



2021 Cha-Ching Review: Thailand

Independent review by Dr Adele Atkinson



Acknowledgements

The author would like to thank Marc Fancy, Executive Director, and Emma Burrows, Director, both Prudence Foundation, for their commitment to open and fair review.

The implementation and evaluation of the Cha-Ching curriculum would not have been possible without the foresight of the Prudence Foundation and the ongoing enthusiasm, effort and commitment of Junior Achievement and thousands of students, teachers and schools in Asia and around the world. Junior Achievement across Asia has also been instrumental in the research by providing data and supporting materials.

This report was written by Dr Adele Atkinson, a senior independent consultant specialising in the preparation of high-quality research and policy guidance around financial literacy, financial inclusion and financial resilience.

Contents

Acknowledgements	1
Introduction	3
What does Cha-Ching cover?	5
Student outcomes	8
Student knowledge	9
Student attitudes	10
Student behaviour	11
Evidence of impact	13
Figure 1 Financial knowledge in Thailand before and after participating in Cha-Ching: Correct responses	9
Figure 2 Financial attitudes in Thailand before and after participating in Cha-Ching: Positive responses	10
Figure 3 Financial behaviour in Thailand before and after participating in Cha-Ching: Positive responses	11
Figure 4 Percentage of boys and girls getting full marks before and after participating in Cha-Ching	12
Figure 5 Measuring the impact of participating in the Cha-Ching curriculum in Thailand: Effect sizes	13
Figure 6 Variations in knowledge, attitudes and behaviour test scores after participating in Cha-Ching	15

Introduction

Prudential plc, through its charitable arm, Prudence Foundation, has developed various financial education tools aimed at entertaining and informing children and youth. These are built around 18 high energy cartoon music videos lasting around 3 minutes each.¹

Reviewer observations

The Cha-Ching music video characters illustrate that everyone can learn new skills or adapt their behaviours where necessary to achieve positive outcomes.

Each of the characters has strongly identifiable attitudes, behaviours, habits, skills and preferences. They are all likeable, and they each add value in the stories. As every character manages to improve their money management styles irrespective of their initial attitudes and skills, students see that everyone who takes the time to learn and understand can be a successful money manager. This is a very powerful message, put across in an appealing and entertaining way.

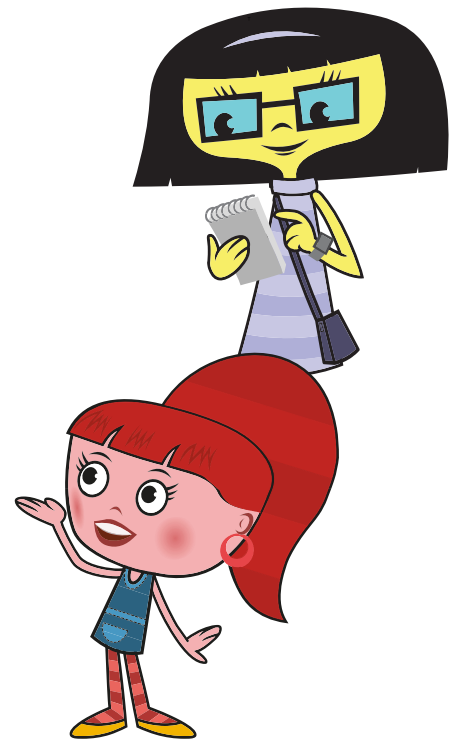
Building on the success of this approach, in 2016, Prudence Foundation partnered with JA Asia Pacific to develop a financial education package for schools. The resulting 'Cha-Ching curriculum' offers teachers structured lesson plans built around 6 of the cartoon music videos and a '360 degrees' support package. The support package provides teachers and students with access to additional online materials via websites, video streaming, and social media. The curriculum materials also include take-home activities, games and comics to engage students and their parents and family members.

¹ [Cha-Ching Financial Literacy for Kids | Home \(cha-ching.com\)](http://cha-ching.com)

Reviewer observations

The breadth of materials is impressive. Teachers have a fully comprehensive teaching package, designed to make sure that they apply good practices in each lesson. Students have the opportunity to further develop their skills through a variety of activities at home and access to additional resources, including more videos. The materials include various questions designed to encourage students to think about the topics in the lesson and model answers. This allows consistency in the overall teaching approach and helps to ensure that important elements of the lesson are not overlooked during the discussion.

The Cha-Ching curriculum materials are clear and attractive and written in simple language that is appropriate for teachers from a range of disciplines and backgrounds. They encourage the teachers to prepare well for each lesson and learn the definitions of each of the key concepts.



What does Cha-Ching cover?

The Cha-Ching curriculum draws on good practices and international guidance, including the G20/OECD Core Competencies on Financial Literacy for Youth. It is organised around Earn, Save, Spend and Donate. The basic premise is that these four elements are choices that are necessary to reach goals.



EARN

Receive income for work or services



SAVE

Keep money now for later use so as to realise short-term goals (e.g. buy a candy) or long term goals (e.g. go to university)



SPEND

The use of money to buy things or services



DONATE

Give time, items and/or money away freely in order to help others

The teacher guide describes the curriculum as follows:

'Cha-Ching curriculum encompasses economics curriculum for students in primary 2 to 6. The programme emphasises economic and social studies content while providing a strong focus on finance, mathematics, planning and analytical skills. Students are encouraged to use divergent and critical thinking to make decisions on how they manage their money applying the four concepts, Earn, Save, Spend and Donate in their daily life which support positive attitudes as they explore and enhance their money-management skills.'

Teacher support for the curriculum materials and teacher training

“Wonderful course, student was interested.”

“Keep continuously this project every year.”

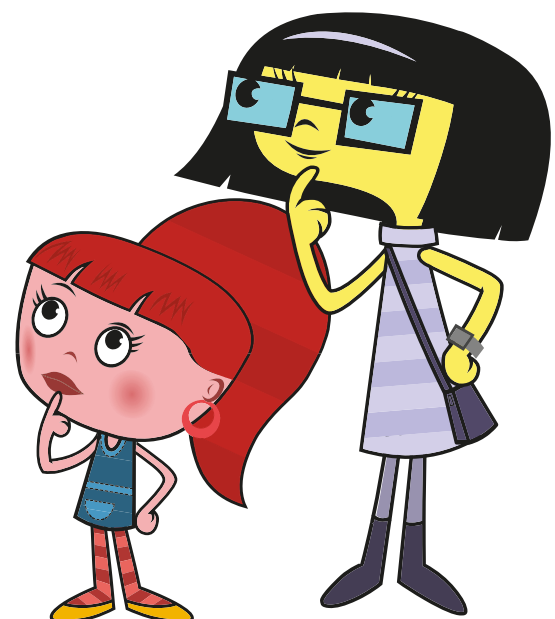


Reviewer observations

The curriculum incorporates elements of **economics** such as utility, scarcity and opportunity costs and aspects of **social studies** such as understanding how society functions and the role of charity in a child friendly way.

With a focus on **finance**, the topic allows teachers to cover basic **mathematics**, and the activities incorporate planning budgets and analysis of available options. The curriculum may also nudge teachers to think about their own financial situation.

The Cha-Ching curriculum is likely to appeal to subject teachers seeking new ways to help young people to learn about money matters.



Student Outcomes

Prudence Foundation follows good practices in evaluating the Cha-Ching curriculum. It was designed with monitoring and evaluation in place and uses a consistent method across countries and schools to ensure comparability. Data has been collected on the progress of students using the Cha-Ching curriculum in schools across five countries in Asia (Indonesia, Malaysia, the Philippines, Thailand and Vietnam). The data includes information about the students, teachers, and schools. Students take a short test before and after attending the 6 classes, and their responses are collected by the teacher. This makes it possible to analyse the outcomes and impact of Cha-Ching across schools, countries, and years and to create scores on financial knowledge, attitude and behaviour.²

This short note focuses on the implementation of the Cha-Ching curriculum in Thailand. Thailand understands the importance of financial education, as evidenced by the Committee on Financial Education.³ The Ministry of Education in Thailand has also endorsed the Cha-Ching curriculum.

The evaluation data includes a total of 21,677 students receiving the Cha-Ching curriculum in schools in Thailand: 11,894 from 2018-2019; 9,783 from 2019-2020.

In Thailand, students participating in the Cha-Ching curriculum were typically 11 or 12 years of age. 83% were in Grade 4 and 17% in Grade 5.



² Knowledge score based on 3 questions in Figure 1: Besides spend what are the other options we can make with money; I want to buy a new model; Which is not a way to spend wisely. Attitude score based on 3 questions reported in Figure 2: To make this world a better place; Agrees money comes from hard work; Earning, saving, spending and donating is important. Behaviour score based on 4 questions in Figure 3: Save money to buy things they need; Gives money time etc to the needy; Does not spend all, or quickly.

³ [Financial education policies in Asia and the Pacific.pdf \(asiawomen.org.sg\)](https://asiawomen.org.sg/Financial%20education%20policies%20in%20Asia%20and%20the%20Pacific.pdf)

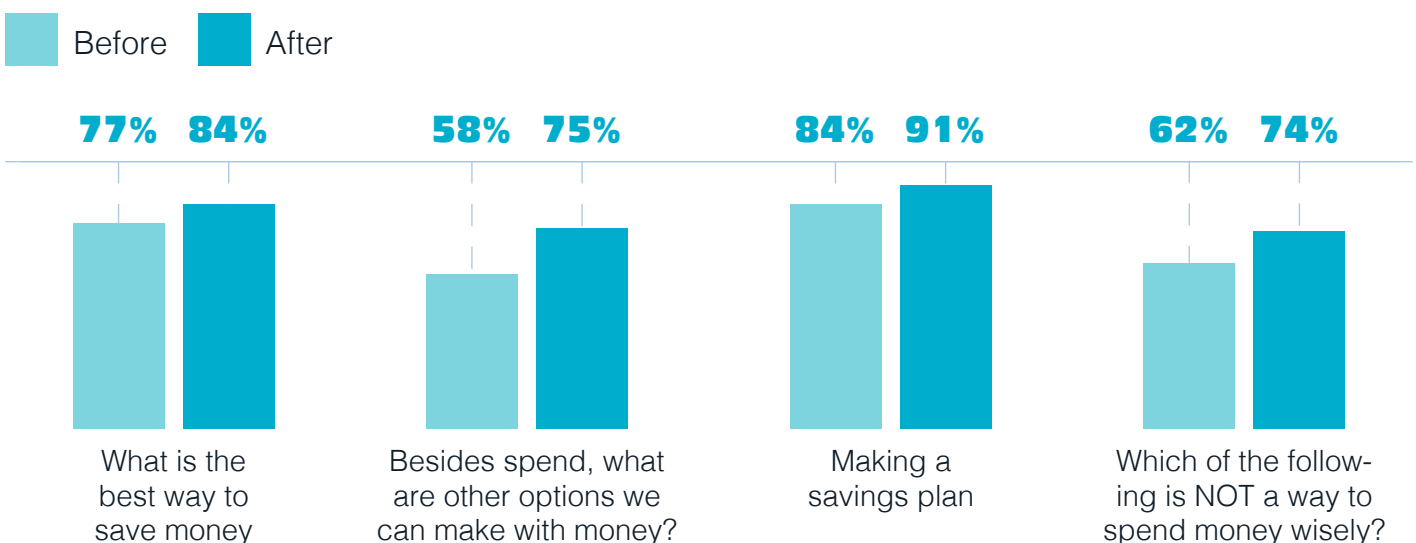
Student Knowledge

Figure 1 shows students' knowledge before and after participating in the Cha-Ching curriculum.⁴ Before the lessons started the majority of students answered the knowledge questions correctly. 84% correctly answered the question about funding the purchase of a new model and 77% knew which was the best way to save money. Even though students were relatively knowledgeable to start with, more students gave correct responses to the knowledge questions after participating in the 6 lessons, indicating learning across the topics tested. In particular, students became more aware of the four options for money.



Figure 1

Financial knowledge in Thailand before and after participating in Cha-Ching: Correct responses



⁴This review does not use the categorisation of knowledge, attitudes and behaviour indicated in the questionnaires. The grouping takes into account other measurement approaches, factor analyses and reliability tests.

Student Attitudes

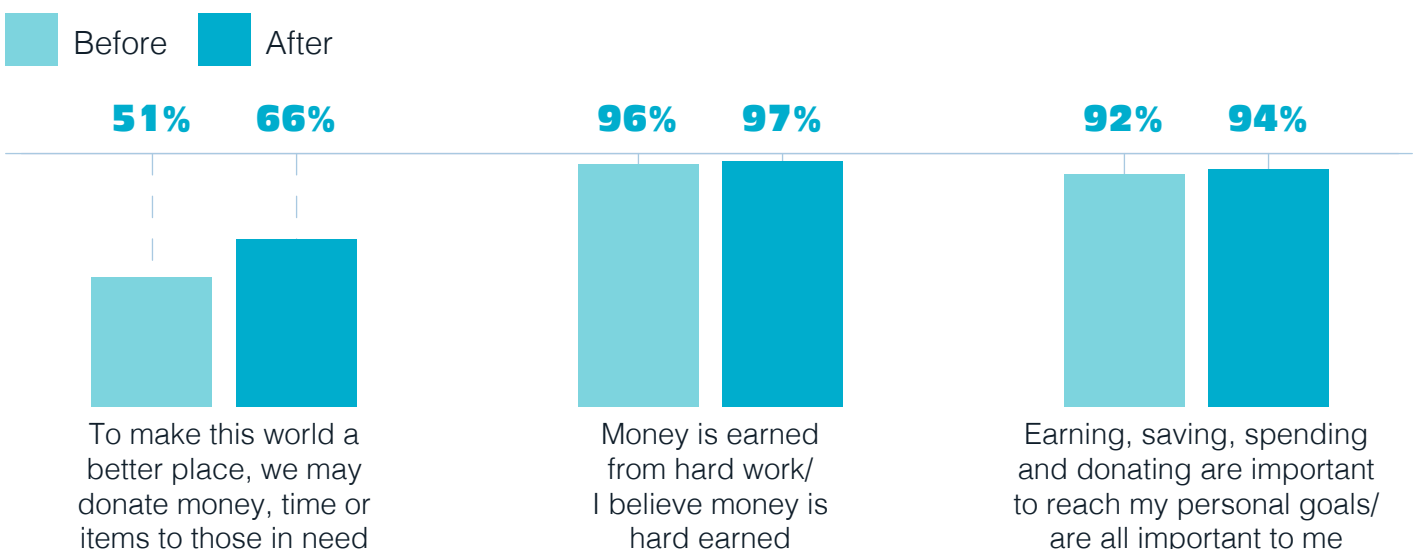
Several questions provide insights into the students' financial attitudes before and after participating in the Cha-Ching curriculum.

Figure 2 shows very positive responses across the financial attitudes covered in the test. Students' already agreed with the attitude statements around work and goals before participating. This is excellent news. However, it also indicates that there is little room for improvement in this area, suggesting that teachers can safely focus on other aspects of the curriculum, including donating.



Figure 2

Financial attitudes in Thailand before and after participating in Cha-Ching: Positive responses



Note: Correct response to the first question is 'Donate money, time or items to those in need'.

Student Behaviour

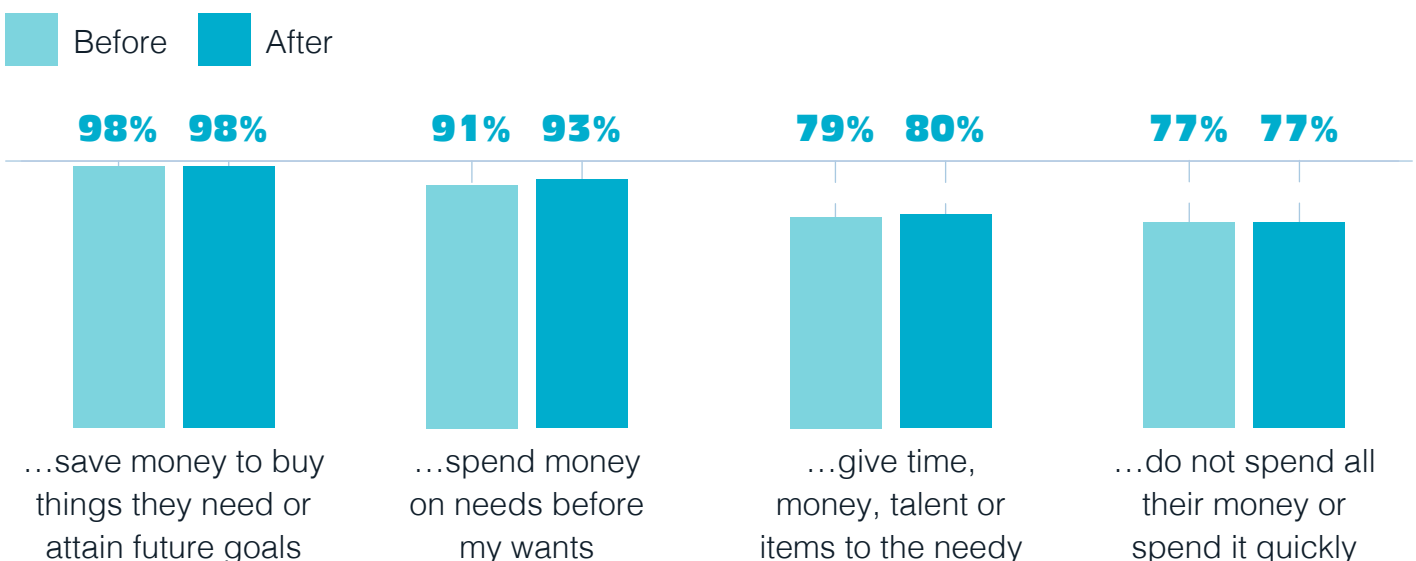
The questionnaire includes a range of questions relevant to student behaviour. Questionnaires can only ever give an approximate idea of behaviour, as they record people’s own reports rather than an independent observation. Additionally, there are only a few financial behaviours that students are likely to exhibit, as they are not yet responsible for a wide range of financial decisions. Nevertheless, with such a large dataset the responses provide valuable insights.

Figure 3 shows that most students reported behaving in a financially responsible way even before participating in the Cha-Ching curriculum. 98% of students in Thailand said that they save money to buy things they need or for the future even before participating and 91% spent on needs before wants. Given these positive initial behaviours, it is unsurprising that behaviour scores increased very little in Thailand amongst students who participated in Cha-Ching.



Figure 3

Financial behaviour in Thailand before and after participating in Cha-Ching: Correct responses

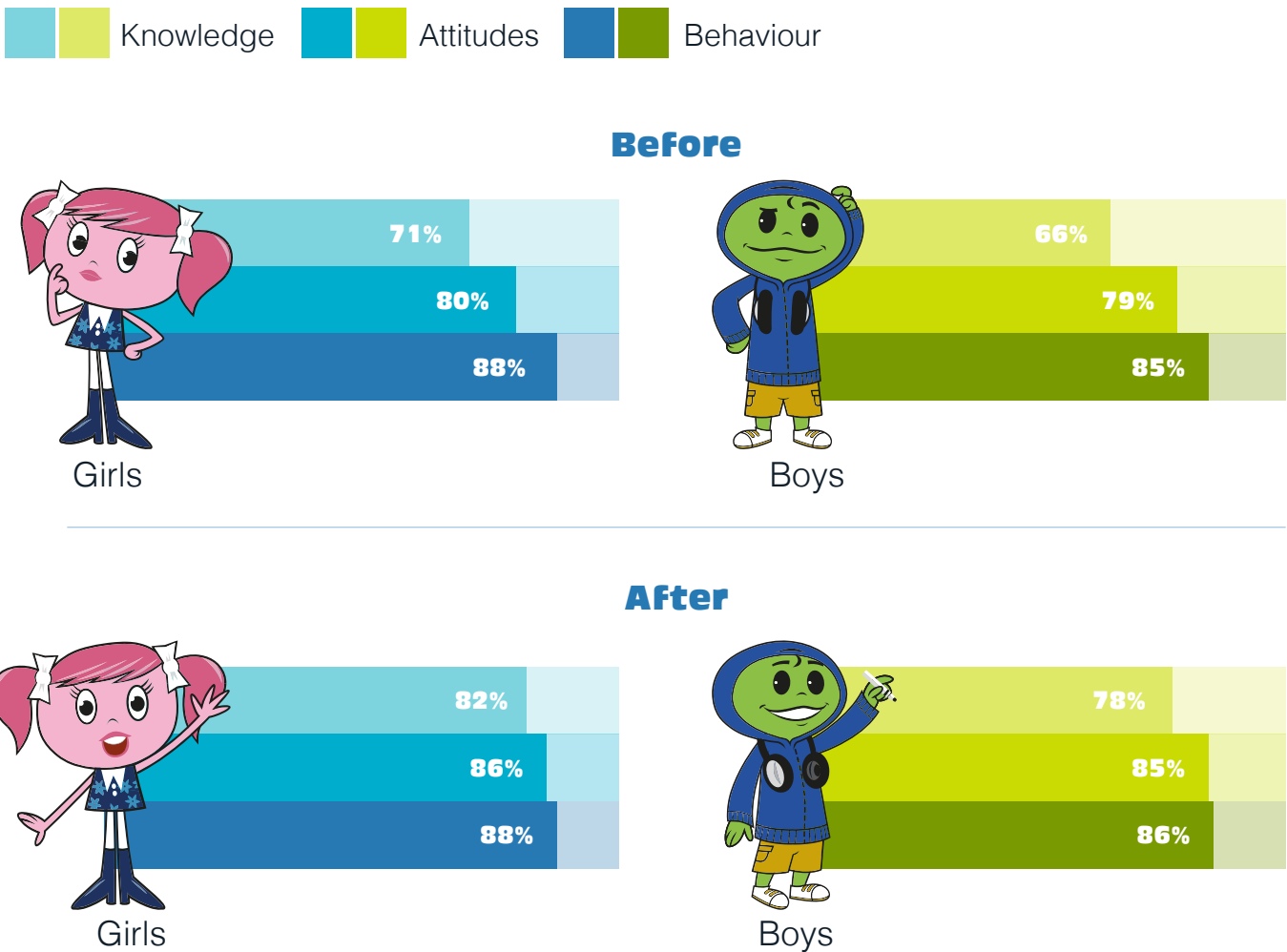


Note: The responses are reversed before analysis if necessary, to indicate positive behaviors.

Figure 4 shows improvement in the scores for knowledge, attitude and behaviour after completing the Cha-Ching curriculum. It shows that initially boys and girls were less likely to gain full marks on knowledge than attitudes and behaviours. Fewer boys than girls achieved full marks before participating, but both boys and girls increased their behaviour and attitude scores after taking part in Cha-Ching curriculum.

Figure 4

Percentage of boys and girls getting full marks before and after participating in Cha-Ching



Note: Average percentage of full marks (Max 3 for knowledge and attitudes, 4 for behaviour).

Evidence of Impact

In-depth analysis of the data from Thailand makes it clear that students are learning more about financial matters and improving their financial attitudes more than we would expect if they had not participated in the Cha-Ching curriculum.

Figure 5

Measuring the impact of participating in the Cha-Ching curriculum in Thailand: Effect sizes

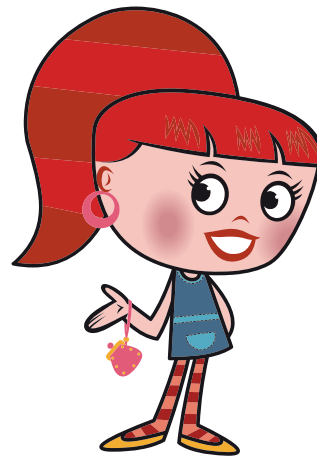
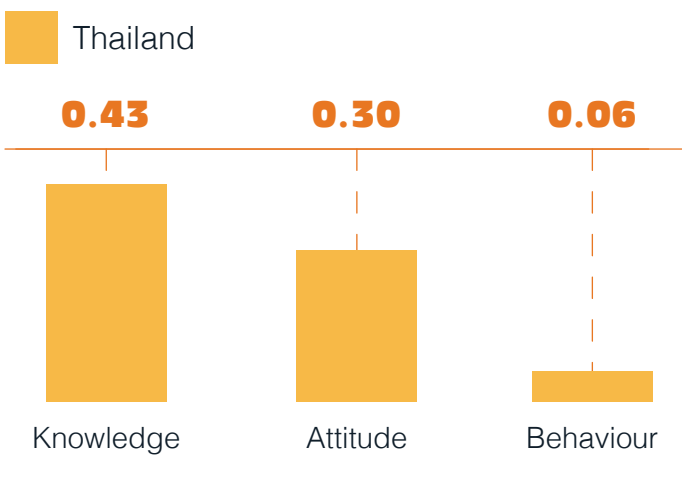


Figure 5 reports the size of the impact of Cha-Ching on students using a measure that is often used to discuss the impact of teaching because it can be compared across different curricula. It is called the 'effect size'.⁵

A recent report looked at the impact of many different financial education curricula around the world and found that 'effect sizes on financial knowledge are significantly larger in developed economies (0.39 SD) relative to developing economies (0.14 SD).⁶ The effect size of Cha-Ching on financial knowledge in Thailand is 0.43 SD, indicating that Cha-Ching is having a positive effect on students' financial knowledge. There is also a positive effect on attitudes and a smaller one on behaviour. This is expected since education primarily seeks to impact directly on knowledge and the positive attitudes and behaviour before participating.

⁵ The effect size is measured in terms of standard deviations or SD.

⁶ Kaiser and Menkhoff (2020) Financial education in schools: A meta-analysis of experimental studies

Teacher feedback on the positive impact

“Very useful to students.”

“I want to have this project every years.”



Figure 6 explores the impact further by looking at the factors that are associated with students' scores after participating. It shows that, other things being equal, students initial results in terms of knowledge, attitude and behaviour are important predictors of their tests after participating in Cha-Ching.

The results show that students of the same age, gender and prior ability had different outcomes depending on which year they participated. Girls achieved slightly more than boys on each of the outcome measures after taking into account the other factors.

Older students made larger improvements after taking into account any differences in initial scores, gender and year.

These findings suggest that teachers in Thailand have implemented the Cha-Ching curriculum in a way that has benefitted students. They have had a positive impact on the financial literacy of students, increasing knowledge, attitudes and (to a small extent) behaviour, despite particularly positive attitudes and behaviour before participating.

Figure 6

Variations in knowledge, attitudes and behaviour test scores after participating in Cha-Ching

Knowledge	High knowledge scores	Low knowledge scores
	<ul style="list-style-type: none"> - Students participating in 2018-2019 - Students with high before-test on knowledge, attitude and/or behaviour - Girls - Students aged 10 and over 	<ul style="list-style-type: none"> - Students participating in 2019-2020 - Students with low before-test on knowledge, attitude and/or behaviour - Boys - Students aged 7 to 9
Attitude	High attitude scores	Low attitude scores
	<ul style="list-style-type: none"> - Students participating in 2018-2019 - Students with high before-test on knowledge, attitude and/or behaviour - Girls - Students aged 9+ 	<ul style="list-style-type: none"> - Students participating in 2019-2020 - Students with low before-test on knowledge, attitude and/or behaviour - Boys - Students under age 9
Behaviour	High behaviour scores	Low behaviour scores
	<ul style="list-style-type: none"> - Students participating in 2018-2019 - Students with high before-test on attitude and/or behaviour - Girls - Students aged 12 	<ul style="list-style-type: none"> - Students participating in 2019-2020 - Students with low before-test on attitude and/or behaviour - Boys - Students not aged 12

Note: When there is no mention of year of implementation, age, gender or before-test scores, there were no significant differences in outcomes by these factors.

Significant at 0.01. Adjusted R² knowledge 0.12; attitude 0.08; behaviour 0.13.



2021 Cha-Ching Review: Asia

Independent review by Dr Adele Atkinson

After five years of implementing the Cha-Ching curriculum in Asia, we are delighted that the findings from Dr Atkinson's report confirm that Prudence Foundation is having a positive impact on the lives of hundreds of thousands of young people across Asia.

Our Cha-Ching curriculum is providing teachers with entertaining videos, practical resources and a wealth of professional guidance, and the results for children's financial education are impressive. As Dr Atkinson observes *'Students [watching the videos and who take the curriculum] realise that everyone who takes the time to learn and understand can be a successful money manager.'* And her analysis certainly confirms this view. After participating in 6 Cha-Ching lessons, students know more, improve their behaviour and have more positive attitudes towards financial matters than they did before.

A handwritten signature in black ink, appearing to read "Marc Fancy".

Marc Fancy
Executive Director
Prudence Foundation

Get in touch with us for more info at

<https://www.prudencefoundation.com/>
 prudence.foundation@prudential.com.hk