

PRIMAX



KIST: Taoyuan Elementary School KIPP-Inspired School in Taiwan Project

Social Return on Investment (SROI) Evaluation Report

July 2020

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Summary

Project Activities Background and Primary Objectives

This research project was compiled and sponsored by PRIMAX Electronics Ltd (hereinafter referred to as PRIMAX), a long-term sponsor of Chengzhi Education Foundation. The main purpose of preparing this report is to use it for internal management and analysis. It is hoped that through the analysis of SROI, the KIST project can be adjusted and optimized to enhance the benefits and impact of the overall project.

The introduction, promotion and management of KIST education methods are integrated with the character education model of KIPP (Knowledge is Power Program) into Taiwan by Chengzhi Education Foundation, using physical schools as the field to realize the ideal of social justice to provide equal learning opportunities for disadvantaged children. In 2017, Chengzhi Education Foundation began to promote private management of public experimental education schools, which is called KIST, KIPP-Inspired School in Taiwan. The main field of this report "Taitung County Taoyuan Elementary School" is one of the schools that introduced KIST teaching methods (hereinafter referred to as Taoyuan Elementary School KIST).

The purpose of the report is to understand the social impact of KIST teaching methods at Taoyuan Elementary School. We used observations, interviews and questionnaires to evaluate the impact and changes of this project activities on relevant stakeholders to optimize this project to expand its influence and social value and benefits.

Methodology of the Research

This report adopts the Social Return on Investment (SROI) methodology for the evaluation research and assessment. In this report, we have followed "A Guide to Social Return on Investment" (2012 edition; hereinafter referred to as the "SROI Guide") published by the British government, as the basis of our analytical framework. Based on the actual data from interviews with the stakeholders during the assessment period, the changes and impacts that occurred for the stakeholders during that time served as the basis for evaluating the project's social impact.

We carried out each step of the research analysis in accordance with the description and framework design of the SROI Guide, as outlined in the table below.

SROI Analysis Procedures	Description
1. Establishing scope and identifying stakeholders	Scoping the boundaries of the report and identifying stakeholders involved.
2. Mapping outcomes	Building an impact map based on the engagement with stakeholders.

SROI Analysis Procedures	Description
3. Evidencing outcomes and giving them a value	Finding data to show whether outcomes have happened and then valuing them.
4. Establishing impact	Applying four filter coefficients: deadweight, attribution, displacement and drop-off to adjust and change the value.
5. Calculating the SROI	Adding up all the benefits, subtracting any negatives and comparing the result to the investment.
6. Reporting, using and embedding	Sharing findings with stakeholders and responding to them, embedding good outcome processes and verifying the report.

Limitations and Risks of the Research

Under the SROI structure, we price abstract or use narrative non-quantitative indicators, and use hypothetical variables as adjustment factors (e.g., deadweight factors, drop-off factors, etc.); the value generation comes from the feelings of stakeholders, not a traditional predictive financial analysis model. Therefore, the social investment return figures calculated in this report are not suitable for comparison with the SROI values of different project properties.

In view of the above, in addition to the SROI results, we must be responsible for publicizing the SROI report, explaining the results and calculations, and deducing the process in a public manner, ensuring we list the assumptions and sensitivity analysis in the process. Users of the report will be able understand the event and its social value with the complete information, which can then be used as the basis for not only decision-making and judging the event management but also maximizing social value.

In addition, we follow the seven principles of SROI during the research process. The following table describes the limitations and possible risks of the research.

SROI Principles	Limitations of the Research	Possible Effects on SROI Outcomes	Response Method
Involve stakeholders	Stakeholders included junior students, who may be incapable of accurately expressing their opinions and thoughts.	Underestimation/ Overestimation	Applied the developments of caregivers, teachers and local residents not involved in the activities via using the supplementary principles of SROI as supporting evaluations.
Understand what changes	Due to emerging KIST, indistinct variations were difficult to evaluate.	Underestimation/ Overestimation	Realized the changing development by engaging with graduated students

SROI Principles	Limitations of the Research	Possible Effects on SROI Outcomes	Response Method
			and teachers.
Value the things that matter	Most stakeholders were initially unable to value what matters.	Underestimation	Engaged in multiple discussions with stakeholders to assign outcome values that best matched their perceptions.
Only include what is material	Different levels of impact on stakeholders prevented being able to accurately determine the degree of importance.	Underestimation	Referred to academic literature, discussed with experts and then confirmed presentation with stakeholders.
Do not over-claim	The impact on a small number of stakeholders was relatively indirect.	Underestimation/ Overestimation	Based on the do not over-claim principle, stakeholders could not describe the causation of impact or provide clear evidence of outcomes; under these circumstances, the data below the standards of scale was not included in calculations (professional judgment).
Be transparent	Information in the complete impact map could be unclear due to layout restrictions.	N/A	Outcomes, calculations and derivation processes were openly explained in report.
Verify the result	Due to time constraints, not all stakeholders in the study were invited to participate in verifying results.	N/A	Results were verified by sampling each type of stakeholder; literature and discussions with experts and scholars were used to verify.

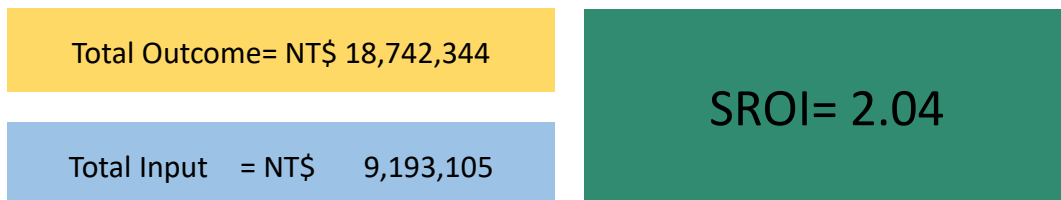
The main purpose of this report is to understand the changes experienced by, and the influence of stakeholders so that project activities can optimize social influence through effective management. Therefore, the stakeholder changes and results under this purpose are our main inventory and frame the scope of the analysis.

Scope of the Research

- I. **Time frame:** The time frame evaluated in this report is an approximately 2-year period from August 2017 to August 2019.

- II. **Geographical scope:** The scope of the field activities uses the educational activities carried out by Taoyuan Elementary School in Taitung County for the main analysis.
- III. **Scope of stakeholders:** The educational and childcare activities carried out in the Taoyuan Elementary School serve as the center of the analysis scope.

SROI Analysis Results



Based on the investigation and analysis of this research, every NT\$1 invested in the Taoyuan Elementary School KIST activity project will create a social value equal to about NT\$2.04. The sensitivity analysis results are between NT\$1.43 and 2.24.

After discussions with stakeholders, the main influence of this project was determined; it has enhanced the independent ability, interpersonal relationships and learning enthusiasm of the children at Taoyuan Elementary School. For participating teachers, the project has improved their teaching skills and interpersonal relationships.

We also discuss the results and stakeholder feedback on the research process to optimize our project. We look forward to further adjusting and revising the implementation process in the future so that the project can expand to maximize its impact, social value and benefits.

Chapter 1: TAOYUAN ELEMENTARY SCHOOL KIST

1-1 The Origin of KIST

According to statistics from the Ministry of the Interior, R.O.C. (Taiwan) had a population of 23.6 million, 4,265 in January 2020, of which 12,510 were newborns born that month. Compared with 16,916 born in December of the prior year, the number of newborns in January 2020 dropped by more than 4,000. In terms of death toll, 14,673 people died in January 2020 (7.34% crude death rate), which is significantly more than the number of births in the same period. With the declining birthrate, there are more than 1,000 small schools with fewer than 100 students in the country. In the absence of a super-human principal, each of these schools is very difficult to operate, the teachers are unstable, and the basic academic ability of the students is very weak; they are even considered to have a wasted life.

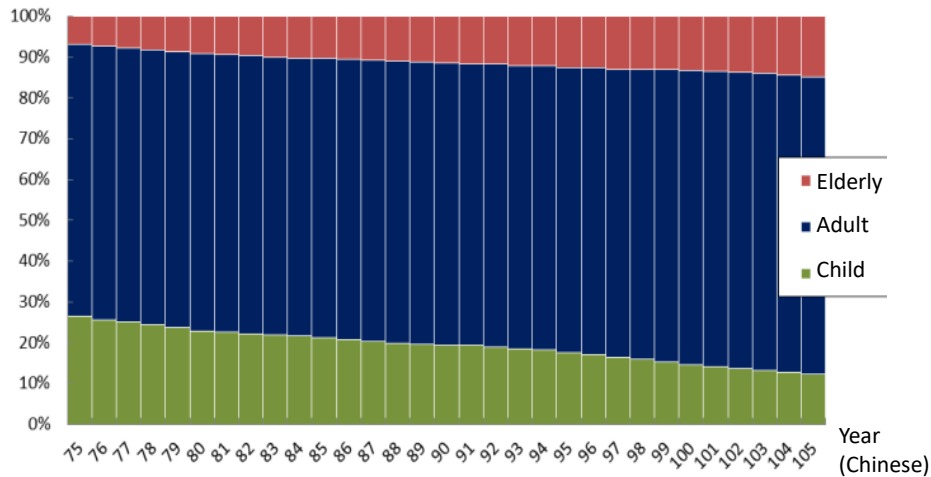


Figure 1. Proportion of the elderly, young adults, and young population in Taitung County over the years¹

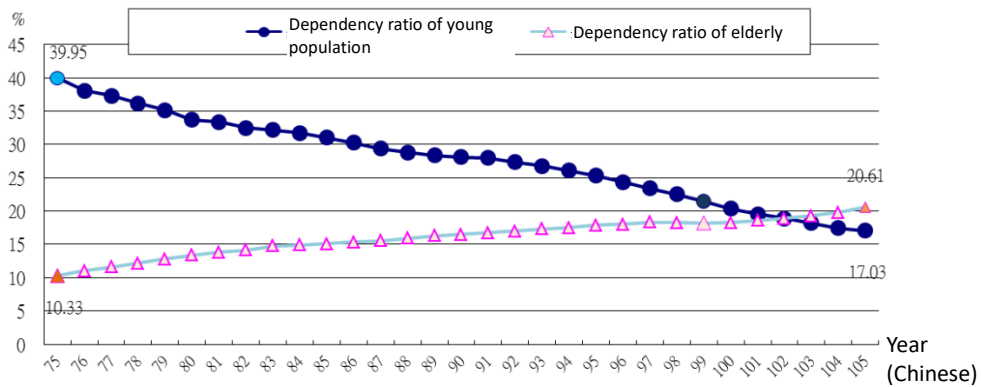


Figure 2. Dependency ratio of infants and elderly in Taitung County over the years¹

¹ Source: Taitung County Government's 105-year Population Analysis Report (<https://bit.ly/38rFq4V>)

In November 2014, the Legislative Yuan passed the Three Acts of Experimental Education, allowing non-profit organizations (NPOs) to undertake public schools (i.e., private management of public schools). This legislation has brought another opportunity for education in Taiwan. We can now use different concepts and methods to reverse the destiny of rural students. The most progressive and efficient method of education will no longer be the exclusive right of schools in big cities.

Chengzhi Education Foundation was established at the end of 2010 and began operations in May 2011. From the first day, it has embraced "caring for the disadvantaged and saving the country with science" as its two missions. In July 2015, we took a dozen principals and teachers to the United States to participate in the annual meeting of Knowledge is Power Program (KIPP), the largest group of private management of public schools in the United States. The short three days brought great shock. KIPP has served 80,000 disadvantaged, African and Latino students in the 21 years since its establishment. Not only the scale, but more importantly their effectiveness, the proportion of KIPP students who graduated from college is five times that of other students with similarly disadvantaged socioeconomic backgrounds. Originally, KIPP only valued knowledge, but then saw how easily students give up and lose their way after entering university. In response, KIPP continued to explore, reflect and modify, ultimately deciding that character is more important than knowledge (character 51% + knowledge 49%).

We very much agree with the KIPP philosophy of "studying hard and being kind to others." We also agree with its dialectical culture. In July 2016, after we attended another KIPP annual meeting, Principal Zheng Hanwen, Principal Lin Yuxing and Teacher Shi Xinyuan decided to join us in applying for private management of public schools. At present, Chengzhi operates the following four KIST public private schools, namely in Taitung County: Taoyuan Elementary School, Sanmin Elementary School in Hualien County, Zhengmin Elementary School in Yunlin County, and Zhanghu Elementary School. We call ourselves KIST schools, short for KIPP-Inspired Schools in Taiwan.

1-2 KIPP in Taiwan

The Chengzhi Education Foundation borrowed from the successful experience of KIPP schools in the United States to operate the KIST schools with "work hard, be nice" as the school motto. The seven character abilities depicted in the figure below are placed at the core, and they are integrated into the organizational culture, school environment, curriculum structure and teacher-student interactions. The character abilities stimulate internal motivation and maintain children's high academic motivation. With high achievement, children have the ability to go out of their hometown and the character to go back home.



Figure 3. KIST Seven Great Characters

The 6E teaching strategies of character education include Example, Explanation, Exhortation, Environment, Experience and Expectation. We look forward to shaping the seven successful characteristics into the common language of the whole school through KIST classrooms, with growth thinking and deliberate practice reflection as the basic components. As a result, our classrooms will not only display exquisite works but also match the students' learning process, show the growth process and provide learning scaffolding and learning strategies.

The KIST school strives to create an extraordinary next generation and is committed to nurturing extraordinary teachers to help all children become extraordinary next generations, influencing parents and changing the community. We are convinced that in order to cultivate extraordinary students, we must start with cultivating outstanding teachers. We therefore sincerely invest resources to organize local and foreign teacher training. Schools are also promoting morning circles and evening circles to enhance teachers' teaching skills through discussion activities and research.

We hope that the introduction of the social return on investment (SROI) evaluation will allow us to use the SROI guidelines issued by the British government departments for measuring the social influence and social value of any methodology (hereafter called "SROI Guidelines"). The SROI Guidelines use a six-step method to measure the theory of change between inputs, outputs and results, and then express it in currency as a unified unit of measurement. Because it can describe the changes between the input, output and results of public welfare in detail, as the cost and benefit methodology of the project, SROI has become one of the most widely recognized calculation and evaluation tools in the world.

In other words, with SROI, we can define a broad and relative measure of the value of money, such as self-confidence, independence, contentment and other abstract perceptions that cannot be monetized. On the other hand, SROI considers the stakeholders involved in the project and measures all the values that are important to the stakeholders, rather than just considering the economic rewards, so that the conclusions of the analysis can be more complete and objective.

Based on the above factors, the analysis framework adopted in this report is based on "A Guide to Social Return on Investment" (published in 2012), and the data analyzed covers an approximately 2-year period from August 2017 to August 2019. Changes experienced by, and the influence of stakeholders are also calculated based on changes during this period. Therefore, based on the SROI Guidelines, this report is classified as an evaluation SROI evaluation report.

Chapter 2: STAKEHOLDERS

The SROI analysis process can be summarized into six major steps depicted below, and the detailed analysis content is presented in the following chapters.



Figure 4. The Six Steps of SROI Analysis

2-1 Engaging with Stakeholders

1. Identification and categorization of stakeholders

We identified, counted and classified all the people contacted during the execution of the project in a rolling manner, based on the targets and goals of the project activities. We first discussed the impact of the project with the project activity executors, then with the school principal and teachers, and finally with the stakeholders mentioned in the negotiation process and all the relevant stakeholders, we could understand what individual impact each type of stakeholder had on this project. The people involved in the KIST activities of Taoyuan Elementary School are categorized into two types of stakeholders: primary stakeholders and secondary stakeholders. Both types are described in the table below.

Type of Stakeholders	Description
Primary Stakeholders	<ol style="list-style-type: none"> 1. Individuals/groups are directly involved in events or activities. 2. The individuals/groups with a high degree of being impacted by the project or impacting the project.
Secondary Stakeholders	<ol style="list-style-type: none"> 1. Individuals/groups are indirectly involved in events or activities. 2. The individuals/groups with a low degree of being impacted by the project or impacting the project.

We contacted stakeholders in the following order: project team, direct stakeholders and finally, secondary stakeholders. The indirect stakeholders took clues from the negotiations of the direct stakeholders and negotiated a settlement. We judged the stakeholders of this activity from the perspective of the project implementation team, government agencies, direct stakeholder discussions and experimental elementary school literature² and activities. At the preliminary stage of stakeholder analysis, we were ready to make the first sub-ethnic judgment of stakeholders who would clearly be affected differently by the activity, as illustrated in the table below.

Type	Stakeholder	Subgroup	Description
Primary Stakeholders	Students	Sixth grade (senior age)	Students who participate in school activities
		Fifth grade (senior age)	
		Fourth grade (middle age)	
		Third grade (middle age)	
		Second grade (junior age)	
		First grade (junior age)	
	Teachers	Senior teachers	Teachers who participate in workshop and Consensus Camp
		New teachers	
	Parents of students		Parents who participate in school activities or dwell in the area near the school
	School employees	Administration staff	Employees who support and arrange school activities
Social workers			
Residents of the community		Residents who participate in a community conference at least two times	
PRIMAX Electronics Ltd CSR team		Company team who visited the school three times	
Chengzhi Education Foundation		Organization that sponsors activity funds	
Chengzhi Education Foundation staff		Organization staff who visited the school fifty times	

² Xie Xiu Mei, Research public office camp experimental primary school transformation and development of the impact of. Master's thesis, Providence University Institute of Education, 2018.5.

Type	Stakeholder	Subgroup	Description
	PRIMAX Electronics Ltd		Organization that sponsors activity funds
	School		Organization that sponsors activity funds
Secondary Stakeholders	Graduated students/resigned teachers or employees from school		Students who graduated/teachers who resigned or employees from Taoyuan Elementary School
	School near the area		School near the area
	Competent education authority		Primary authority of Education Ministry that supervises Taoyuan Elementary School

Due to the significance of SROI and the principle of non-exaggeration, we did not include those activities whose impact and changes are not significant, even if such activities may have influenced changes or impacted stakeholders. The decision to include or exclude stakeholders is a rolling process. We will refer to the literature³ and the process of negotiation. As the investigation progresses, if we find that the influence of stakeholders has changed, we will further include or exclude the sub-ethnic groups that we distinguish among stakeholders. For the evaluation for this report, we used two stages of analysis to determine the inclusion and exclusion of stakeholders, as explained below.

At the stage of inclusion and exclusion of interests, we referred to the AA1000 Stakeholder Engagement Standard (2015) for the internal management of this project and engaged in discussions with external counselors in the process of negotiating with the project executive team and stakeholders. We started by discussing the five major stakeholder judgment aspects of AA1000 to give comprehensive consideration of the stakeholders and what relevant aspects this project may affect. We then made the following analysis and judgments of the direct and indirect stakeholders of Taoyuan Elementary School's KIST activities. The scope of possible stakeholders was initially identified, and the project execution team, scholars and experts, external professional consultants, and stakeholders worked together to judge the principles as shown in the table below.

Table 1. The Five Major Stakeholder Judgment Aspects

Principle ⁴	Description
Influence	Having a direct and significant influence on the activities of KIST in Taoyuan Elementary School, which manifests in behavior, attitude, concept and willingness

³ AA1000 Stakeholders engagement standards (2015) 3.3.2 Stakeholder Identification.

⁴ AA1000 Stakeholders engagement standards (2015) 3.3.2 Stakeholder Identification(p.17)

Principle⁴	Description
Responsibility	Having possible responsibilities with Taoyuan Elementary School KIST activities, such as law, morality, etc.
Urgency	Showing the social problems that Taoyuan Elementary School KIST activities want to solve have a direct and urgent impact
Dependency	Having dependency on the Taoyuan Elementary School KIST activities or the activities depending on the stakeholders
Multi-perspective	Judging the stakeholders of Taoyuan Elementary School with respect to applying the viewpoints of all stakeholders

Stakeholders are defined as "persons or organizations that have undergone changes due to project activities or have affected project activities"⁵. Under this definition, we first held discussions with stakeholders who have direct contact with project activities and further asked if they have had contact with other stakeholders. At the same time, we asked the project manager whether there were any other stakeholders. We conducted a list discussion and judged relatively indirect stakeholders as follows; with the direct stakeholders, we discussed and clarified the relevance and importance of indirect stakeholders with respect to the project's impact, then determined whether to include them in the calculation of the project.

Table 2. The Analysis of Indirect Stakeholders in KIST Project

	Current Teachers of Graduated Students	Nearby Schools	Administrator of Authority
Has an understanding of or experience with this project	May have information but have no experience	May have information but have no experience	Most are unclear and do not have any experience
Feedback from other stakeholders	Some of the junior high school teachers of the graduates understand that the students come from Taoyuan Elementary School; the specific situation of Taoyuan Elementary School is not very clear	In the process of communicating, nearby schools may contact Taoyuan Elementary School and understand its education mode, but those schools are not affected	Authorities of the Education Ministry know that Taoyuan Elementary School is founded by the government and managed by a private corporation, but authorities make only routine visits without active

⁵ Social value international, standards on applying principle 1: Involve stakeholders, version 2.0, p. 3.

	Current Teachers of Graduated Students	Nearby Schools	Administrator of Authority
	however		participation and proposals
Adjusting factor causation	May be very high	May be very high	May be very high
Do not over-claim	Including may result in over-claiming	Including may result in over-claiming	Including may result in over-claiming
Extent of connection with the project	Low	Low	Low
Determination of relevance and significance	Low	Low	Low
Counted or not	No	No	No

There are additional stakeholder groups that we have excluded due to materiality; these groups include the general public who receive media or social information, academics and experts in related fields in experimental primary schools, foreign seminars or seminars, and other participants. We excluded these stakeholders given the restrictions of the quantitative negotiation. We also observed that the excluded stakeholders do not have a negative impact due to the intervention of the project activities under generally reasonable circumstances. The exclusion will therefore not cause an overestimation of the SROI results, and there are no doubts about exaggeration and overestimation.

The stakeholder groups not included in the calculation does not mean that the stakeholder is completely separated from the calculation because, under the SROI methodology, the stakeholder is defined as someone or organization who change due to project activities or impact the project activity"⁶. Under this definition, the stakeholder groups excluded in this project only represent that their achievements are not significant or that their inclusion in the project would result in exaggeration, so they are excluded. The input cost of the interested party was still calculated as part of the total project input cost. In addition, in the process of peace negotiation with stakeholders, we discussed and confirmed the rationality to the stakeholders we

⁶ Social value international, standards on applying principle 1: Involve stakeholders, version 2.0, p. 3.

excluded and further asked if they have come into contact with other stakeholders. We mainly asked the stakeholders in two stages: the first interview and the last confirmation. In the interview phase, we asked the stakeholders to explain the stakeholder groups that they had contacted during the project activities; in the confirmation phase, we informed them of the types of stakeholders we had listed and the reasons for inclusion and exclusion to confirm whether it was consistent with what they had experienced, thereby following the principle of verifiable results of SROI.

The most frequently asked questions were as follows:

- (1) Initial contact and interview stage: “Who is the main contact person for the experimental teaching method of Taoyuan Elementary School?” “As far as you know, who will be affected by Taoyuan Elementary School, or affect Taoyuan Elementary School?”
- (2) Confirmation stage: “This is the category of stakeholders who, after our research, we think will be affected by Taoyuan Elementary School or influence Taoyuan Elementary School’s implementation of the project. Some are not included in this analysis because the impact is relatively insignificant or for other reasons. Can you give us some additional opinions?”

In sum, for the present project, the stakeholder groups to be included and excluded were determined to be those shown in the table below.

Table 3. The Summary of Stakeholders in KIST Project

Categories	Stakeholders	Subgroup	INCL. or EXCL.
Primary Stakeholders	Students	Sixth grade (senior age)	INCL.
		Fifth grade (senior age)	INCL.
		Fourth grade (middle age)	INCL.
		Third grade (middle age)	INCL.
		Second grade (junior age)	INCL.
		First grade (junior age)	INCL.
	Teachers	Senior teachers	INCL.
		New teachers	INCL.
	Parents of students		INCL.
	School employees	Administration staff	INCL.
		Social workers	INCL.
	Residents of the community		INCL.
	PRIMAX Electronics Ltd. CSR team		INCL.
Chengzhi Education Foundation		INCL.	

Categories	Stakeholders	Subgroup	INCL. or EXCL.
	Chengzhi Education Foundation staff		INCL.
	PRIMAX Electronics Ltd		INCL.
	School		INCL.
Secondary Stakeholders	Graduated students/resigned teachers or employees from school		EXCL.
	Other schools near Taoyuan Elementary School		EXCL.
	The Education Ministry authority in command of Taoyuan Elementary School		EXCL.

Among the direct stakeholders, the main reasons that we excluded PRIMAX Electronics Ltd and School are as follows:

- (1) PRIMAX Electronics Ltd was the long-term sponsor, not the main beneficiary of the project, so it was not the important part of project management.
- (2) School is mainly a collection of teachers and students. We have calculated the value of teachers and students, so we excluded it to avoid double-counting.

2. Negotiation with stakeholders

We referred to the AA1000 guidelines to gain a preliminary understanding of the potential stakeholders and the impact range of these stakeholders in this project. We designed different negotiation for different stakeholders since the expected impact methods and quantities on stakeholders are not the same. To improve the reliability, based on our professional judgment, the management needs user reports, other SROI reports and academic literature, we designed different negotiation procedures for different stakeholders.

For a relatively large number of stakeholders, we used multiple sampling methods to reduce sampling errors and increase confidence levels. The total coverage ratio of the three negotiations was as high as 66% and 100%. The number of other stakeholders was relatively small, so we engaged in face-to-face negotiations with focus groups. The total coverage ratio of the negotiation stages reached 100%. The implementation methods are shown in the table below:

Table 4. The Summary of Stakeholders Negotiations Amount

Stakeholders	Subgroup	Ways of Engagement	Population	Phase 1 (interview)	Phase 2 (questionnaire)	Phase 3 (verification interview)	Total number of negotiations	Negotiation rate
Students	5 th –6 th grades	Questionnaire	27	20 (students:18, teachers:2)	18	2	97	120%
	1 st –4 th grades	Questionnaire	54		50	7 (parents, teachers)		
Teachers	Senior teachers	Questionnaire	15	8	11	2	21	140%
	New teachers	Questionnaire	4	0	4	2	6	150%
Parents of students		Questionnaire	73	2	46	10	58	79%
School employees	Administration staff	Interview	1	1	N/A	1	2	200%
	Social workers	Interview	1	1	N/A	1	2	200%
Residents of the community		Questionnaire	109	4	90	10	104	95%
PRIMAX Electronics Ltd CSR team		Questionnaire	4	1	4	2	7	175%
Chengzhi Education Foundation		Interview	1	1	N/A	1	2	200%
Chengzhi Education Foundation staff		Interview	4	2	N/A	2	4	100%
PRIMAX Electronics Ltd		Interview	1	1	N/A	N/A	N/A	
Nearby school		Interview	1	N/A	N/A	N/A	N/A	

3. Stakeholders clarify and focus

Based on the types and levels of achievements of each stakeholder in the first and second stages of the negotiation process, we first considered whether to group the stakeholder groups and ultimately identified the sub-ethnic identification as laid out in the table below.

Stakeholders	Possible Impact Factors for Subgroup Division	Subgroup Categorization Results
Students	The course of the changes and the degree of influence are different and vary by the number of years students have been educated in the school	Senior-aged, 6 th grade
		Senior-aged, 5 th grade
		Middle-aged, 4 th grade
		Middle-aged, 3 rd grade
		Junior-aged, 2 nd grade
		Junior-aged, 1 st grade
Teachers	The course of changes and the degree of influence are different	Senior teachers
		New teachers
School support staff	Different outcomes	Administrative staff
		Social workers

Chapter 3: INPUTS, OUTPUTS AND OUTCOMES

3-1 Inputs and Outputs

1. Project activity input

The resources invested by the stakeholders to make the project activities happen are listed in the table below.

Table 5. Input of KIST Project

Stakeholders	Type of Input	(NTD)	Description
Senior grades	Time	0	Time is students' class time, and there will be no other economic-related output; thus, the input value is not calculated
Middle and junior grades	Time	0	
Senior teachers	Time	1,715,580	Average salary of civil servants and teachers
New teachers	Time	25,416	Fee to attend Consensus Camp
Parents of students	Money	0	Included in sponsoring of PRIMAX Electronics Ltd
Administration staff	Time	1,040,000	Project expense of administrative personnel allowed by Education Ministry
Social workers	Time	580,478	Time inputs of social works calculated on wages, included in personnel costs for social workers
Resident of the community	Time	0	
PRIMAX Electronics Ltd CSR team	Time	8,269	Average salary of electronics industry between 6/2017 and 8/2019
Chengzhi Education Foundation	Money	747,989	Sponsoring expense

Stakeholders	Type of Input	(NTD)	Description
Chengzhi Education Foundation staff	Time	54,635	Real salary
PRIMAX Electronics Ltd	Money	3,384,609	Sponsoring expense
School	Money	1,636,129	Sponsoring expense
Total Inputs		9,193,105	

2. The special case of output

In the table below, the project activities are listed in conjunction with the relevant stakeholders.

Table 6. Output of KIST Project

Stakeholders	Outputs Items	Units
Senior teachers	Times participating training workshop	80 times
	Times participating Conscious Camp	5 times
	Morning circle discussions	120 times
	Visiting times of USA KIPP	6 times
	Teaching hours of KIST character education	240 hours
New teachers	Times participating Conscious Camp	1 time
	Visiting times of USA KIPP	1 time
Junior students	Times attending traditional tribe activities	4 times
	Courses of native language	160 courses (lower age)/80 course (middle age)
	Courses of club activities	120 courses
	Times of field trip	4 times
Senior students	Times attending traditional tribe activities	4 times
	Courses of native language	80 courses
	Courses of club activities	120 courses
	Times attending field trip	4 times
Social workers	Working hours of individual case consultation	44 hours
	Working hours for community work	528 hours
Administration staff	Working hours for administration work	432 hours
	Hours arranging and shifting courses	80 hours

Stakeholders	Outputs Items	Units
Parents of students	Times attending tribal activities	4 times
Residents of the community	Times attending the community conferences	2 times
	Times attending tribal activities	4 times
PRIMAX Electronic Ltd employees	Times visiting school	3 times
Chengzhi Education Foundation staff	Times visiting school	50 times

3-2 Change and Results

The outcomes are based on the feedback of stakeholders and literature. For this report, we also used both qualitative and quantitative analysis to measure results and performance indicators. Qualitative information was based on the contents of discussion with stakeholders; quantitative data was based on actual objective. While some indicators were based on objective facts and discussions with stakeholders, these were conducted in a qualitative and quantitative manner. Stakeholders participated in the discussion at every important stage and, based on the results of the discussion, became an important basis for the next stage of work.

The stakeholder participation process is shown in the flowchart below.

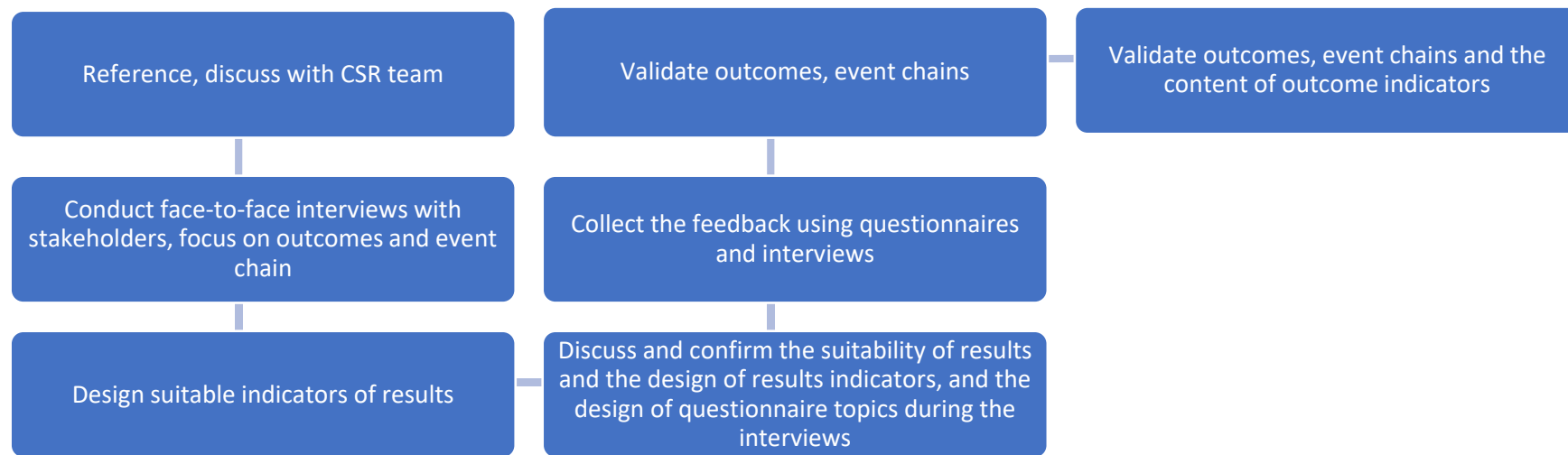


Figure 5. The Flowchart of Defining Outcomes

[Material Judgment of Results]

Based on the SROI "Only important matters should be included" guideline, we only included important results for stakeholders. For the judgment of materiality, we follow SROI "Supplementary Guidance on Materiality"⁷, and focus on the principles of Relevance and Significance. Relevance means that outcomes are relevant to decision-making. If an outcome was relevant, we would continue to consider the significance of the results. Significance refers to the real or potential scale of the outcome has passed a threshold (indicators) that means it influences decisions and actions.

Relevance is that we discussed the causality of the outcomes with the stakeholders from research literature, interviews with stakeholders and feedback from focus groups. We chose the most mentioned results that most of the stakeholders agreed with. If we confirmed these outcomes connected with our decisions and management, then it meant they passed the test of relevance. As for significance, we used threshold of indicators as the basis for decisions.

In order not to be affected by the opinions of stakeholders who were too qualitative, we employed the Likert scale⁸. The survey score for the importance of the theoretical design results was based on the average of the total score of 5 points, with 3 points as the baseline. If the importance score of the result was higher than 3 points, the result was regarded as important.

The Likert scale was created by a psychologist, Rensis Likert. It is often used in questionnaires. It is currently the most widely used scale in social psychology, psychology and management behavior surveys and can assist respondents in specific feedback, such as people's thoughts or feelings. We used 3 as the benchmark mainly because the Likert scale adopts 5 grade options, from a value of 1 to indicate a strong disagreement (strongly disagree); 2 (disagree); 3 (neither agree nor disagree)); 4 (agree) and 5 (strongly agree). The scores of 4 and 5 indicate that the stakeholders strongly agree with the change, and they can better distinguish the change. In addition, the purpose of this project to analyze the subjective attitude of stakeholders was to inspire and cultivate the environmental literacy and self-realization of stakeholders. In the design at the beginning of the event, the measurement standards needed were mainly to be able to confirm whether there is or not.

⁷ [http://www.socialvalueuk.org/app/uploads/2016/03/Supplementary%20Guidance%20on%20Materiality%20\(PDF\).pdf](http://www.socialvalueuk.org/app/uploads/2016/03/Supplementary%20Guidance%20on%20Materiality%20(PDF).pdf)

⁸ Reference materials: <https://zh.wikipedia.org/wiki/%E6%9D%8E%E5%85%8B%E7%89%B9%E9%87%8F%E8%A1%A8>

[Judgment of Negative Outcomes]

Under the seven principles of SROI, in addition to positive outcomes, negative outcomes must also be counted. Taoyuan Elementary School is an innovative private management of public schools based on the KIST method. According to other literatures⁹, there are often following negative impact:

- (1) The software and hardware cannot cooperate.
- (2) Parents easily take their children to private management of public schools but and it may not be suitable for children.
- (3) The "experiment" of policy guidance is difficult to implement for a long time.

There are also documents that point out experimental education may cause an excessively high teacher turnover rate due to increased workload and careers outside the system¹⁰.

Therefore, when we counted outcomes, we started with the situation mentioned in the literature as the basis for confirming with stakeholders to identify as much negative outcomes as possible.

1. Chain of Events (Event chains)

We conducted interviews and questionnaires to collect feedback from the interested parties and stakeholders in order to identify the results from the event chains, explain the causal relationships between the results, discuss them with stakeholders and define the final outcomes (well-defined outcomes). The event chains of all stakeholders please refer to appendix 2.

2. Outcome indicators

[Description of Outcome Indicators]

⁹ 實驗學校量產背後，凸顯哪些教育隱憂？陳雅慧，親子天下，2018年3月1日。

¹⁰ 原住民小學轉型實驗教育學校之個案研究，顏素瑛，國立暨南國際大學，教育政策與行政學系碩士論文，2019年度。

For the indicators of whether the results have occurred, we referred to the SROI principles and used the stakeholder hostage feedback or quantitative feedback as indicators for the occurrence of results. Therefore, in the first stage of the qualitative and the second stage of the quantitative questionnaires, we asked stakeholders to use the quantitative data of the "before and after score changes" as feedback to assess the degree of change in the results, or the description of the actual changes that occurred in the qualitative process. The hostage and quantitative feedback indicators of interest were used to assist in judging whether results have occurred, as well as for assessing the degree and impact of the importance of stakeholders.

(1) Students

The outcome occurrence of students was mainly based on reaching the threshold set by us. Among every outcome, there was generally a high threshold achievement rate, confirming the occurrence of it. For students who did not reach the threshold, because we mainly used anonymous surveys and negotiations, it was more difficult to track the changes and results experienced by specific people in their feedback; but because we would add open questions in on-site interviews and focus group discussions, it was also helpful to understand and capture different opinions. In order not to exaggerate, we added some test items to sensitivity analysis, assuming that the unchanged stakeholders had negative impact on the final outcome calculation. Students who did not experienced changes will be our priority in the future.

Table 7. The Outcome Indicator of Students

Stakeholder	Outcomes	Index	Indicator Attributes
Senior grades	Self-confidence increase	<ol style="list-style-type: none"> 1. More willing to express your ideas 2. Be much surer of yourself through club performances or competitions 3. More willing to introduce yourself or school to others 	Parallel qualitative and quantitative
	Increased independence	<ol style="list-style-type: none"> 1. Practice your assigning your own schoolwork and club time 	Parallel qualitative and quantitative

Stakeholder	Outcomes	Index	Indicator Attributes
		<ul style="list-style-type: none"> 2. Arrange transportation and time by yourself when teaching outside school 3. I will arrange my own itinerary when I go to other counties and cities on vacation 	
	Enthusiasm for learning increased	<ul style="list-style-type: none"> 1. I don't need teachers and parents to tell me, then I'll take the initiative to read books. 2. I do not hate to go to school any longer 3. I will take the initiative to ask questions when I don't understand 4. I use a uniform education online learning platform to increase time or frequency 	Parallel qualitative and quantitative
	Interpersonal relationship improvement	<ul style="list-style-type: none"> 1. I have more friends at school 2. I interact with classmates more often (discussing homework, going out to play, etc.) 3. I feel that there is less bullying or squeezing of certain classmates in the class 	Parallel qualitative and quantitative
	Broader view	<ul style="list-style-type: none"> 1. I am exposed to new things more often than before 2. I become more and more distant 3. I can see things from other people's perspectives 	Parallel qualitative and quantitative
Low-middle grades	Self-confidence increase	<ul style="list-style-type: none"> 1. More willing to express your own thoughts 2. More affirmation of yourself through club performances or competitions 	Parallel qualitative and quantitative

Stakeholder	Outcomes	Index	Indicator Attributes
		3. More willing to introduce yourself or the school to others	
	Increased independence	1. Practice your own assignment of schoolwork and club time 2. Arrange transportation and time by yourself when teaching outside school	Parallel qualitative and quantitative
	Enthusiasm for learning increased	1. I don't need teachers and parents to tell me, then I'll take the initiative to read books. 2. I do not hate to go to school any longer 3. I will take the initiative to ask questions when I don't understand 4. I use a uniform education online learning platform to increase time or frequency	Parallel qualitative and quantitative
	Interpersonal relationship improvement	1. I have more friends at school 2. I interact with classmates more often (discussing homework, going out to play, etc.) 3. I feel that there is less bullying or squeezing of certain classmates	Parallel qualitative and quantitative
	Broader view	1. I am exposed to new things more often than before 2. I become more and more distant 3. I can see things from other people's perspectives	Parallel qualitative and quantitative

Table 8. The Outcome Incidence of Students

Stakeholder		Outcomes	Outcome Incidence	Outcome Amount
Sub-group	Population			
Senior grade (sixth grades)	13	Self-confidence increase	61%	8
		Increased independence	56%	7
		Enthusiasm for learning increased	56%	7
		Interpersonal relationship improvement	72%	9
		Broader view	72%	9
Senior grade (fifth grades)	14	Self-confidence increase	61%	9
		Increased independence	56%	8
		Enthusiasm for learning increased	56%	8
		Interpersonal relationship improvement	72%	10
		Broader view	72%	10
Low-middle grade (fourth grades)	9	Self-confidence increase	86%	8
		Increased independence	80%	7
		Enthusiasm for learning increased	79%	7
		Interpersonal relationship improvement	77%	7
		Broader view	80%	7
Low-middle grade (third grades)	16	Self-confidence increase	86%	14
		Increased independence	80%	13
		Enthusiasm for learning increased	79%	13
		Interpersonal relationship improvement	77%	12

Stakeholder		Outcomes	Outcome Incidence	Outcome Amount
Sub-group	Population			
		Broader view	80%	13
Low-middle grade (second grades)	14	Self-confidence increase	86%	12
		Increased independence	80%	11
		Enthusiasm for learning increased	79%	11
		Interpersonal relationship improvement	77%	11
		Broader view	80%	11
Low-middle grade (first grades)	15	Self-confidence increase	86%	13
		Increased independence	80%	12
		Enthusiasm for learning increased	79%	12
		Interpersonal relationship improvement	77%	12
		Broader view	80%	12

(2) Teachers

The outcome occurrence of teachers was mainly based on reaching the threshold set by us. There was a significant threshold achievement rate in every outcome. For some senior teachers who did not reach the threshold, in our survey, the main reasons were that the characteristics of KIST teaching method are mainly aimed at strengthening teamwork and immediate feedback, and the outcomes related to this method achieved better significance. The work efficiency and other outcomes were mainly related to personal working habits and methods, so some teachers did not change. New teachers who did not pass the indicator threshold test gave feedback that because the participation time was too short, so they could not clearly feel the specific changes yet, rather than having a major negative impact.

Table 9. The Outcome Indicator of Teachers

Stakeholder	Outcomes	Index	Indicator Attributes
Teachers	Teaching skills improvement	<ol style="list-style-type: none"> 1. More active participation in various teaching research 2. My teaching method is more diverse than before 3. I apply others' good teaching methods to my own teaching 4. More able to understand local problems and use teaching strategies effectively 	Parallel qualitative and quantitative
	Interpersonal relationship improvement	<ol style="list-style-type: none"> 1. Students are more willing to share their own affairs with me 2. More interaction with students and fewer barriers 3. I spend more time caring about students 4. Have more benign communication with students 5. I will share more personal matters such as my family and pressure with colleagues 6. I will assist students in my colleagues' classes 7. I will exchange teaching strategies and methods with my colleagues more often 	Parallel qualitative and quantitative
	Increased sense of work accomplishment	<ol style="list-style-type: none"> 1. I can better understand the meaning of teaching work 2. Student behavior is better 3. Student performance is improved 4. I have a closer relationship with students 	Parallel qualitative and quantitative
	Increased work efficiency	<ol style="list-style-type: none"> 1. The teaching rhythm in the classroom is not easily interrupted, and the teaching progress can be maintained 2. Under the KIST principle, the course objectives are clearer and the curriculum design is more efficient 3. The administrative workload is reduced 	Parallel qualitative and quantitative

Stakeholder	Outcomes	Index	Indicator Attributes
	Attitude correction	<ol style="list-style-type: none"> 1. Use positive language for yourself and those around you 2. Use discussion instead of blame when dealing with student problems 3. Be optimistic about stressful events 	Parallel qualitative and quantitative
	Poor quality of life	<ol style="list-style-type: none"> 1. Reduced leisure time 2. Reduced time spent with family and friends 	Parallel qualitative and quantitative
	Poor health	<ol style="list-style-type: none"> 1. Increase in weight 2. Increase in psychological stress 	Parallel qualitative and quantitative

Table 10. The Outcome Incidence of Teachers

Stakeholder		Outcomes	Outcome Incidence	Outcome Amount
Sub-group	Sub-group			
Senior teachers	15	Teaching skills improvement	91%	14
		Interpersonal relationship improvement	89%	13
		Increased sense of work accomplishment	45%	7
		Increased work efficiency	27%	4
		Attitude correction	64%	10
		Poor quality of life	25%	4
		Poor health	50%	8
New teachers	4	Teaching skills improvement	0%	0
		Interpersonal relationship improvement	50%	2
		Increased sense of work accomplishment	50%	2

Stakeholder		Outcomes	Outcome Incidence	Outcome Amount
Sub-group	Sub-group			
		Increased work efficiency	0%	0
		Attitude correction	50%	2
		Poor quality of life	50%	2
		Poor health	0%	0

(3) Parents of students

Because we investigated the changes and outcomes of parents anonymously, it was more difficult to track the views of parents who did not pass the indicator threshold. In the open questionnaire, there was not special feedback either. Therefore, we discussed with the representative of parents in the form of focus groups. After discussion, we believed that the possible reason was that those parents less involved in school activities. Because the outcome incidence all exceeded 90% and there was not significant negative outcome, we will try to clarify the changes of those parents who did not achieve outcomes in the future surveys.

Table 11. The Outcome Indicator and Incidence of Teachers

Stakeholder	Outcomes	Index	Indicator Attributes	Outcome Incidence	Outcome Amount
Parents of students	Reduce the effort to take care of children	<ol style="list-style-type: none"> 1. Know more about children's learning performance 2. Know more about children's learning advantages and disadvantages, and interests 3. Know more about how to assist children in learning 4. Know more about how to arrange their children's future 	Parallel qualitative and quantitative	90%	66

Stakeholder	Outcomes	Index	Indicator Attributes	Outcome Incidence	Outcome Amount
	Interpersonal relationship improvement (teacher/child)	<ol style="list-style-type: none"> 1. I feel more connected to my children through school activities 2. I feel more connected to my children through tribal cultural activities 3. Parent-child interactions increase 4. Parents and children can communicate more rationally 5. I prefer to let my children participate in school extracurricular activities 6. I participate in activities organized by the school more often 7. I prefer to let my children study at Taoyuan Elementary School 	Parallel qualitative and quantitative	91%	67

(4) School employees

Both administrative staff and social workers passed our indicator threshold 100%, so we confirmed the occurrence of outcomes.

Table 12. The Outcome Indicator and Incidence of School Employees

Stakeholder	Outcomes	Index	Indicator Attributes	Outcome Incidence	Outcome Amount
Administration staff	Enhance the sense of work accomplishment	<ol style="list-style-type: none"> 1. Get closer to students 2. Receive gratitude from students after assisting students 	Parallel qualitative and quantitative	100%	1

Stakeholder	Outcomes	Index	Indicator Attributes	Outcome Incidence	Outcome Amount
		3. Students will take the initiative to say hello			
Social worker	Improve work ability	1. Improving the skills and experience of social workers in indigenous communities 2. Improving student guidance skills	Parallel qualitative and quantitative	100%	1

(5) Residents

Taoyuan Elementary School mainly held aboriginal cultural activities to communicate with the community. Most of the community residents increased cultural identity of the indigenous communities because of their participation in the activities. Residents whose outcomes did not happened were mainly because they less concerned about this area or they worked in the urban area, rather than because of negative effects.

Table 13. The Outcome Indicator and Incidence of Residents

Stakeholder	Outcomes	Index	Indicator Attributes	Outcome Incidence	Outcome Amount
Residents	Improve community identity	1. Community residents have more opportunities for communication 2. The community becomes safer because of the discussion and implementation of community safety issues 3. I am more willing to participate in tribal or community activities	Parallel qualitative and quantitative	69%	75

(6) Employees of PRIMAX Electronic Ltd CSR team

Those who did not pass the threshold originally had high empathy attitude, so the outcomes did not have major impact on them.

Table 14. The Outcome Indicator and Incidence of Employees of PRIMAX Electronic Ltd CSR team

Stakeholder	Outcomes	Index	Indicator Attributes	Outcome Incidence	Outcome Amount
Employees of PRIMAX Electronic Ltd CSR team	Get the satisfaction of giving back to society	<ol style="list-style-type: none"> 1. I feel that I am not just doing a daily job, but I can actually give back to society 2. I feel that my work is more meaningful 	Parallel qualitative and quantitative	100%	4
	Increase company identity	<ol style="list-style-type: none"> 1. By participating in CSR projects, you can better understand the company's social influence. 2. More agree with the company's investment in social welfare 	Parallel qualitative and quantitative	100%	4
	Increased empathy	<ol style="list-style-type: none"> 1. Be more empathetic to social welfare issues 2. Began to pay attention to social welfare issues 3. More willing to volunteer 4. Start to invite relatives and friends to volunteer together 5. Increase volunteer service time 	Parallel qualitative and quantitative	75%	3

(7) Chengzhi Education Foundation

After the approval of employees and project managers, Taoyuan Elementary School is the first KIST introduction school, so the marginal benefits of increasing professional experience and knowledge was more obvious.

Table 15. The Outcome Indicator and Incidence of Chengzhi Education Foundation

Stakeholder	Outcomes	Index	Indicator Attributes	Outcome Incidence	Outcome Amount
Chengzhi Education Foundation	Increase experience and know how in public and private schools and counseling disadvantaged students	<ol style="list-style-type: none"> 1. The foundation uses social workers to identify methods for tutoring disadvantaged students 2. Taoyuan Elementary School principals share school success stories 3. Taoyuan Elementary School teachers share teaching methods 	Parallel qualitative and quantitative	100%	1

(8) Employees at Chengzhi Education Foundation

Since the staff of Chengzhi Education Foundation were very familiar with the issues of education and aboriginal people, and there were many projects in progress, so the incidence of the improvement of understanding of the issues and the improvement of sense of accomplishment is low. Only one employee reported the negative impact.

Table 16. The Outcome Indicator and Incidence of Employees at Chengzhi Education Foundation

Stakeholder	Outcomes	Index	Indicator Attributes	Outcome Incidence	Outcome Amount
Employees at Chengzhi	Raise awareness of social care and increase understanding	<ol style="list-style-type: none"> 1. Be more empathetic to indigenous people/pastoral issues 2. More often focus on indigenous issues 	Parallel qualitative and quantitative	25%	1

Stakeholder	Outcomes	Index	Indicator Attributes	Outcome Incidence	Outcome Amount
Education Foundation	of indigenous peoples/pastoral issues	3. Have a deeper and broader understanding of indigenous issues			
	Increase work accomplishment	1. I feel that work can contribute to rural education 2. I am very happy to see the changes in students and teachers	Parallel qualitative and quantitative	25%	1
	Poor quality of life	1. Reduce the chance of relaxing by meeting and chatting with relatives and friends Do less of what you want to do	Parallel qualitative and quantitative	25%	1

3-3 Outcome Evaluation

1. Financial agency variables

In this project study, the results mostly focused on changes in attitudes, relationships, behaviors and thoughts, and stakeholders were not familiar with the evaluation methods. Therefore, the choice of evaluation methods became a challenge we must overcome. We first referred to similar assured SROI reports to understand how the evaluation method is determined, and then discussed all possible evaluation methods and possible financial agency variables with stakeholders in the three different stages of preliminary interviews, questionnaires and confirmation.

Eventually, in order to make it easier for stakeholders to understand the connotation of evaluation, we used cost and substitutes analogy as the main evaluation method, allowing stakeholders to use input cost or similar things as the evaluation method in exchange for outcomes. The cost method is the cost, expense or amount directly saved by stakeholders. The substitute analogy method is to identify similar alternative or activities for each outcome by professional judgment. After deciding all possible variables, we set different frequencies or differences in degree, and interviewed with stakeholders to determine all possible substitutes. At last, we looked for local average price of all substitutes or labor services in Taiwan.

In the initial focus group interviews, we decided on similar alternatives with stakeholders. We selected alternatives approved by the stakeholder groups as options in the questionnaires. In order to avoid evaluation bias, we also asked stakeholders in the questionnaire and focus interviews to confirm the importance of the results, and there were not major abnormalities and biases against the cost of evaluation and alternatives.

After completing the questionnaire survey, we used weighted-average-method to equalize the cost and alternatives selected by stakeholders. The main reason was we found that stakeholders chose different alternatives was not because the stakeholders experienced different outcomes or the change degree differed between them, but because of their personal values. Since personal values were a private field that our project does not intend to manage and intervene in, so under the consideration for not influencing calculation and de-characterization, we chose weighted-average-method to calculate the outcome evaluation. In addition, we also carefully considered whether there were extreme values.

Table 17. Financial agency variables

Stakeholder	Results	Calculation Basis	Financial Agency Variables	Consolidation of Feedback and Explanations from Stakeholders	Source
Senior grades	Self-confidence increase	5,968	Perform outside of school 3–5 times	Students think that the improvement of self-confidence is like the applause and affirmation they get when performing outside the school, making people more willing to participate	Questionnaire
	Increased independence	33,973	Exchange abroad for 2 weeks	Students think that the promotion of independence is like an independent life of studying abroad	Questionnaire
	Enthusiasm for learning increased	16,783	Exchange abroad for 1 week	Students think that the improvement of their enthusiasm for learning is like the motivation and impression of studying abroad, making people more willing to learn	Questionnaire
	Interpersonal relationship improvement	75,354	Studying in other counties and cities for 1 year	Students think that the improvement of interpersonal relationship is like studying in other counties and cities, and they can recognize people from all regions	Questionnaire
	Broader view	110,823	Study abroad for 1 year	Students think that they can have a broader field of vision, just as they see different people and things when studying abroad, which makes people more willing to learn	Questionnaire
Low-middle grades	Self-confidence increase	13,862	One year of potential development course	Students believe that enhance self-confidence is like the growing process obtained from potential development courses	Questionnaire
	Increased independence	13,392	Let the children plan their own domestic travel 4 times	Students think that the improvement of independence is as fun as planning their own domestic travel	Questionnaire

Stakeholder	Results	Calculation Basis	Financial Agency Variables	Consolidation of Feedback and Explanations from Stakeholders	Source
	Enthusiasm for learning increased	9,282	One-year online teaching course	Students think that the improvement of learning enthusiasm is like taking online teaching courses; the learning method is novel and makes students more willing to participate.	Questionnaire
	Interpersonal relationship improvement	8,182	School-run class team sports course, 1 semester	Students think that the improvement of interpersonal relationships is like when the school organizes team sports classes to recognize classmates outside their own class	Questionnaire
	Broader view	17,250	Let the children go for training and then participate in for off-campus competition 1–2 times a year	Students think that they can have a broader field of vision, just like participating in a competition outside the school, making people more willing to participate	Questionnaire
Senior teacher	Teaching skills improvement	246,222	Business class ticket	The teacher believes that the improvement of teaching skills is equivalent to getting a business class ticket	Questionnaire
	Interpersonal relationship improvement	323,111	One-year household allowance	The teacher thinks that the improvement of interpersonal relationship is like getting a year of household subsidy	Questionnaire
	Increased sense of work accomplishment	436,000	Family travel fund	An increase in work accomplishment is like getting a family travel fund	Questionnaire
	Increased work efficiency	284,333	One-year household allowance	The increase in work efficiency is like getting a year's household subsidy	Questionnaire

Stakeholder	Results	Calculation Basis	Financial Agency Variables	Consolidation of Feedback and Explanations from Stakeholders	Source
	Attitude correction	307,143	One-year household allowance	A more positive attitude is like getting a year's household subsidy	Questionnaire
	Poor quality of life	-266,125	Business class ticket	The deterioration of the quality of life is equivalent to the loss of a business class ticket	Questionnaire
	Poor health	-288,857	One-year home travel subsidy	Poor health is like losing one year of home travel subsidy	Questionnaire
New teacher	Teaching skills improvement	N/A			Questionnaire
	Interpersonal relationship improvement	250,500	Business class ticket	The improvement of interpersonal relationships is equivalent to getting a business class ticket	Questionnaire
	Increased sense of work accomplishment	151,000	One year of advancement assistance	The increase in work accomplishment is like getting a subsidy for one year of training	Questionnaire
	Increased work efficiency	N/A			Questionnaire
	Attitude correction	520,000	Family travel fund	Attitudes becoming more positive is like getting a family travel fund	Questionnaire
	Poor quality of life	-500,500	Family travel fund	The deterioration of the quality of life equals the loss of a family travel fund	Questionnaire
	Poor health	N/A			Questionnaire

Stakeholder	Results	Calculation Basis	Financial Agency Variables	Consolidation of Feedback and Explanations from Stakeholders	Source
Students' parents	Reduce the effort to take care of children	8,705	The time cost of communicating with the teacher for half an hour per week	For parents, reducing the effort to take care of their children is equivalent to the time cost of communicating with the teacher for half an hour per week	Questionnaire
	Interpersonal relationship improvement (teacher/child)	9,299	The time cost of communicating with the teacher for half an hour per week	For parents, improving the relationship with their children and teachers is equivalent to the time cost of communicating with the teacher for half an hour per week	Questionnaire
Administration staff	Enhance the sense of work accomplishment	23,333	Government subsidy	Executives believe that enhancing the sense of accomplishment at work is like the government's improvement and assistance to individuals	Interview
Social worker	Improve work ability	500,000	Family travel fund	Social workers think that the improvement of work ability is like getting a family travel fund	Interview
Residents	Improve community identity	7,412	Time cost of participating in community activities	Residents in the community have increased their sense of identity with the community by participating in community activities	Questionnaire
Employees of PRIMAX CSR team	Get the satisfaction of giving back to society	39,203	Time cost of being a short-term volunteer	CSR team employees get the satisfaction of giving back to society by serving as short-term community volunteers	Questionnaire
	Increase company identity	246,264	Work performance is recognized and publicly praised within the company	CSR team employees increase their sense of identity with the company, for their work performance is publicly praised by the company	Questionnaire

Stakeholder	Results	Calculation Basis	Financial Agency Variables	Consolidation of Feedback and Explanations from Stakeholders	Source
	Increased empathy	229,402	Time cost of being a short-term volunteer	CSR team employees increase empathy by serving as short-term community volunteers	Questionnaire
Chengzhi Education Foundation	Increase experience and know how in public and private schools and counseling disadvantaged students	112,847	Reduced application costs for applying to other schools	The foundation increases the experience of tutoring disadvantaged students by applying to public private schools	Interview
Employees at Chengzhi Education Foundation	Raise awareness of social care and increase understanding of indigenous peoples/pastoral issues	60,000	Aboriginal tribes long, one-month stay	Foundation employees live in the tribe for one month to enhance their awareness of social care and increase their understanding of rural issues	Interview
	Increase work accomplishment	100,000	Annual salary increase	Foundation employees believe that increasing their sense of work accomplishment is like getting a salary increase.	Interview
	Poor quality of life	-20,000	Additional consumption due to overtime	Foundation employees believe that the deterioration of quality of life is due to the increase in extra consumption due to overtime	Interview

2. Impact Factors of Stakeholder Outcomes

In order to follow the “Do not over-claim” SROI principle, we excluded the impacts that are not part of this evaluation project. We considered four impact factors, as illustrated in the table below.

Impact Factors	Description
Deadweight factor (Deadweight)	Refers to the proportion of whether the implementation of this project the changes or outcomes will still happen on stakeholders;. The deadweight factor of this project is based on interviews and questionnaires, and is calculated by the weighted average of the stakeholder replies.
Transfer factor (Displacement)	Refers to the proportion of the project’s outcome that transfers the problem to other places or excludes others. This factor has no obvious transfer problems in this project, but considering the principle of not exaggerating SROI, it was planned to discuss with sensitivity analysis and not included in the calculation of results.
Attribution factor (Attribution)	Refers to the proportion of the change in the outcome of the project that is attributed to the contribution of other factors—that is, the proportion of the outcome that is not our credit. The attribution factor of this project is based on interviews and questionnaires, and is calculated by the weighted average of the stakeholder replies.
Attenuation factor (Drop-off)	Refers to the proportion of the results that diminish with time—that is, the proportion of the results produced by the project whose benefits are diminishing year by year. The attenuation factor of this project is based on interviews and questionnaires, and is calculated by the weighted average of the stakeholder replies.

Regarding the four impact factors, due to the complex concept, we had to discuss many examples with the stakeholders by offering many examples during the interview, so stakeholders could fully comprehend the significance of the impact factors.

Although the stakeholders understood the impact factors after our explanation, we could not get accurate feedback on the proportions of the impact factors. Therefore, in our discussions, we also referred to the design of the Likert scale, and the stakeholders could only respond effectively with a five-point scale. For example, when we asked event participants about the deadweight factors in the results of "enhancing physical and mental satisfaction," we asked them the following question: "Would you take part in similar activities that give you the same feelings to enhance your physical and mental satisfaction through other approaches, if this activity was not part of the project?" Then the participants of the community responded by selecting one of five ranges—*very high chance*, *high opportunity*, *common opportunities*, *low chance* and *very low chance*—which represented 100%, 75%, 50%, 25% and 0%, respectively. In terms of calculation, we used a less biased weighted average method to ensure all stakeholders responses would be reflected in the proportions of the four major impact factors.

Table 18. Deadweight Factor and Attribution Factor

Stakeholder	Results	Deadweight Factor	Stakeholder Description	Attribution Factor	Stakeholder Description
Senior grades	Self-confidence increase	50%	Taiwanese schools have established non-cognitive curriculum training, so even if there is no project activity, the stakeholders believe that there is a 50% chance that the same change will occur.	41%	Because of the family environment, personality traits and other factors, it may not be entirely contributed by this project.
	Increased independence	43%	Taiwanese schools have established non-cognitive curriculum training, so even if there is no project activity, the stakeholders think that there is a nearly 50% chance of it happening.	41%	
	Enthusiasm for learning increased	42%	School teachers may also help children achieve similar results.	38%	Enthusiasm for learning is not necessarily fully contributed by the project due to

Stakeholder	Results	Deadweight Factor	Stakeholder Description	Attribution Factor	Stakeholder Description
					factors such as learning environment and personality traits.
	Interpersonal relationship improvement	39%	Winter and summer camps held by the school may not achieve similar results.	38%	The improvement of interpersonal relationships is not necessarily contributed by this project due to factors such as environment and personality traits.
	Broader view	46%	School teachers may also help children achieve similar results.	38%	A wider field of vision is not necessarily fully contributed by this project due to the influence of family environment, contact surface and other factors.
Lower middle grades	Self-confidence increase	25%	Students in middle and lower grades are less exposed to this kind of non-cognitive curriculum training.	25%	Because of the influence of family, personality traits, learning environment and other factors, it may not be completely contributed by this project.
	Increased independence	25%		25%	
	Enthusiasm for learning increased	25%		25%	
	Interpersonal relationship improvement	25%		25%	
	Broader view	25%		25%	
Senior teacher	Teaching skills improvement	53%	The senior teachers originally improved their teaching skills because of the	36%	Because senior teachers have accumulated their own teaching

Stakeholder	Results	Deadweight Factor	Stakeholder Description	Attribution Factor	Stakeholder Description
			accumulation of teaching experience and further training.		experience, after exposure to new teaching methods, they can gain more improvement on their original teaching skills than ordinary teachers.
	Interpersonal relationship improvement	44%	Through teaching sharing among teachers, it is believed that there will be a nearly 50% chance of this happening.	31%	Interpersonal relationships include the improvement of the relationships between peers and parents. In addition to the help of KIST, this part is also based on subjective and objective conditions, such as the teacher's own personality.
	Increased sense of work accomplishment	25%	Because of the principal's leadership style and the school's special culture, there is a chance that the senior teacher's sense of accomplishment will occur without this project activity.	25%	The teacher's increased sense of accomplishment may be partly due to the principal's culture of motivating peers.
	Increased work efficiency	58%	Because of the principal's request, there is basically more than 50% probability that the work efficiency will be increased.	58%	The increase in teacher's work efficiency also includes the teacher's own attitude and personality while adapting to and mastering new teaching methods.
	Attitude correction	50%	In the local environment, because of the simplicity and personality of the principal, even without the introduction of	29%	The change in attitude comes from KIST's peer encouragement mechanism, but it is also related to each person's growth background and environment.

Stakeholder	Results	Deadweight Factor	Stakeholder Description	Attribution Factor	Stakeholder Description
			the KIST system, the attitude towards life will change.		
	Declined quality of life	38%	The deterioration of quality of life and health is related to the current overall working environment of primary school teachers. In such an environment, there is a certain probability that the quality of life and health will deteriorate.	13%	May result from living in township and having overly self-requirement.
	Poor health	36%		14%	Part of the deterioration of health is due to factors such as age and living environment.
New teacher	Teaching skills improvement	0%	Since the new teachers have not worked in other schools, there is no other opportunity to improve their teaching skills.	0%	Because the new teachers did not get involved in other external activities, they increased their teaching skills in the KIST environment of Taoyuan Elementary School, and there was no other factor.
	Interpersonal relationship improvement	50%	Because the new teachers have just come in, they think that there will be a 50% chance of improving interpersonal relationships through teaching sharing among teachers in unfamiliar environments.	50%	The reasons for the improvement of interpersonal relationships may also be other factors, such as individual personality and work attitude.
	Increased sense of work accomplishment	50%	The increase in the sense of achievement of new teachers may be due to them having come into contact with	38%	The sense of achievement of a new teacher may also originate from the content of the teacher's job, not just

Stakeholder	Results	Deadweight Factor	Stakeholder Description	Attribution Factor	Stakeholder Description
			practice since they just graduated from school, and they may have similar opportunities in other schools.		because of the influence of the KIST system.
	Increased work efficiency	0%	Taoyuan Elementary School is the first workplace, and there is no other opportunity.	0%	Taoyuan Elementary School is the first workplace, and there are no other factors that will increase work efficiency.
	Attitude correction	50%	Positive work attitudes stem from both KIST and non-KIST reasons. Even if KIST is not introduced, there are still opportunities to change work attitudes due to the local environment and the principal's leadership style.	38%	A more positive attitude towards work may originate from the process of teachers' contact with students and parents, making their attitude more positive.
	Poor quality of life	63%	Teachers will change due to the stress of life.	25%	Part of the quality of life may be due to being in a rural area, self-requirements, etc.
	Poor health	0%	New teachers change their physical conditions due to their work, mainly because of the heavy workload of KIST.	0%	New teachers' health changes are mainly due to work.
Parents of students	Reduce the effort to take care of children	24%	If there are other groups involved in after-school counseling, there are opportunities to reduce the pressure of caring for	33%	Relieving the stress of care may also come from the support of everyone in the remote villages and the participation of the local church

Stakeholder	Results	Deadweight Factor	Stakeholder Description	Attribution Factor	Stakeholder Description
	Interpersonal relationship improvement (teacher/child)	25%	children and improve interpersonal relationships.	25%	The improvement of interpersonal relationships may also be due to the local living environment and customs.
administration staff	Enhance the sense of work accomplishment	0%	Hiring additional administrative staff to assist in teaching is only available at Taoyuan Elementary School.	30%	The increase in work accomplishment is caused by other reasons, such as its own characteristics and work attitude.
Social worker	Improve work ability	25%	At present, social workers in Taiwan rarely have such opportunities to participate in KIST's collaborative education activities.	50%	The improvement of work ability also occurs because the problems encountered in the remote villages are more complicated than in other places.
Residents	Improve community identity	48%	Community residents would have increased their sense of identity due to the gradual increase and emphasis on tribal activities.	52%	The increase in identity may also be affected by factors such as tribal culture, community activities, beliefs, etc.
Employees of PRIMAX Electronic Ltd CSR team	Get the satisfaction of giving back to society	75%	If PRIMAX Electronic Ltd does not participate in the KIST project, it will also participate in other projects and still get the satisfaction of giving back to the society.	44%	Satisfaction and the reasons for joining other projects.
	Increase company identity	56%	Even if there is no KIST project, because the company will sponsor various types of	44%	Increasing the company's sense of identity may include the outstanding

Stakeholder	Results	Deadweight Factor	Stakeholder Description	Attribution Factor	Stakeholder Description
			projects, it will enhance the sense of identity with the company.		company performance and other performance.
	Increased empathy	83%	The increase in empathy, if there is no KIST project, will also increase because the company invests in other activities.	42%	In addition to KIST's project, the increase in empathy may also be due to the company's investment in other projects at the same time.
Chengzhi Education Foundation	Increase experience and know how in public and private schools and counseling disadvantaged students	0%	Taoyuan Elementary School is the first public private school, so there is no other opportunity to increase experience.	0%	The main increase in experience is due to the actual field execution experience of Taoyuan Elementary School.
Employees at Chengzhi Education Foundation	Raise awareness of social care and increase understanding of indigenous peoples/pastoral issues	10%	In Chengzhi's project, there are not many opportunities to touch the field of indigenous issues.	10%	The understanding and improvement of indigenous issues mainly come from the implementation of this project in the original village.
	Increase work accomplishment	50%	The increased sense of work accomplishment originally had the opportunity to come from other projects.	50%	In addition to the KIST project, there are other reasons for the increase in the

Stakeholder	Results	Deadweight Factor	Stakeholder Description	Attribution Factor	Stakeholder Description
					sense of work accomplishment, such as personal work attitude.
	Poor quality of life	75%	The quality of life is due to the increase in workload, which is inevitable in the modern working environment.	50%	The quality of life is also affected by other factors, such as the environment.

Table 19. Transfer Factor and Drop-off Factor

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
Senior grades	Self-confidence increase	0%	Increased self-confidence will not occur the transfer of negative impacts and resources crowding out.	34%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Increased independence	0%	Increased independence and autonomy will not occur the transfer of negative impacts and resources crowding out.	23%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.

¹¹ The drop-off factor is calculated in "years." If the unit is in months, the impact amount is too small. Considering the significance, "years" are used as the benchmark.

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
	Enthusiasm for learning increased	0%	Enhancing learning enthusiasm will not occur the transfer of negative impacts and resources crowding out.	21%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Interpersonal relationship improvement	0%	The improvement of interpersonal relationship will not occur the transfer of negative impacts and resources crowding out.	38%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Broader view	0%	A broader vision will not occur the transfer of negative impacts and resources crowding out.	31%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
Lower middle grades	Self-confidence increase	0%	Increased self-confidence will not occur the transfer of negative impacts and resources crowding out.	25%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
					attenuation of the outcome indicators is estimated for each year.
	Increased independence	0%	Increased independence and autonomy will not occur the transfer of negative impacts and resources crowding out.	25%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Enthusiasm for learning increased	0%	Enhancing learning enthusiasm will not occur the transfer of negative impacts and resources crowding out.	25%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Interpersonal relationship improvement	0%	The improvement of interpersonal relationship will not occur the transfer of negative impacts and resources crowding out.	25%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Broader view	0%	A broader vision will not occur the transfer of negative impacts and resources crowding out.	25%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
					survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
Senior teacher	Teaching skills improvement	0%	The improvement of teaching skills will not occur the transfer of negative impacts and resources crowding out.	22%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Interpersonal relationship improvement	0%	The improvement of interpersonal relationship will not occur the transfer of negative impacts and resources crowding out.	25%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Increased sense of work accomplishment	0%	Increased sense of work accomplishment will not occur the transfer of negative impacts and resources crowding out.	30%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
	Increased work efficiency	0%	Increased work efficiency will not occur the transfer of negative impacts and resources crowding out.	42%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Attitude correction	0%	Attitude corrections will not occur the transfer of negative impacts and resources crowding out.	14%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Poor quality of life	0%	The deterioration of the quality of life will not occur the transfer of negative impacts and resources crowding out.	31%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Poor health	0%	Health deterioration will not occur the transfer of negative impacts and resources crowding out.	32%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
					attenuation of the outcome indicators is estimated for each year.
New teacher	Teaching skills improvement	0%	The improvement of teaching skills will not occur the transfer of negative impacts and resources crowding out.	0%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Interpersonal relationship improvement	0%	The improvement of interpersonal relationship will not occur the transfer of negative impacts and resources crowding out.	13%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Increased sense of work accomplishment	0%	Increased sense of work accomplishment will not occur the transfer of negative impacts and resources crowding out.	25%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Increased work efficiency	0%	Increased work efficiency will not occur the transfer of negative impacts and resources crowding out.	0%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
					survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Attitude correction	0%	Attitude corrections will not occur the transfer of negative impacts and resources crowding out.	13%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Poor quality of life	0%	The deterioration of the quality of life will not occur the transfer of negative impacts and resources crowding out.	25%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Poor health	0%	Health deterioration will not occur the transfer of negative impacts and resources crowding out.	0%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
Students' parents	Reduce the effort to take care of children	0%	Reducing the effort to take care of children will not occur the transfer of negative impacts and resources crowding out.	5%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Interpersonal relationship improvement (teacher/child)	0%	The improvement of interpersonal relationship will not occur the transfer of negative impacts and resources crowding out.	25%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
Administration staff	Enhance the sense of work accomplishment	0%	The increase in work accomplishment will not occur the transfer of negative impacts and resources crowding out.	0%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
Social worker	Improve work ability	0%	The improvement of work ability will not occur the transfer of negative impacts and resources crowding out.	0%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
					attenuation of the outcome indicators is estimated for each year.
Residents	Improve community identity	0%	The improvement of community identity will not occur the transfer of negative impacts and resources crowding out.	0%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
Employees of PRIMAX Electronic Ltd CSR team	Get the satisfaction of giving back to society	0%	The satisfaction of getting back to the society will not occur the transfer of negative impacts and resources crowding out.	31%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Increase company identity	0%	Increasing the company's sense of identity will not occur the transfer of negative impacts and resources crowding out.	31%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Increased empathy	0%	Increased empathy will not occur the transfer of negative impacts and resources crowding out.	25%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
					survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
Chengzhi Education Foundation	Increase experience and know how in public and private schools and counseling disadvantaged students	0%	There will not occur the transfer of negative impacts and resources crowding out.	0%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
Employees at Chengzhi Education Foundation	Raise awareness of social care and increase understanding of indigenous peoples/pastoral issues	0%	There will not occur the transfer of negative impacts and resources crowding out.	0%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.
	Increase work accomplishment	0%	Increasing the sense of work accomplishment will not occur the transfer of negative impacts and resources crowding out.	0%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.

Stakeholder	Results	Transfer Factor	Stakeholder Description	Drop-off Factor ¹¹	Stakeholder Description
	Poor quality of life	0%	The deterioration of the quality of life will not occur the transfer of negative impacts and resources crowding out.	0%	Because the results will last for several years, in the process of investigating stakeholders, the decline rate of the survey stakeholders and the attenuation of the outcome indicators is estimated for each year.

Chapter 4: SROI CALCULATION AND SENSITIVITY ANALYSIS

4-1 Calculating the Present Value

We calculated the influence of the aforementioned results negotiated with the stakeholders, and the value of each result was calculated as follows:

$$\text{Outcome value} = \text{Quality of outcomes} * \text{Evidencing outcome} * (1-\text{Deadweight}) * (1-\text{Transfer}) * (1-\text{Attribution}) * (1-\text{Attenuation})$$

The outcome value during the duration came from the feedback from the stakeholder questionnaires and interviews. Because it was difficult for primary school students to clearly express the impact duration of the outcomes, and after students graduate from Taoyuan Elementary School, the outcomes may result from their middle school, so we used the remaining years that student study in Taoyuan Elementary School as the reference for the duration of each outcome. The following table presents the total value of each stakeholder during the entire duration. For detailed outcome value of each year, please refer to Appendix 2.

The total input in the KIST project is NT\$9,193,105, and the total outcome value is NT\$18,742,344 (net present value), which means that for every NT\$1 invested, about NT\$2.04 social value was created.

Table 20. The Calculation of Outcome Value

Stakeholder	Population	Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Price	Duration	Outcome Value					
							Before discount				Discount rate	1.05 %
							Outcome Value [Before Adj.] ¹²	Four Factor Adj. ¹³	Outcome Value [After Adj.]	Outcome Value Subtotal	Outcome Value Subtotal (NPV)	
Senior grade, sixth grade	13	Self-confidence increase	61%	8	5,968	1	47,744	19%	14,009	758,753	750,869	
		Increased independence	56%	7	33,973	1	237,811	26%	82,378			
		Enthusiasm for learning increased	56%	7	16,783	1	117,481	29%	44,192			
		Interpersonal relationship improvement	72%	9	75,354	1	678,186	24%	271,339			
		Broader view	72%	9	110,823	1	997,407	23%	346,835			
Senior grade, fifth grade	14	Self-confidence increase	61%	9	5,968	2	107,424	19%	25,029	1,374,509	1,354,496	
		Increased independence	56%	8	33,973	2	543,568	26%	157,266			
		Enthusiasm for learning increased	56%	8	16,783	2	268,528	29%	85,268			
		Interpersonal relationship improvement	72%	10	75,354	2	1,507,080	24%	474,844			

¹² =Outcome amount * outcome unit price * duration, if the duration is below 1 year, it will be calculated as 1.

¹³ =(1-deadweight factor) * (1-transfer factor) * (1-attribution factor) * (1-drop-off factor), the detailed rate for the four factor please refer to P.34~P45.

Stakeholder	Population	Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Price	Duration	Outcome Value					
							Before discount				Discount rate	1.05 %
							Outcome Value [Before Adj.] ¹²	Four Factor Adj. ¹³	Outcome Value [After Adj.]	Outcome Value Subtotal	Outcome Value Subtotal (NPV)	
		Broader view	72%	10	110,823	2	2,216,460	23%	632,102			
Lower middle grade, fourth grade	9	Self-confidence increase	86%	8	13,862	3	332,688	42%	139,727	586,602	575,631	
		Increased independence	80%	7	13,392	3	281,232	42%	125,455			
		Enthusiasm for learning increased	79%	7	9,282	3	194,922	42%	86,374			
		Interpersonal relationship improvement	77%	7	8,182	3	171,822	42%	73,446			
		Broader view	80%	7	17,250	3	362,250	42%	161,600			
Lower middle grade, third grade	16	Self-confidence increase	86%	14	13,862	4	776,272	42%	293,719	1,233,096	1,205,808	
		Increased independence	80%	13	13,392	4	696,384	42%	263,719			
		Enthusiasm for learning increased	79%	13	9,282	4	482,664	42%	181,566			
		Interpersonal relationship improvement	77%	12	8,182	4	392,736	42%	154,392			
		Broader view	80%	13	17,250	4	897,000	42%	339,700			
Lower middle	14	Self-confidence increase	86%	12	13,862	5	831,720	42%	286,744	1,203,811	1,173,580	

Stakeholder	Population	Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Price	Duration	Outcome Value					
							Before discount				Discount rate	1.05 %
							Outcome Value [Before Adj.] <small>12</small>	Four Factor Adj. <small>13</small>	Outcome Value [After Adj.]	Outcome Value Subtotal	Outcome Value Subtotal (NPV)	
grade, second grade		Increased independence	80%	11	13,392	5	736,560	42%	257,456			
		Enthusiasm for learning increased	79%	11	9,282	5	510,510	42%	177,254			
		Interpersonal relationship improvement	77%	11	8,182	5	450,010	42%	150,725			
		Broader view	80%	11	17,250	5	948,750	42%	331,632			
Lower middle grades, first grade	15	Self-confidence increase	86%	13	13,862	6	1,081,236	42%	331,123	1,390,125	1,358,446	
		Increased independence	80%	12	13,392	6	964,224	42%	297,302			
		Enthusiasm for learning increased	79%	12	9,282	6	668,304	42%	204,688			
		Interpersonal relationship improvement	77%	12	8,182	6	589,104	42%	174,053			
		Broader view	80%	12	17,250	6	1,242,000	42%	382,959			
Senior teacher	15	Teaching skills improvement	91%	14	46,222	2	6,894,216	23%	1,800,840	8,934,336	8,768,501	
		Interpersonal relationship improvement	89%	13	323,111	2.5	12,601,329	29%	3,843,593			

Stakeholder	Population	Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Price	Duration	Outcome Value					
							Before discount				Discount rate	1.05 %
							Outcome Value [Before Adj.] <small>12</small>	Four Factor Adj. <small>13</small>	Outcome Value [After Adj.]	Outcome Value Subtotal	Outcome Value Subtotal (NPV)	
		Increased sense of work accomplishment	45%	7	436,000	2.5	9,156,000	39%	3,662,028			
		Increased work efficiency	27%	4	284,333	2	2,274,664	10%	388,457			
		Attitude correction	64%	10	307,143	2.5	9,214,290	31%	2,713,855			
		Poor quality of life	25%	4	-266,125	2	-2,129,000	38%	-920,977			
		Poor health	50%	8	-288,857	2.5	-6,932,568	37%	-2,553,460			
New teacher	4	Teaching skills improvement	0%	0	N/A				336,320	332,073		
		Interpersonal relationship improvement	50%	2	250,500	1	501,000	22%			125,250	
		Increased sense of work accomplishment	50%	2	151,000	1	302,000	23%			94,375	
		Increased work efficiency	0%	0	N/A							
		Attitude correction	50%	2	520,000	2	2,080,000	27%			609,375	
		Poor quality of life	50%	2	-500,500	2	-2,002,000	21%			-492,680	

Stakeholder	Population	Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Price	Duration	Outcome Value					
							Before discount				Discount rate	1.05 %
							Outcome Value [Before Adj.] <small>12</small>	Four Factor Adj. <small>13</small>	Outcome Value [After Adj.]	Outcome Value Subtotal	Outcome Value Subtotal (NPV)	
		Poor health	0%	0	N/A							
Students' parents	73	Reduce the effort to take care of children	90%	66	8,705	3	1,723,590	49%	837,173	1,447,307	1,421,293	
		Interpersonal relationship improvement (teacher / child)	91%	67	9,299	1.5	1,246,066	42%	610,134			
Administration staff	1	Enhance the sense of work accomplishment	100%	1	23,333	3	69,999	70%	49,000	49,000	47,989	
Social worker	1	Improve work ability	100%	1	500,000	3	1,500,000	38%	562,500	562,500	550,891	
Residents	109	Improve community identity	69%	75	7,412	1	555,900	25%	137,214	137,214	135,788	
Employees of PRIMAX Electronic Ltd CSR team	4	Get the satisfaction of giving back to society	100%	4	39,203	1	156,812	10%	37,212	563,381	555,141	
		Increase company identity	100%	4	246,264	1	985,056	17%	409,078			
		Increased empathy	75%	3	229,402	1	688,206	7%	117,091			
Chengzhi	1	Increase experience and know how	100%	1	112,847	3	338,541	100%	338,541	338,541	331,554	

Stakeholder	Population	Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Price	Duration	Outcome Value					
							Before discount				Discount rate	1.05 %
							Outcome Value [Before Adj.] ¹²	Four Factor Adj. ¹³	Outcome Value [After Adj.]	Outcome Value Subtotal	Outcome Value Subtotal (NPV)	
Education Foundation		in private management of public schools and counseling disadvantaged students										
Employees at Chengzhi Education Foundation	4	Raise awareness of social care and increase understanding of indigenous peoples/pastoral issues	25%	1	60,000	3	180,000	81%	145,800	190,800	187,092	
		Increase work accomplishment	25%	1	100,000	2	200,000	25%	50,000			
		Poor quality of life	25%	1	-20,000	2	-40,000	13%	-5,000			

Total present value	18,742,344
Total input	9,193,105
Social return on investment (SROI) ¹⁴	2.04

¹⁴ SROI=total present value/total input

4-2 Sensitivity Analysis

Since the calculation of SROI monetizes non-quantitative information, such as qualitative and narrative information, it involves many assumptions and estimates. In order to quantify and verify the results, the SROI standard requires that SROI be included in each analysis report. Thus, we conducted a sensitivity analysis and have disclosed the relevant information.

The impact factors and financial agency variables in this analysis report were calculated based on the weighted average of actual costs/expenses incurred. We added or subtracted 10% from the original calculated SROI results, and for the four impact factors where results were less than 10%, we adjusted to 10% and 30%, respectively.

For stakeholders who did not reach the outcome indicator threshold, since we could not ensure the outcomes were non-impacted or negative outcomes for them, we adopted a more conservative approach to estimate that they might have had slight negative impact. The calculation method for these is the original outcome value * the amount of outcomes did not reach indicator threshold * - 10%.

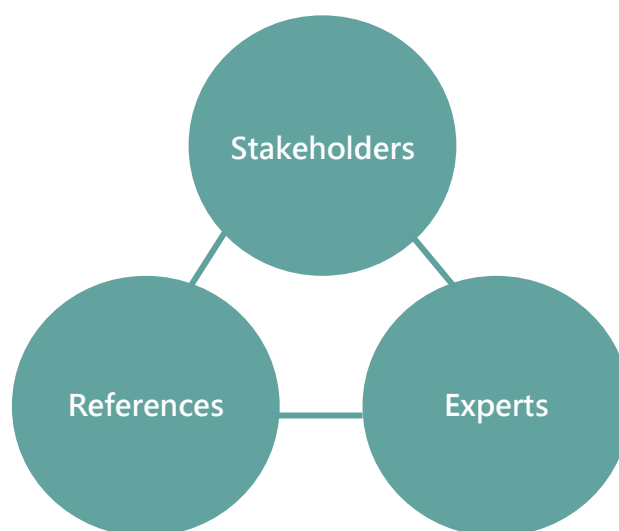
Table 21. Sensitivity Analysis

SROI	Adjustment Item	Adjust Content	Description	
2.24	SROI	Up 10%	Because this assessment was based on different assumptions, we adjusted the error range by 10% above and below.	
1.83	SROI	Down 10%		
2.03	Deadweight factor	<10% adjusted to 10%	In our evaluation, deadweight factor, attribution factor, transfer factor and drop-off factor were the most difficult parameters for stakeholders to understand. Therefore, in order to comply with the principle of "do not over-claim", we adjusted the four factors under different assumptions.	
1.95	Deadweight factor	< 30 % adjusted to 30%		
2.04	Attribution factor	<10% adjusted to 10%		
2.03	Attribution factor	< 30 % adjusted to 30%		
2.02	Drop-off factor	<10% adjusted to 10%		
1.86	Drop-off factor	<30 % adjusted to 30%		
1.83	Transfer factor (Displacement)	0% adjusted to 10%		
1.43	Transfer factor (Displacement)	0% adjusted to 30%		
1.86	Stakeholders who did not change	Assumed they had negative impact		Because we mainly investigated the feedback and reactions of stakeholders anonymously, we were not able to know the changes and results of

			stakeholders who did not pass the indicator threshold, so we conservatively estimate that it might had slight negative impact on them.
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4-3 Verification Results

In the third stage of verifying the results and the process, we worked face to face with stakeholders and conducted telephone interviews to confirm all results and the analysis of the content¹⁵. Considering during our research period, some senior students who had experienced KIST education method in Taoyuan Elementary School graduated continuously, so we also interviewed with 15 graduated students. In addition, during the negotiations, we also referred to the relevant literature¹⁶ and maintained close contact and discussions with experts to confirm that the overall research and analysis results aligned with actual and reasonable conditions. The verification content is presented in the figure and details below.



1. Confirm the achievement chain of events

We confirmed the outcome chain of events drawn after interviews and questionnaire surveys with various stakeholders. Since the outcome chain of events captures the feedback content of various stakeholders, in the verification stage, most stakeholders agreed with the chain of events. The course of the results drawn were impacted by stakeholders not returning negative results in the first and second phases of the negotiation results. Thus, we discussed and confirmed the situation with the stakeholders in the third phase. There were no negative results.

2. Confirm the calculation result

We explained the calculation logic and its meaning to the stakeholders, and then further confirmed the importance of the results to the stakeholders and the degree of occurrence. These steps allowed us to determine whether the results were consistent with the final calculation results, which showed that the

¹⁵ Please refer to Table 4 (p.16) column "Phase 3" for detailed negotiation amount of each stakeholder group.

¹⁶ Please attach references for details.

stakeholders agreed with our calculations. Therefore, the result was consistent with the stakeholders' feelings and feedback.

3. *Verify the conclusion*

After the calculation process, negotiation and verification of this report, the project management team believes no clear evidence exists that other people's calculations of this project activity will be materially different from our calculation result.

Chapter 5: ACHIEVEMENT VERIFICATION AND DISCLOSURE

5-1 Results Analysis

Based on the analysis in this report, the value distribution of the results of each stakeholder can be determined. This distribution is presented in the table below.

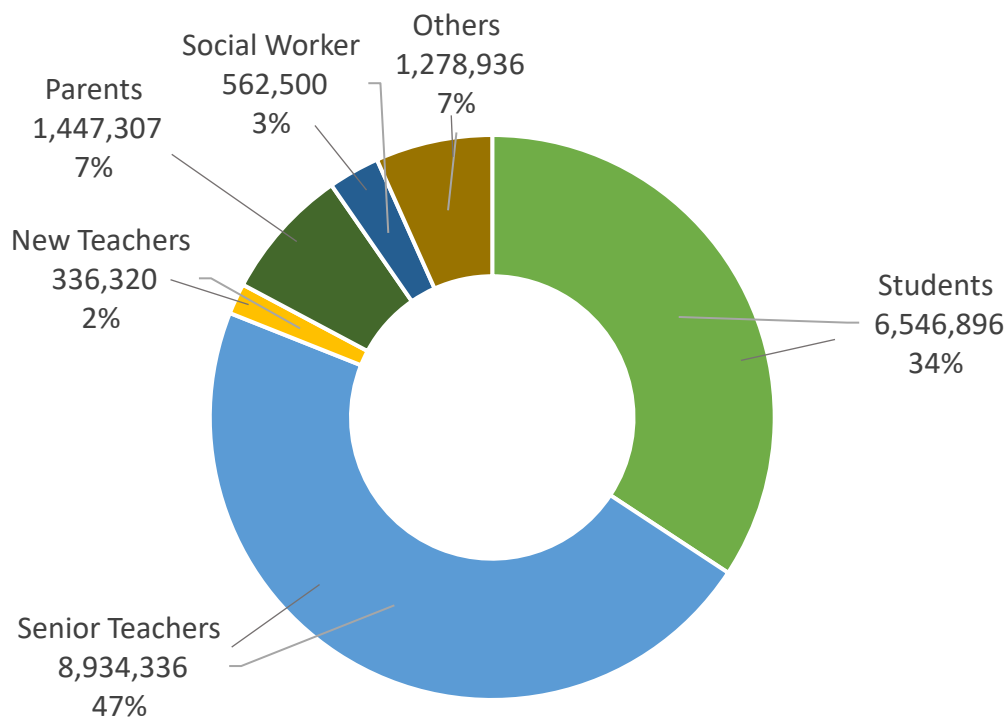


Figure 6. Pie-chart of Outcome Value

Table 22. Summary of Outcome Value

Stakeholder	Outcome Value	Percentage of Total Outcomes
Senior grade, sixth grade	758,753	4.0%
Senior grade, fifth grade	1,374,509	7.2%
Lower middle grade, fourth grade	586,602	3.1%
Lower middle grade, third grade	1,233,096	6.4%
Lower middle grade, second grade	1,203,811	6.3%
Lower middle grade, first grade	1,390,125	7.3%

Stakeholder	Outcome Value	Percentage of Total Outcomes
Senior teachers	8,934,336	46.8%
New teachers	336,320	1.8%
Parents	1,447,307	7.6%
Social worker	49,000	0.3%
Administration staff	562,500	2.9%
Residents	137,214	0.7%
Chengzhi Education Foundation	563,381	2.9%
Employees at Chengzhi Education Foundation	338,541	1.7%
Employees of PRIMAX CSR team	190,800	1.0%
Total	\$ 19,106,295	100.00%

The KIST School implements character education method, which uses local legends, cultures and communities as teaching materials, so the responsibility of education is shared among schools, parents and students. Since school introduced the KIST model, it has had significant changes on the main stakeholders. Students' learning attitudes and personality-development have changed obviously. In addition, they have cultivated much more confidence and become more independent. The senior teachers have enhanced teaching skills, interpersonal relationships and teaching enthusiasm under the KIST education method. The connection between schools and local communities has become closer as well.

1. The outcomes are mainly focused on senior teachers. The main reason is senior teachers put more effort and longer time to develop KIST's new education approach, so there are more significant changes and influences on them.
2. After students graduated from Taoyuan Elementary School, the related influences and changes tend to slow down and decrease. The main reason may be that the graduates in this survey have a relatively short period of education influence in KIST, which is unable to develop a long-term and deep impact on students. In the future, we will continue tracking whether the influence and changes of the current lower-grade students will still last after they graduates.
3. The principal and teachers' traits of personality and their devotion also have a significant impact on the changes of students, so the results also reflect on the analysis of Deadweight and Attribution factor.

5-2 The risks in Research and Professional Judgements

This report was analyzed by SROI method. We followed the seven principles to compile this report. However, the research methods and information required by SROI report were different from those required by the public sector in Taiwan, which might bring some restrictions on the collection of relevant information, so we made different professional judgments in the following stages:

Professional Judgement Items	Descriptions
Inclusion and exclusion of stakeholders	The inclusion and exclusion of stakeholders affected the calculation scope of the entire report. Although we used the judgment scale of stakeholders as the basis, we still needed to integrate it with experts' ¹⁷ judgements to ensure all related stakeholders were considered.
Judgment of negative outcomes	We carefully analyzed whether there are any negative effects on stakeholders or stakeholders outside the scope of our analysis. At first, we started from the literature research to determine the preliminary direction; and then collected stakeholders' opinions by interviews and open questions; finally, we put stakeholders who did not reach outcome indicator into sensitivity analysis test.
Selection of evaluation methods	There are various evaluation methods in the guidance "Value the things that matter". We referred to the opinions of experts for different outcomes and selected the most appropriate one for each outcome, which was most clear and objective for stakeholders.
Investigation method of four influence factors	The influence factors were challenging in terms of the observation of evidence and the communication with stakeholders. Therefore, we decided to divide the degree of influence factor into 5 equal parts on the basis of the level of rigor in this report to seek more suitable evaluation percentage if the stakeholders could fully understand it.

¹⁷ Included Chengzhi Education Foundation, scholars in the field of early childhood education and local community residents

[Optimization of future SROI analysis]

Based on above research risks and our analysis experience, we will focus on the following items to optimize and refine our negotiation and analysis methods in the next SROI report:

Items	Description
Judgment of negative outcomes	As we used anonymous questionnaires to discuss with stakeholders, it was difficult to judge the results of stakeholders who did not give any feedback were results without impact or were negative impact. Therefore, we assumed these stakeholders had few negative impact in the sensitivity analysis. In the future, we will refer to the results in this report and new domestic and foreign documents to design more complete questions for testing negative outcomes in the questionnaire. In addition, to let stakeholders know more clearly about the difference between non-impact and negative outcomes, we will and explain more in the interview, focus group or verification stage to ensure all possible negative outcomes are calculated.
Optimization of outcome indicators	This report is KIST's first SROI analysis report. We have already had preliminary ideas on the context and direction of the changes of stakeholders. Therefore, in the future, we will review the indicators determined in this assessment and seek more representative indicators.
Elaboration of evaluation options	In order to make it easier for stakeholders to judge and understand stakeholders' attitude towards prices and possible range, we widened the price range of items selected in the willingness to pay value method and the alternatives analogy method. In the future evaluation design, we will start from this and design more refined evaluation options.
Number of negotiators in verification stage	Due to the limitation of research time, we were not able to confirm the results with all stakeholders. In the future, we aim to

	<p>increase the proportion of negotiation in the verification stage to more than 50%; but for those groups with more than 20 people (for example: parents of students, community residents, etc.), since it difficult to interview more than half, we will priorly interview with the representatives in each group (e.g. representatives of student parents, chiefs of townships/community, etc.) and then contact other individuals as many as possible.</p>
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5-3 Future Prospects of KIST

So far, there are 4 KIST schools in Taiwan, which have achieved outstanding results and the number of students in each school has continued to grow. In the future, we will take the experiences of these four schools as example and cooperate with other county and city governments to introduce KIST method into more schools. Furthermore, we will especially focus on solving the problem of insufficient teachers in rural schools, so that every student in Taiwan can have equal rights of education.

In addition, through the analysis of this report, we found that although KIST mostly brought positive outcomes to stakeholders, there were still some negative impacts, especially on teachers. The major reason we conclude is that the implementation of KIST is a non-traditional typical education model and is still in the beginning stage in Taiwan, so teachers need to use their extra time to study. In view of this, we will optimize the education system in our KIST Alliance, such as the management of online book clubs, cross-school curriculum sharing, cross-school observation courses exchange, educational leadership development and other training courses. Furthermore, we will also introduce more external resources and deepen the communication with overseas organizations (such as KIPP in US) to improve teaching efficiency and student learning effectiveness and reduce the number of negative impacts and the duration of negative outcomes.

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Appendix 1: INTERVIEW QUESTION OUTLINE AND QUESTIONNAIRE

Outline of Interview Questions

Project	Interview Topic
Results	After cooperation/participation in Taoyuan Elementary School KIST activities, for you personally or with a group, what changes around you represent the people and things produced (include ideas, behaviors, cognition, moods, etc.)? Were there any negative changes? Influences?
Deadweight factor	If there is no cooperation/participation in Taoyuan Elementary School KIST activities, is it still possible that the above changes will happen?
Attribution factor	Are there other factors that contribute to the above changes?
Transfer factor	Do the results of the activity transfer the problem to other places?
Attenuation factor/duration	How long did these changes last? Will they gradually decrease over time?
Importance	Please rank the above changes according to their importance to you.
Pricing	Are there other channels that can be the same as the changes caused by this plan? What is the approximate cost of these channels?
Other	Are there any unexpected changes? Please explain. Regarding the Taoyuan Elementary School KIST activities, do you have other ideas or suggestions?

Questionnaire (take students: senior grades as example)

" Dear students or alumni of Taoyuan Elementary School:

Hi!

Taoyuan Elementary School has been promoting character education since August 2017, letting students do a lot of things freely. This experimental and innovative education method is called "KIST". We want to know the changes you have made in KIST philosophy of Taoyuan

Elementary School, so please fill out this questionnaire. It will take about 10 minutes to answer the questionnaire. Please answer according to your actual experience. Thank you.

※ Please answer based on your experience from August 2017 to August 2019. "

1. Basic information

1.1 What is your current grade?

- fifth grade
- sixth grade
- seventh grade
- eighth grade

1.2 When did you begin studying at Taoyuan Elementary School?

- Since first grade
- Since second grade
- Since third grade
- Since fourth grade
- Since fifth grade
- Since sixth grade

2. Student change

Taoyuan Elementary School has been promoting character education since August 2017, letting students do a lot of things. This experimental and innovative education method is called KIST. After interviews, we concluded that the introduction of experimental education (KIST) in Taoyuan Elementary School can have the following changes and effects on students. Please answer the following questions based on your real situation

2.1 Relations with classmates from other ethnic groups have become better

2.1.1 Do you agree or disagree with Taoyuan Elementary School. What about the following changes? (You can choose more than one)

- I have fewer quarrels with classmates from different ethnic groups (the number of quarrels reduced by about _____% a month)
- I don't want to laugh at my classmates
- I will observe the gesture
- I will actively protect and help classmates\
- I will take the school attitude home
- I will never get along with my family in a noisy way
- Other, please specify _____
- I did not change the above

2.2 More self-confidence

2.2.1 Do you have the following changes in Taoyuan Elementary School based on KIST philosophy? (You can choose more than one)

- I am more willing to speak out my thoughts than before (the number of times I speak my thoughts proactively increases by about _____%a week)
- Through club performances or competitions, I feel more awesome
- I am more willing to introduce myself or the school to others when competing or performing outside school (the number of voluntary introductions will increase by about _____% per semester)
- When there are guests from the school, I am more willing to introduce the characteristics of the school to the guests (the number of voluntary introductions increases by about _____% per semester)
- Other, please specify _____
- I did not change the above

2.3 Become more independent

2.3.1 Do you have the following changes in Taoyuan Elementary School based on KIST philosophy? (You can choose more than one)

- I started to practice my own assignment of schoolwork and club time
- When teaching outside of school, we arrange transportation and time by ourselves
- I will arrange my own itinerary when I go to other counties and cities on vacation
- Other, please specify _____
- I did not change the above

2.4 More perseverance

2.4.1 Do you have the following changes in Taoyuan Elementary School based on KIST philosophy? (You can choose more than one)

- I become reluctant to give up or escape when facing difficulties or challenges
- I become more committed to the goals I set
- I am not afraid to face failure and keep improving
- Other, please specify _____
- I did not change the above

2.5 More enthusiasm for learning

2.5.1 Do you have the following changes in Taoyuan Elementary School based on KIST philosophy? (You can choose more than one)

- I don't need teachers and parents to tell me, so I look for books
- I become like class
- I will take the initiative to ask questions when I encounter something I don't understand (the number of questions will increase by _____% in about a week)
- The time or number of times I use the Junyi online education platform to study has increased
- Other, please specify _____
- I did not change the above

2.6 Become more independent thinking

2.6.1 Do you have the following changes in Taoyuan Elementary School based on KIST philosophy? (You can choose more than one)

- I changed from waiting for the teacher to give answers to learning to think by myself
- I become proactive in discussing current affairs in society with my family or teachers (on average, the number of discussions per month has increased by _____%)
- I became my own opinion on things instead of following the ideas of my classmates
- Other, please specify _____
- I did not change the above

2.7 More self-control

2.7.1 Do you have the following changes in Taoyuan Elementary School based on KIST philosophy? (You can choose more than one)

- I become less likely to lose my temper (the number of tantrums is reduced by about _____%)
- I abide by the teacher's KIST gesture requirements
- I finish the homework assigned by the teacher or the practice of the club more on time (the number of times on time increases by about _____% a week)
- Other, please specify _____
- I did not change the above

2.8 Better communication skills

2.8.1 Do you have the following changes in Taoyuan Elementary School based on KIST philosophy? (You can choose more than one)

- I have fewer conflicts or quarrels with my classmates (about _____% reduction in the number of quarrels or quarrels a month)
- It's easier for other people to understand what I'm talking about
- I can stand in the other side's position when I speak
- Other, please specify _____
- I did not change the above

2.9 Better learning effect

2.9.1 Do you have the following changes in Taoyuan Elementary School based on KIST philosophy? (You can choose more than one)

- I am less likely to have negative emotions such as sadness or unhappiness
- Be more attentive in class or homework
- I learn new things faster
- Performance improvement
- After I learn it, I can teach other students
- Other, please specify _____
- I did not change the above

2.10 Better relationships

2.10.1 Do you have the following changes in Taoyuan Elementary School based on KIST philosophy? (You can choose more than one)

- I have more friends at school
- I interact with classmates more often (discuss homework, go out to play, etc.)
- I think it's less likely to bully or exclude some classmates in the class (about _____% fewer people)
- Other, please specify _____
- I did not change the above

2.11 Broader vision

2.11.1 Do you have the following changes in Taoyuan Elementary School based on KIST philosophy? (You can choose more than one)

- I am exposed to new things more often than before
- I become more and more distant
- I became able to see things from other people's perspectives
- Other, please specify _____
- I did not change the above

2.12 Other achievements

2.12.1 Do you have any other changes that have not appeared above? Especially bad changes, such as increased psychological stress. If yes,

please write it down

2.13 Importance of results

2.13.1 Please give points for the changes you have in the second part of the questionnaire according to the importance of your mind. 0-10 points, 10 points are the most important, 1 point is the least important, the same score can be given for the same importance

2.13.2 For each of the results/changes selected above, if you want to achieve the same effect in one year, which of the following activities is the most likely to achieve close results? Please select an activity for each result (please fill in the English code, one English code is OK (Choose more than once)

	Importance score (1-10 points)	Activity English Code
1. Relations with classmates from other ethnic groups become better		
2. More confident		
3. Become more independent		
4. More perseverance		
5. More enthusiasm for learning		
6. Become more independent thinking		
7. More self-control		
8. Better communication skills		
9. Learning effect becomes better		
10. Better relationships		
11. Broader field of view		

Activity	A	Family dinner	I	Exchange abroad for 1 week a year
	B	Domestic travel	J	One year to exchange abroad for one month
	C	1~2 times a year outside school	K	Studying in other counties and cities for 1 year
	D	3~5 times a year outside school	L	Studying in other counties and cities for 3 year
	E	1~2 times a year to compete outside school	M	Study abroad for 1 year
	F	3~5 times a year to compete outside school	N	Study abroad for 3 year
	G	Perform 1~2 times a year outside school	O	Extra 2~5 hours of after-school tutoring per week
	H	Perform 3~5 times a year outside school	P	Extra 8-10 hours of after-school tutoring per week

2.14 How long can the changes last & are there other reasons for these changes to occur?

2.14.1 How long do you think your change can last? (Please tick)

Change	Less than 3 months (inclusive) 0.25 years	6 months (0.5 years)	1 year	2 year	3 year	4 year	5 year	Other (please specify)
1. Better relationship with other classmates								
2. More confident								
3. Become more independent								

4. More perseverance								
5. More enthusiasm for learning								
6. Become more independent thinking								
7. More self-control								
8. Better communication skills								
9. Learning effect becomes better								
10. Better relationships								
11. Broader field of view								

2.14.2 "If you graduate or transfer from Taoyuan Elementary School, do you think these results will decrease over time?"

Change	Will decrease a lot every year (75%)	Will be halved every year (50%)	Not likely to decrease year by year (25%)	Will not decrease at all (0%)	Other (please specify)
1. Relations with other students become better					
2. More self-confidence					
3. Become more independent					
4. More perseverance					

5. More enthusiasm for learning					
6. Become more independent thinking					
7. More self-control					
8. Better communication skills					
9. Learning effect becomes better					
10. Better relationships					
11. A wider field of view					

2.14.3 " If there is not KIST concept at Taoyuan Elementary School, do you think these changes are still possible?

(Example: Even if there is no KIST concept in Taoyuan Elementary School, I go to an after-school tutoring class, which may make the learning effect better)"

Change	The changes made by KIST are irreplaceable 0%	Other methods may not achieve the effect of KIST 25%	The degree of change in other methods is only half that of KIST 50%	I have some chances to get the same change in other ways 75%	I have many ways to get the same change 100%
1. Relations with other students become better					
2. More self-confidence					
3. Become more independent					
4. More perseverance					
5. More enthusiasm for learning					

6. Become more independent thinking					
7. More self-control					
8. Better communication skills					
9. Learning effect becomes better					
10. Better relationships					
11. A wider field of view					

2.14.4 " In addition to KIST Concept Taoyuan Elementary School, there are other ways to make you change. What percentage of KIST Concept Taoyuan Elementary School contributes to your change?

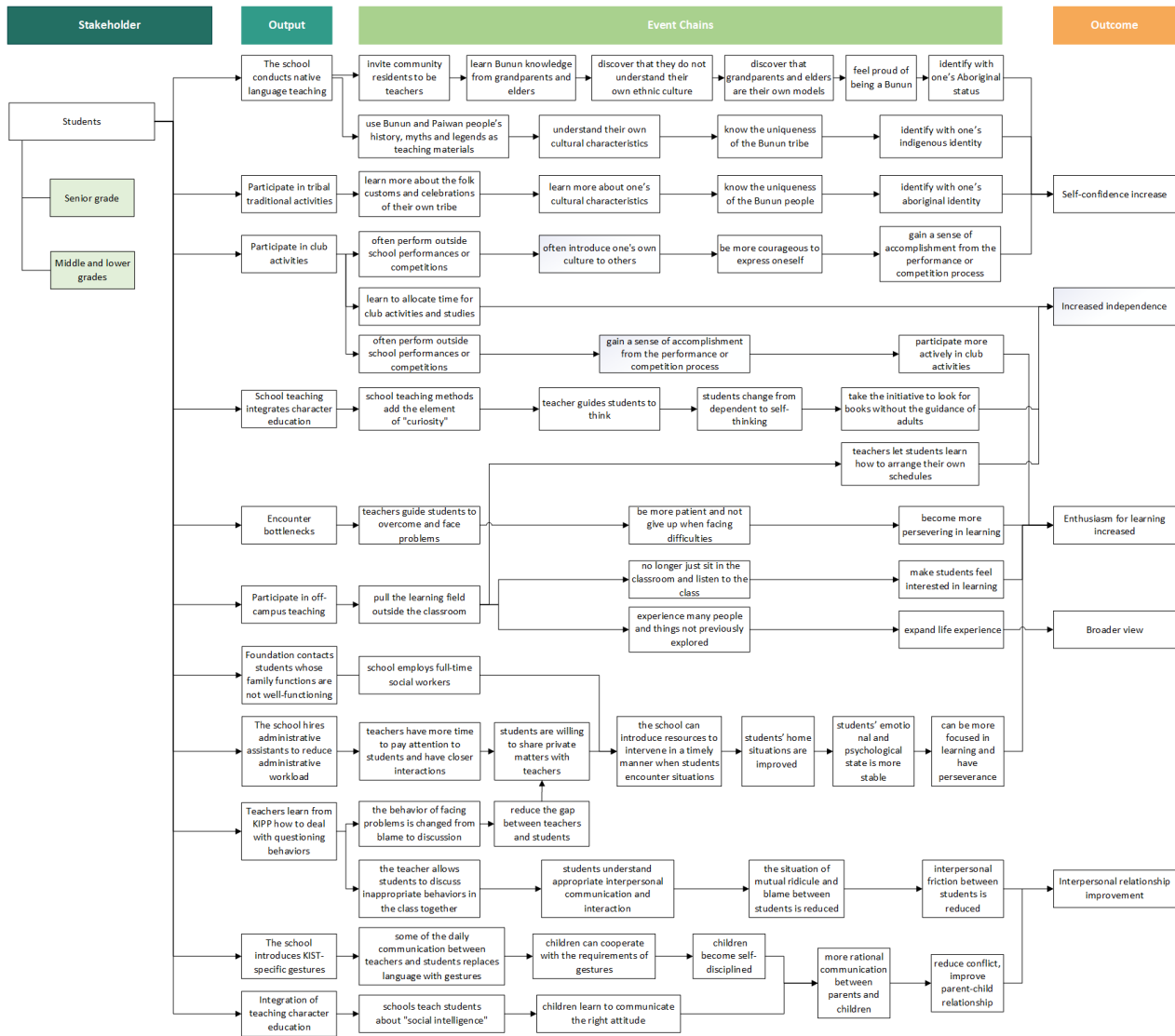
(Example: In addition to importing KIST, I am more confident because of my parents' encouragement)"

Change	Are all caused by KIST 0%	Mostly KIST's relationship 25%	KIST and other factors each contribute half 50%	Most of the changes are caused by other factors 75%	My change has nothing to do with KIST 100%
1. Relations with other students become better					
2. More self-confidence					
3. Become more independent					
4. More perseverance					
5. More enthusiasm for learning					
6. Become more independent					

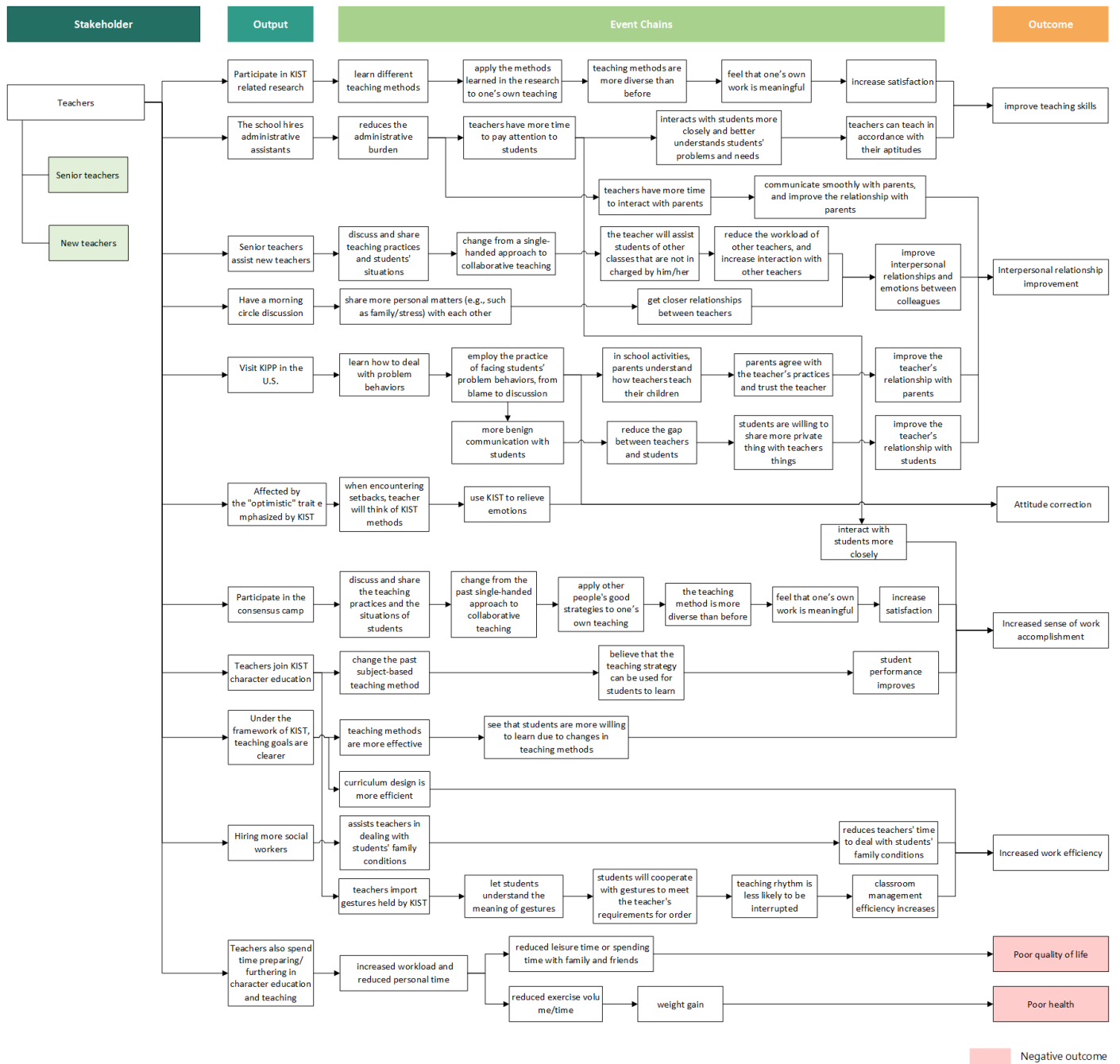
thinking					
7. More self-control					
8. Better communication skills					
9. Learning effect becomes better					
10. Better relationships					
11. A wider field of view					

Appendix 2: Chain of events (Event chains)

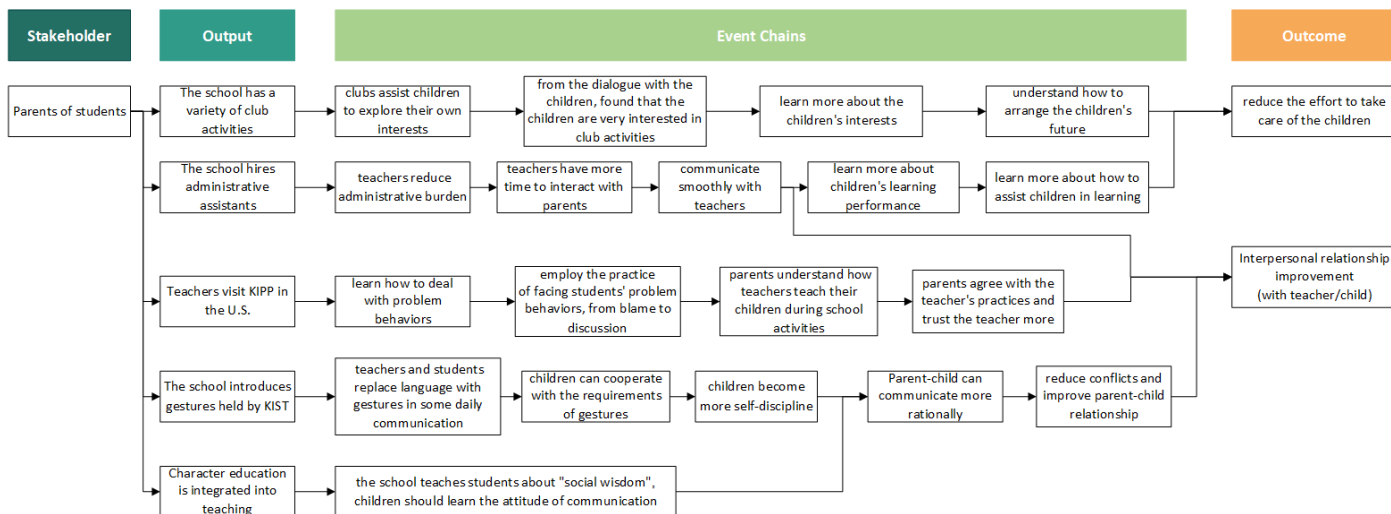
1. Students



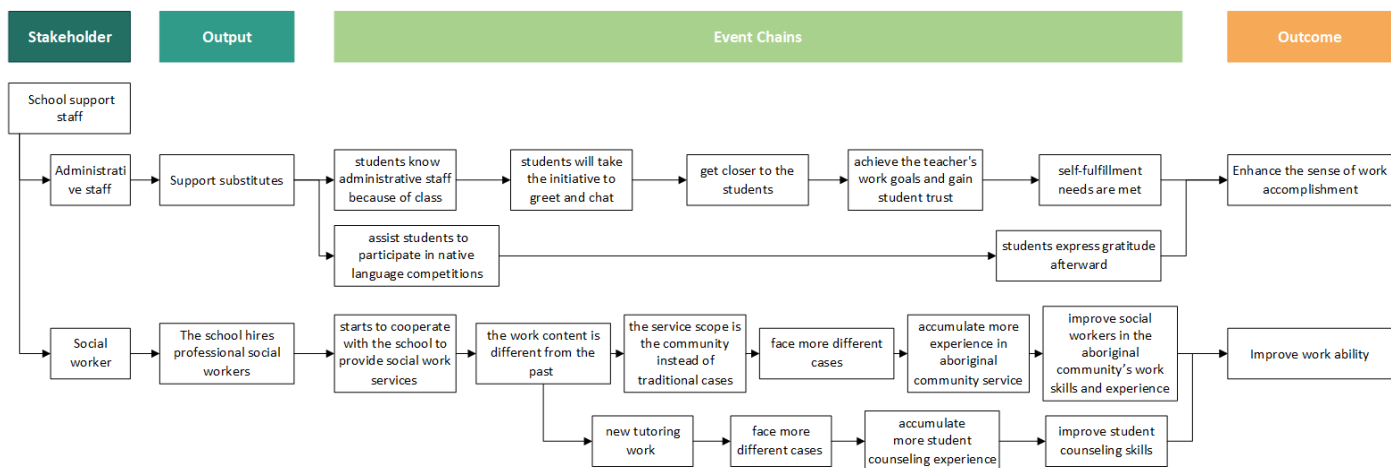
2. Teachers



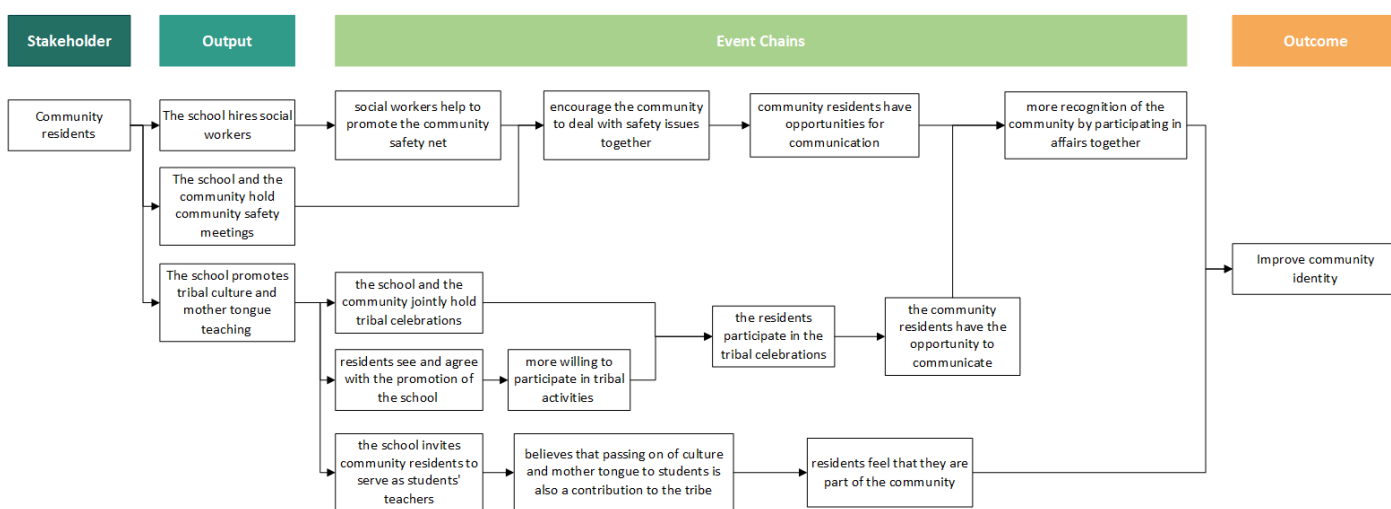
3. Parents of students



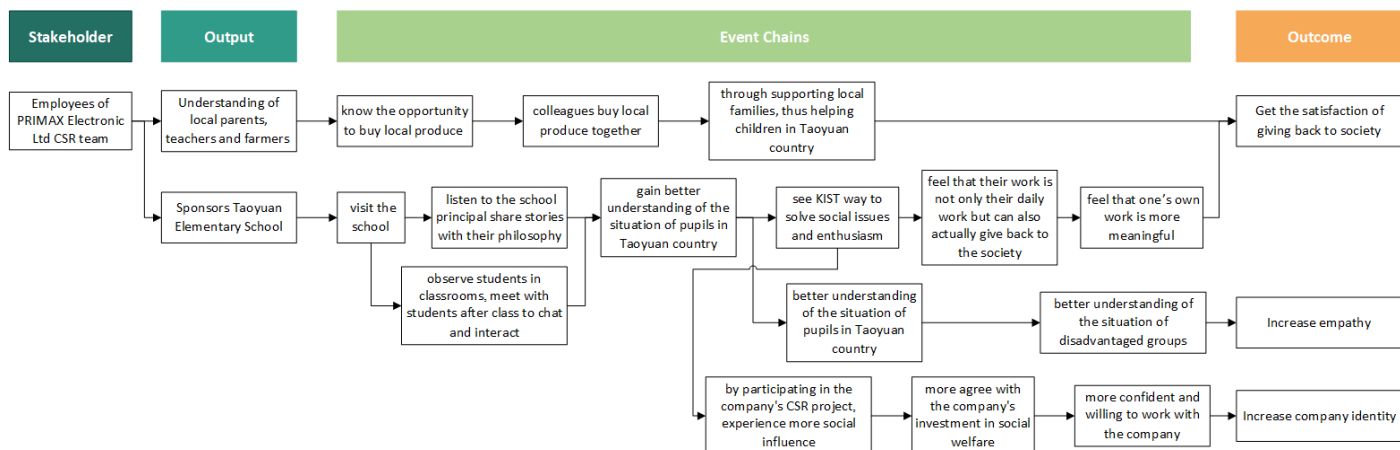
4. School support staff



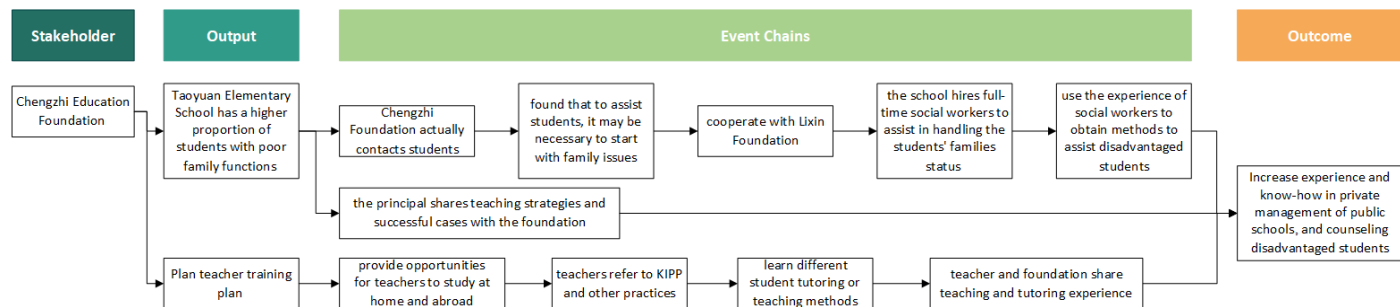
5. Community residents



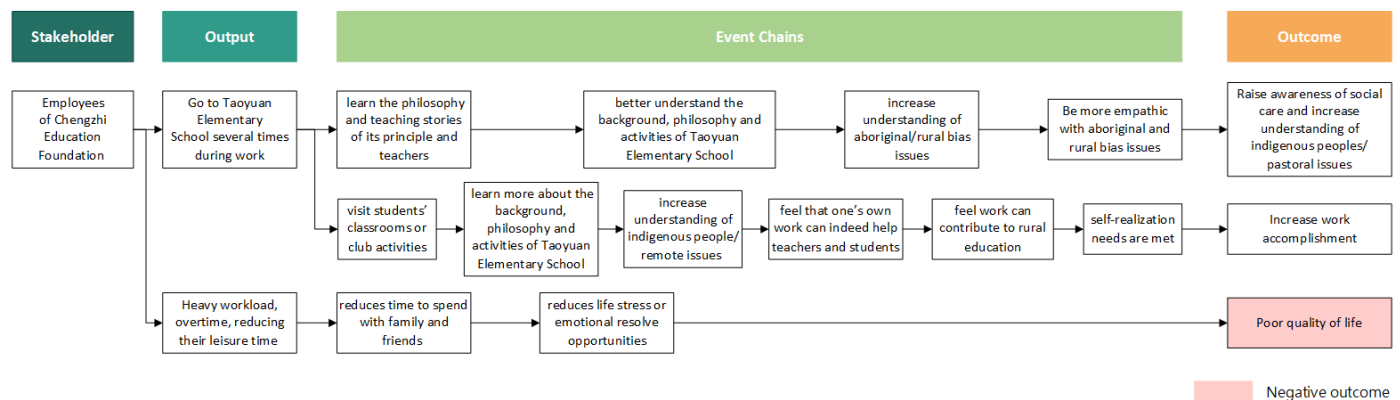
6. Employees of PRIMAX Electronic Ltd CSR team



7. Chengzhi Education Foundation



8. Employees of Chengzhi Education Foundation



Appendix 3: The Calculation of Outcome Value (by years)

Stakeholders		Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Value [Before Adj.]	Duration (Year)	D.W. Factor	TR. Factor	ATT. Factor	D.O. Factor	Outcome Value					
Subgroup	Population										Discount %	1.05%				
											1 st year (after project)	2 nd year	3 rd year	4 th year	5 th year	6 th year
Senior grade, sixth grade	13	Self-confidence increase	61%	8	5,968	1	50%	0%	41%	34%	14,009					
		Increased independence	56%	7	33,973	1	43%	0%	41%	23%	82,378					
		Enthusiasm for learning increased	56%	7	16,783	1	42%	0%	38%	21%	44,192					
		Interpersonal relationship improvement	72%	9	75,354	1	39%	0%	38%	38%	271,339					
		Broader view	72%	9	110,823	1	46%	0%	38%	31%	346,835					
Senior grade, fifth grade	14	Self-confidence increase	61%	9	5,968	2	50%	0%	41%	34%	15,086	9,943				
		Increased independence	56%	8	33,973	2	43%	0%	41%	23%	88,714	68,552				

Stakeholders		Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Value [Before Adj.]	Duration (Year)	D.W. Factor	TR. Factor	ATT. Factor	D.O. Factor	Outcome Value					
Subgroup	Population										Discount %	1.05%				
											1 st year (after project)	2 nd year	3 rd year	4 th year	5 th year	6 th year
		Enthusiasm for learning increased	56%	8	16,783	2	42%	0%	38%	21%	47,592	37,677				
		Interpersonal relationship improvement	72%	10	75,354	2	39%	0%	38%	38%	292,211	182,632				
		Broader view	72%	10	110,823	2	46%	0%	38%	31%	373,515	258,587				
Lower middle grade, fourth grade	9	Self-confidence increase	86%	8	13,862	3	25%	0%	25%	25%	60,422	45,317	33,988			
		Increased independence	80%	7	13,392	3	25%	0%	25%	25%	54,251	40,688	30,516			
		Enthusiasm for learning increased	79%	7	9,282	3	25%	0%	25%	25%	37,351	28,013	21,010			
		Interpersonal relationship improvement	77%	7	8,182	3	25%	0%	25%	25%	31,761	23,820	17,865			

Stakeholders		Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Value [Before Adj.]	Duration (Year)	D.W. Factor	TR. Factor	ATT. Factor	D.O. Factor	Outcome Value						
Subgroup	Population										Discount %	1.05%					
											1 st year (after project)	2 nd year	3 rd year	4 th year	5 th year	6 th year	
		Broader view	80%	7	17,250	3	25%	0%	25%	25%	69,881	52,411	39,308	-	-	-	
Lower middle grade, third grade	15	Self-confidence increase	86%	14	13,862	4	25%	0%	25%	25%	107,417	80,563	60,422	45,317	-	-	
		Increased independence	80%	13	13,392	4	25%	0%	25%	25%	96,446	72,334	54,251	40,688	-	-	
		Enthusiasm for learning increased	79%	13	9,282	4	25%	0%	25%	25%	66,401	49,801	37,351	28,013	-	-	
		Interpersonal relationship improvement	77%	12	8,182	4	25%	0%	25%	25%	56,463	42,347	31,761	23,820	-	-	
		Broader view	80%	13	17,250	4	25%	0%	25%	25%	124,233	93,175	69,881	52,411	-	-	
Lower middle grade, second grade	14	Self-confidence increase	86%	12	13,862	5	25%	0%	25%	25%	93,990	70,493	52,870	39,652	29,739	-	
		Increased independence	80%	11	13,392	5	25%	0%	25%	25%	84,390	63,293	47,469	35,602	26,702	-	
		Enthusiasm for	79%	11	9,282	5	25%	0%	25%	25%	58,101	43,576	32,682	24,511	18,384	-	

Stakeholders		Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Value [Before Adj.]	Duration (Year)	D.W. Factor	TR. Factor	ATT. Factor	D.O. Factor	Outcome Value						
Subgroup	Population										Discount %	1.05%					
											1 st year (after project)	2 nd year	3 rd year	4 th year	5 th year	6 th year	
		learning increased															
		Interpersonal relationship improvement	77%	11	8,182	5	25%	0%	25%	25%	49,405	37,054	27,791	20,843	15,632	-	
		Broader view	80%	11	17,250	5	25%	0%	25%	25%	108,704	81,528	61,146	45,860	34,395	-	
Lower middle grade, first grade	15	Self-confidence increase	86%	13	13,862	6	25%	0%	25%	25%	100,704	75,528	56,646	42,484	31,863	23,897	
		Increased independence	80%	12	13,392	6	25%	0%	25%	25%	90,418	67,813	50,860	38,145	28,609	21,457	
		Enthusiasm for learning increased	79%	12	9,282	6	25%	0%	25%	25%	62,251	46,689	35,016	26,262	19,697	14,773	
		Interpersonal relationship improvement	77%	12	8,182	6	25%	0%	25%	25%	52,934	39,701	29,776	22,332	16,749	12,562	
		Broader view	80%	12	17,250	6	25%	0%	25%	25%	116,469	87,351	65,514	49,135	36,851	27,639	

Stakeholders		Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Value [Before Adj.]	Duration (Year)	D.W. Factor	TR. Factor	ATT. Factor	D.O. Factor	Outcome Value						
Subgroup	Population										Discount %	1.05%					
											1 st year (after project)	2 nd year	3 rd year	4 th year	5 th year	6 th year	
Senior teachers	15	Teaching skills improvement	91%	14	46,222	2	53%	0%	36%	22%	1,012,972	787,867	0				
		Interpersonal relationship improvement	89%	13	323,111	2.5	44%	0%	31%	25%	1,662,094	1,246,571	934,928				
		Increased sense of work accomplishment	45%	7	436,000	2.5	25%	0%	25%	30%	1,672,159	1,170,511	819,358				
		Increased work efficiency	27%	4	284,333	2	58%	0%	58%	42%	201,941	117,799	68,716				
		Attitude correction	64%	10	307,143	2.5	50%	0%	29%	14%	1,047,078	897,495	769,282				
		Poor quality of life	25%	4	-266,125	2	38%	0%	13%	31%	-545,764	-375,213	0				
		Poor health	50%	8	-288,857	2.5	36%	0%	14%	32%	-1,193,746	-810,042	-549,671				

Stakeholders		Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Value [Before Adj.]	Duration (Year)	D.W. Factor	TR. Factor	ATT. Factor	D.O. Factor	Outcome Value					
Subgroup	Population										Discount %	1.05%				
											1 st year (after project)	2 nd year	3 rd year	4 th year	5 th year	6 th year
New teachers	4	Teaching skills improvement	0%	0	N/A											
		Interpersonal relationship improvement	50%	2	250,500	1	50%	0%	50%	13%	125,250					
		Increased sense of work accomplishment	50%	2	151,000	1	50%	0%	38%	25%	94,375					
		Increased work efficiency	0%	0	N/A											
		Attitude correction	50%	2	520,000	2	50%	0%	38%	13%	325,000	284,375				
		Poor quality of life	50%	2	-500,500	2	63%	0%	25%	25%	-281,531	-211,148				
		Poor health	0%	0	N/A											

Stakeholders		Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Value [Before Adj.]	Duration (Year)	D.W. Factor	TR. Factor	ATT. Factor	D.O. Factor	Outcome Value						
Subgroup	Population										Discount %	1.05%					
											1 st year (after project)	2 nd year	3 rd year	4 th year	5 th year	6 th year	
Students' parents	73	Reduce the effort to take care of children	90%	66	8,705	3	24%	0%	33%	5%	293,487	278,813	264,872				
		Interpersonal relationship improvement (teacher / child)	91%	67	9,299	1.5	25%	0%	25%	25%	348,648	261,486	0				
Administration staff	1	Enhance the sense of work accomplishment	100%	1	23,333	3	0%	0%	30%	0%	16,333	16,333	16,333				
Social worker	1	Improve work ability	100%	1	500,000	3	25%	0%	50%	0%	187,500	187,500	187,500				
Reside	109	Improve	69%	75	7,412	1	48%	0%	52%	0%	137,214						

Stakeholders		Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Value [Before Adj.]	Duration (Year)	D.W. Factor	TR. Factor	ATT. Factor	D.O. Factor	Outcome Value					
Subgroup	Population										Discount %	1.05%				
											1 st year (after project)	2 nd year	3 rd year	4 th year	5 th year	6 th year
nts		community identity														
Employees of PRI MAX Electronic Ltd CSR team	4	Get the satisfaction of giving back to society	100%	4	39,203	1	75%	0%	44%	31%	22,052	15,161				
		Increase company identity	100%	4	246,264	1	56%	0%	44%	31%	242,416	166,661				
		Increased empathy	75%	3	229,402	1	83%	0%	42%	25%	66,909	50,182				
Chengzhi Education Foundation	1	Increase experience and know how in private management of public	100%	1	112,847	3	0%	0%	0%	0%	112,847	112,847	112,847			

Stakeholders		Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Value [Before Adj.]	Duration (Year)	D.W. Factor	TR. Factor	ATT. Factor	D.O. Factor	Outcome Value					
Subgroup	Population										Discount %	1.05%				
											1 st year (after project)	2 nd year	3 rd year	4 th year	5 th year	6 th year
		schools and counseling disadvantaged students														
Employees at Chengzhi Education Foundation 工	4	Raise awareness of social care and increase understanding of indigenous peoples / pastoral issues	25%	1	60,000	3	10%	0%	10%	0%	48,600	48,600	48,600			
		Increase work accomplishment	25%	1	100,000	2	50%	0%	50%	0%	25,000	25,000	-			
		Poor quality of life	25%	1	-20,000	2	75%	0%	50%	0%	-2,500	-2,500	-			

Stakeholders		Outcomes	Outcome Incidence	Outcome Amount	Outcome Unit Value [Before Adj.]	Duration (Year)	D.W. Factor	TR. Factor	ATT. Factor	D.O. Factor	Outcome Value					
Subgroup	Population										Discount %	1.05%				
											1 st year (after project)	2 nd year	3 rd year	4 th year	5 th year	6 th year
NPV over the years											8,625,631	5,843,820	3,420,021	513,180	245,460	94,232
Total NPV											\$18,742,344					
Total input											\$9,193,105					
SROI											2.04					