



# 2021 Cha-Ching Review: Malaysia

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.

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# 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 \(cha-ching.com\)](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.**

## Teacher support for the curriculum materials and teacher training

“Good activities for pupils to manage money wisely.”

“Good for the students to practice good money managements.”

“Very useful programme for pupils.”

“This programme is one of the best experience that my students have gained. Thanks!”

“Fruitful curriculum for the students.”



## 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

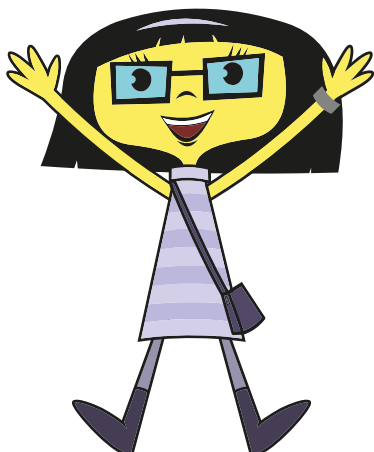
The teacher guide describes the curriculum as follows:

*'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 feedback on teaching the curriculum

"Thank you for giving us this opportunity to share this with our students."

"Seemingly ideal to implement the careful saving and spending awareness."



## 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.

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

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## 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 outcomes of students participating in the Cha-Ching curriculum in Malaysia. Malaysia has had several strategies on financial education. The most recent one was launched in 2019, and its Strategic Priority 1 is to nurture financial resilience from childhood, with the intended outcome that 'young Malaysians understand and are able to apply basic financial knowledge, skills and values when making financial decisions.' The Ministry of Education in Malaysia has endorsed the Cha-Ching curriculum.

The evaluation data includes a total of 43,225 students receiving the Cha-Ching curriculum in schools in Malaysia: 12,967 students from 2016-17; 17,420 students from 2017-2018; 6,535 from 2018-2019; 6,303 from 2019-2020.

The variation across years reflects changes in the evaluation method rather than changes in the numbers of students.

In Malaysia, 92% of the students were approximately 11 years of age. Almost all were in Grade 5.



<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.



## Student Knowledge

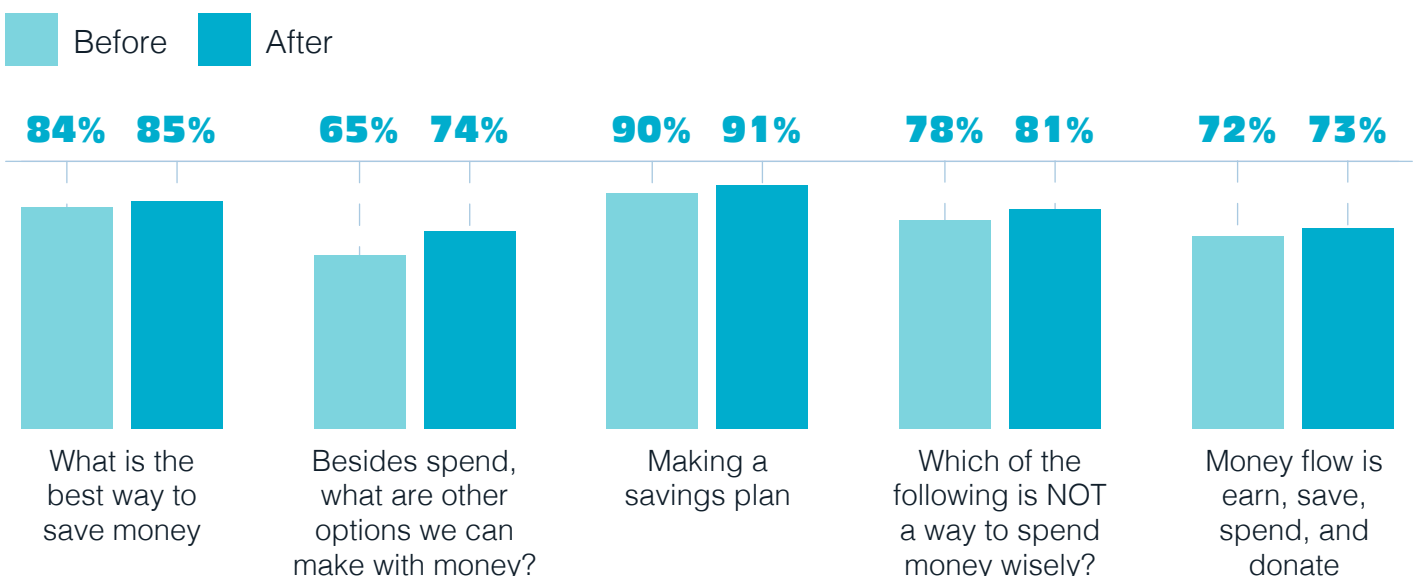
Figure 1 shows student knowledge before and after participating in the Cha-Ching curriculum.<sup>3</sup> Most students gave correct answers before participating, and there was a small increase in the percentage of correct responses after completing the 6 lessons.

The largest increase occurred on the question around the options that can be made with money. Teacher feedback indicates that this may reflect an increased awareness of the role of donating. At the same time, there was very little change in the proportion of students recognising the meaning of money flow or the best way to save.



**Figure 1**

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



<sup>3</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.

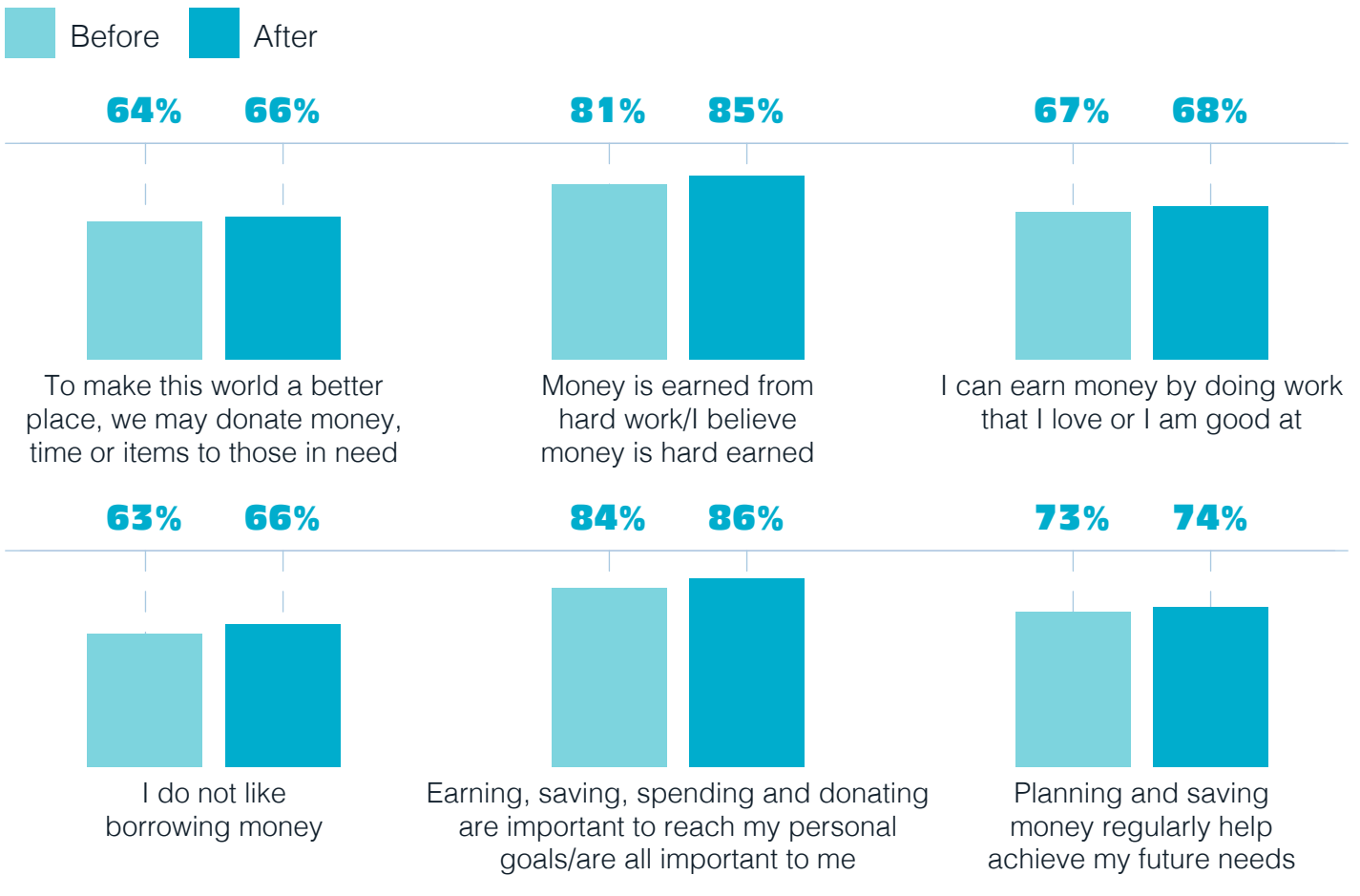
## Student Attitudes

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

Figure 2 shows relatively positive responses across the financial attitudes covered in the test. Students' responses indicate small improvements in attitudes after participating in the Cha-Ching curriculum Malaysia, particularly in terms of agreeing that money is earned from hard work. The small improvement in attitudes towards credit is interesting given that this is not explicitly covered in the curriculum and suggests that the students started to think about money in a more mature way.

**Figure 2**

Financial attitudes in Malaysia 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'.

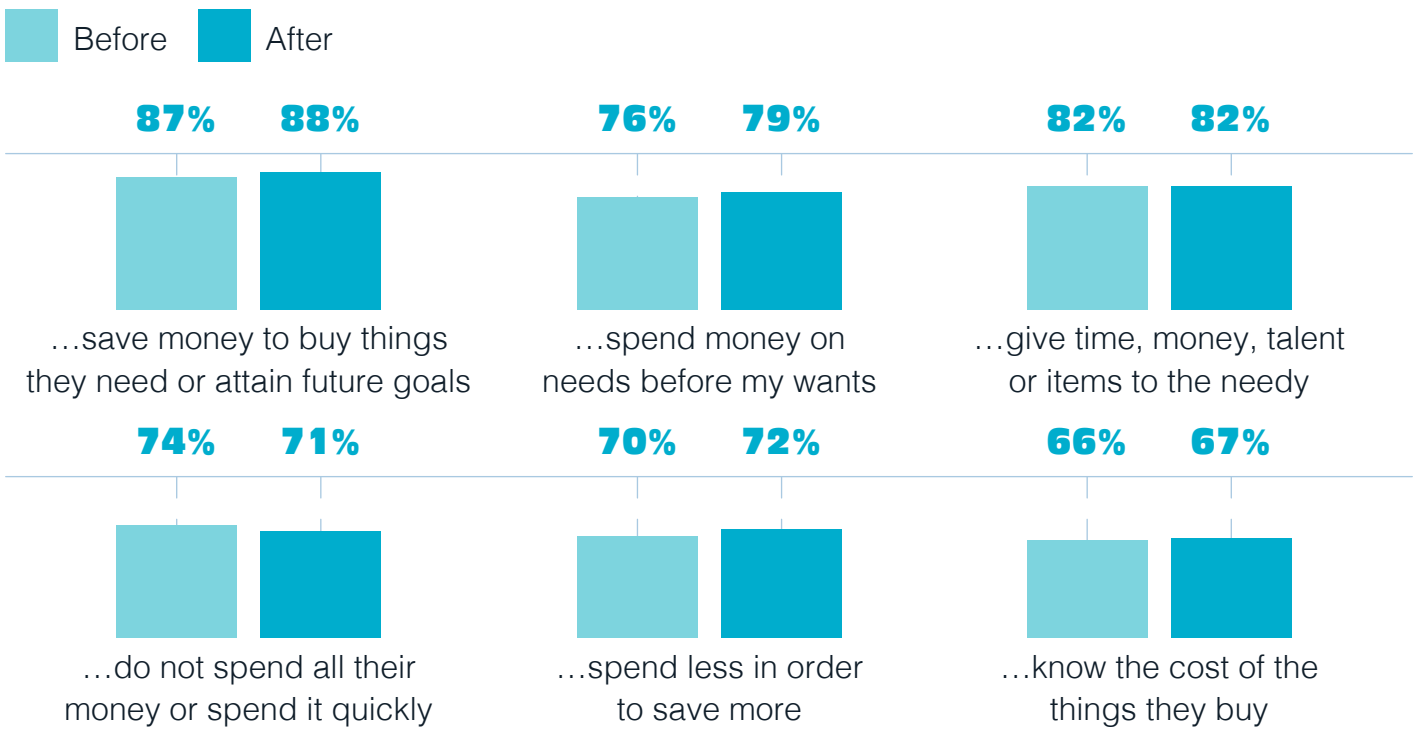
## Student Behaviour

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 the majority of students were saving before participating in the Cha-Ching curriculum. Almost 90% of students in Malaysia said that they save money to buy things they need or for the future even before participating. The largest improvement was in terms of spending on needs before wants. Interestingly, a small reduction in the proportion of students reporting that they do not spend all of their money suggests that combined with the understanding of needs and wants suggests that, the curriculum may have encouraged students to think about the various uses of their money in more detail – something also discussed above. This could be explored further in discussion with students.

**Figure 3**

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

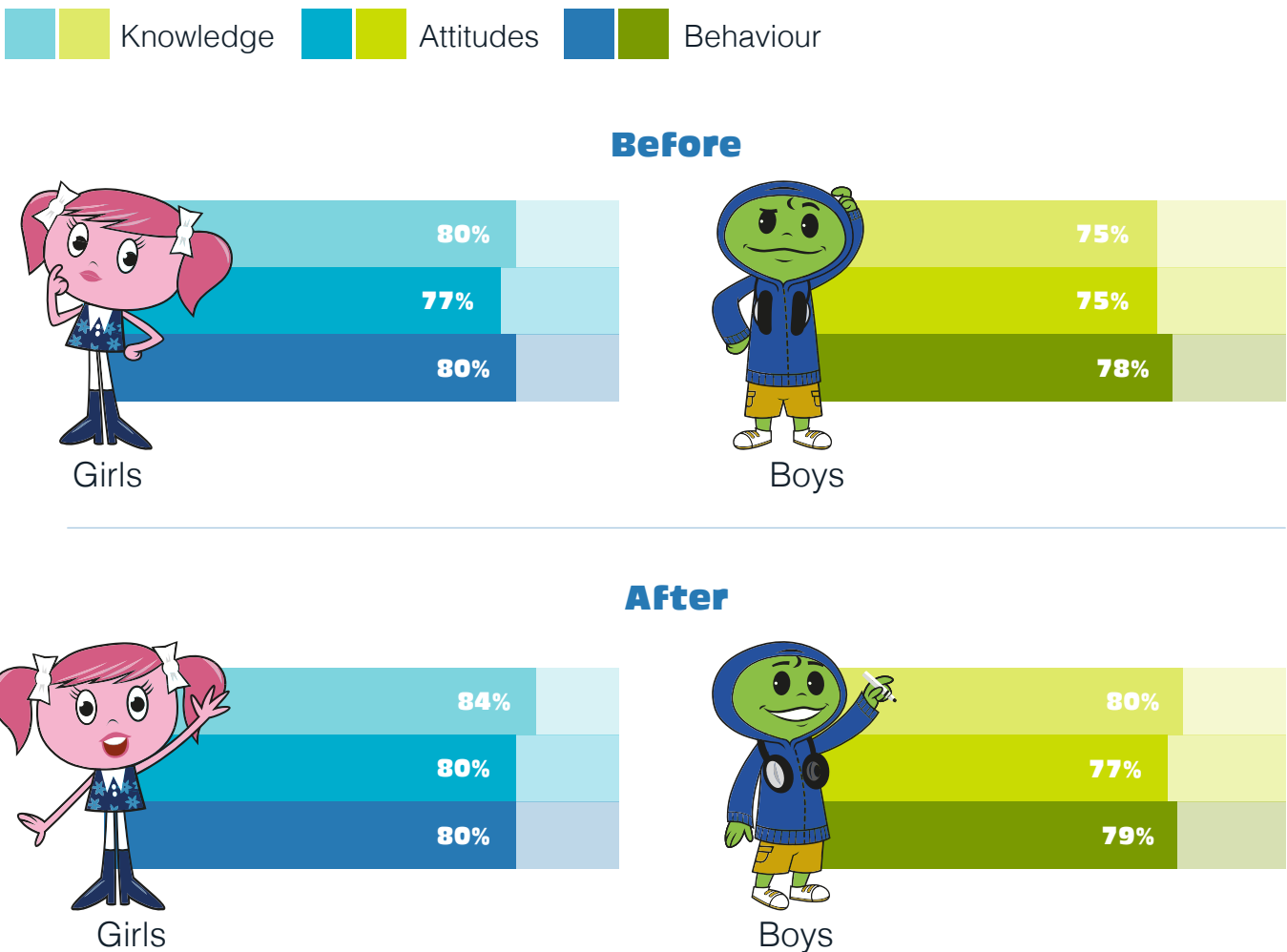


Note: The responses are reversed before analysis if necessary, to indicate positive behaviors. However, the negative wording may have made it harder for some students to understand the question and may have influenced responses to the 4th question above.

Figure 4 shows the improvement in knowledge, attitude and behaviour scores after completing the Cha-Ching curriculum. It shows that initially more girls achieved full marks on knowledge and behaviour than attitudes, and boys achieved highest scores on behaviour. Overall, more girls than boys gained full marks on all three elements. After participating in the Cha-Ching curriculum more boys and girls gained full marks on knowledge and attitudes, but girls did not improve their behaviour, and boys only made a small improvement.

**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).

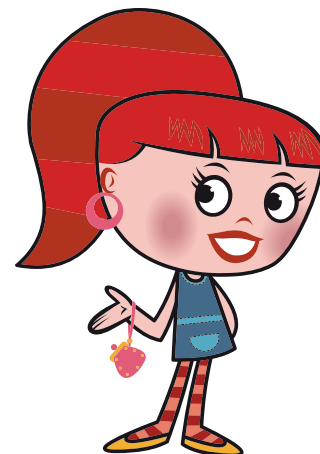
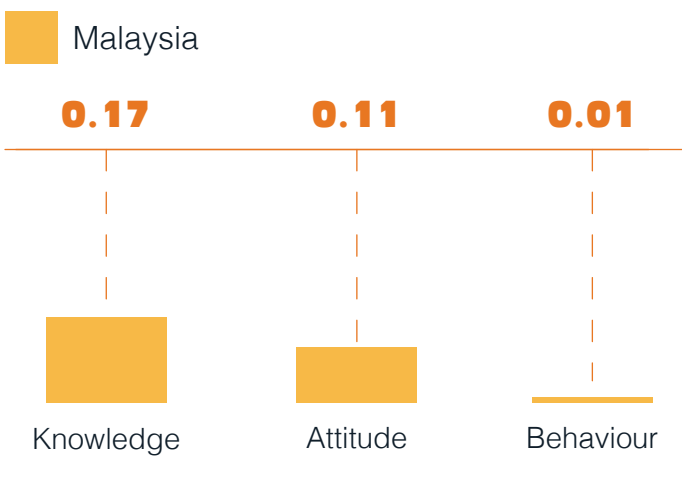
# Evidence of Impact

In depth analysis of the data from Malaysia show that students have increased their knowledge more than would be expected 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>4</sup>

**Figure 5**

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



<sup>4</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>5</sup> The effect size of Cha-Ching on financial knowledge in Malaysia is 0.17 SD, indicating that Cha-Ching is having a modest positive effect on students' financial knowledge; similarly there is a small, positive effect on attitudes. As discussed above, the change in behaviour is very small, with an effect size of just 0.01.

## Teacher feedback on the positive impact

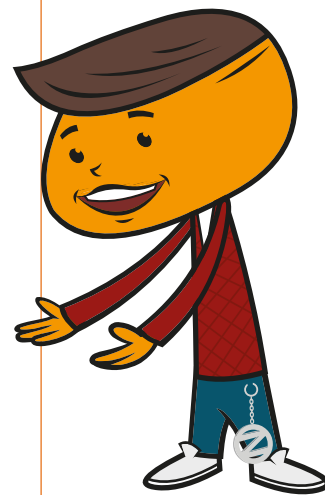
"A meritorious curriculum and propitious experience for the students and teachers as well. Fabulous :)"

"Not only for English subject, language is the barrier."

"This programme created awareness on Earn, Save, Spend and Donate. Donate was something new for the Year 5 Pupils. They realized that we need to help the needy."

"It's good for my students' knowledge."

"Good topic for pupils to learn."



<sup>5</sup> Kaiser and Menkhoff (2020) Financial education in schools: A meta-analysis of experimental studies

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 scores after participating – this is to be expected given the relatively small changes between before and after scores.

The vast majority of students in Malaysia are aged 11, but there is no significant difference in outcomes for students who are older or younger after taking into account any differences in initial scores, gender and year.

Girls achieve slightly more than boys in Malaysia after taking into account the other factors.

The results show that students of the same age, gender and prior ability had different outcomes depending on which year they participated. Outcomes in terms of attitudes and behaviour were a little lower in 2019-20 than they had been previously; whilst knowledge outcomes were lower between 2017-19.

These findings suggest that teachers in Malaysia have implemented the Cha-Ching curriculum in a way that has benefitted students to some extent. They have had a positive impact on students' knowledge and attitudes. Considering the analyses from other countries, it could be interesting to offer the curriculum to younger age groups in future, and to develop local language materials.

**Figure 6**

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

<b>Knowledge</b>	<b>High knowledge scores</b>	<b>Low knowledge scores</b>
	<ul style="list-style-type: none"> <li>- Students participating in 2016-2017 and 2019-2020</li> <li>- Students with high before-test on knowledge, attitude and/or behaviour scores</li> <li>- Girls</li> </ul>	<ul style="list-style-type: none"> <li>- Students participating in 2017-2018 and 2018-2019</li> <li>- Students with low before-test on knowledge, attitude and/or behaviour scores</li> <li>- Boys</li> </ul>
<b>Attitude</b>	<b>High attitude scores</b>	<b>Low attitude scores</b>
	<ul style="list-style-type: none"> <li>- Students participating in 2016-2019</li> <li>- Students with high before-test on knowledge, attitude and/or behaviour scores</li> <li>- Girls</li> </ul>	<ul style="list-style-type: none"> <li>- Students participating in 2019-2020</li> <li>- Students with low before-test on knowledge, attitude and/or behaviour scores</li> <li>- Boys</li> </ul>
<b>Behaviour</b>	<b>High behaviour scores</b>	<b>Low behaviour scores</b>
	<ul style="list-style-type: none"> <li>- Students participating in 2016-2019</li> <li>- Students with high before-test on attitude and/or behaviour scores</li> <li>- Girls</li> </ul>	<ul style="list-style-type: none"> <li>- Students participating in 2019-2020</li> <li>- Students with low before-test on attitude and/or behaviour scores</li> <li>- Boys</li> </ul>

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 R<sup>2</sup> knowledge 0.10; attitude 0.15; behaviour 0.21.





## 2021 Cha-Ching Review: Asia

Independent review by Dr Adele Atkinson

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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  
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