



2021 Cha-Ching Review: Indonesia

Independent review by Dr Adele Atkinson



Acknowledgements

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

Teacher support for the curriculum materials and teacher training

“With the introduction of curriculum cha-ching programs, children know how difficult it is to get money. So children are eager to save so that what they want is achieved.”

“Cha-ching curriculum helps students to manage finances early by prioritizing needs rather than desires.”

“Dare to encourage them to be able to live productively and be part of economic change.”

“Developed in the form of video is somewhat easier to understand.”



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

"Very satisfying program."

"Recommend friends and family because this program is very good at learning and understanding how to manage money well."

"Very impressed."

"This Cha-Ching program is already good, it's just that more time must be spent so that children are really used to using money wisely."

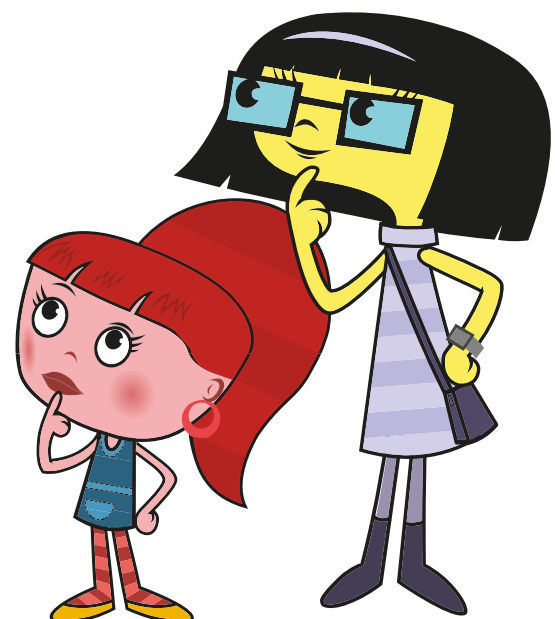


Reviewer observations

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 outcomes of students participating in the Cha-Ching curriculum in Indonesia. The Ministry of Education in Indonesia has endorsed the Cha-Ching curriculum. Indonesia has also had a National Strategy on Financial Literacy since 2013, which identifies school students as a target group.³ The most recent version of the strategy is broad, covering topics such as Sharia financial literacy, financial inclusion, digital financial services and financial planning.

The evaluation data includes a total of 72,076 students receiving the Cha-Ching curriculum in schools in Indonesia: 53,976 students from 2017-2018; 6,006 from 2018-2019; 12,094 from 2019-2020. The variation across years reflects changes in the evaluation method rather than changes in the numbers of students.

In Indonesia, the students were typically 10, but 18% were aged 8 or 9. Almost all were in Grade 3.



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 [2019-financial-education-in-apec-economies.pdf \(oecd.org\)](https://www.oecd.org/2019-financial-education-in-apec-economies.pdf)

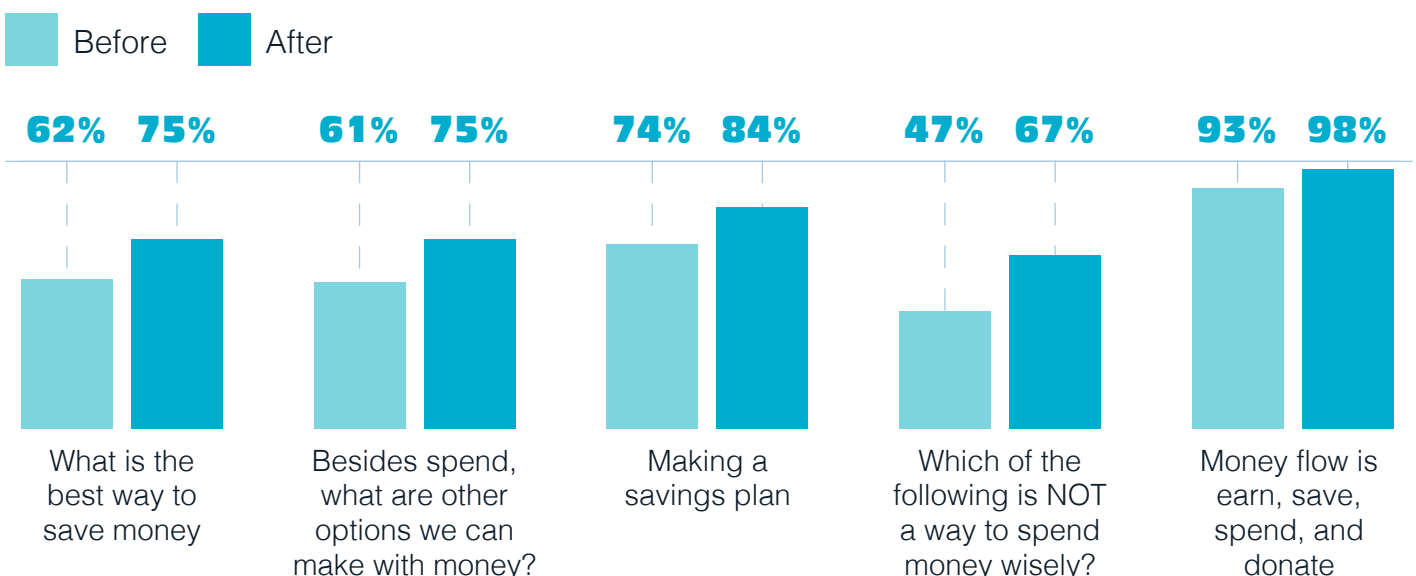
Student Knowledge

Figure 1 shows students' knowledge before and after participating in the Cha-Ching curriculum.⁴ More students gave correct responses to the repeated knowledge questions after participating in the 6 lessons, indicating learning across the topics tested. Interestingly, the vast majority of students answered the question regarding money flow correctly even before participating, leaving little room for improvement.



Figure 1

Financial knowledge in Indonesia 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

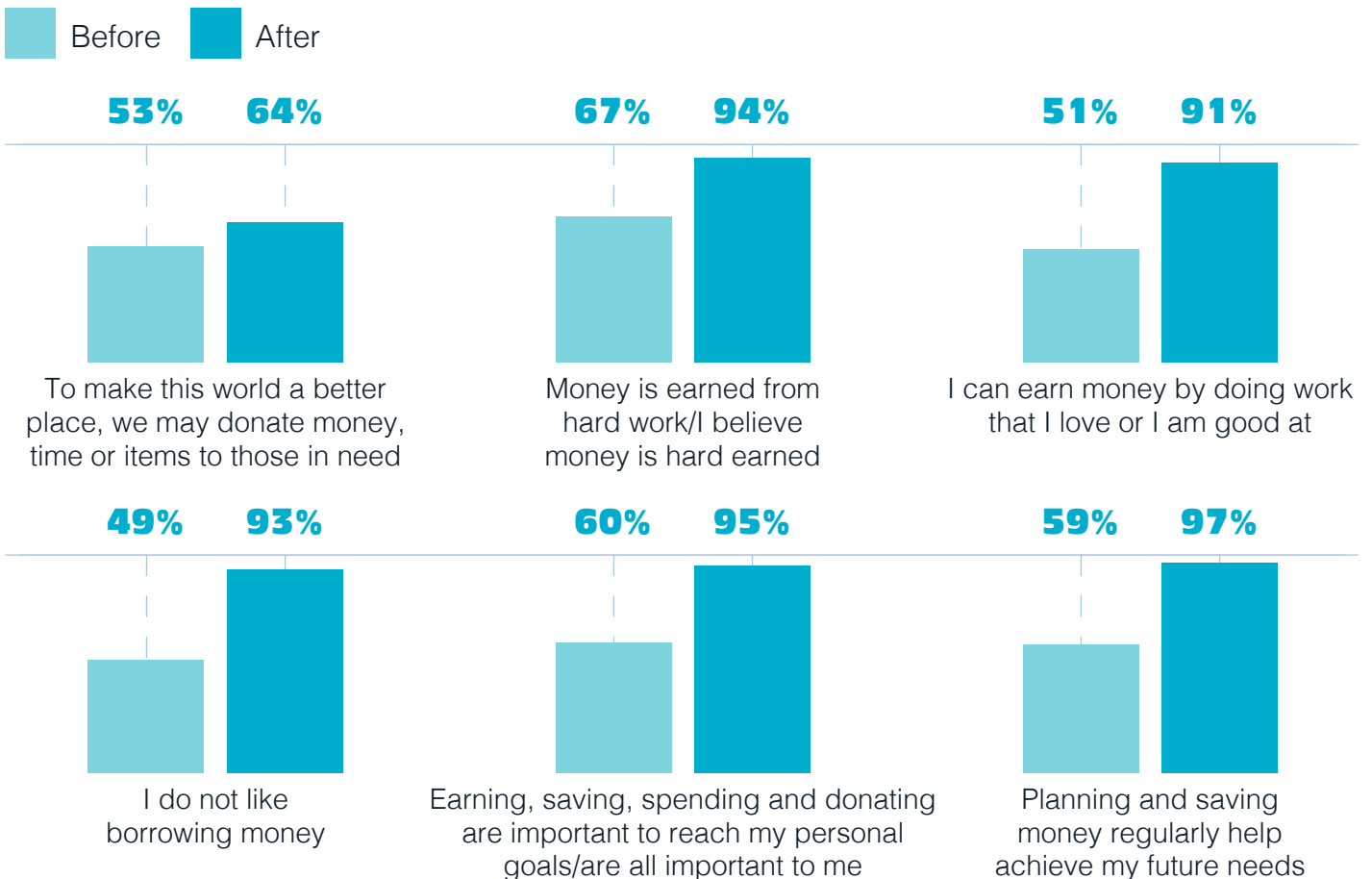
Several questions provide insights into the students' financial attitudes before and after participating in the Cha-Ching curriculum.

Figure 2 shows that before participating, some attitudes were more commonly held than others. In general, students were most likely to associate earning with hard work (67%).

After participating, average attitude scores increased, indicating that students became far more positive, although there remained some reticence in terms of believing that we can make the world a better place by donating, relative to the other attitudes. The very large improvement in attitudes towards credit is particularly interesting given that this is not explicitly covered in the curriculum; it suggests that the students started to think about money in a more mature way.

Figure 2

Financial attitudes in Indonesia 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'.

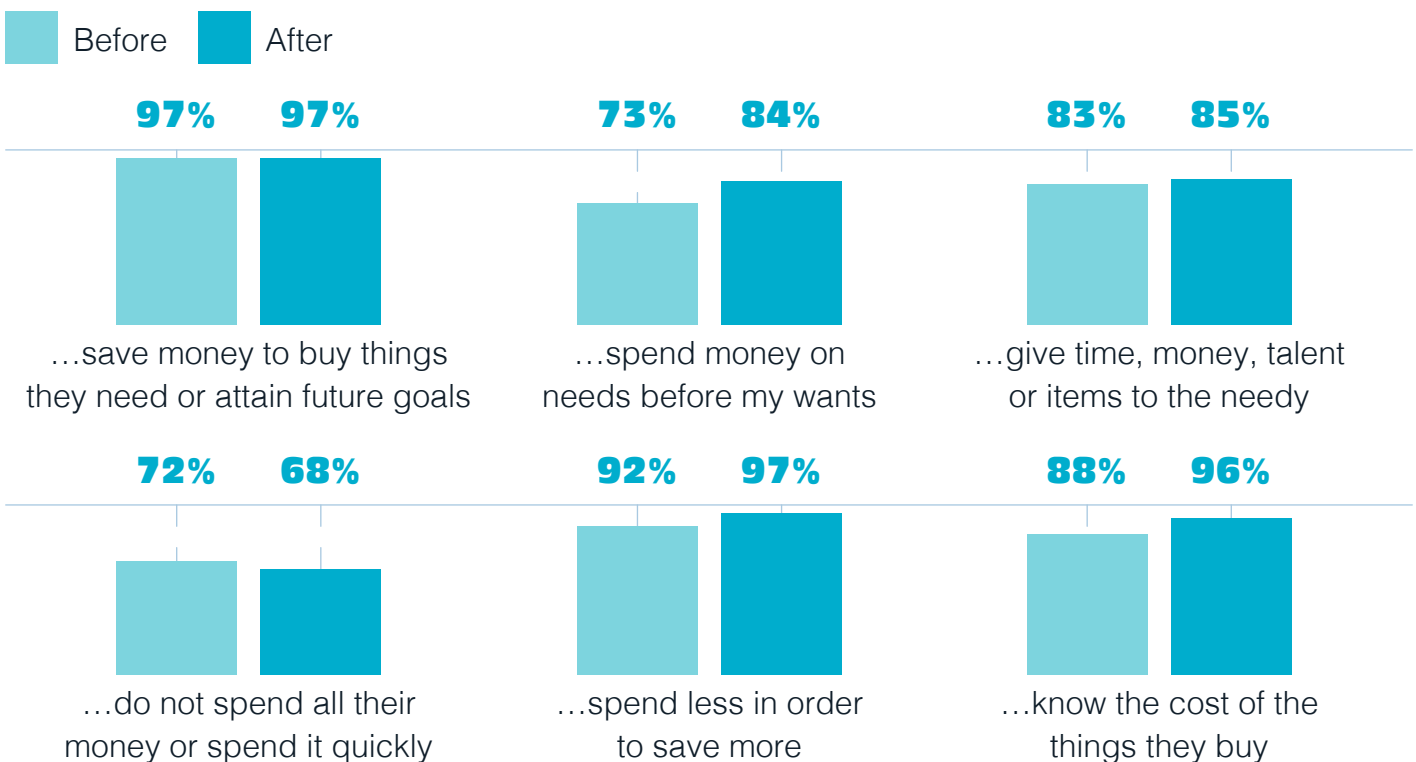
Student Behaviour

The questionnaire includes several 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 almost all students in Indonesia were saving before participating in the Cha-Ching curriculum. However, a smaller proportion (72%) reported that they do not spend all their money, or they do not spend it quickly, and this fell to 68% after completing the programme. This may suggest that the wording of the question caused some misunderstanding but given that there was also an increase in students saying they know the cost of things they buy, they may also have started to become more active in using their money. This could be explored further through qualitative research.

Figure 3

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

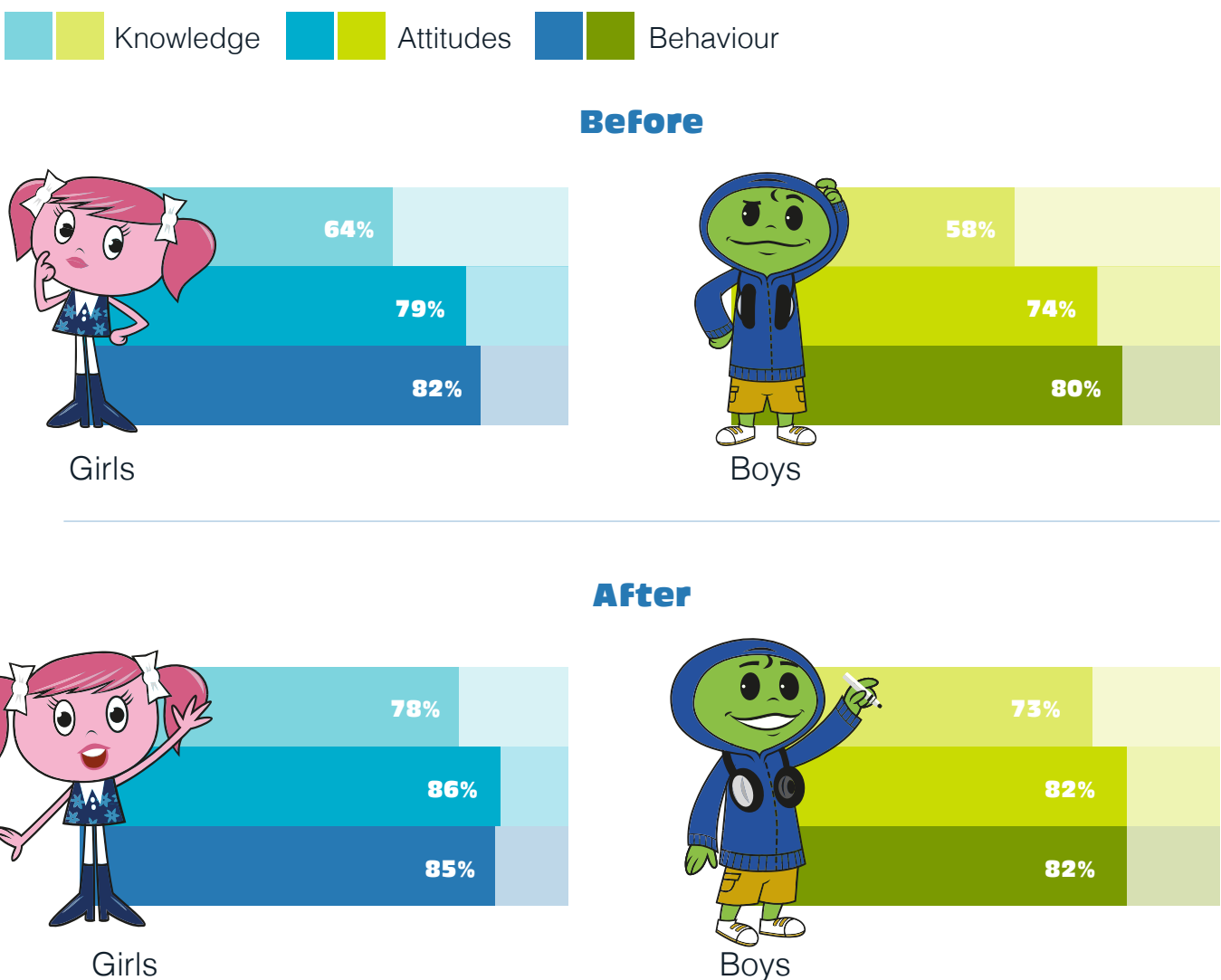


Note: The responses are reversed before analysis if necessary, to indicate positive behaviors. However, the negative wording may have made it harder for some students to understand the question and may have influenced responses to the 4th question above

Figure 4 shows improvements in knowledge, attitude and behaviour after completing the Cha-Ching curriculum. Before participating, more girls than boys achieved full marks on knowledge, attitudes and behaviours, and whilst both boys and girls improved their scores, girls maintained their lead.

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 Indonesia makes it clear that students are learning more about financial matters and improving their financial attitudes and financial behaviour more than what would be expected if they had not participated in the Cha-Ching curriculum.

Figure 5

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

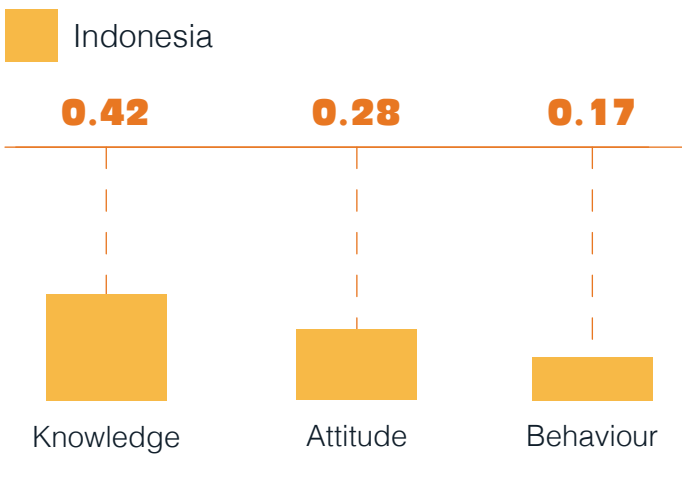
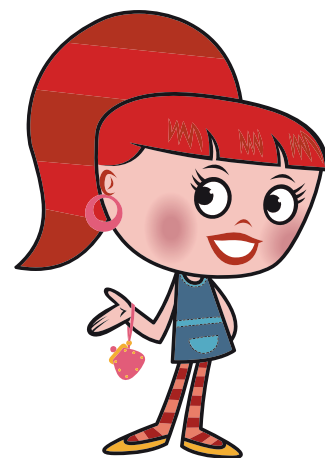


Figure 5 reports the size of the impact of Cha-Ching on students using a measure that is often used to discuss the impact of teaching because it can be compared across different curricula. It is called the 'effect size'.⁵



⁵ 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).⁶ Since the effect size of Cha-Ching on financial knowledge in Indonesia is 0.42 SD it is clear that Cha-Ching is having a larger than expected effect on students' financial knowledge. It is also having a positive effect on attitude and behaviour.

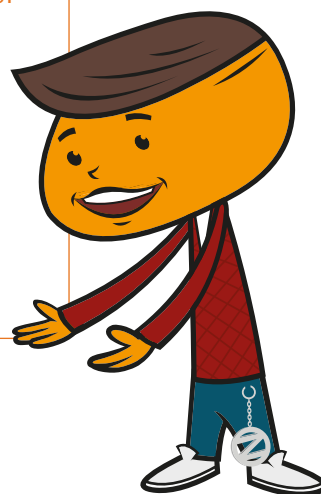
Teacher feedback on the positive impact

"The program provides students with knowledge and habituation of good money management."

"Highly recommended to be able to distinguish between needs and desires."

"It can expand the development of knowledge in using money better."

"I hope Indonesian children can manage finances."



⁶ 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 after taking into account other factors, there remains a significant relationship between financial knowledge, attitudes and behaviour before and after participating in the Cha-Ching curriculum.

The results also show that, other things being equal, students' outcomes knowledge and attitude scores after participating in Cha-Ching were better in 2019-20 than they had been previously, whilst the opposite is true for behavioural outcomes. Boys improved their knowledge more than girls of the same age with the same initial scores, whilst girls improved their attitudes and behaviour more than boys. Older students increased knowledge and attitudes slightly more than younger ones even after taking into account their initial scores, but this was not the case for behaviour, where a slightly larger increase was observed among the younger participants.

These findings suggest that teachers in Indonesia have successfully implemented the Cha-Ching curriculum. They have had a positive impact on the financial literacy of students, increasing knowledge, attitudes and behaviour. The impact in Indonesia is relatively large compared with the average impact of financial education globally, and with the exception of behaviour change, it appears to be getting larger over time.

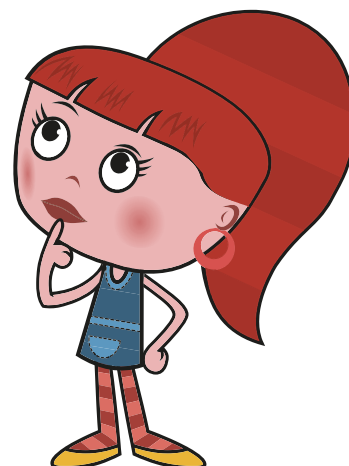


Figure 6

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 2019-2020 - Students aged 10 - Students with high before-test on knowledge, attitude and/or behaviour scores - Boys 	<ul style="list-style-type: none"> - Students participating prior to 2019-2020 - Students aged less than 10 - Students with low before-test on knowledge, attitude and/or behaviour scores - Girls
Attitude	High attitude scores	Low attitude scores
	<ul style="list-style-type: none"> - Students participating in 2019-2020 - Students aged 10 - Students with high before-test on knowledge, attitude and/or behaviour scores - Girls 	<ul style="list-style-type: none"> - Students participating prior to 2019-2020 - Students aged less than 10 - Students with low before-test on knowledge, attitude and/or behaviour scores - Boys
Behaviour	High behaviour scores	Low behaviour scores
	<ul style="list-style-type: none"> - Students participating prior to 2019-2020 - Students aged less than 10 - Students with high before-test on knowledge, attitude and/or behaviour scores - Girls 	<ul style="list-style-type: none"> - Students participating in 2019-2020 - Students aged 10 - Students with low before-test on knowledge, attitude and/or behaviour scores - Boys

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 0.06; behaviour 0.27.



2021 Cha-Ching Review: Asia

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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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