

The Self-Improvement School Project: A Case Study of Choafa (Princess) Ubonratana School

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Abstract: The Self-Improvement School Project was funded by The Equitable Education Fund (EEF), Thailand. The purpose program was to improve the quality of 636 schools. Choafa Ubonratana School is one of the project schools for this case study. The research used mixed method research. Key informants were 30 school stakeholders and 3 school coaches. Data collection included quantitative data and qualitative data collection from field studies. The content analysis is used as well as the statistics used. It found that Choafa Ubonrat School is a charitable private school located in Chiang Mai Province, Northern Thailand. They provide educational services to people of 28 villages from kindergarten level to secondary level with 28 teachers and 332 students. All are from various hill tribes along the borderline. Their parents are poor. They have trouble speaking and writing in Thai. Communication with teachers requires an interpreter. The development has caused all 13 hill tribe students to be able to read and write in Thai. Students has developed skills in the 21st century especially on a better and improved living and professional skills to raise additional income for their families. They have a better quality of life. All of these occurred from the determination and quadrilateral focus on the work and sacrifice of the teachers, academic leadership, and change of school administrators. As a result, the school has been developed all of administrator, teachers, students as well as parents especially core learning outcomes of students with knowledge, skills, attitude and values at the National Educational Average.

Keywords: Self-Improvement School, School Development, Choafa Ubonrat School, Equitable Education Fund, School Management

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Introduction

Education is an important mechanism for the development of people, the nation and the ability to compete at their own

society, nation and international level. Each country aims to develop people for the development of the country such as knowledge, skills, attitudes and behaviors to improve throughout life in various ways (Siridhrungsri, 2019). The last 20 years, globalization and economic, social, cultural, political prosperity have been limited. Influence context affecting the development such as governance, science and technology pushed each country to be more competitive (Education Council, 2016). Therefore, the countries have evolved both materially and the nation, as long-handed only have winners to live in world society. Therefore, countries are grouped in the form of developed, developing and underdeveloped countries. The mechanism to keep those countries is to get people's education, reduce inequality as a base for development, especially in the wake of a new pandemic, such as the COVID-19 pandemic that is spreading violently affecting human life throughout the world. There's no sign of calming down yet. The plague challenges human intelligence to find ways to manage, each country needs to protect its peoples, and the circumstances become a post-globalization situation that, in addition to competing for survival, must be done for themselves and their own countries more important than to take into internationalism helping each other. Education and knowledge can only save all peoples or people from crises. That needs to be supported and developed for schools are the main institutions to manage education, accessibility, quality, equity with effectively (UNESCO, 2000) and sustainable development. (United Nation, 2017)

However, inequality in student-driven education continues to appear in the Thai education system, despite the efforts of the authorities responsible for the management of education both public, private and local governments, as well as other institutions that support education (Sueksathikarn Foundation, 2020), especially the Equitable Education Fund (EEF), Thailand, which has been making efforts to reduce inequality and support student education through the process of developing teachers and schools to continuously improve the quality of education program (Equitable Education Fund, 2020). Equitable Education Fund (EEF) Thailand, it plays a role and mission focused on helping those in need, funding, reducing educational inequality, enhancing, and improving teacher quality and performance to strengthen and improve the quality and efficiency of teachers to be able to provide teaching and learning. It can develop juveniles based on different fundamentals and potentials. To encourage, support and assist schools so that they can teach and develop according to their aptitude and potential, as well as conduct or provide education, research or research on how to develop teachers in the spirit of teacher hood. Virtue, ethical, knowledgeable and capable of providing teaching and developing learners to reduce inequality in education with appropriate motivation. As well as encouraging or encouraging the establishment of model institutions in teacher production and development (Government Gazette a, 2018).

Schools are the most important unit in the education system because they provide access to basic education services over 7.3 million students. (Education Council, 2021). It is also a learning management unit that will develop potential students. The skills and competence required in the 21st century; quality citizens of the country and good citizens of the world. Whole school approach is an important break-in point both in terms of ensuring equality in access to children and youth education and improving the quality of learning in both academic, important skills and attributes of children and young people, which will be in line with the Thailand 20-year national strategy (2018-2037) to develop human resources as an important force for national development (Government Gazette b, 2018). This depends on how effectively the school performs its role. Self – improvement School Project is one of the programs to enhance the school student quality funded by EEF

between 2019 and 2022.

Research on the Self -Improvement Schools Project was funded by EEF between 2020 and 2022. Princess Ubonratana School is one of the project schools for this case study.

Research Objective

Objectives of the research was to study the development result of self-improvement Choafa Ubonrattana School, administrator, teachers and students to improve the quality of education

Research Methodology

Method used was the Mixed Method Research, both qualitative and quantitative. Research tools for the quantitative research included surveys, questionnaires, while tools for the qualitative research comprised interviews, group discussion, observation and document synthesis in keeping with the objectives and research conceptual framework in terms of environment, factors, process, outputs, outcomes, impacts, problems and obstacles, strengths, limitations, efficiency, effectiveness, factors and conditions for success. Informants consisted of coaches in the development project, school administrators, teachers responsible for the project implementation, students' representatives, parents' representatives as well as communities' representatives. For data collection; quantitative data collection used the Google form system and sending questionnaires directly to the participating schools (together with other schools of the project), while qualitative data collection used manually conducted from field studies, focus - group discussions, operational observation and document synthesis. The analysis of quantitative data was analyzed by package software and qualitative data analysis using content analysis; data were analyzed by using percentage, PD (percentage difference) and the Relative Gain's Score. Data presentation is in essay type associated with photos. Research duration was between August, 2020 and September, 2022.

Related Literature

Self-Improvement School Project

(Education Equitable Fund, 2020, pp. 1-10)): Self-Improvement School Project is a project in 2020-22 , 1-34) set up following the development of teachers and schools to continuously improve the quality of education during June 2020 – July 2022, in 40 provinces, 636 schools were received with development grants to develop teachers and schools through 11 educational institutions: 1) Khon Kaen University 2) Prince of Songkla University 3), Future Skills Foundation) 4) Lamplimat Pattana Foundation 5) Naresuan University 6) Kanchanaburi Rajabhat University 7) Phuket Rajabhat University 8) Siam Kammachon Foundation 9) Yuvapat

Center Statesman Foundation, General Prem Tinsulanont, 10) Surin Primary Educational Service Area Office 2, and 11) Starfish Country Home School Foundation with the following concepts, goals and objectives:

A. Operating Framework: The key conceptual framework of the Self-Improvement School Project will guide the school to improve the quality on its own in the entire school system according to the school's needs. By reinforcing the support of network parties in various measures to create a framework for executives progressing to lead the transformation of the organization and empower teachers to proactively manage teaching and learning management. In order to develop the 21st century performance to learners and have desirable attributes, the measures that schools should take to drive development such as clearly having school goals. Using information as a targeting base, monitoring students' school visits, including student support teachers will encourage teachers to have knowledge in the subjects they teach, and the active learning management process evaluates students' progress. Able to take care of students individually. Have a good relationship with students and improving teacher performance focuses on the process of self-improvement. Teachers in schools create learning communities to improve teachers' professions in schools and expand the learning community between schools. This may also enhance the skills of teaching and learning according to the needs of teachers.

The Self-Improvement School Project is an ongoing project from teacher and school development projects to continuously improve the quality of education in the third year in the target school. The original operation of the project, both 1st and 2nd generations, 636 schools through the joint network supporting the development of all 11 educational institutes and maintaining the principles of voluntary operation and requirements of the school. The measures of the development of the entire school system are 6 measures and increased support measures to support the care system for disadvantaged and special needs students.

To increase educational equality and create a better quality of learning for disadvantaged children, the project continues to focus on the school developing the school management system and developing the class management system itself, which will be carried out in two main ways: expanding the school's performance to develop self-quality to sustainable outcomes and communicating knowledge to the wider society, as well as communicating with parties, including affiliated agencies and related organizations, for broader expansion or positive impact. Supported by 8 supplementary processes, including (1) Project Series Management (2) Research, Monitoring and Evaluation of Projects (3) Supporting quality communication systems for school management (info) (4) Using evaluation guidelines for the development of learning students (5) Self-assessment with process development evaluation or developmental evaluation (6) Research, development, measurement and evaluation of active learning outcomes developed Executive Function (7) Transcription of Project Operations and (8) Social Communication (Public Advocacy) operations in two parallel characteristics. It will help the school to develop itself in quality, leading to desirable outcomes for the learner. In other words, students have the 21st century performance and desirable attributes. Happy and well-being, reduce the rate of drop-off from the education system, reduce regressive learning situations and increase access to a quality education system. Finally, parents and communities can be strong as well.

B. Target: The school has the ability to continuously improve itself. To continuously enhance the quality of education. As a result, students in the target schools of the project have developed quality in terms of performance in the 21st century, have higher desirable characteristics and academic achievements, as well as receive full care, assistance and development, potential and safety, to create educational opportunities, reduce inequality and reduce the rate of drop-off from the education system.

C. Objectives: 1) To promote the quality development of the school itself in whole school approach and schools. Have the potential to continue to develop themselves, 2) to improve the performance of students in the 21th century, leading to higher academic achievements according to the potential of the learner. It focuses on caring for disadvantaged students in both quantitative and quality. 3) To develop the skills of administrators in school management and the skills needed for teachers to provide teaching and learning that can develop students to compete in the 21st century. 4) To create a network for improving the quality of schools in Active Learning Management. 5) To develop information systems (Q-info) and the use of databases for school management and student support. 6. To study, monitor and evaluate and take lessons from operations and expand development to network schools to achieve appropriate and contextual quality improvement. Lead social communication and policy drive with relevant agencies

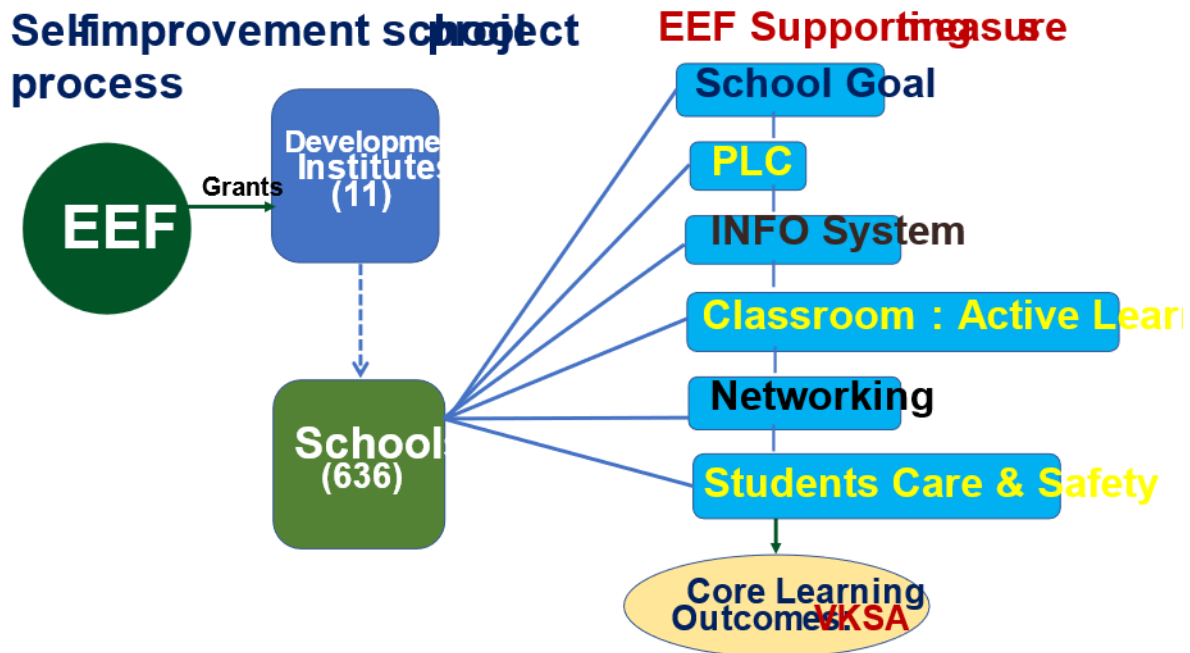


Figure 1. Modified Model of Self-Improvement School Project Process Adapted From “Self-Improvement Model,” By P. Siridhrungsri and W. Witsarutapa, 2022. *Report Research and Evaluation of The Self-Improvement School Project*, P.17.

Source: Siridhrungsri and Witsarutapa (2022, P. 17).

EEF supporting measures (Education Equitable Fund, 2020) : In this project, EEF sets the supporting measures for the school development with 6 measures, those are 1) setting quality goal (School Goal), 2) developing teachers and

administrators through professional learning community process, 3) management of effective information system, 4) development of quality instruction in classroom to be the active learning with various techniques, 5) creation of collaborative networks together, and 6) intense students care and safety system, with the four key processes inclusive flexible learning management, care of students thoroughly and equitably, developing teachers to be motivated by pursuit of knowledge and be a professional teacher, plus building faith in community participation, shown as figure 1 as follow:

STEAM Design process: It is established model using innovative development of instruction with STEAM Design Process developed by Starfish Country Home School Foundation from the results of research, development, and experiment then results expanded and well accepted at last. It has been used for developing the school in the self - improvement project under Starfish Country Home School Foundation consist of Ask, Imagine, Plan, Create, and Reflect and redesign, shown as figure 2 as follow:

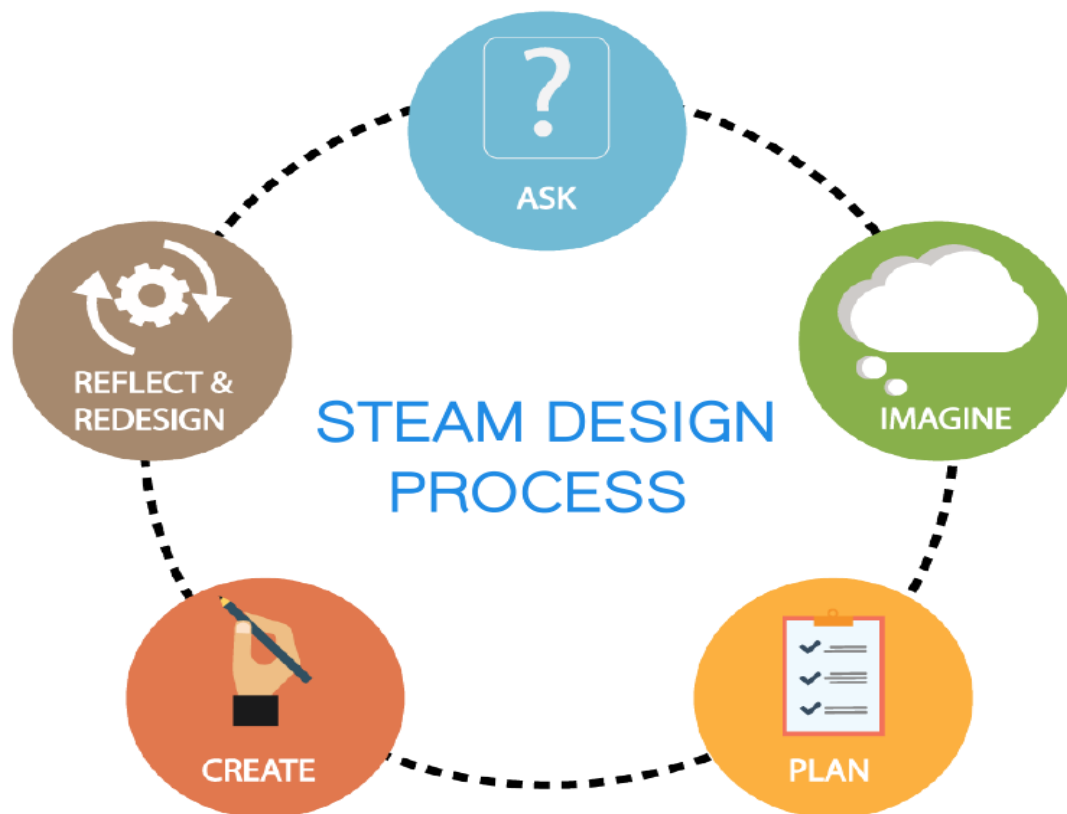


Figure 2. STEAM Design Process. From Starfish Country Home School Foundation, 2019.

Source: Starfish Country Home School Foundation, 2019. Retrieved December 3, 2019 from <https://bre.is/ZmacurUf>

Core Learning Outcomes: EEF set the result of the projects that the learning outcomes of the projects to be made to students at the National Education Average (NEA), both knowledge, skills and morality as follows:

No.	Learning Outcomes	Indicators
1	<p>knowledge</p> <p>Knowledge of learning and participation in project activities</p>	<p>Students can</p> <ol style="list-style-type: none"> 1) capture and draw important conclusions from readable stories 2) choose a writing style to communicate to others, suitable for the situation and potential of themselves. 3) describe the relationship between knowledge gained and their daily livelihood, families, societies, countries, and world societies. 4) identify problems and solutions for families, communities and societies where they can become members 5) tell themselves how to apply the knowledge gained from the project in everyday life.
2	<p>Skills</p> <p>1.1 Critical Thinking and Critical Thinking Skills</p>	<p>Students can</p> <ol style="list-style-type: none"> 1) think critically, sort out the situations that happen to lead to decisions and connect to real life. 2) choose a smart and rational solution.
	<p>1.2 Creative skills</p>	<p>Students can</p> <ol style="list-style-type: none"> 1) think flexible and varied 2) innovate new methods until they are accepted.
	<p>1.3 Communication skills</p>	<p>Students can</p> <ol style="list-style-type: none"> 1) speech, writing or body language can be used to communicate to others correctly, clearly, easily. 2) choose the right technology or tactics to communicate.
	<p>1.4 Professional skills</p>	<p>Students can</p> <ol style="list-style-type: none"> 1) choose to practice the profession they are interested in. 2) apply basic professional knowledge to further development as a career.
	<p>1.5 Life skills</p>	<p>Students can</p> <ol style="list-style-type: none"> 1) think progressively and optimistically 2) have the ability to adapt, be ready for change and work with others.
2	<p>Morality (Desirable Attributes)</p> <p>2.1 Discipline means a feature that represents the adherence to the Agreement family rules and regulations, communities and society</p>	<p>Students can</p> <ol style="list-style-type: none"> 1) comply with family agreements and rules Schools, society and non-infringements on the rights of others 2) punctual to learn and perform activities.

No.	Learning Outcomes	Indicators
	2.2 Be honest means a feature that expresses adherence to accuracy, behave according to the truth to oneself and others.	Students can 1) behave in the right way for yourself and others. 2) behave and advise others to follow the rules of society and culture.
	2.3 Have a public spirit means a feature that expresses participation in activities or situations that benefit others, community and society willingly enthusiastic without hope of return.	Students can 1) share and help others willingly and satisfied with no hope of return. 2) participate in activities that benefit the family. Schools, communities and society, with enthusiasm and unsteadiness to the situation.

Research Findings

It was found that education provision in the midst of difficulties on the basis of ethnic, religious, cultural, economic, social and national security is viewed quite challenging education for the administrators and teachers of Princess Ubonratana School.

School context: Choafa (means Princess) Ubonratana School is a private charitable school under the supervision of Slurs de Saint-Paul de Chartres, Princess Ubonratana School situate at 167 Mu 8, Chiang Dao Sub-district, Chiang Dao District, Chiangmai Province. The school is affiliated to the Office of the Private Education Commission under control of Chiangmai Provincial Education Office, and support from Princess Ubolratana Foundation. Purpose of the school is to improve the quality of life and education of poor students, those infected with HIV and the students whose parents are prosecuted for drug related crimes and other lawsuits.

The school provides education for students from 28 villages in Chiang Dao District, offering from Kindergarten 1 to Mathayom 3, with 28 administrators/teachers, 332 students; 200 of them residing in the school under care of the teachers and administrators throughout the entire 24 hours of the day. Students included the children from 13 ethnic tribes such as Pgakayor. Akha, Hmong, Lisu, Lahu, Dara AngKachin, Yao, Lawa, Thai Yai and Thai students in the north along the border stitch. Their poor parents engaged in agriculture. Mostly are Christians and Buddhists. Students in each tribe cannot speak and write Thai. Thus, an interpreter is required

for communication with the teachers. Due to different society circumstances, culture and tradition in each tribe, the school therefore has found it hard to provide education for them.

School's Measures for further development included

1. Determining quality school goals, Princess Ubonratana School by school administrators, teachers, representatives of the school committees and parents' representatives are committed to share determining the goals of school. Problems encountered by the students are determined, i.e. students cannot read Thai, no social life with others, but will associate with friends from the same tribe, students speak their tribal language, the teacher does not understand the language of the students. The elders in each tribe of the school must interpret for the teachers. The administrators, teachers, parents, and committees wish the students can use Thai as the medium of communication with student fellows from all 13 tribes in the school. By employing the process of Development Evaluation (DE) trained by the EEF and the Starfish Country Home School Foundation, vision and goals of school are defined as follows:

Vision : To build learners with the 21st century skills, enabling them to read, write, and transfer knowledge through vocational skills activities.

Goals: Learners can read, write and communicate, emphasizing upon vocational skills.

In the past year, the school's goals highlighted on reading and writing, but this year to focus on idioms, proverbs, rhythm of prose (recitation). It can be seen that the goals set by school conforming to the students' problems. The identified goals are consistent with the vision, are short, concise, language used is simply to understand and can be fruitfully implemented within one academic year.

From the school's self-assessment, it was found that before participating in the project, the determining school's goals was at **high level**, but after participating in the project at the **highest level**. Participants in determining the school's goals comprised the administrators and school committees. The goal setting method employed knowledge sharing using the PLC process, SWOT analysis and Development Evaluation (DE). The school's current goals are “ Smart, Good, Happy ” . To achieve the determined goals, the school has prepared a plan to improving quality of student life and a project on quality building school.

2. Managing quality information system: Last year, Princess Ubonratana School applied the information system specified by the EEF to some programs, such as checking students' names, assisting and caring the students in conjunction with the old school information system. Recently, the school's original affiliation (Office of the Private Education Commission: OPEC) required all private schools to use its information system called Regis. If not, that school will not receive a subsidy from the OPEC. The school thus solved the problem by using both of the existing information system and the one required by the OPEC concurrently.

From the school's self-assessment, it was found that before participating in the project, the school's information system management was at **moderate level**, after participating in the project at **low level** because the school

must use the information system of the original affiliation. For this reason, it is not possible to fully implement the information system specified by the EEF. The school's use of the EEF's information system was at the beginner level. In the meantime, the school encountered the system of the EEF was unstable and not comprehensive. The school therefore uses both the information system suggested by the original affiliation and the one developed by the school on its own.

3. Developing teachers and administrators through the Professional Learning Community Process (PLC)

– The school administrators have the teachers organize knowledge sharing activities using the PLC Process by dividing the teachers into subgroups according to individual learning area, sharing knowledge once a week and knowledge sharing meeting of the teachers once a month for the whole school. The issues raised in the exchange of knowledge forum included problems that each teacher has encountered. In the meeting, problems will be solved together, permitting the teachers to reflect problems or behaviors of individual students. Then all teachers will come up with solutions to the problems. Or they will share and learn what the teachers have noticed any positive performance from the students. Every teacher must record the results of knowledge sharing. In addition, the administrators and teachers share knowledge with administrators and teachers from other schools under the network of the Starfish Country Home School Foundation. Once a month, knowledge sharing activity is held through conducting the PLC Leader, PLC Teacher, and PLC Happy Hour Life. Moreover, the school participates in exchanging knowledge with private schools in Chiangmai Province to improve the quality of education together and with other schools in the Roman Catholic network.

From the school's self-assessment, it was found that before participating in the school project, the development of the teachers and administrators through the Professional Learning Community process (PLC) was at *high level*, after participating in the project at the *highest level*.

4. Building collaborative networks, Princess Ubonratana School joined working network with parents, students, and schools attached to the Starfish Country Home School Foundation network, including other foundations and agencies as follows:

- The school is networked with schools belong to the same Roman Catholic network to develop academic and administrative works.
- The teachers are networked with all of students' parents. They work together to support, looking after, and monitor students.
- The teachers are networked with schools participating in the project launched by the Starfish Country Home School Foundation in order to share knowledge concerning instruction and evaluation.
- The school is networked with alumni to serve as local wisdom teachers and help the school where possible.
- The school is networked with the Forest in Our Hearts Foundation of Thai Beverage Company to give the students guidance how to maintain and take care of trees.
- The school is networked with the PTT Green World Project.

- The school is networked with the Love Chiang Dao Club.
 - The school is networked with Learn Anywhere by using the program for online study.
 - The school is networked with the Rotary Club of Chiangmai that donated water purifiers and school supplies.
 - The school is networked with the Khun Phao Sarasin Foundation.
 - The school is networked with Phor Luang Wat Dong Chai Thawee (to learn the history of Chiang Dao).
 - The school is networked with Chiangmai University for academic support in preparing a course.
 - The school is networked with the Foundation for the Underprivileged of Maejo Agricultural College.

Over the past year, the school's self-assessment achieved at **good level**. But this year (2022), the school has substantially made more progress, resulting in the following outcomes.

Effects on students

1. **Learning achievement:** From group discussions with the administrators and teachers, it was found the students at each level attained the following achievements.

- **Reading test (RT) results, Primary 1:** For academic year 2020, the students had higher reading test results than in academic year 2019 (compared to school level), but had lower test results than the national and provincial averages.
- **National Test (NT) results, Primary 3:** The students had Language and computation lower test results lower than the national and provincial averages.
- **Ordinary National Educational Test (O - Net) test results, Primary 6 and Secondary 3:** The students had learning area of Thai language higher test results than the national and provincial averages. For learning area of mathematics, science and English, however still lower than the national and provincial averages but higher test results at school level than academic year 2019.

From self-assessment of the school after the project implementation, it was found that students' learning achievement was at **high level**.

2. **Learning outcomes as determined by the Equitable Education Fund (EEF):** According to group discussions with the students who experienced learning through the STEAM Design Process for almost 2 years, they achieved the following learning outcomes as prescribed by the EEF.

Equality of students was discovered that; Equality of the students who have been cared, supported, and developed to their full potential both before and after participating in the project. It is obvious that the students are equally cared at the **highest level**.

Quality of student can be classified into each aspect as follows:

1) **Knowledge:** From conversation with the students, it was found that the students successfully created different works through learning from the 5-step STEAM Design Process. They gained knowledge about working

together as a team, taking the knowledge gained from learning to build upon which finally turning out a career. For example, a student revealed, “ *I made mulberry paper from a banana tree, then colored the paper to make bags, boxes, book covers, gift wrapping paper and sold them in the market or online. Moreover, we also learned about raising chickens, fish, and crickets obtaining knowledge of animal sanitation.*” A secondary 2 student mentioned, “*I learned about embroidery and weaving, which came to the idea of designing fabric patterns which are made embroidery later by my parents for sale as a career.*” The students said, “*We learned reading and writing Thai for communication use as foundation of study diverse learning areas and we can teach the children better in villages.*”

From the school's self-assessment on knowledge, it was found the overall that before participating in the project, the students obtained knowledge of four indicators at the **highest level**, except for one indicator, namely the description of the relationship between the knowledge gained and leading their daily lives was found at high level. After participating in the project, the students acquired knowledge of all indicators at the **highest level**.

2) Skills Included;

2.1) Analytical thinking skills, problem solving skills, and critical thinking skills with consideration, it was found according to a student that “*I know how to think critically in choosing materials such as banana trees to make mulberry paper and think of colors that will be used to dye the paper beautifully In which the student analyzed that if using natural colors, they will get colors that are not as bright as those from chemicals. Therefore, the student chose to use paints from chemicals to dye the mulberry paper. In making the paper, it was discovered the paper texture was not fine, and failed to form a sheet, causing problems. The student solved the problem by cutting the banana tree into small pieces. and blended thoroughly. As a result, a sheet of mulberry paper turned into more fine texture.*” Or in a folk performance” *I hit the stick out of rhythm and solved the problem by having everyone count the strokes of the stick.*” When finished, students presented before friends and teacher to criticize their works. Most of the students’ comments still had few reasons, not a variety of reasons. It is significant for the teachers to develop and train them more to criticize rationally. By practice more often, the students can develop their critical thinking better.

From the school’s self-assessment In terms of analytical thinking, problem solving, and critical thinking with consideration skills, it was discovered that before participating in the project, the students had critical thinking skills at high level, after participating in the project at the highest level.

2.2) Creative thinking skills, it was found the students are able to create a variety of creative ideas, for example,

“I used embroidered fabrics to decorate bags made of mulberry paper to be more beautiful, adding value to the products I have made. I thought of designing the embroidery in a lotus pattern that is different from the heart pattern and tribal flowers. The embroidered fabrics are displayed in various tribal events. What is more, bottled waters can be made into a toy car.”

From the school's self-assessment on creative thinking skills, it was found that before participating in the project, the students had creative thinking skills at **high level** and developed at the **highest level** of creative thinking skills after participating in the project.

2.3) Communication skills, the schools have set a policy to develop the use of Thai as a medium of communication among the students from 13 tribes through the 5-Step STEAM Design Process, in which each stage the students must use the language; both spoken and written language to create a piece of work for presentation. As a result, most students use Thai language to speak better. But for written language, especially Thai writing, they need further improvement. The reason is the students will write Thai according to the language spoken causing the Thai language to be written incorrectly. For example, the word “ **rongrian (school)** ” they will write “ **rongriang** ” (written in their spoken language). Anyway, the class teacher will always correct their writing.

From the school's self-assessment on communication skills, it was found that before participating in the project, the students had **high level** of communication skills **after** participating in the project at the **highest level**.

2.4) Vocational skills, the school provided diverse vocational skills training for the students. Most of the occupations that are practiced are culturally aligned with parent's occupation, and community context, such as pig raising, chicken raising, duck raising, embroidering, weaving, foot massage, body massage, Thai music, marching band, electronic tone, rice basket weaving, basket weaving, vetiver doll making, including agriculture such as growing cabbage, Kale, garlic, lettuce planting, as well as cultural performances of different tribes. Products from some occupations such as agriculture, vegetable growing, and animal husbandry will be sent for cooking at the school's canteen providing the students with three meals a day (for boarding students in the school). The students can also bring their occupational knowledge to continue at home with their parents extending the career to generate family income as well.

From the school's self-assessment on vocational skills, it was found that before and after participating in the project, the students had the **highest level** of vocational skills.

2.5) Life skills, It was found the school offered life skills practice for the students through learning from various learning areas, i.e. having students of each tribe work together as a group to practice using Thai as a medium for communication between other tribes and use Thai language to learning each learning area. Besides, they have learned how to take care of their own health, i.e. to get rid of head lice with local herbs, and how to use the hygienic toilet. In addition, the teachers trained them to do farming for cooking benefit, i.e. raising animals, growing vegetables for consumption in daily life, and be able to coexist with others in society.

From the school's self-assessment on life skills, it was found that before participating in the project, the students had **high level** of life skills but after participating in the project at the **highest level**.

3) Morals consisted of three topics:

Discipline, the students mentioned, “ *We are more disciplined; we stand in lines orderly, submit assignments on time, attend classes on time, work on time, take off and putt shoes in order, help parents do housework without delay, such as help mother wash dishes, keep things tidy, mop the floor, cook rice, and help the teachers raise animals... ”*

From the school’s self-assessment, it was found that before participating in the project, the students had **high level** of discipline, after participating in the project, at the **highest level**.

Honesty, “*I am sincere with my friends - do not take other people's things as mine and keep warning friends to follow regulations of the school.*”

From the school’s self-assessment, it was found that both before and after participating in the project, the students had the **highest level** of honesty.

Public mind. “ *I share embroidery designs with friends, help the teachers take care of younger students boarding in school, helping teach homework to children, clean dormitory, clean school compound, classrooms and other surrounding buildings without being told by the teachers at all the time, join reforestation in A Young Plant towards a Forest in Our Hearts Project, participate in forest ordination activities with the community. ”*

From the school’s self-assessment, it was found that both before and after participating in the project, the students had the **highest level** of public mind.

Reflection from parents and school Committees

- **Parents:**

“I agree with Princess Ubonratana School’s application of the STEAM Design Process to teaching and learning so that students can read and write. This is because the STEAM Design Process is a teaching process for students enabling them to actually practice develop life skills, discipline and ability to use technology in search of knowledge which is different from the traditional teaching and learning management. We are alumni of the school when we were students, dare not show, back home and never tell parents what we had learned, which is different from now – teachers’ instruction through asking the kids to think about what they want to know, plan their work and take action using the existing materials the school has in the Maker Space Room, create own ideas, use Thai language for presentations, inform mother what has learned and what the teachers asked to do today. The child is not fluent in Thai. Teachers use teaching tools to develop skills in reading consonants, vowels and compound words in reading and writing Thai, and teach children how to live each day in order to live in society happily. During COVID - 19 pandemic, our children stayed home not at school. The school organized classes by On Hand Instruction, sending worksheets and videos to the children and let them

take their own actions that are consistent with their life skills, such as having them grow morning glory at home, wash dishes, lay out the beds, pick up the beds, and plant the plants by themselves. These make happy learning for our children and become skillful in solving problems arising from operations”.

In the children’s learning, parents take part in assisting their study by preparing learning materials such as providing coffee straws for children to make flowers, preparing materials for them to make fancy masks, guiding their works, searching information from the internet, taking a clip of their performance to teachers for evaluation. For example, to implement the salted egg project of a student, mother will shoot a video clip of her child's salted egg cooking process and send the teacher to evaluate the child's task. In addition, the mothers help school by cooking tribal food for children on special occasions.

Parents' Suggestions: In this regards, *“I want Princess Ubonratana School to adopt the STEAM Design Process in teaching and learning management for students even after the project ends ”.*

- **School Committees:**

School Committees agree with the school’s application of the STEAM Design Process to instruction. However, the teachers are advised to employ other teaching strategies to develop students as well. Because they perceived that teaching process alone cannot help students to be more effective. Also, the school committees supported the school with school supplies, food for students, Installation of water filter for the school (on behalf of Rotary Club of Chiangmai), coordination with Thai Beverage Company to educate children about trees in the forest, coordination with Mae Fah Luang Foundation to educate about trees, recommendations on management of online learning and planning together with the administrators and teachers about parents’ visit to boarding students during the widespread of COVID - 19, help solve problems, and attend school meetings four times a year regularly.

What the school committees and parents have noticed the change in students was that most of the students are able to read and write. Teachers take care of all students like their own kids. The children do not play mobile phones while studying. On the other hand, they can be exposed to external media. The students are humble; always pay respects when they come across with an adult entering the school, more assertive, able to coexist in society, and make use of knowledge about learning Thai language to teach children and parents in the community. The students have learned different occupational skills based on individual tribal context, such as tribal embroidery, bringing banana ropes to weave into dolls.

Suggestions of the School Committees *“The students are to bring their knowledge back to teach children in the community. At the same time, the teachers are to keep on looking after those good and polite students like this forever.”*

Implementation according to the supporting measures prescribed by the EEF

It found that two EEF supporting measures successfully implemented by the school:

1. Quality classroom instruction: Before joining the project with the Starfish Country Home School Foundation, the school provided a variety of teaching methods, such as project-based teaching in Kindergarten Grades 1 – 3, teaching by experience, building activities to enhance experiences in primary education. STEM Education is offered in secondary education as well as the 5E teaching model consisted of 1) engage to generate interest, 2) explore, 3) explain and conclusion, 4) elaborate knowledge, and 5) evaluation, plus with the Brain-Based Learning (BBL).

When joining the project with the Starfish Country Home School Foundation. In the first year, the school adopted the STEAM Design Process in the instruction from primary 1 to secondary 3 by allowing all the teachers to integrate into the learning area of Thai language, and into other learning areas taught by the core teachers, such as the learning area of science and technology, the learning area of mathematics, the learning area of social studies, religion, and culture, the learning area of health education and physical education, including the learning area of home economics. What is more, the STEAM Design Process is integrated with life skills which the students perform in the afternoon activities, such as pig raising, chicken raising, fish raising, vegetable growing, and tribal performances to be more fun and enjoyable, i.e. “Reeree Khaosan show”, the performance of percussion dance with musical instruments of the Akha tribe, changing the rows style in the show, wood slamming using music. The rehearsals supervised by local wisdom teachers and viewed the show by the student friends afterwards.

With regard to instructional management for many tribal students to use Thai language in reading and writing, a book entitled “Darunsuksa” written by F. Heilaire, (who was a brother teacher at Assumption School, composed in 1910 after spending only 9 years in Thailand) was used by Princess Ubonratana School. They are able to read and write Thai using as a medium for communication between teachers and students and between the students of different tribes. Darunsuksa is a book that teaches how-to reading in Thai language. It starts with a combination of middle, high, low, long vowels, short vowels, and tonal variations. There is a practice of reading the compound words in every chapter, teaching numbers, and teaching signs. Once the students have read it, there are chapters to read as moral tales such as the story of the Hare and the Tortoise, the Bullfrog, the Fox, the Ant, the Lion, Grandma and Grandpa, etc. Always, every story will advise morals and ethics to the students. In the elder’s class, teaching Thai is conducted via poetry, either by self-composed or from some old poems. Additionally, literature is employed for teaching how to read Thai as well, such as “ **Chalom (or bamboo basket) for Containing Water** ” (Khom Dam Din), “ **Phra Chai Chet** ”, “ **Nai Khanom Tom**”, and verse composition “**Subjects as Goods.**” There are four books of Darunsuksa set, namely 1) Assumption Darunsuksa, Kor Khor Level, 2) Assumption Darunsuksa, Beginner Level, 3) Assumption Darunsuksa Intermediate Level, and 4) Assumption Darunsuksa, Advanced Level, (later changed the name to Darunsuksa). Being widely popular in most schools, especially private school of the church, Darunsuksa is a textbook that facilitates effective Thai teaching and learning to ensure students’ reading and writing fluently. It has a broad and well-rounded vocabulary. There are also illustrations to enhance students’ enjoyment, fun, and enthusiasm in learning not boring. Later, there were some improvements regarding the use of Thai language in harmony of the current era, with the preparation of footnotes explaining the meaning of the words truly help students understand the

content, meaning of such words both in the original context and the context in use today, which is much clearer. The book Darunsuksa has been used in teaching Thai language for over 100 years and is still in use today (Banluesin, 2017).

When the school participated in the project with the Starfish Country Home School Foundation, the teachers used the STEAM Design Process, starting **with questions asking** students to think about “ how to read and write Thai”. As a group, the students searched for **knowledge and design** (engage to imagine stage) by designing interesting piece of work to interest people’s reading, such as making a knowledge sheet about reading, preparing a moral-tale book, and idiom/proverb booklets. Next, the students worked together to **plan**, determined what equipment to use from the Maker Space Room, looked for more materials, divided assigned tasks in line with abilities of each individual, determined the steps for making a moral-tale book, such as composing a moral tale, story of unity, then everyone took **action** according to the planned steps by composing a story on paper, and compiled into a book of moral stories. When finished, they presented to the teachers and classmates. Finally, **rethink and redesign**, classmates and teachers all together commented reflected the tale-content was too short, there should be more contents. Upon completion of the moral book, it was suggested the book be brought to young children for reading practice. The teachers evaluated with the Starfish Class tool and examined students’ works, evaluated students’ collaboration and overall evaluated by testing their knowledge.

During COVID - 19 epidemic, the school has made instructional arrangements as follows:

- 1) Boarding students to study on-site
- 2) Day school students studied on - hand, online, and on-demand with very few students. It can be seen from 35 students in primary 1, only 8-9 students participated in learning, there are 30 students in secondary 5-6, but only 10 students have Internet access for online learning. Students’ learning loss due to school closure. The teachers solved the problem by providing additional tutoring via Zoom by parents' mobile phones in the evening when parents free from work, asking them stop to pick up worksheets for students to do at home. Unfortunately, most students failed to complete all the worksheets as parents cannot teach their children. The teacher then asked the elders next door to help teach the younger children. Anyway, the problem was partially solved.

From teaching and learning through the STEAM Design Process, **the teachers have changed** as follows:

- 1) Enthusiastic about searching information and find out more to enhance teaching strategy.
- 2) The teachers are developed through online training, enabling them to use technology media better.
- 3) The teachers in the same and different learning areas share more experiences through knowledge sharing with via the PLC process .
- 4) The teachers have prepared more lesson plans than ever before.
- 5) The teachers have changed the role of an instructor to a coach and learned to raise questions for the students toward critical thinking.

The students have changed as follows:

- 1) Assertiveness, the students know how to think critically in solving problems on their own (previously, the teachers helped solve the problems).
- 2) Better use of Thai language in speaking and writing (from their reading and writing practice via many media initiated by the teachers and students - there are a moving basket and mobile library in the school).
- 3) Being more creative, such as taking waste to recycle as toys, and utensils.
- 4) Becoming more disciplined, such as being responsible person, and punctual.
- 5) Teamwork – they now realize to work collaboratively with frequent knowledge sharings.
- 6) They are proud of themselves to be able to read, write, and socialize. This can be seen from the students - they greeted the school administrators when coming across and said, “ **I can read a book now.** ” “ **I can work with my friends from other tribes.**” “ **We help each other to finish assigned tasks.**”

From the school’s self-assessment, it was found that the teachers had the **highest level** of improvement in classroom teaching management both before and after participating in the project.

Active teaching and learning management model used by the teachers to manage learning are the 5 STEPs, STEM, science projects, the STEAM Design Process, including Maker Space.

Further education of the students after finished the academic year 2020, it was found that 26 students who finished Kindergarten 3 continued their primary education at Princess Ubonratana School, representing 100 %. 16 students finished primary 6 continued to secondary 1 at Princess Ubonratana School, representing 47.05%, while 18 students continued to study in other schools, representing 52.94 %. 59 students of secondary 3 (the highest class of school) continued to study other schools, representing 92.19 %, whereas 5 students continued to study vocational education, or 7.81%.

2. Student care and student safety

2.1 Student care, Princess Ubonratana School has organized activities to help students, such as visits their homes. All of the school administrators and teachers visit the students' homes once a month by visiting a village at a time. COVID - 19 outbreak made the administrators and teachers impossible to visit students' homes but let parents come to pick up the worksheets or talked to them on phone about student care in terms of study and assignments according to the worksheet assigned by the teachers. The students were screened for normal, at-risk and problematic groups. Problems faced by the students comprised:

- **Poor students**, there are poor students in the whole school (332 students). Solution sought by the school was request for scholarship donations from kind-hearted donors.
- **Malnourished students**, it was found the school received lunch subsidy from the original affiliation for students at kindergarten and primary education level from the original affiliation, unfortunately excluded lower secondary students. The school’s solution was asking for rice donations from parents of the lower secondary students, 50 kilograms per person per year. Some parents nevertheless, gave 50

kilograms, some donated only 20 kilograms, while some parents gave none. To find the way out, the school therefore initiated rice-farming by students in the school compound for consumption and purchase more if needed. This is because the rice donated by parents and planted by the school is not enough to meet the students' consumption throughout academic year. Moreover, most students especially secondary students eat more than usual. In this context, the students grow vegetables, raise chickens, raise ducks, raise fish, and raise pigs as food for them three meals a day.

- **No playground equipment for the students** to exercise and play. The school asked for donations from the other schools or agencies but not enough to meet the needs of students.
- **Inadequate water for the students used in the dry season.** The school solved the problem by building water reservoirs for students to use in the dry season.
- **Students with physical problems,** they are underweight and their height below the threshold, the students are to drink milk - food supplement, eat all meals, and exercise.
- **Students with difficulty in reading and writing,** the teachers allow the students to come study in the evening by practicing their reading with the teachers.
- **Students with special needs,** there are 16 students with learning disorder. So far, they have school classes with normal children. A special teacher is appointed to teach Thai and mathematics, providing extra classes with the teachers in the evening by using Darunsuksa textbook. Usually, it takes two weeks for them to read and start reading in words. They can read two chapters. There are reading games for them to enjoy. They have fun and want to learn more. For ADHD students (attention deficit hyperactivity disorder – ADHD), the school encourages parents to take good care of them, to feel them warmth.
- **Students with mental health problems,** lonely students, not feeling warmth because boarding students are not frequently visited by their parents. To solve problem, the administrators asked the teachers to closely look after, telling close friends to talk with, so that students will not feel lonely. Elder children to take care the younger ones, or each tribe has a tribal chief to take care of the younger children in the same tribe, encourage them to talk and play so they don't miss home.

2.2 Student safety, Princess Ubonratana School's student safety is maintained. There is a fence around the school, the teachers on duty to take care of students in the morning and evening. They supervise students' play at all times. There is a dormitory teacher in the same room as students to oversee them around the clock 24 hours daily. At night, the school doors are locked with CCTV. There are meetings of the shuttle drivers to keep students safe. A patrol officer from Chiang Dao District Police Station regularly watches over the school. Por Luang (villager master) has a team to look after students' safety. Moreover, officials from Chiang Dao Sub-district Administrative Organization will come to provide basic fire fighting and evacuation fire drill training once in a semester to ensure students' safety.

From the school's self-assessment, it was found that both before participating in the project and after participating in the project, the school has provided care and safety to the students at the **highest level.**

Inclusive assistances provided to individual group of students are the following.

1. **Normal group** of 220 students are cared and overseen by visiting teachers to the students' homes both online and onsite hoping to develop the students' effective self-help.
2. **Children with special abilities**
 - **Children with mathematical abilities** in a number of 33 students, representing 11.26%. The school has promoted solving analytical thinking of math problem. As a result, the students have a systematic analytical thinking, and able to solve problems.
 - **Children with artistic talent** in a number of 33 students, representing 11.26%. They are encouraged to practice creative works of art more often. As a result, the students can create works out of their imagination and creativity.
 - **Children with language proficiency** in a number of 32 students, representing 10.92%. The school organized activities and created media to develop speaking, reading, writing and communication skills. As a result, the students can use language to communicate well.
 - **Children with musical abilities**, in a number of 52 students, representing 17.75%. The school has promoted potential students to music practice and meditation every day. As a result, they have well improved concentration in playing music.
 - **Children with athletic abilities**, in a number of 25 students, representing 8.53%. The school has encouraged them to play their favorite sports and are good at. Sports competitions are held in schools. As a result, the students become more skillful in sports, aware of the rules, sporting spirit, and bring about good relationships with their friends at the same time.
 - **Children with acting talent** in a number of 28 students, representing 9.56%. On regular basis, the school promotes their assertive skills to perform publicly in the community. As a result, the students dare to express themselves and appreciate the significance of their culture.
 - **Children with talent in embroidery and weaving** in a number of 29 students, representing 9.90%. The school trains the students' skills in designing a variety of patterns according to creativity, meanwhile developing embroidery and weaving skills regularly. As a result, the students can create products, and other works from their own imagination with new patterns not the same or repeated designs.
3. **Creative children** in a number of 293 students, representing 90.99%. The school provides suitable environment for them to learn in the real practice and learning management through the STEAM Design Process. In consequence, the students become more creative in producing new achievements.
4. **Children with special needs**
 - **Children with intellectual disabilities** in a number of 6 students, representing 2.05%. The school trains them skills in daily life. As a result, the students can learn to live with others.
 - **Children with learning disabilities** in a number of 10 students, representing 3.41%. The school puts them to study with normal children practicing how to live with others in society. As a result, the students increase learning skills corresponding to intelligence.
5. **Problem children**

- **Children being bullied** in a number of 10 students, representing 3.41%. The school has a teacher to give advice, warning and closely looking after the students. As a result, they can adapt themselves and cope with what may come.
 - **Children in broken families** in a number of 59 students, representing 20.14%. The school provides teachers to care, assist, while promoting morals and ethics. As a result, the students are warmly cared enabling them to live with others.
 - **Children are unable to read and write** in a number of 35 students, representing 11.95%. The school develops writing and reading development by teaching after school hours, asking the elder students to teach the younger ones. As a result, the students increase writing and reading abilities.
 - **Children with learning loss**, in a number of 70 students, representing 23.89%. The school gets them to study onsite by individually teaching. As a result, the students have better learning development.
- 6. Poor and disadvantaged children**
- **Poor and disadvantaged children who are not funded** in a number of 123 students, representing 41.98%. The school provides them with kinscholarships from kind donors offering assistance as appropriate. As a result, the students receive initial help.
 - **Poor and disadvantaged children funded by other agencies** in a number of 15 students, representing 5.12%. As a result, the students are given learning opportunities.

From self-assessment of the school both before and after participating in the project, it was found the school's building collaborative networks was at the **highest level**.

- **Efficiency:** From the past operations, it was found Princess Ubonratana School's efficiency in value, in-time, and maximum benefit at the **highest level**.

From the past year, it was found Princess Ubonratana School's efficiency in several aspects as follows:

- **Value:** The students can read and write. They are valuable and beneficial to society. The teachers teach students to be good people, forward knowledge to community, unselfish, grateful and behave for the benefit of community and society.
- **Benefit:** Graduated students are able to pursue their own careers. The students are contributors to society. The students can apply their knowledge to develop their future careers and earn income to support the family. The students can live in society happily.
- **In time:** The teachers achieved in helping students to read and write Thai language. The administrators and teachers developed themselves to use technology for teaching, in the meantime developed the students during COVID - 19 pandemic. The teachers helped students in a timely manner with the PLC Process when facing problems.
- **Effectiveness:** According to the school's self-assessment after participating in the program, it was found the school effectiveness with regard to accomplishment, pride, and development continuity was at the **highest level**, as follow:
- **Accomplishment:** The teachers are developed in learning and teaching 100% (by attending meetings

with the Starfish Country Home School Foundation quite often), and The students are developed 100% (but the level of development varies depending on the student's potential) .

- **Pride:** The students produced their own products. Those are happy to study., Through self-development, the teachers are able to use technology in teaching and learning management as well as seeking knowledge on their own, and the students can use Thai language to communicate with creativity in self-improvement.
- **Continuous development:** The school will continue to employ the innovations introduced by the Starfish Country Home School Foundation even after completion of the project. Because the STEAM Design Process has effectively driven students toward the 21st century skills.

Results of changes in school self-development

It was found that

1. The students are assertive possessing the 21st century life skills arose from learning through the STEAM Design Process with higher learning achievements at *high level*.
2. The teachers have developed a variety of instructional management; management of active learning was at the highest level. The teachers' knowledge sharing forums took place by the PLC Process. On top of that, the teachers are being continuously developed by the Starfish Country School Foundation enabling them to create innovations in learning management at the highest level.
3. The administrators developed and transformed to the whole school system, which uplifted them to academic leaders in the role of change agent at the highest level, and by way of building atmosphere and organizational culture at work that is conducive to the development of the whole school system at the highest level.
4. Through many projects, the school has freedom to adjust its operation in order to achieve the school's goals at the highest level. At work, the participation of both personnel inside and from outside the school has been highlighted. Under this favorable context, innovation of management and innovation in learning management emerged accordingly. There are learning resources and atmosphere advantageous to learning.
5. Parents have positive attitudes toward the school and turned to increasingly collaborate with the school in doing activities, leading to self-development learning at high level.
6. The community participated in learning management and looking after the students at **high level**, cooperating in the school activities, as they have earlier joined the school's knowledge sharing via the PLC Process online.

Benefits obtained by school after completion of the project as follow: The students improved basic health. The teachers are developed in terms of knowledge and learning management, leading to improved effective teaching. The administrators have a broad vision. The school has a better environment and health development. Parents have a positive attitudes toward the school and get involved in the school activities. The

community gives more support, promotes learning management, and takes care of the students closely. The original affiliation gives more support to the school's mission. The Starfish Country Home School Foundation sends to the school a team of knowledgeable and capable coaches to help, recommend, and implement six measures to develop diverse active learning management for the teachers.

Effects: The school established a policy to develop the whole school system at *high level*. The students have increased knowledge, skills, morals, and educational opportunities and higher quality learning at *the highest level*. The school achieved in building a network of cooperation in caring students with their families, and community at the *highest level*.

Calculating effect size to measure changes in students: Chaofa Ubonratana School extended toward caring the students' basic health through activity "We win over head lice" by having the teachers and students use herbs to get rid of head lice. The students' behavior was evaluated before and after the activity. Prevalence rate of students' head lice was found much lower than before with improved health after this initiative.

Success factors are: The administrators and teachers work as a team, the teachers and students cooperate very well in teaching, the administrators support teachers, acting as consultants to the teachers. The school received financial support from the EEF for its operations. Having a coach to give advice as consultant, assisting the teachers and school in a friendly manner, and the administrators possess transformational leadership, meanwhile the teachers are more ready to learn and improve themselves.

Further innovation: Since there are different tribes of students in the school, students in each tribe have poor basic health. The school therefore chooses to develop the basic health of the learners that will allow learners to aware of good sanitation habits and make use of knowledge in everyday life, at home and in the community.

Satisfaction with the coach: The administrators and teachers are satisfied with the coach's supervision, advice, and assistance at the **highest level** and wish the school be visited by the coach more frequently.

The above operations have resulted in reading and writing skills of the students from all 13 hill tribes. They now can read and write Thai and forwarded Thai language knowledge to teach further their parents and other children in the community, so that they will be able to read and write Thai for efficient and effective communication with the general public. The students acquired skills in the 21st century, possessing better life skills, dare to speak, dare to think, becoming assertive and self-confident. In coexistence, the students of all races can live together as brothers, taking care of each other with unity, discipline and public mind. This is due to the commitment and dedication of the teachers serving as academic leaders - and Last but not least, with the transformational leadership of the school administrators as well.

Problems/Obstacles

1. The administrators and teachers have less time to rest, because they have to manage teaching and looking after boarding students all day long, 24 hours a day.
2. The school has a lot of other jobs to do which resulting in late submission.
3. Sometimes the administrators and teachers cannot attend meetings with the Foundation development because they have to attend the original affiliation's meeting.

Recommendations for the problems solving are to ask the Starfish Country Home School Foundation help record the VDO meeting of each gathering for the administrators and teachers to view in later days, and the coaches are recommended to help develop the teachers and schools more often.

Conclusion

The self-improvement school project was granted by The Equitable Education Fund (EEF), Thailand. The purpose program was to improve the quality of 636 schools. Choafa Ubonratana School is one of the project schools. It found that self-improvement of Choafa Ubonrattana School was developed by Starfish Country Home School Foundation instruction granted by Equitable Education Fund (EEF). The STEAM Design process has been used for developing the school consist of Ask, Imagine, Plan, Create, and Reflect and redesign under the EEF supporting measures for the school development with 6 measures: 1) setting quality goal (School Goal), 2) developing teachers and administrators through professional learning community process, 3) management of effective information system, 4) development of quality instruction in classroom to be the active learning with various techniques, 5) creation of collaborative networks together, and 6) intense students care and safety system during 2020-2022.

After the school joined the project, the development has caused all 13 hill tribe students to be able to read and write in Thai. Students has developed skills in the 21st century especially on a better and improved living and professional skills to raise additional income for their families. They have a better quality of life. All of these occurred from the determination and quadrilateral focus on the work and sacrifice of the teachers, academic leadership, and change of school administrators. As a result, the school has been developed all of administrator, teachers, students as well as parents especially core learning outcomes of students with knowledge, skills, attitude and values at the National Educational Average.

Recommendations

From the study of the self-Improvement project and Choafa Ubonrattana School development result, it shown that self-improvement school should be concerned for raising accessibility, equity, equality and quality of students as education for all and all for education. So, recommendations for educational agencies (Siridhrungsri & Suwan, 2022, p.23; Siridhrungsri & Witsarutapa, 2022, pp.92-93) are as follow:

Choafa Ubonrattana School

1. To create an organizational culture for joint development, so when there are changes in administrator and teachers who have implemented the project, the development process will go on, such as the common development goals, PLC process, teamwork, knowledge sharing, participatory management and development, respecting and appreciating the value of each individual at teacher level, administrator level, student level, parents level, and community level, listening to and opening up to each other for feedback, and applying the DE process in self-assessment.
2. To develop STEAM Design process for student learning as way of life in and out class in order to apply for daily life.
3. To encourage and support teachers to design and develop self- integrated learning units through participation of students and teachers of different subject areas, reflecting the problems and needs of local and community active learning management, to cultivate students on learning attainment in the real practice, and live in harmony with community and society
4. To build a capable coach teacher or a capable core teacher at school level, class level, and/or individual subject level to ensure academic development, upgrading and learning from each other without having to wait for coaching from outsiders in the long run.
5. To adjust plan and different methods of student development i.e. learning from coaches, networks and educational movements, and learning development that cause active learning as well In the midst of COVID - 19 circumstance, such as organizing a mobile education vehicle, using learning box associated with worksheets that students can learn and do activities with parents, etc.
6. To employ the PLC process between teachers and parents to monitor, solve problems and improve students' learning, both in the form of online group, group meeting and building parents' leaders to coordinate learning management, etc.
7. To develop learning networks at school level, teacher level, and subject area level, both inside and outside the school, both in the same area, and at national level for knowledge sharing, building upon and expanding outcomes to a wider area. It is a development cycle that ultimately produces positive impact on students learning.

The development institute (Starfish country home school foundation)

1. To develop management system, operation structure, and capability of coaches how to use innovations to develop learning management for the school.
2. To explore development needs, by modifying time and the teachers and administrator development approach compatible with the context, needs, time and availability of the teachers to be versatile and flexible, both normal system and the online system.
3. To coordinate with the original affiliation at supervisory level, support and/or administrative level in formulating development policy for using and expansion of the development results of the original affiliation in the upcoming time.

4. Upon completion of the project, the institute should serve as learning and development resources, in terms of body of knowledge collection, and methods by which may be established as a dissemination center and/or provide a development website with real-time information.

Equity Education Fund (EEF)

1. To continue supporting the project implemented by the funded institutes to accomplish more intense continuous development by giving school opportunities to choose receiving development based on the schools' contexts in terms of quality and students' opportunities to equally receive development at classroom and school level through the teachers and administrator development.
2. To coordinate the policy on teachers and school development in order to continuously raise the quality of education between the development institute and the funded institutes for further development and results expansion.
3. To build upon the successful school development with outstanding level of development, be prototype development model, source of learning and inspiration for other schools in terms of administrators, teachers and learning innovation.
4. To emphasize and support creation of educational equality of students, in terms of opportunities for receiving quality education and receiving thorough and equal care, inside and outside classroom through directly and continuously support from the funded institutes and schools either the body of knowledge or scholarship.
5. To conduct the research and development of the teachers and school development systems to persistently uplift the educational quality aiming at improving and developing the best approach and the most versatile. This is to enable schools to select and apply them in accordance with the school's context, local circumstance, and Thai society at broad overview level and in depth.
6. To promote the development of administrative leadership so as to develop efficient teachers and schools in terms of characteristic; such as vision, knowledge and competency in management, sacrifice. Managerial behavior included teamwork, decision-making based on information and knowledge, decisiveness, ability to utilize technology and apply technology to management, good governance, accountable responsibility, morals, ethics, building participation etc.
7. To promote the teacher development capable to create a variety of the active learning management according to the set guidelines and continue to successively develop building upon till ultimately leading to the results expansion.

The Original Affiliation

1. To facilitate, support and promote development activities of the institute receiving development fund and schools in the project to integrate the development with the school's learning management mission with indistinguish ability, to reduce the school's concerns over the original affiliation, in order to effectively achieve the school's learning management according to the development goals.

2. To inherit, carry on and/or screen the projects' innovations that are relevant to context, and/or formulate policies and guidelines for school development with wide-ranging innovations under academic support from the development institute.
3. To foster the development or apply the development of teachers and schools in accordance with the teacher and school development project guidelines in order to continuously improve the quality of education. They then will be able to develop teachers and school in their responsibilities with efficiency on their own.
4. To provide academic knowledge sharing between the project schools and the non-project schools within the responsible affiliation for application and expansion of results, as the case may be. This will contribute to successful educational mission of the original affiliation as a whole

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