



# 2021 Cha-Ching Review: Vietnam

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

<b>Acknowledgements</b>	<b>1</b>
<b>Introduction</b>	<b>3</b>
What does Cha-Ching cover?	5
<b>Student outcomes</b>	<b>8</b>
Student knowledge	9
Student attitudes	10
Student behaviour	11
<b>Evidence of impact</b>	<b>13</b>
<b>Figure 1</b> Financial knowledge in Vietnam before and after participating in Cha-Ching: Correct responses	9
<b>Figure 2</b> Financial attitudes in Vietnam before and after participating in Cha-Ching: Positive responses	10
<b>Figure 3</b> Financial behaviour in Vietnam before and after participating in Cha-Ching: Positive responses	11
<b>Figure 4</b> Percentage of boys and girls getting full marks before and after participating in Cha-Ching	12
<b>Figure 5</b> Measuring the impact of participating in the Cha-Ching curriculum in Vietnam: Effect sizes	13
<b>Figure 6</b> 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.<sup>1</sup>

## 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.

<sup>1</sup> [Cha-Ching Financial Literacy for Kids | Home \(cha-ching.com\)](https://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**

"I totally agree that Cha-Ching curriculum is helpful to implement at schools."

"A meaningful and practical training session. We hope that the program will be implemented as soon as possible in elementary schools."



## Reviewer observations

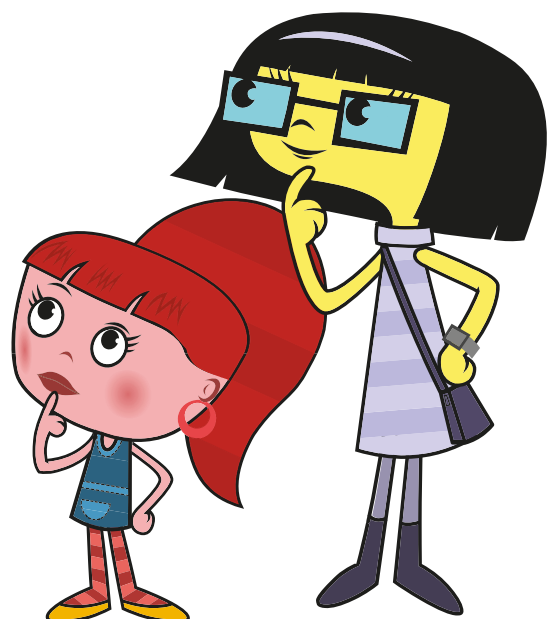
The curriculum incorporates elements of **economics** such as utility, scarcity and opportunity costs and aspects of **social studies** such as understanding how society functions and the role of charity in a child friendly way.

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.<sup>2</sup>

This short note focuses on the implementation of the Cha-Ching curriculum in Vietnam. In 2020, Vietnam also launched a National Financial Inclusion Strategy which incorporates financial education across the whole population and businesses.<sup>3</sup> Furthermore, with the endorsement by the Ministry of Education and Training in 'Decision on the approval of documents Financial Literacy - Work readiness - Entrepreneurship for teachers, students at education institutions' the Cha-Ching curriculum can be implemented at all schools nationwide.

The evaluation data includes a total of 13,635 students receiving the Cha-Ching curriculum in schools in Vietnam over two waves: 6,299 in 2019 and 7,336 in 2020.

In Vietnam, 64% of participating students were approximately 10 years of age; 35% were 9. All were in Grade 4.



<sup>2</sup> 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.

<sup>3</sup> [Financial education, financial consumer protection and financial inclusion policies and strategies in Cambodia, Laos Myanmar & Vietnam](#)

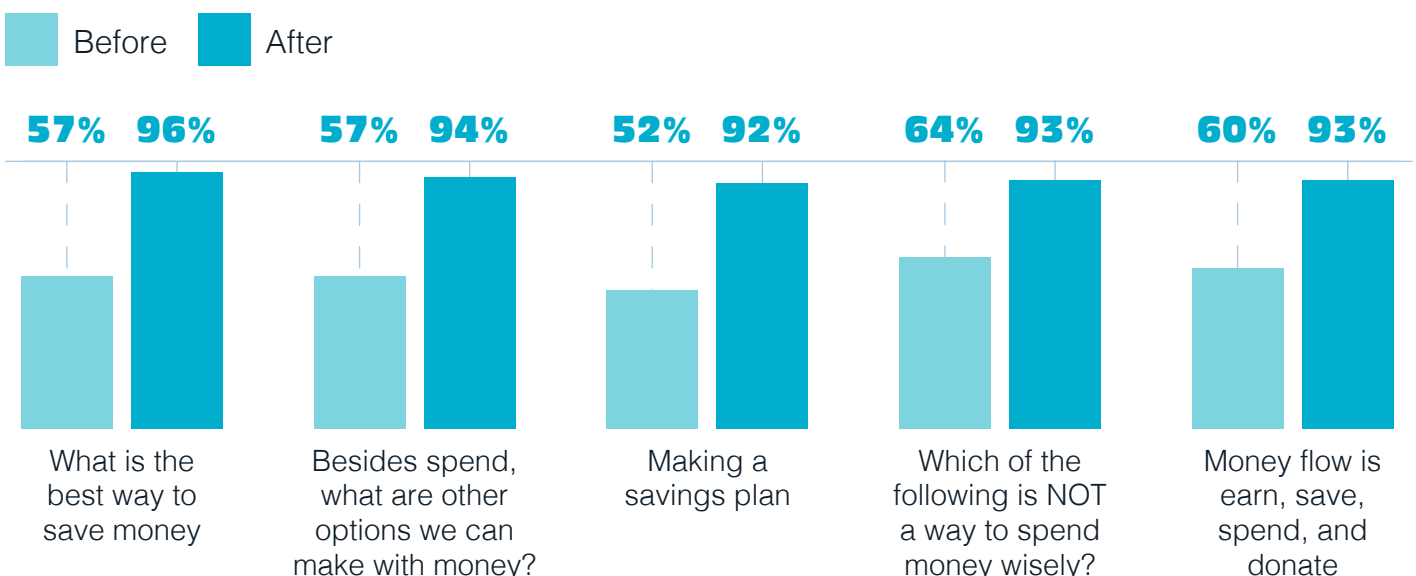
## Student Knowledge

Figure 1 shows students' knowledge before and after participating in the Cha-Ching curriculum.<sup>4</sup> Each of the questions was answered correctly by just over half of the students before participating, whilst almost all students gave correct responses to the repeated knowledge questions after participating in the curriculum. This is a much bigger improvement than observed elsewhere.



**Figure 1**

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



<sup>4</sup>This 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.

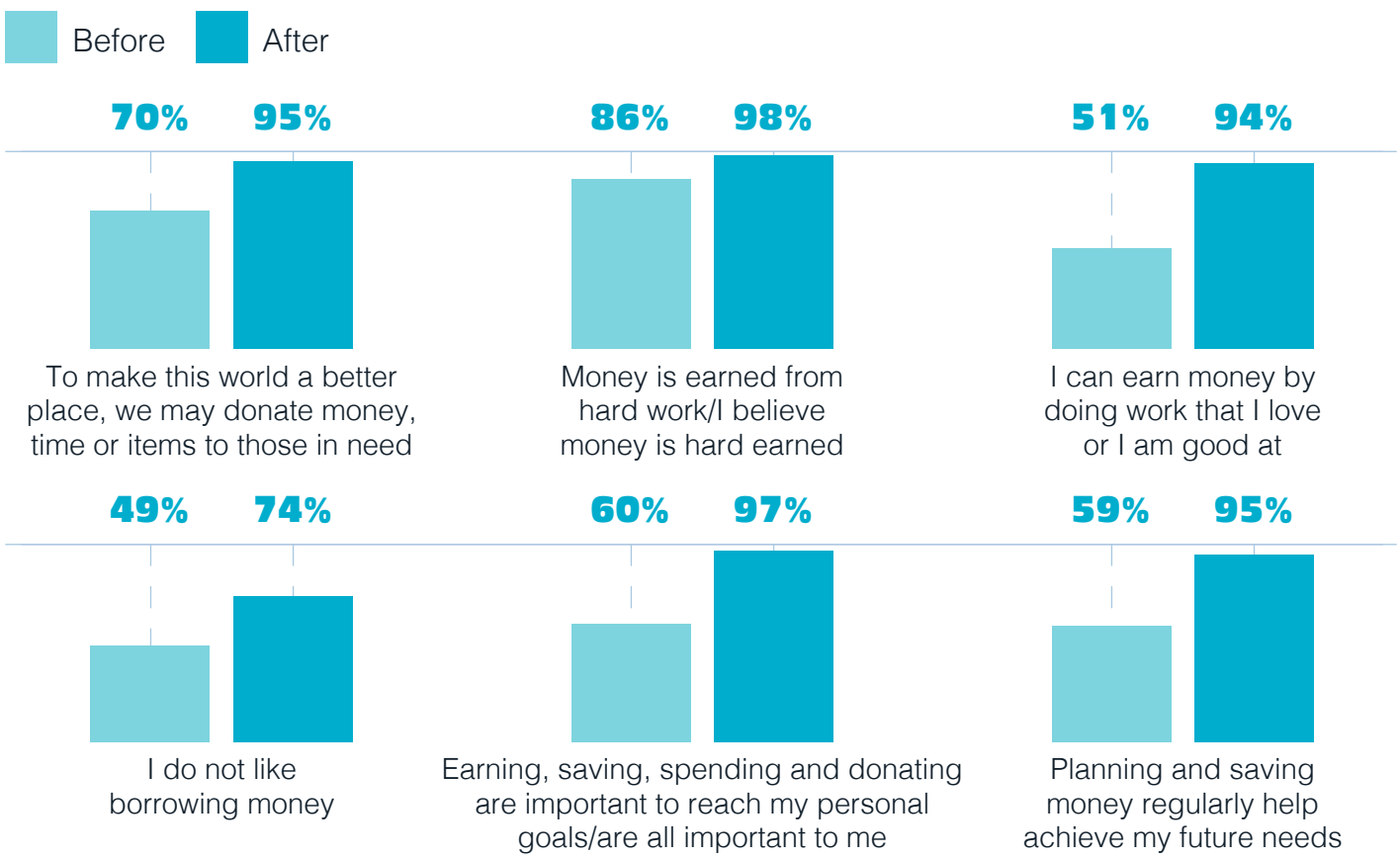
# Student Attitudes

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. Most students had positive attitudes before participating, for example 86% already believed that money is earned from hard work. More students had positive attitudes at the end of the 6 lessons. The proportion having the attitude that they could earn from work that they love rose from 51% to 94%. Interestingly, 74% of students reported that they did not like borrowing money after participating, an increase of 25%. This suggests that students attitudes changed even across topics that were not covered in the curriculum.

**Figure 2**

Financial attitudes in Vietnam 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'.

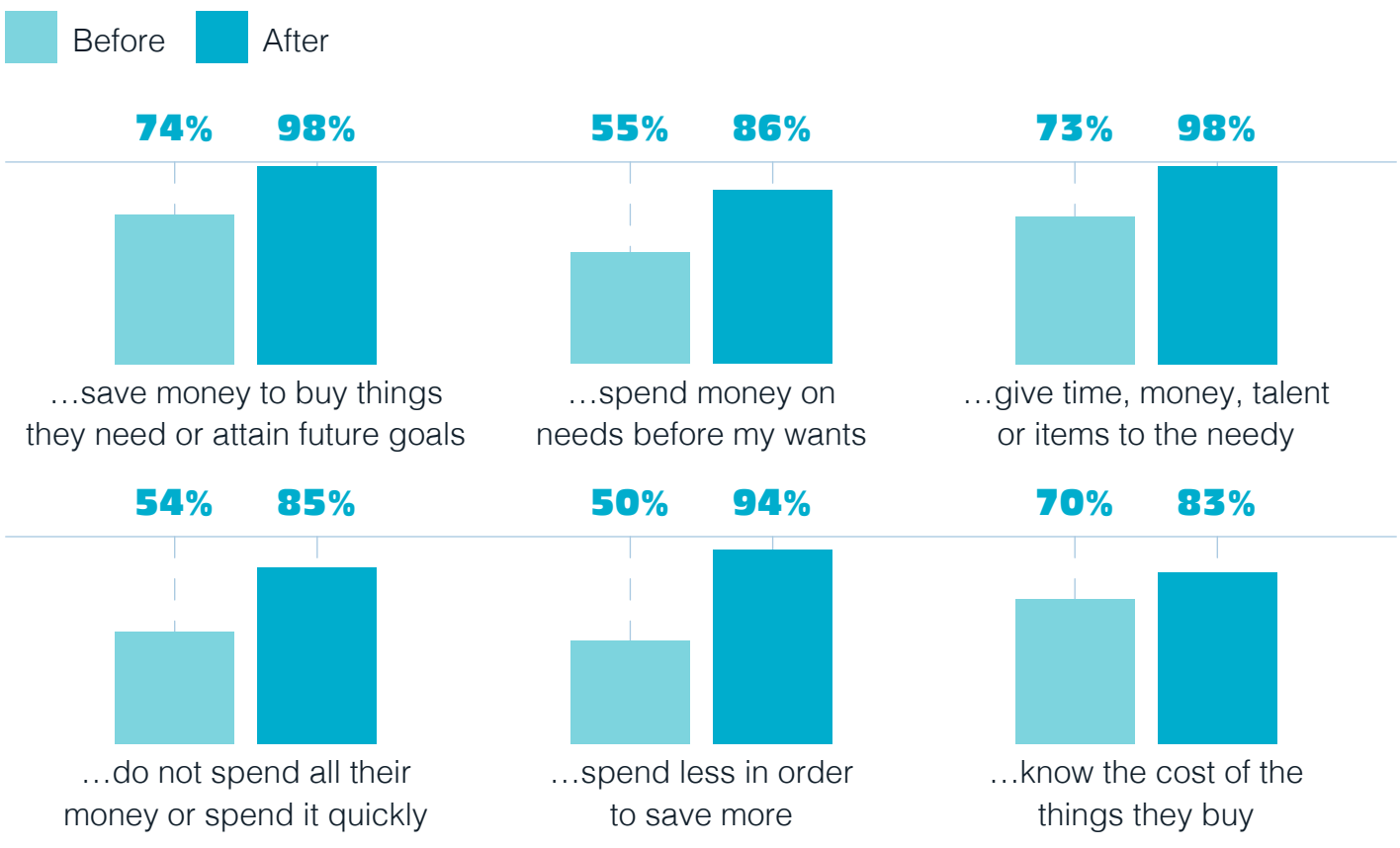
## Student Behaviour

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 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 many students reported behaving in a financially responsible way even before participating in the Cha-Ching curriculum. 74% of students in Vietnam said that they save money to buy things they need or for the future even before participating, for example. However, after participating, almost all students reported positive behaviours.

The smallest increase was in terms of knowing the cost of things they buy (13 percentage point increase), whilst the largest was in terms of spending less to save more (44 percentage point increase).

**Figure 3**

Financial behaviour in Vietnam before and after participating in Cha-Ching: Positive responses

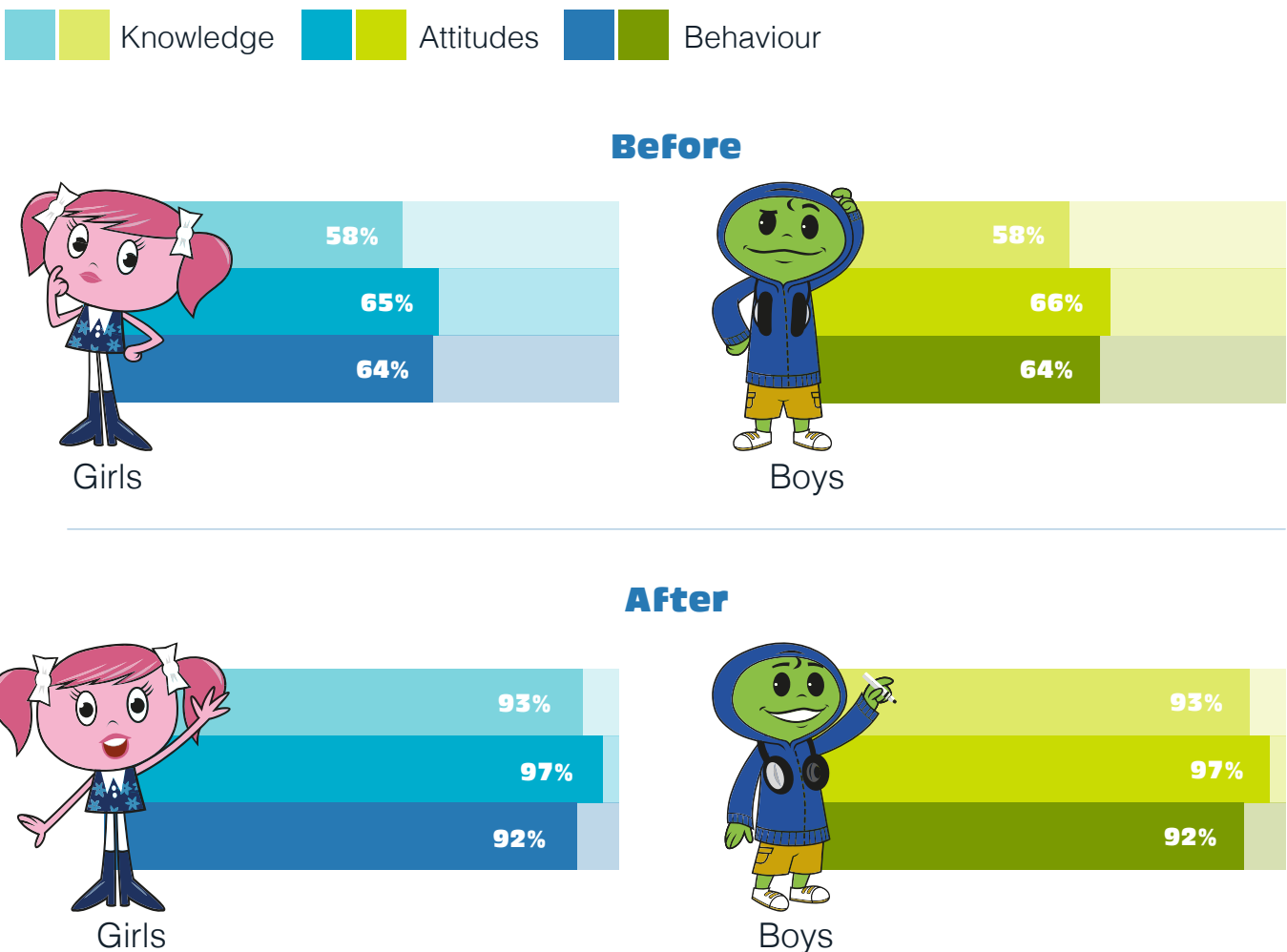


Note: The responses are reversed before analysis if necessary, to indicate positive behaviors.

Figure 4 shows improvement in the scores for knowledge, attitude and behaviour after completing the Cha-Ching curriculum. It shows that similar proportions of boys' and girls' achieved full marks on the test before participating and that more boys and girls achieved improvements in their scores at the end of the 6 lessons.

**Figure 4**

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



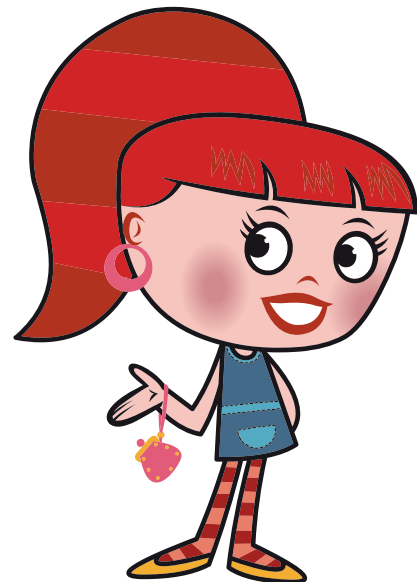
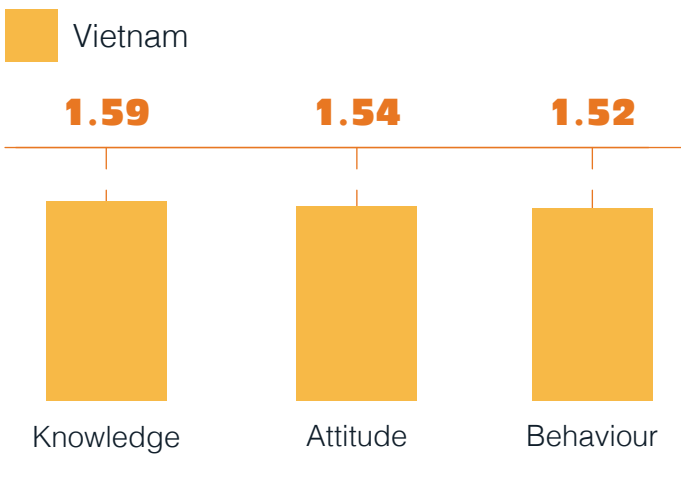
Note: Average percentage of full marks (Max 3 for knowledge and attitudes, 4 for behaviour).

# Evidence of Impact

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

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'.<sup>5</sup>

**Figure 5**  
Measuring the impact of participating in the Cha-Ching curriculum in Vietnam: Effect sizes



<sup>5</sup>The effect size is measured in terms of standard deviations or SD.

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).<sup>6</sup> The effect size of Cha-Ching on financial knowledge in Vietnam is 1.59 SD, indicating that Cha-Ching is having a very positive effect on students' financial knowledge. Similarly large effect sizes are also seen on attitudes and behaviour which is unusual as people typically change their attitude and behaviour more slowly than their understanding. These measures suggest that there is something about the teaching in Vietnam that is impacting students more than in other countries using the Cha-Ching curriculum and more than is typical across various financial education programmes in developed countries. It may not be possible to maintain this exceptional effect size, but it would be interesting to try to find out how schools have created the large impact so far.<sup>7</sup>

Figure 6 explores the impact further by looking at the factors that are associated with students' scores after participating. They show that, as anticipated, students final knowledge scores are associated with their initial scores. However, the results stand in contrast with those found in other countries in some ways.<sup>8</sup> The surprisingly large improvements in behaviour scores are not significantly associated with students' behaviour or knowledge before participating. They are higher among those who initially showed more negative financial attitudes. Attitudes are also inversely related to levels of knowledge - students with higher knowledge before participating improved their attitudes by less than those with lower knowledge scores, and students with higher attitude scores initially improved their knowledge by less than those with lower initial attitude scores. Additionally, outcomes do not vary significantly by age or gender once initial results are taken into account.

However, as seen elsewhere, results show that students of the same age, gender and prior ability had different outcomes depending on which year they participated. The reduced impact of the second wave may reflect normal differences in cohorts or the added impact of COVID-19.

These findings suggest that the participating teachers and schools in Vietnam have implemented the Cha-Ching curriculum in a way that has had significant impact on the financial literacy of students, increasing knowledge, attitudes and behaviour.

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

<sup>7</sup> It is possible that the students responded to the attitude and behaviour questions as if they were knowledge questions, saying what they thought they should do, rather than what they actually do. Even so, the large increase suggests that many more students understood what should be done after participating, which is still exceptional.

<sup>8</sup> The R<sup>2</sup> reported in Figure 6 also confirm that only a small amount of the differences observed in outcomes in Vietnam are explained by prior achievement, age, gender or year of participation. For example, the regression on knowledge scores only explains 5% of the variation in outcomes, which means that 95% of the variation is due to other factors that are not included in the analysis.

**Figure 6**

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

<b>Knowledge</b>	High <b>knowledge</b> scores	Low <b>knowledge</b> scores
	<ul style="list-style-type: none"> <li>- Students participating in 2018-2019</li> <li>- Students with higher before-test on knowledge and/or lower before-test on attitude</li> </ul>	<ul style="list-style-type: none"> <li>- Students participating in 2019-2020</li> <li>- Students with lower before-test on knowledge and/or higher before-test on attitude</li> </ul>
<b>Attitude</b>	High <b>attitude</b> scores	Low <b>attitude</b> scores
	<ul style="list-style-type: none"> <li>- Students participating in 2018-2019</li> <li>- Students with lower before-test on knowledge and/or higher attitude score</li> </ul>	<ul style="list-style-type: none"> <li>- Students participating in 2019-2020</li> <li>- Students with higher before-test on knowledge and/or lower attitude score</li> </ul>
<b>Behaviour</b>	High <b>behaviour</b> scores	Low <b>behaviour</b> scores
	<ul style="list-style-type: none"> <li>- Students participating in 2018-2019</li> <li>- Students with lower attitude score</li> </ul>	<ul style="list-style-type: none"> <li>- Students participating in 2019-2020</li> <li>- Students with higher attitude score</li> </ul>

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 R<sup>2</sup> knowledge 0.05; attitude 0.01; behaviour 0.09





## 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](mailto:prudence.foundation@prudential.com.hk)