Considering the higher Mean values, respectively, 2.92, 3.06, and 4.00, and when considering the Standard Deviation, it was found that there were low values in all 3 periods, which were 0.10, 0.14 and 0.10 respectively, indicating that the opinions of the research participants at each stage had low variance. The result of the analysis of the data as a whole and for each item in Table 1.

**Table 1.** Compare the Results of the Self-assessment of the Research Participants to the Level of Implementation of the 49 Development Guidelines in 3 Phases: before and after the Performance of the First Cycle and after the Performance of the 2nd Cycle

Direction of Development (Principles / Concepts / Techniques / Methods / Activities)	Before		After		After	
	Execute in		Execute in		Execute in	
	Cycle 1		Cycle 1		Cycle 2	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.
• Students use their diligence and carefulness in making decisions.	3.28	0.61	3.48	0.71	4.20	0.60
• Students know how to build their own immunity.	2.96	0.93	3.32	0.74	4.10	0.60
• Students can cope with the changes that occur.	3.28	0.67	3.40	0.81	4.10	0.90
• Students can manage and control conflicts.	3.04	0.79	3.20	0.70	4.20	0.70
• The students have a tactful.	3.12	0.97	3.28	0.93	4.00	0.80
• Students use technology to solve problems.	3.00	0.86	3.20	0.57	4.00	0.50
• Students can direct their own learning.	3.08	0.86	3.12	0.78	4.00	0.80
• Students be interested in the immediate application of knowledge	3.08	0.70	3.12	0.60	4.20	0.80
• Students can be good negotiators	3.20	0.76	3.20	0.76	4.10	0.60
• Students can relate the concepts to local community	2.96	0.84	3.08	0.64	4.20	0.80
• Students think overseas experience is a good thing.	3.08	0.99	3.20	0.81	1.60	0.50
• Students view challenges as problems and seek solutions.	3.32	0.74	3.36	0.7	4.20	0.70
• Students have humility.	3.12	0.88	3.28	0.73	4.10	0.70
• Students are cautious honesty.	3.24	0.77	3.32	0.74	4.10	0.70
• Students are internally motivated, rather than externally, to learn.	3.16	0.62	3.24	0.59	4.20	0.70
• Students become astute with their surroundings.	2.60	1.00	2.80	1.00	4.00	0.90
• Students contribute to work.	2.72	0.79	2.84	0.62	4.40	0.50
• Students have deep self-awareness.	2.52	0.71	2.68	0.47	4.20	0.70
• Students adapt to cultural diversity.	2.76	0.66	2.84	0.74	4.10	0.70
• Students have a lifelong curiosity.	2.72	0.73	2.80	0.64	4.10	0.70
• Students have global strategic thinking.	2.64	0.75	2.72	0.61	4.20	0.70
• Students apply think-pair-share concepts.	2.60	0.76	3.12	0.33	4.20	0.70
• Students can develop a class question wall with student-generated questions to guide their thinking when they are designing.	2.92	0.75	3.04	0.67	4.20	0.60
• Students know what competencies and behaviors are needed to achieve business outcomes.	2.96	0.67	3.40	0.70	4.10	0.50
• Students have accumulated a reservoir of life experience from childhood survival tactics to adult social skills and communication strategies.	2.76	0.72	2.76	0.72	4.20	0.60
• Teachers organize an interaction activity and live happily with others.	2.96	0.79	3.16	0.62	4.20	0.60
• Teachers organize activities to enhance assertiveness skills through a variety of methods.	3.32	0.80	3.52	0.71	4.10	0.60
• Teachers organize a brave stage award.	3.36	0.86	3.48	0.77	4.20	0.70
• Teachers organize activities to promote academic skills.	3.16	0.98	3.36	0.90	4.10	0.70
• Teachers accept students who have diversity-minded candidates.	2.48	0.82	2.68	0.55	4.20	0.70
• Teachers identify global leadership competencies.	2.88	0.83	3.00	0.81	4.20	0.80
• Teachers define the target as the use of executive coaching to achieve global leadership objectives.	2.88	0.83	3.04	0.61	4.20	0.70
• Teachers build immersion leadership simulations.	2.48	0.82	2.68	0.55	4.10	0.70
• Teachers use globally-specific executive coaching.	2.64	0.95	2.68	0.90	4.20	0.60
• Teachers use summarizing strategies regularly.	2.68	0.62	2.68	0.62	3.40	0.60
• Teachers choose talent selection and assessment tools to provide feedback and insight into global developmental needs.	2.64	0.81	2.64	0.81	4.10	0.70
• Teachers support students to develop criteria for success for their design projects and use these to evaluate and improve the designs and solutions they develop.	2.80	0.81	2.80	0.81	4.20	0.80
• Teachers provide open-ended design challenges to encourage creativity.	2.72	0.89	2.72	0.89	4.00	0.60
• Teachers add constraints to design challenges to encourage students to come up with new ideas and alternative ways to solve problems.	2.88	0.72	2.88	0.72	4.20	0.60



Direction of Development (Principles / Concepts / Techniques / Methods / Activities)	Before		After		After	
	Execute in		Execute in		Execute in	
	Cycle 1		Cycle 1		Cycle 2	
	$\bar{x}$	S.D.	$\bar{x}$	S.D.	$\bar{x}$	S.D.
• Teachers develop students learning by learning by up skilling or reskilling.	2.88	0.72	2.88	0.72	4.10	0.70
• Teachers build cultivate curiosity in students.	2.88	0.60	3.28	0.54	4.20	0.60
• Teachers have training on Global collaboration and project team leadership.	2.92	0.70	3.20	0.40	2.70	0.50
• Teachers practice their executive coaching for global leadership skills.	2.80	0.81	3.32	0.47	4.10	0.70
• Teachers provide opportunities for students to work collaboratively on solving real-world problems.	3.28	0.61	3.28	0.61	4.20	0.50
• When students work in diverse contexts with people who are different from them self, individuals need to be able to accurately perceive and learn.	2.68	0.74	2.68	0.74	4.20	0.70
• Teachers provide opportunities for students to work on collaborative projects where each student takes responsibility for an aspect of a larger group project.	2.76	0.77	3.12	0.33	4.00	0.80
• Teachers encourage students to provide constructive feedback to help other students improve their designs.	3.08	0.90	3.24	0.66	4.00	0.70
• Teachers encourage students to come up with as many ideas as they can before selecting an idea for a designed solution.	3.08	0.86	3.16	0.75	4.10	0.70
• Teachers present students with real-world scenarios and ask them to identify possible issues or problems. By positioning students as problem seekers and problem finders we are encouraging them to think critically when they are identifying needs and opportunities.	2.72	0.67	2.76	0.59	4.10	0.60
<b>Total</b>	<b>2.92</b>	<b>0.10</b>	<b>3.06</b>	<b>0.14</b>	<b>4.00</b>	<b>0.10</b>

### 5.1.2 Expect Students to Gain more the Global Leadership Skills

According to the results of the Student's Global Leadership Skills assessment, there are changes for the better in these 3 phases. Considered the higher Mean value, respectively, from a Mean equal to 2.47 in the period before the practice in the 1st cycle, to 3.17 after the practice in the 1st cycle, and to 3.59. After the practice in the 2nd cycle, and when considering the Standard Deviation, it can be seen that were at the low level, 0.01, 0.01, and 0.25, respectively. And the opinions of the 640 students who were assessed had low variance. The result of the analysis of the data as a whole, by each side and by item in Table 2.

### 5.2 Unexpected Outcomes

From the reflection activities in Cycle 1 and Cycle 2 and from the workshop to summarize the research results together between the researcher and the research participants, it was found that the results from this research caused unexpected changes in the way that also improved as follows: 1) Before conducting research, some school teachers find it improbable or difficult to do. And some people are afraid that it will increase their workload. But when the research team clarified and pointed out the benefits that will be obtained, more than half of all teachers wished to participate in this research. 2) Before conducting the research, few teachers in schools teach in group activities. But when brainstorming taking lessons and mutual learning exchange, there was a group working process. 3) Before conducting research, there are still no different techniques. But when having a conversation together it has created a new body of knowledge that will be used in a variety of practices. 4) This research has created the cooperation power of teachers, administrators, local communities, and related agencies. This is the starting point for further cooperation in the future. 5) When developed, changes have occurred as expected. Students know more about self-esteem by gaining life skills in various fields, being assertive, being able to think outside the box, and being able to solve immediate problems. Also, they can develop leadership skills in themselves and learn to live happily with other.

### 5.3 Learning from Practice

The research team realizing the importance of acquiring working techniques and drives that will help strengthen work at all stages is important. Because it gives a more rounded view being more creative has improved their own work efficiency, such as brainstorming techniques change management, communication, and planning, including the application of Buddhist principles as a reminder in the work from the beginning to the end of the research, etc. About the research participants, recognize the importance of teamwork as a way to bring out one's potential in the workplace to the fullest. And create a good relationship with each other and helps to work more efficiently. About Na-ngiw Wittayasan School, becomes aware of the role of school administrators who must promote and support the

implementation of any project organized by the school teachers. Also, establishing a network of cooperation with local communities and relevant agencies to participate in the development.

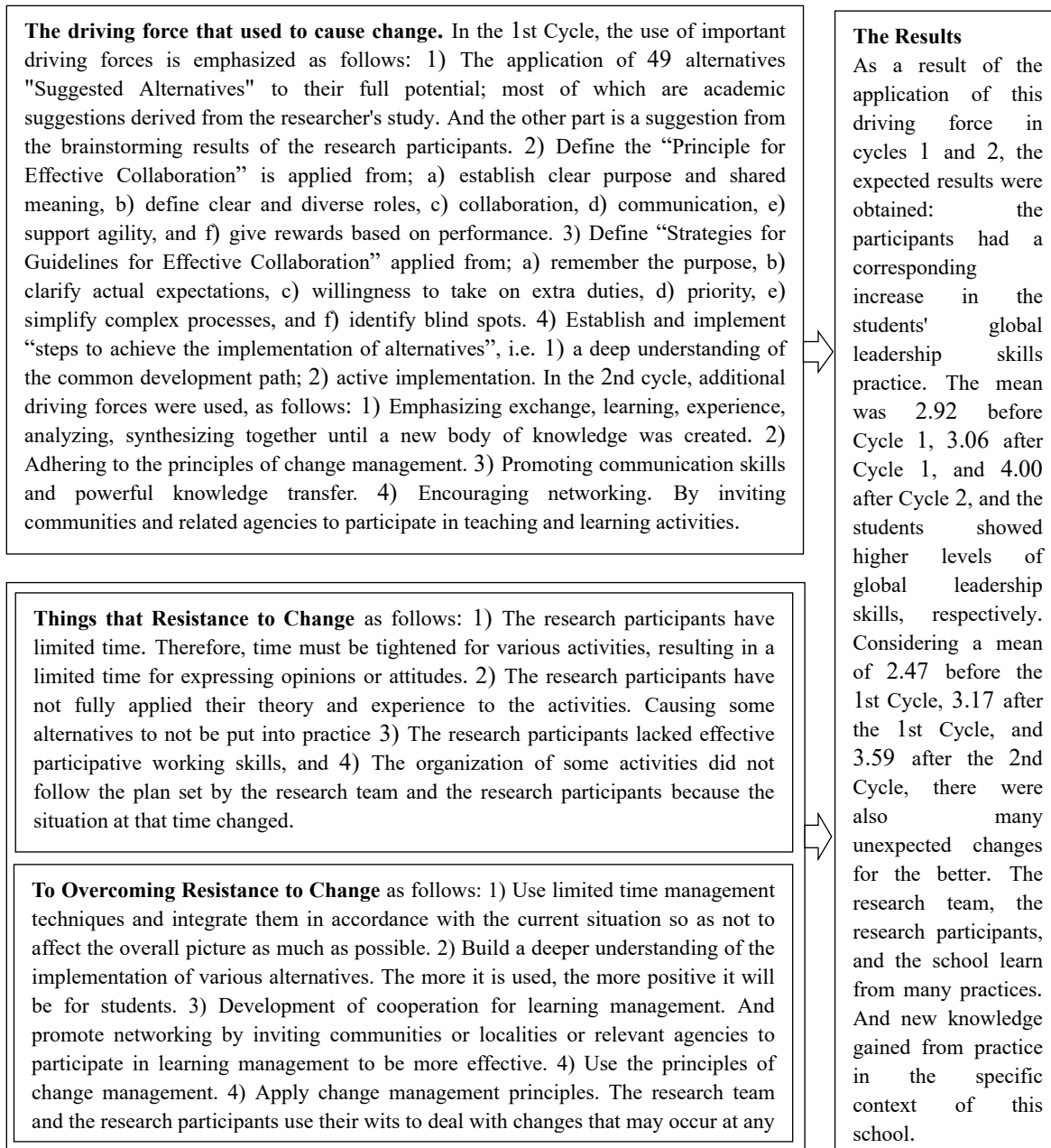
**Table 2.** Compare the Results from the Student's Global Leadership Skills Assessment in 3 Phases: before and after the Implementation of Cycle 1 and after the Implementation of Cycle 2

Expected Outcomes on Global Leadership Skills	Before Execute in Cycle 1		After Execute in Cycle 1		After Execute in Cycle 2	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.
<b>Deep Self – Awareness</b>	<b>2.43</b>	<b>0.07</b>	<b>3.18</b>	<b>0.09</b>	<b>3.58</b>	<b>0.59</b>
A high self-confidence	2.36	0.50	3.07	0.36	3.61	0.65
Be assertive but properly.	2.42	0.63	3.10	0.33	3.50	0.62
Able to plan and set their own learning goals	2.50	0.72	3.24	0.48	3.51	0.69
Able to identify their own learning needs	2.41	0.66	3.06	0.25	3.64	0.73
Able to choose the best learning method for themselves.	2.40	0.66	3.38	0.49	3.52	0.64
High responsibility for self-learning	2.47	0.58	3.24	0.43	3.72	2.10
<b>Effective Communication</b>	<b>2.50</b>	<b>0.05</b>	<b>3.12</b>	<b>0.08</b>	<b>3.58</b>	<b>0.02</b>
Being excellent in communication skills.	2.51	0.51	3.10	0.30	3.55	0.62
Often reach the goals in communication.	2.41	0.54	3.22	0.46	3.54	0.61
Able to speak to persuade listeners as well	2.58	0.62	3.17	0.40	3.55	0.65
Able to effectively convey ideas through writing.	2.50	0.65	3.10	0.31	3.57	0.65
Able to choose appropriate technology tools for communication.	2.45	0.59	3.11	0.33	3.52	0.63
Have excellent skills in using technology media to communicate.	2.54	0.54	3.02	0.20	3.78	0.64
<b>Sensitivity to Cultural Diversity</b>	<b>2.49</b>	<b>0.06</b>	<b>3.22</b>	<b>0.05</b>	<b>3.62</b>	<b>0.02</b>
Deeply aware of cultural differences	2.46	0.50	3.20	0.44	3.53	0.67
Have the effort to recognize and understand the diversity of other cultures around the world.	2.52	0.64	3.27	0.50	3.59	0.63
Have the determination to learn with a variety of people.	2.50	0.65	3.16	0.38	3.69	0.68
Have the ability to adapt well to a variety of cultures.	2.44	0.61	3.29	0.51	3.68	0.68
Able to deal with obstacles arising from cultural diversity.	2.50	0.55	3.21	0.47	3.60	0.69
<b>Lifelong Curiosity</b>	<b>2.49</b>	<b>0.05</b>	<b>3.20</b>	<b>0.07</b>	<b>3.58</b>	<b>0.04</b>
Never stop learning and challenging new things. continue proactively.	2.51	0.51	3.13	0.37	3.52	0.65
Show a lot of curiosity about things.	2.44	0.60	3.38	0.49	3.63	0.74
Determine to find new ways and deal with the problems that are encountered.	2.53	0.65	3.19	0.41	3.60	0.70
Like to learn about international education and constantly seeking to learn new things.	2.52	0.62	3.22	0.46	3.51	0.68
Always think and try to work outside the box.	2.52	0.57	3.06	0.27	3.70	0.71
Have a view that challenge is the biggest challenge of being a global leader.	2.42	0.54	3.20	0.41	3.53	0.62
<b>Big Picture Perspective</b>	<b>2.45</b>	<b>0.05</b>	<b>3.15</b>	<b>0.07</b>	<b>3.59</b>	<b>0.03</b>
The world is my classroom	2.54	0.52	3.14	0.37	3.75	0.62
Always have a broad view of the world situation.	2.43	0.65	3.09	0.32	3.45	0.62
Have imagination. creativity, and always ready to do.	2.40	0.64	3.22	0.45	3.56	0.62
Understand that new experiences will make it fun to grow and learn.	2.47	0.65	3.21	0.47	3.50	0.69
Able to surprise and inspire others.	2.42	0.63	3.12	0.41	3.59	0.70
Noticed themselves about having the special work for the school.	2.48	0.68	3.05	0.27	3.73	0.66
Believes that global thinking will achieve the goals set in life.	2.40	0.55	3.24	0.44	3.52	0.64
<b>Total</b>	<b>2.47</b>	<b>0.01</b>	<b>3.17</b>	<b>0.01</b>	<b>3.59</b>	<b>0.25</b>

#### 5.4 The Knowledge Gain through Research

It is a body of knowledge that is grounded theory based on Kurt Lewin's Force-Field Analysis framework that is used

in the performance reflection process. To know what is the driving force used to cause change. To what extent did the propulsion cause the expected change? What resistance has happened? How to overcome resistance to change? Which in this research is called “Na-ngiw Wittayasan School Model: The Collaborative Power of Teachers to Strengthen Student’s Global Leadership Skills” as shown on Figure 1.



**Figure 1.** Na-ngiw Wittayasan School Model: The Collaborative Power of Teachers to Strengthen Student’s Global Leadership Skills” on Figure 1

## 6. Discussion

As mentioned in the beginning, this research uses Participatory Action Research (PAR) methodology for implementing the project “The Collaborative Power of Teachers to Strengthen Student's Global Leadership Skills in Na-ngiw Wittayasan School” which are 2 cycles of Planning, Acting, Observing, and Reflecting (PAOR) Steps, one for each semester in the academic year 2022 with the objectives of research to 1) bring about changes in the level of

practice and the level of both expected and unanticipated results for the better from the comparison of 3 phases, i.e. before and after Practice in the 1st cycle and after the 2nd cycle practice, 2) to create learning from practice, and 3) to gain knowledge from practice. There were 25 teachers who participated in the research with 640 students in the development target group. The results of the research revealed that Assessment of the level of practice to strengthen Global Leadership Skills for students has a higher value, respectively, from 2.92 to 3.06 and 4.00. As for the students who are the target group for development. 2) the research team, the research participants, and Na-ngiw Wittayasan School had many learnings. 3) Gain knowledge from practice that demonstrates the cause-and-effect relationship of the applied driving forces that result in both expected and unanticipated changes. Anti-change and how to overcome resistance to change which in this research is called “Na-ngiw Wittayasan School Model: The Collaborative Power of Teachers to Strengthen Student’s Global Leadership Skills” as shown on Figure 1.

The results of such research are caused by the main drive power and the auxiliary drive power used. As mentioned in the prototype model above. But here, the researcher would like to emphasize the main driving force to be discussed in this research paper, which is the importance of the concept of bringing academic development that is regarded as explicit knowledge with various issues and many perspectives. The 49 approaches to Strengthen Students’ Global Leadership Skills that can lead to practice (Table 1). This is agreeable with the concept of Knowledge Management (KM), which aims to share perspectives, ideas, experience and information; to ensure that these are available in the right place at the right time to enable informed decisions; and to improve efficiency by reducing the need to rediscover knowledge. (University of Alaska Office of Information Technology, 2012) It is also agreeable with other democratic management theories, such as Participative Leadership Theory (PLT), which Indeed Editorial Team (2022) explains is a leadership style that seeks input from every member of the organization. Generally, the leader asks for thoughts and ideas from their team members before making decisions or establishing new processes and procedures. In most cases, participative leadership follows this process: 1) the leader facilitates a meeting with the team, 2) the leader shares any necessary information and knowledge about the project or problem to solve, 3) team members share their ideas and thoughts with the group, 4) the group processes all the ideas and information, 5) the group or group leader makes a decision, 6) the leader communicates the decision to other stakeholders as needed, and 7) the group proceeds with the project. Which agreeable with School-Based Management (SBM) which is mean a form of decentralization that identifies the individual school as the primary unit of improvement and relies on the redistribution of decision-making authority [to the school level] as the primary means through which improvements might be stimulated and sustained. (Malen, Ogawa & Kranz, 1990). Therefore, adopting a core driving force that values both explicit knowledge and tacit knowledge is an issue that anyone who aims to develop anything or wants to solve any problems with PAR methodology must take into account that it must be used in parallel. To enhance the efficiency of working together in a hand-in-hand manner. If taking into account only the application of tacit knowledge, the work will be the way it has been done before, however, it will be difficult to have the opportunity to create new things or new innovations. But if taking into account only explicit knowledge, it may cause the work to lack continuity and sustainability because it does not correspond to the original context that has been done in the past.

## 7. Recommendations

Implementation of the project “The Collaborative Power of Teachers to Strengthen Student’s Global Leadership Skills in Na-ngiw Wittayasan School, which is carried out with 2 cycles of Planning, Acting, Observing, and Reflecting (PAOR) phases, one for each semester in the academic year 2022. This is just the beginning. This development path must be continued every semester and every academic year, according to the nature of the PAR methodology. It is a spiral development that aims for continuous and sustainable change for the better as John F. Kennedy admonishes, “Change is the law of life and those who look only to the past or present are certain to miss the future.” (Cahoot, 2021) and follows the principle of continuity: learning and development is a never-ending process, especially the development of students in any school. In each academic year, there will be new students to receive development in any subject. Therefore, “The Collaborative Power of Teachers to Strengthen Student’s Global Leadership Skills in Na-ngiw Wittayasan School prototype model” that is one of the results from this research is the starting point for this school to have a model to use as a guideline for student development. Those teachers themselves must be aware of the fact that “There is no such thing as complete success.” Teachers must be lifelong learners and must not stop learning. Also, never stop strengthening the potential in various fields for students. Teachers will need to develop this prototype model to be more effective than this starting point. They must seek the driving force to create new changes. And come to enhance the existing driving force continuously. Especially the study of suggestions as a development line with many new perspectives presented. In addition, because the PAR

methodology contains principles, ethics, roles and procedures that have been applied to the expected success, this school or other schools can adopt PAR methodology based on principles, ethics, roles and procedures. As mentioned in this research article can be used for any development.

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