PISA 2022

Woodlem Park School L.L.C

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PISA 2022 School Report

PISA Background

PISA (Programme for International Student Assessment) is an assessment designed to evaluate education systems worldwide by testing the skills and knowledge of students nearing the end of compulsory education.In other words,it is designed to assess students who are preparing to proceed to either post-secondary education or the labour market.This differs from other international assessments in that it tests students at age 15 rather than assessing by grade level. TIMSS, for example, tests students in both grades four and eight regardless of the age of the student.

PISA was developed by the OECD in response to the demand by member countries for consistent and trustworthy data on the knowledge and skills of their students and the performance of education systems around the globe. Development of the assessment began in the mid-1990s and the first cycle was conducted in 2000.

Every three years, fifteen-year-old students from randomly selected schools in participating economies take assessments in three core domains: reading, mathematics, and science. Additionally, each cycle of PISA focuses on one domain in greater detail, taking up nearly two-thirds of the testing time. The results allow for a deeper dive into student learning and performance in that domain. PISA 2022 was the eighth cycle of PISA. Around 700,000 students in 81 global economies took part; this represented around 29 million 15-year-olds. Although PISA covers the three domains, for this cycle, mathematical literacy constituted the major one. This led to an in- depth analysis of mathematical literacy and the reporting of results by knowledge and system subscales.

Indeed, mathematical literacy was the domain of focus during Dubai's participation in PISA in 2012, and because PISA 2022 once more focused on this subject, this allowed for the comparison of student performance in mathematics in a more detailed way through insightful trend analysis.

In addition to the assessments, PISA also collects information in the form of questionnaires at the school, teacher, and student level. In PISA 2022, specific attention was also given to collecting data on student well-being and financial literacy as an additional domain.

The results from PISA provide very useful information to school leaders. During the annual quality assurance (inspection) process, amongst other things, KHDA evaluates the extent to which schools have made effective use of the data outlined in fully, analytical reports sent to them; adapting the curriculum and bringing sharper language, science and mathematical skills and conceptual knowledge focus to lesson planning. Leaders are expected to use these school level reports to study strengths and gaps in the achievement of their students across the three domains. They are then able to compare the achievement of students in their own school with international benchmarks. Leaders are also expected to compare the achievement of their own students with that of students in other schools in Dubai and, most appropriately with other schools in Dubai following a similar curriculum.

These analyses will help school leaders and teachers match the content of lessons and the broader curriculum to the identified needs of students in the school. The inspectors' judgements about students' attainment and progress, assessment, leadership and self-evaluation will to some extent be informed by each school's effective use of PISA data information, alongside other international and standardised benchmark assessment data.

UAE VISION 2021: First Rate Education

Understanding the value of a first-rate education system and global benchmarks, student achievement on international assessments such as PISA and TIMSS has been included by the leadership of the UAE as part of the UAE Vision 2021 National Agenda.

The following goals have been set by His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai in regard to student performance on these two international assessments:

☐ The UAE will be ranked among the 20 highest performing countries in PISA
☐ The UAE will be ranked among the 15 highest performing countries in TIMSS

Education Indicators & Targets

There are eight education related indicators and targets, two of which are related to international assessments.This report focuses on PISA

Index	INDICATOR	TARGET
1	**Average TIMSS Score**	**Among the top 15 countries**
2	**Average PISA Score**	**Among the top 20 countries**
3	Upper Secondary Graduation Rate	98%
4	Enrolment Rate in Preschools (public and private)	95%
5	% of Students with High Skills in Grade 9	90%
6	% of Schools with High Quality Teachers	100%
7	% of Schools with Highly Effective School Leadership	100%
8	Enrolment Rate in Foundation Year	0%

* PISA 2022 results still continue to contribute towards UAE Vision 2021

Your PISA Targets

Based upon your PISA 2022 results, as an individual school you are now presented with new targets to further raise the performance of your school, in PISA during the next cycle, in 2025. The targets for your school for the three domains in PISA are given in the table below.

Although, the individual targets may appear aspirational, the detailed information presented in this report should provide you with a full understanding of your students' performances in PISA. Therefore, it is important that school leaders use all the data presented in the different sections of this report to plan for meeting these targets .

It is therefore crucial for school leaders to use all the data presented in different sections of this report to plan strategically, to meet these targets. The plans and progress made towards achieving these targets will be assessed during the next DSIB quality assurance visit (inspection).

PISA 2025 Targets			
PISA Domains	**Mathematics**	**Science**	**Reading**
Your PISA 2025 Targets	475	494	464
Actual PISA 2022 Scores	440	469	424

KHDA continues to monitor each school's performance against their targets during annual school inspections. In 2015, KHDA launched the National Agenda Parameter (N.A.P), which is a method for continuously measuring and monitoring schools' progress towards achieving their individual targets in international assessments (PISA,TIMSS and PIRLS). This is done through the use of externally set, marked and moderated standardised, benchmark assessments that meet stringent requirements set out in a previously released circular.

Inspectors evaluate:

• Self-evaluation (SEF) and action plans based on the most recent set of results
• The quality of data analysis received from N.A.P and use of these to adapt the curriculum and to personalise learning for individual students.
• The impact of curriculum modification and the personalised adaptation of teaching plans on the learning skills and achievements of students.
• The validity of each school's assessment methods, so that progress towards targets can be accurately and reliably measured.
• The specific progress students are making towards targets in mathematics, reading and science - the differences in the progress of girls and boys and between Emirati and expatriate students.

Woodlem Park School L.L.C

Summary

School Profile:

School Type	🏫	Private
School Curriculum		Indian
Location		Dubai
Number of Students Assessed in PISA		6

Students Sample at your school

The sampling design used for the PISA assessment is a two-stage stratified sample design. The first-stage sampling units consists of individual schools with 15-year-old students. Schools are sampled systematically from a comprehensive national list of all eligible schools, known as the sampling frame. Prior to sampling, schools in the sampling frame were assigned to mutually exclusive groups based on school characteristics called explicit strata, created to improve the precision of sample-based estimates and to ensure representation of students in various school types.

The second-stage sampling units are students within sampled schools. Once schools are selected to be in the sample, a complete list of each sampled school's 15-year-old students is prepared. The students are selected to be representative of the students in the population, and weights are used to adjust for any differences arising from intended features of the design (e.g. to over-sample minorities) or non-participation by students who were selected. In this way we can provide measures of achievement for the population, based on the responses of a sample of students, along with the confidence interval to indicate the precision of those measures.

Overall Performance

Domain	Score	Proficeincy level
Mathematical Literacy	440	Level 2
Science Literacy	469	Level 2
Reading Literacy	424	Level 2

	Level 6	High Performers
	Level 5	
	Level 4	Middle Performers
	Level 3	
	Level 2	
	Level 1	Low Performers
	Below Level 1	

How well did your students achieve compared to their peers in Dubai?

	Comparing your students' results to average results in:				
	Your School Score	Dubai private schools Average	Difference from the Vision 2021 National Target	Difference from the OECD Average	Top performing country and its score
Mathematics	440	497	-70	-32	Singapore (575)
Science	469	503	-41	-16	Singapore (561)
Reading	424	498	-86	-52	Singapore (543)

Vision 2021 National Target : 510

OECD Average : Mathematics (472) Science (485) Reading (476)

YOUR STUDENTS' ACHIEVEMENT COMPARED TO THEIR PEERS IN PRIVATE SCHOOL OF DUBAI
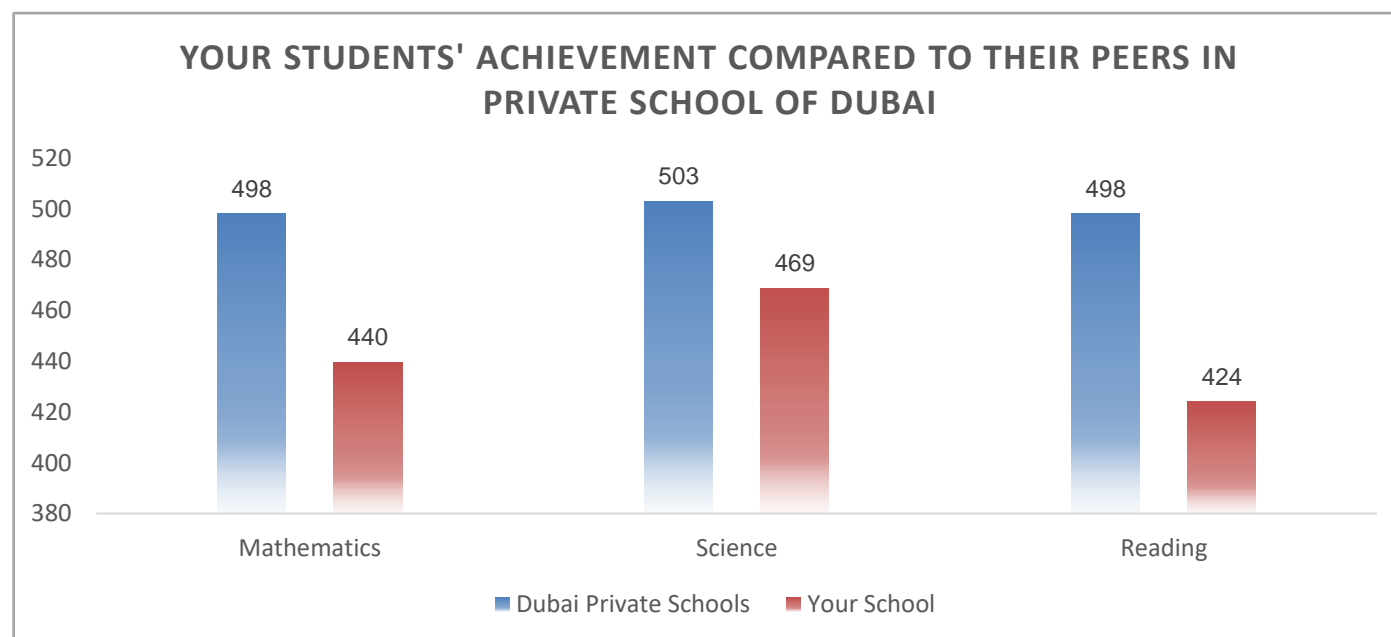
Performance of students in private schools in Dubai based on the curriculum

Curriculum	Mathematics	Science	Reading
Private - UK	516	523	521
Private - Indian	526	534	536
Private - IB	535	538	528
Private - US	453	458	448
Private - MOE	421	420	399

How well did your students achieve against proficiency levels?

This chart shows the distribution of your students across each of the OECD proficiency levels. Students whose scores fell in Levels 5 and 6 were considered "High Achievers" in contrast to those whose scores fell in Level 1 and below and were considered to be "At risk" students.

Distribution across proficiency levels (%)

	Mathematics	Science	Reading
■ Level 6			
■ Level 5		5	2
■ Level 4	2	32	10
■ Level 3	25	53	45
■ Level 2	33	10	40
■ Level 1	28		3
■ Below Level 1	12		
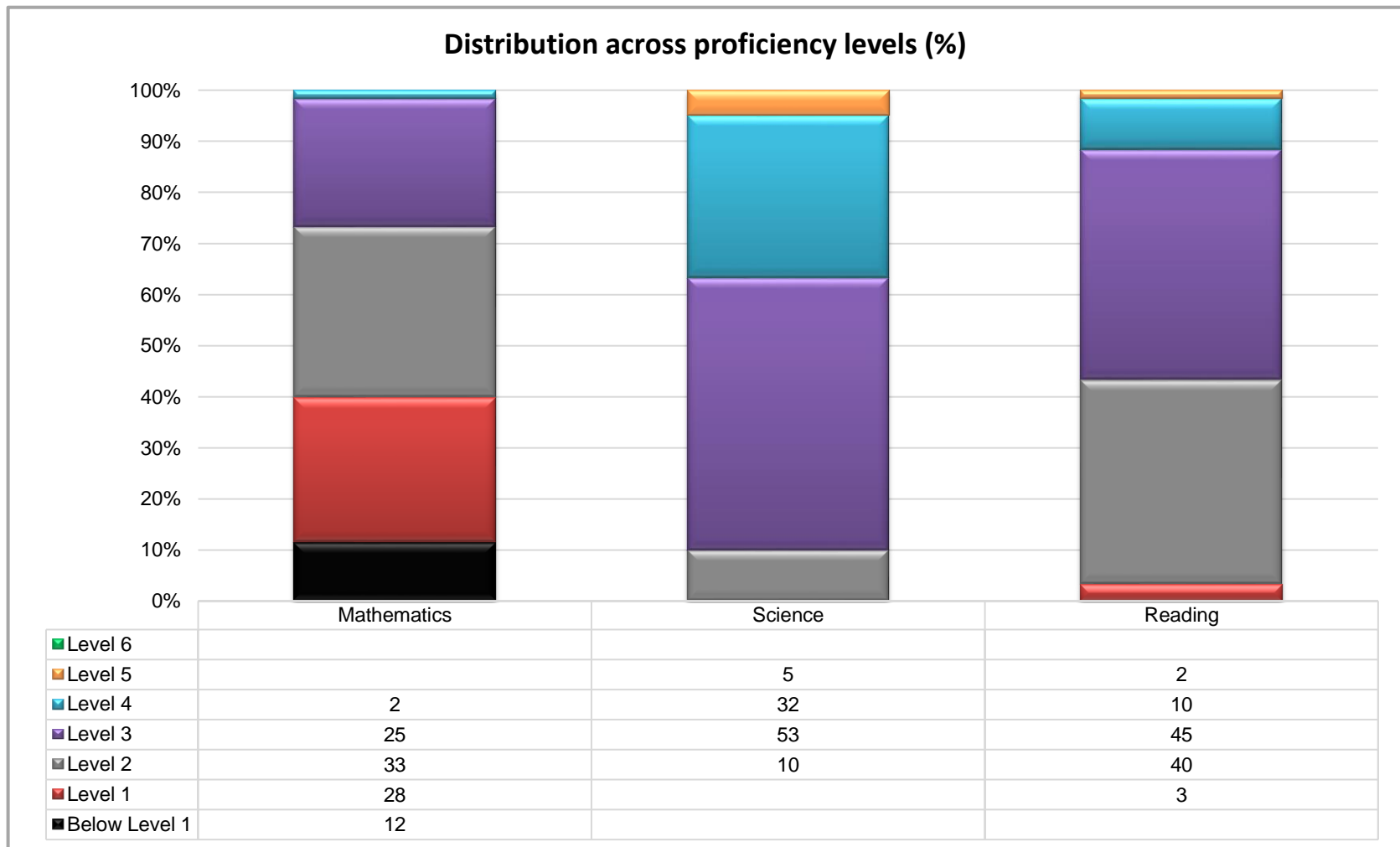
*The total values might not add up to 100% due to system rounding

PISA proficiency levels boundaries

Proficiency levels		Mathematics	Science	Reading
High Performers	Level 6	669	708	698
	Level 5	607	633	626
Middle Performers	Level 4	545	559	553
	Level 3	482	484	480
	Level 2	420	409	407
Low Performers	Level 1	358	335	335
	Below Level 1	<358	<335	<335

* Please refer to the Appendix for full descriptions of the proficiency levels

Change Over Time

The chart below compares your students' average scores over the last four cycles of PISA

PISA scores from 2012 to 2022

	Mathematics	Science	Reading
2022	440	469	424

Legend: 2012, 2015, 2018, 2022
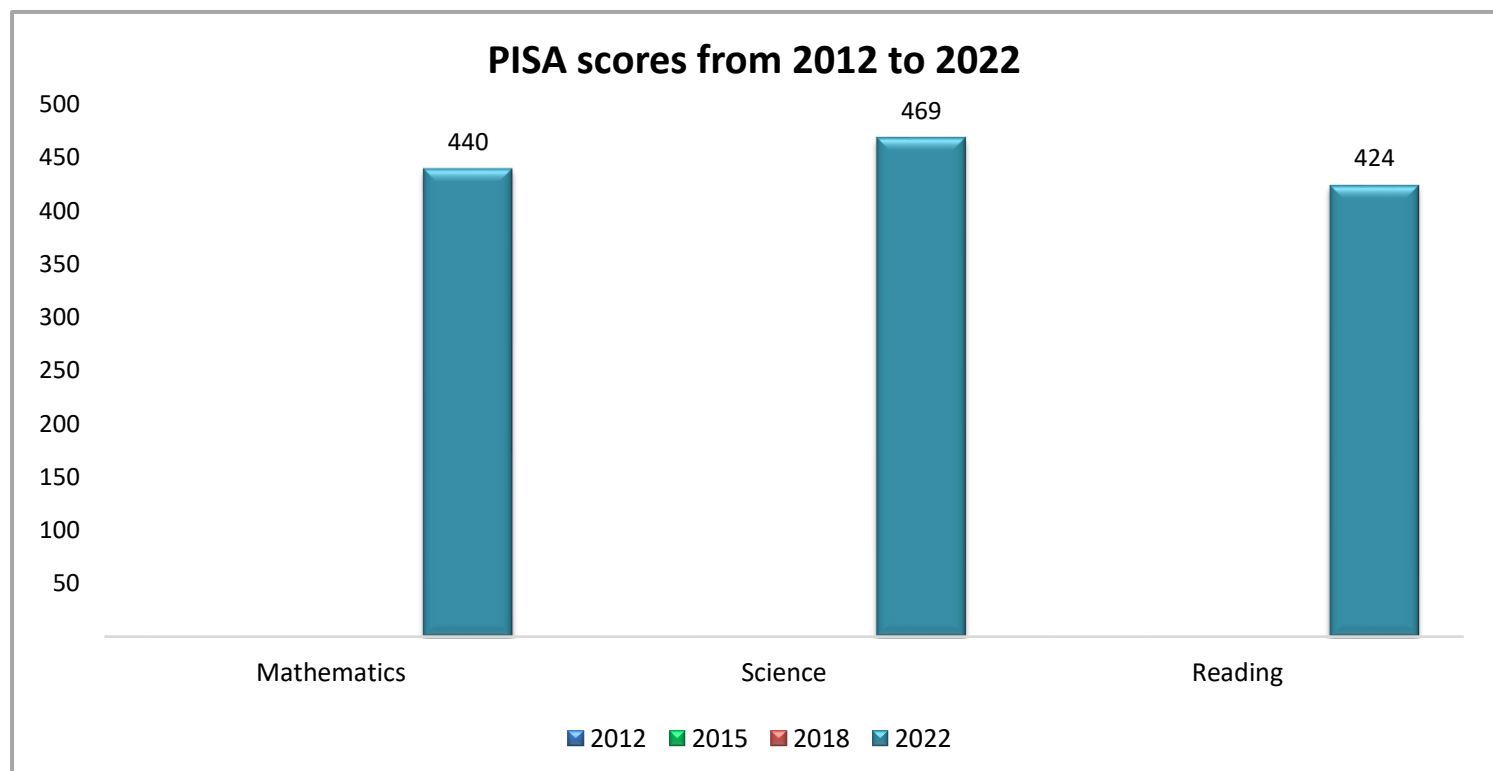
How does achievement at your school vary by gender?

This bar chart indicates the performance of female and male in your school

Gender	Female students	Male students
Number of students in Sample	1	5

Achievement by Gender (Average Score)

	Mathematics	Science	Reading
Female	344	413	402
Male	459	480	428
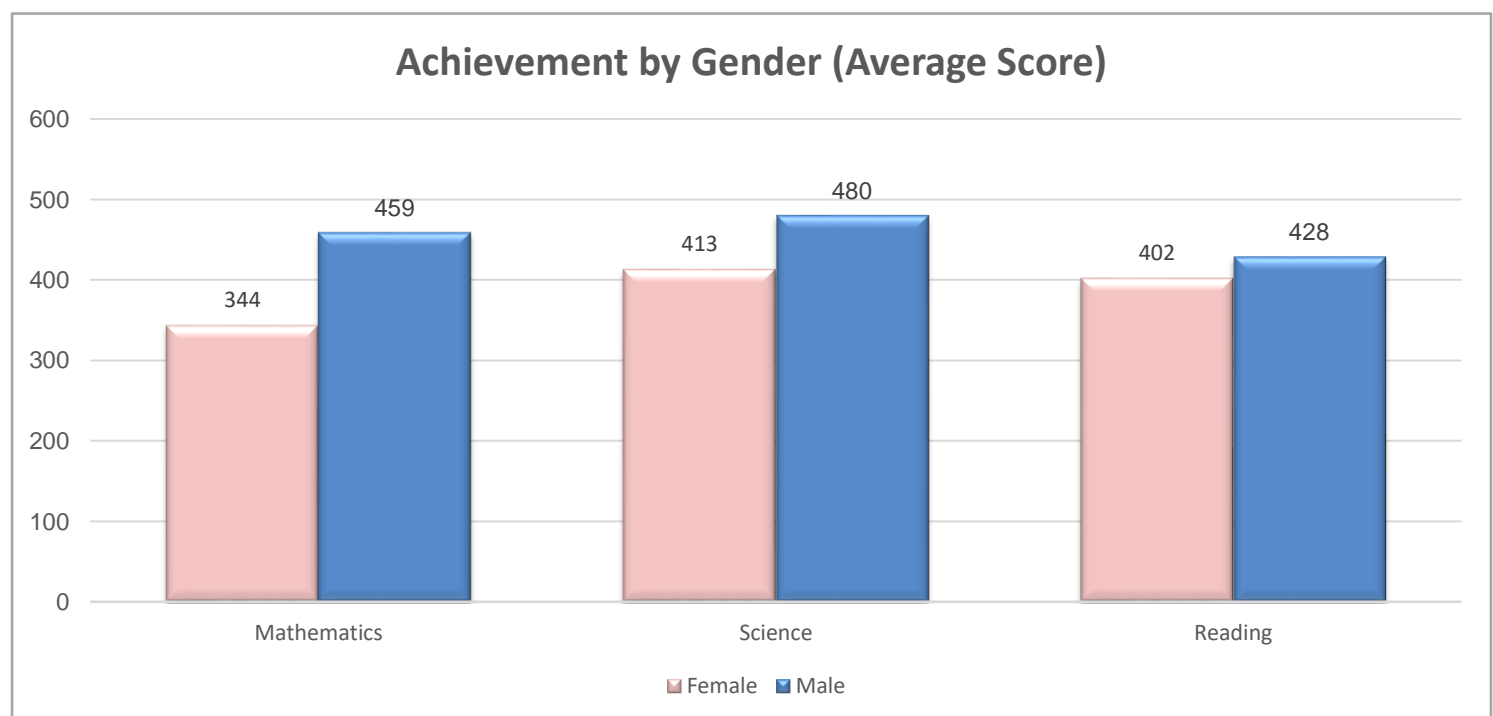
**Not Applicable if students with one gender in sample and schools with single gender

PISA 2022 Major Domain : Mathematics Literacy

Mathematics Processes

The assessment of mathematics had particular significance for PISA 2022, as mathematics was the major domain assessed. The new PISA 2022 mathematics framework considers that large-scale social changes such as digitalisation and new technologies; the ubiquity of data for making personal decisions; and the globalising economy have reshaped what it means to be mathematically competent and well-equipped to participate as a thoughtful, engaged, and reflective citizen in the 21st century. These broad categories are based on the mathematical phenomena that involve different kinds of mathematical thinking and relate to mathematics curriculum in schools. The four content categories are:

Mathematical reasoning: This is the capacity to use mathematical concepts, tools, and logic to conceptualise and create solutions to real-life problems and situations. It involves recognising the mathematical nature inherent to a problem and developing strategies to solve it.Mathematical reasoning includes deductive and inductive reasoning. While reasoning underlies the three mathematical processes described below, it nonetheless is different from them in that reasoning requires thinking through the whole problem-solving process rather than focusing on a specific part of it

Formulating: In this,students can recognise or identify the mathematical concepts and ideas underlying problems encountered in the real world, and then provide mathematical structure to the problems (i.e. formulate them in mathematical terms). This translation – from a contextualised situation to a well-defined mathematics problem – makes it possible to employ mathematical tools to solve real-world problems.

Employing: In this ,students are able to apply appropriate mathematics tools to solve mathematically formulated problems to obtain mathematical conclusions. This process involves activities such as performing arithmetic computations, solving equations, making logical deductions from mathematical assumptions, performing symbolic manipulations, extracting mathematical information from tables and graphs, representing and manipulating shapes in space, and analysing data.

Interpreting and evaluate: For this,students are able to reflect upon mathematical solutions, results or conclusions and interpret them in the context of the real-life problem that started the process. This involves translating mathematical solutions or reasoning back into the context of the problem and determining whether the results are reasonable and make sense in the context of the problem.

Mathematics content domains

Quantity: number sense and estimation; quantification of attributes, objects, relationships, situations, and entities in the world; understanding various representations of those quantifications, and judging interpretations and arguments based on quantity.

Uncertainty and data: recognising the place of variation in the real world, including having a sense of the quantification of that variation, and acknowledging its uncertainty and error in related inferences. It also includes forming, interpreting, and evaluating conclusions drawn in situations where uncertainty is present. The presentation and interpretation of data are also included in this category, as well as basic topics in probability.

Change and relationships: understanding fundamental types of change and recognising when they occur to use suitable mathematical models to describe and predict change. Includes appropriate functions and equations/inequalities as well as creating, interpreting, and translating among symbolic and graphical representations of relationships.

Space and shape: patterns; properties of objects; spatial visualisations; positions and orientations; representations of objects; decoding and encoding of visual information; navigation and dynamic interaction with real shapes as well as representations, movement, displacement, and the ability to anticipate actions in space

How well did your students achieve in each of the Mathematics processes?

Mathematics processes:

	Mathematics processes			
	Formulating	Employing	Interpreting and evaluate	Reasoning
Average score of your students	449	441	433	439
Dubai private schools	499	496	502	494
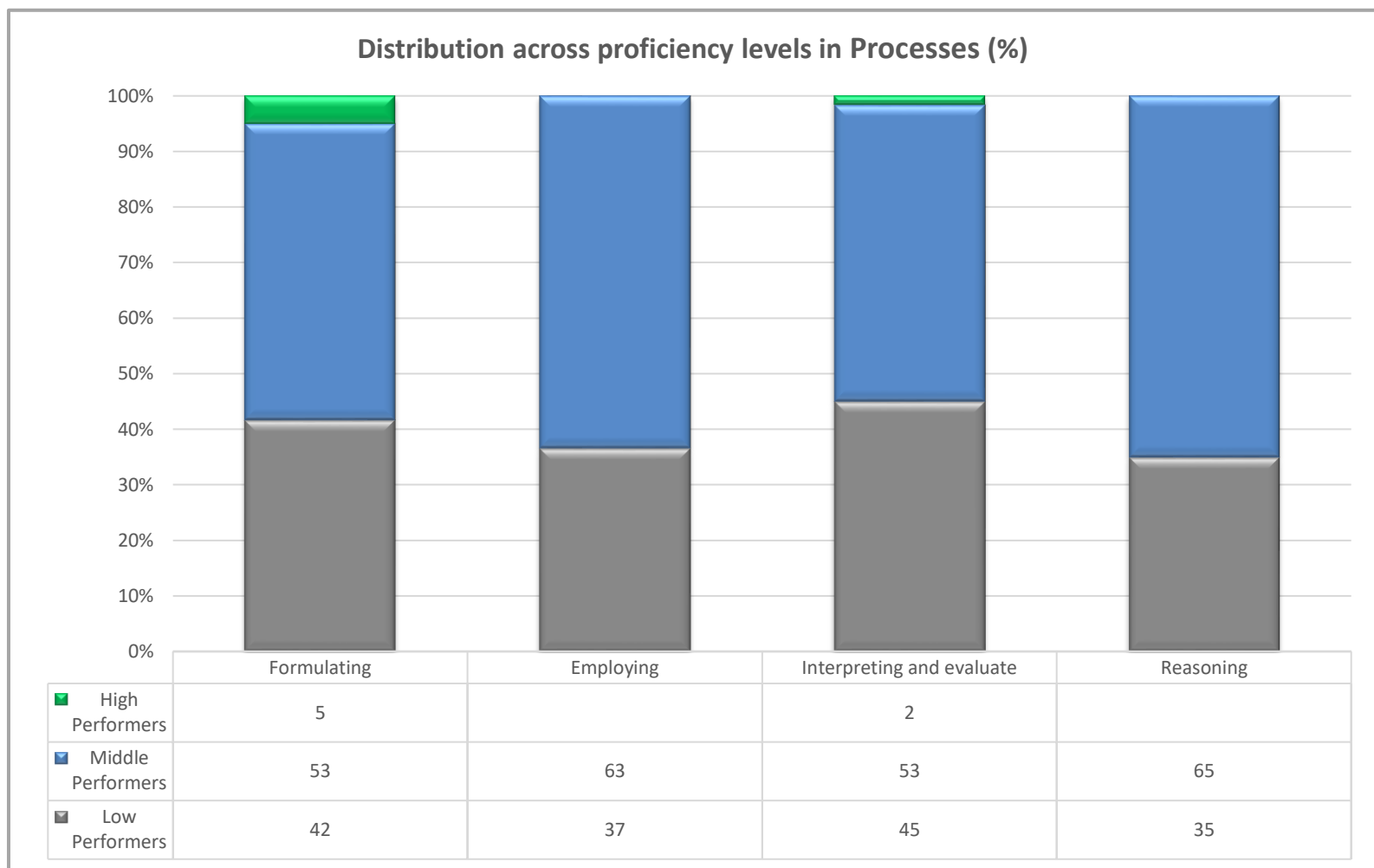
Distribution across proficiency levels in Processes (%)

	Formulating	Employing	Interpreting and evaluate	Reasoning
High Performers	5		2	
Middle Performers	53	63	53	65
Low Performers	42	37	45	35

*The total values might not add up to 100% due to rounding

PISA proficiency levels boundaries

Proficiency levels		Mathematics
High Performers	Level 6	669
	Level 5	607
Middle Performers	Level 4	545
	Level 3	482
	Level 2	420
Low Performers	Level 1	358
	Below Level 1	<358

* Please refer to the Appendix for full descriptions of the proficiency levels

Content Subscale:

	Content Subscale			
	Quantity	Uncertainty and data	Change and relationships	Space and shape
Average score of your students	462	421	466	458
Dubai private schools	502	495	483	503

Distribution across proficiency levels in Processes (%)

		Quantity	Uncertainty and data	Change and relationships	Space and shape
■	High Performers	2		7	3
■	Middle Performers	65	55	57	67
■	Low Performers	33	45	37	30

*The total values might not add up to 100% due to rounding

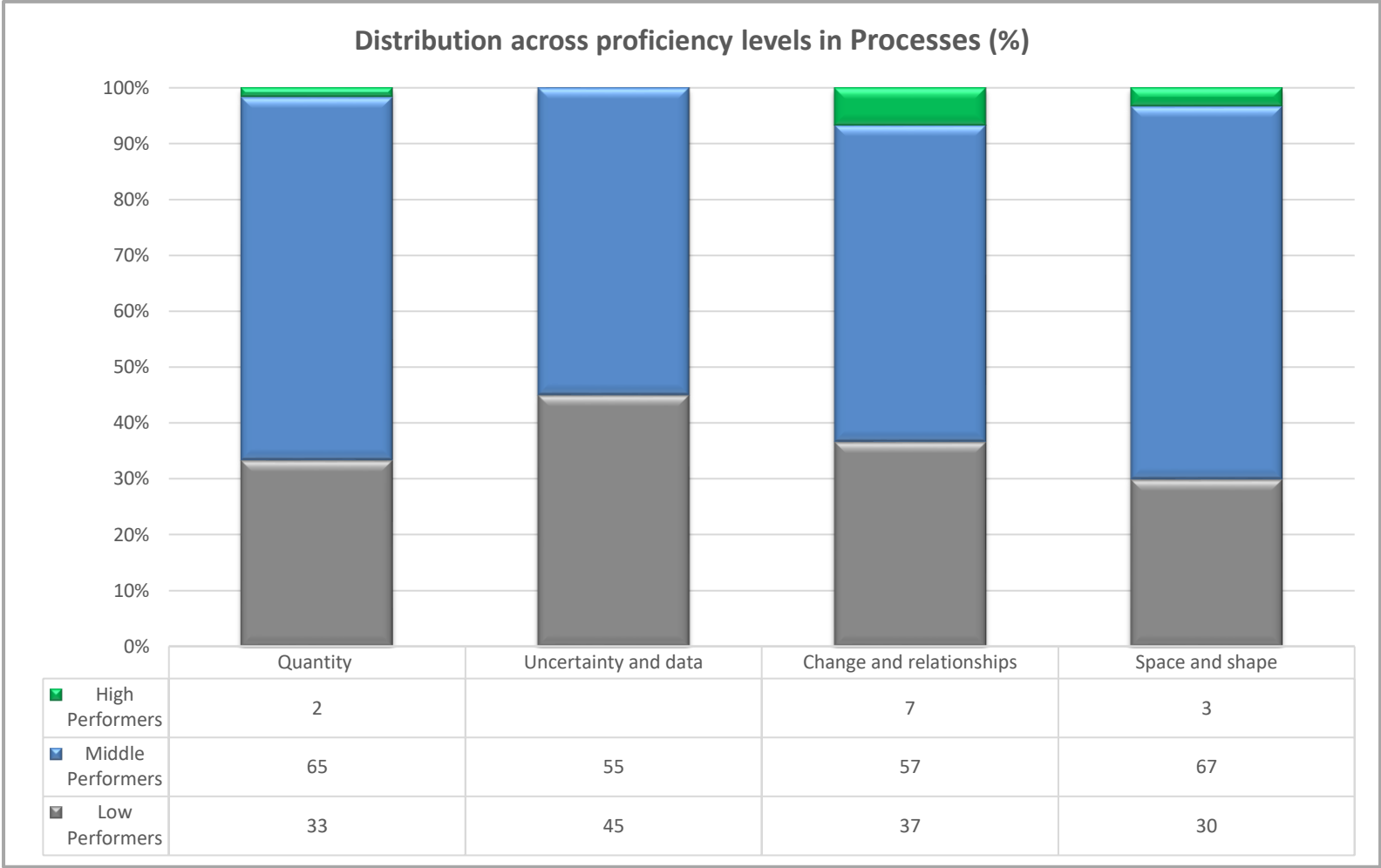## PISA proficiency levels boundaries

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	Below Level 1	<358

* Please refer to the Appendix for full descriptions of the proficiency levels

The performance of Emirati students in your school

The standards of achievement of Emirati students are a very high priority for KHDA and across Dubai there are new, aspirational targets for the performance of the Emirati student cohort in international assessments.

The table below outlines the difference in achievement between Emiratis and expatriate students in your school.

As KHDA continues to prioritise improving the knowledge acquisition and skills development of Emirati students,it is important for schools to work towards improving their skills which will underpin the overall academic performance of this cohort.

Through strategic evaluation and planning and subsequent adaptations to the curriculum and pedagogy,schools must make provision to ensure that Emirati and expatriate students alike go on to make the highest levels of progress in mathematics,science and reading.

Nationality	Score in Mathematics	Score in Science	Score in Reading
Emirati students in your schools	0	0	0
Expatriates students in your schools	0	0	0
Emirati students in private schools	427	428	414
Expected Emirati Students Target in Private schools for 2025	500	500	500

*** Note : there is no comparison of Emirati students against Expatriate student if less than 3 Emirati students for comparision in sample tested because of data restriction

School leaders must understand that these are minimum targets – the expectation is always that the achievements of Emirati students in international assessments work towards at least being in line with those of the whole cohort.

During quality assurance (inspection), schools will be evaluated with respect to closing the gap in performance between Emirati and non-Emirati students.

What did your students have to say?

Students who sat for PISA 2022, answered a background and well-being questionnaire in addition to the test. The test sought information about the students themselves, their home backgrounds and their learning experiences in school.

The questionnaire was divided into six sections encompassing seventy questions in total. In its effort to improve standards and bring to the school's attention certain areas worth prioritising, KHDA has chosen a few of these questions to share with you. Answers to these questions may be relevant to your students' performance. Teachers and school principals need to be able to identify issues that students have. Understanding the problems that students face in their learning should help schools to find impactful solutions.

PISA results clearly indicate that personal drive, motivation, and confidence are essential if students are to fulfil their potentials. Eighty one percent of students in Dubai indicated that they were happy with their schools and the education that they were receiving. Schools should reflect on what these responses are suggesting about provision and respond accordingly.

The charts below reflect the percentage of students in your school who answered to the following questions:

Thinking about your school: to what extent do you agree with the following statement?

Percentage of students who reported how satisfied they were at school

- Totally satisfied: 33
- Satisfied: 67
- Not satisfied: 0
- Not at all satisfied: 0

To what extent do you (the student) agree or disagree with the following statements?

Percentage of students who reported

Legend: Strongly disagree | Disagree | Agree | Strongly agree

Statement	Strongly disagree	Disagree	Agree	Strongly agree
The teachers at my school are respectful towards me	0	0	60	40
The teachers at my school are friendly towards me	0	33	67	0
The teachers at my school are interested in students' well-being	0	25	75	0

This school year, how often did your teacher do the following things in your mathematics lessons?

Percentage of students who reported

Legend: Never or almost never | Less than half of the lessons | About half of the lessons | More than half of the lessons | Every lesson or almost every lesson

Statement	Never or almost never	Less than half of the lessons	About half of the lessons	More than half of the lessons	Every lesson or almost every lesson
The teacher showed us how mathematics can be useful in our everyday lives	0	0	0	20	80
The teacher encouraged us to "think mathematically"	0	0	25	50	25
The teacher taught us how to use mathematical logic when approaching new situations	0	0	50	0	50
The teacher explained how different mathematical ideas connect to a larger context	0	0	25	50	25

What do you (the student) think about Mathematics? Tell how much you agree with each of these statements.

Percentage of students who reported

Statement	Strongly disagree	Disagree	Agree	Strongly agree
Mathematics is one of my favourite subjects with other people	0	33	50	17
Mathematics is easy for me	0	33	67	0
I want to do well in my mathematics class	0	0	67	33

Legend: Strongly disagree, Disagree, Agree, Strongly agree
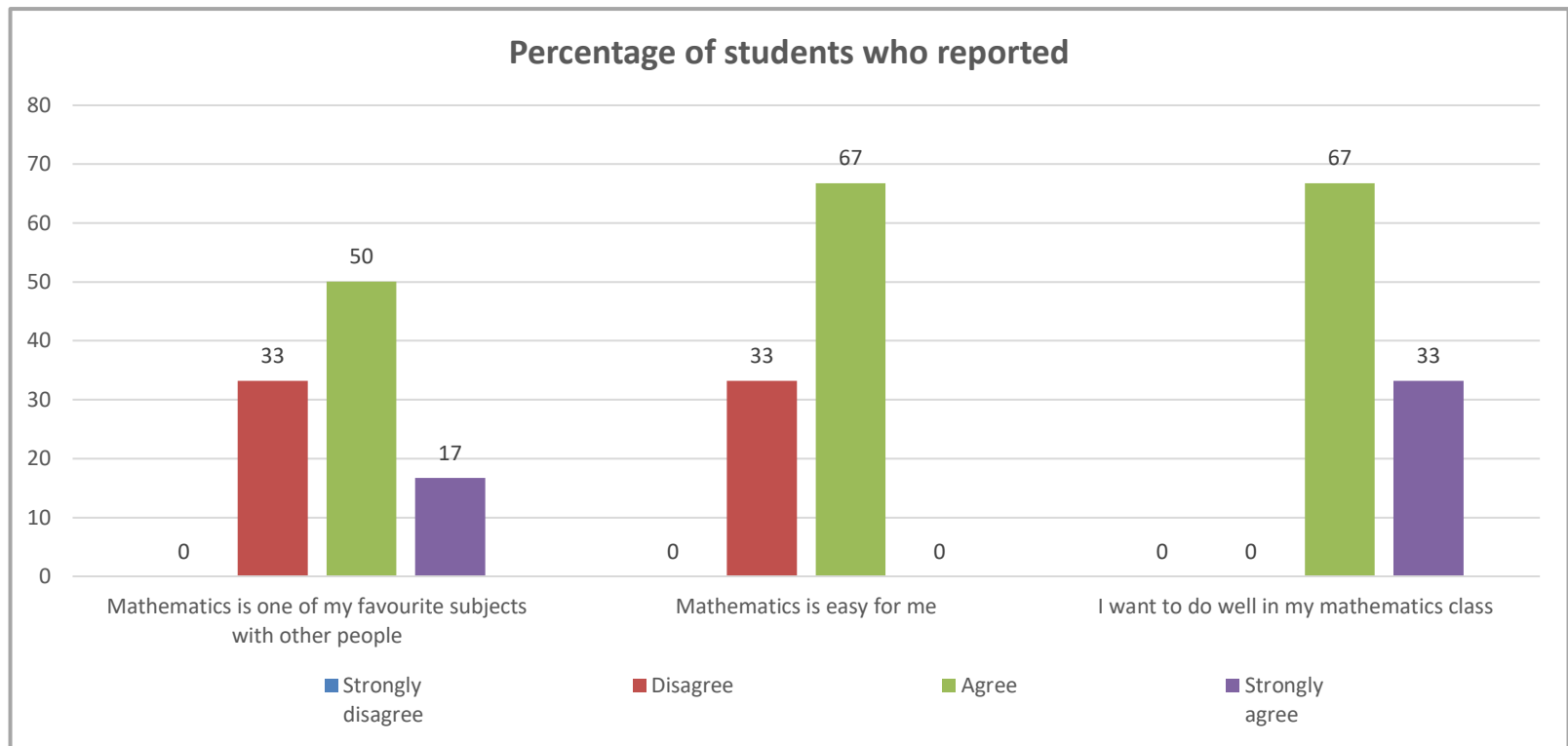
To what extent do you (the student) agree or disagree with the following statements about the time when your school building was closed because of COVID-19?

Percentage of students who reported

Statement	Strongly disagree	Disagree	Agree	Strongly agree
I enjoyed learning by myself	0	0	100	0
My teachers were well prepared to provide instruction remotely for many of my classmates	0	0	100	0
I was well prepared to learn on my own any other subject	0	0	50	50

Legend: Strongly disagree, Disagree, Agree, Strongly agree
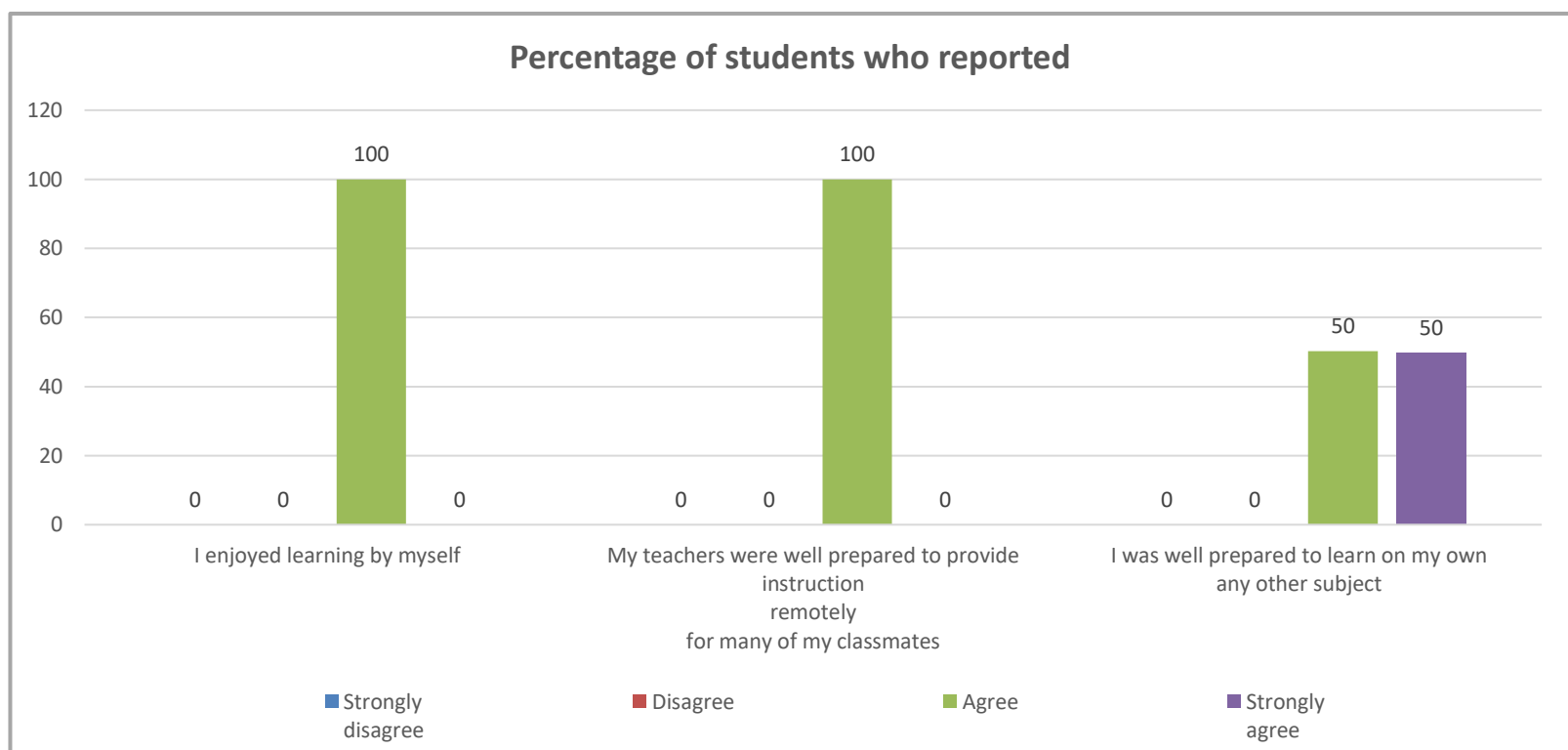
What contributes to students' well-being

PISA 2022 survey included variables reflecting the dimensions of students' psychological, cognitive, material, physical, and social well-being, KHDA has chosen few of these questions to share with you.

The charts below reflect the percentage of students in your school who answered to the following questions from well-being:

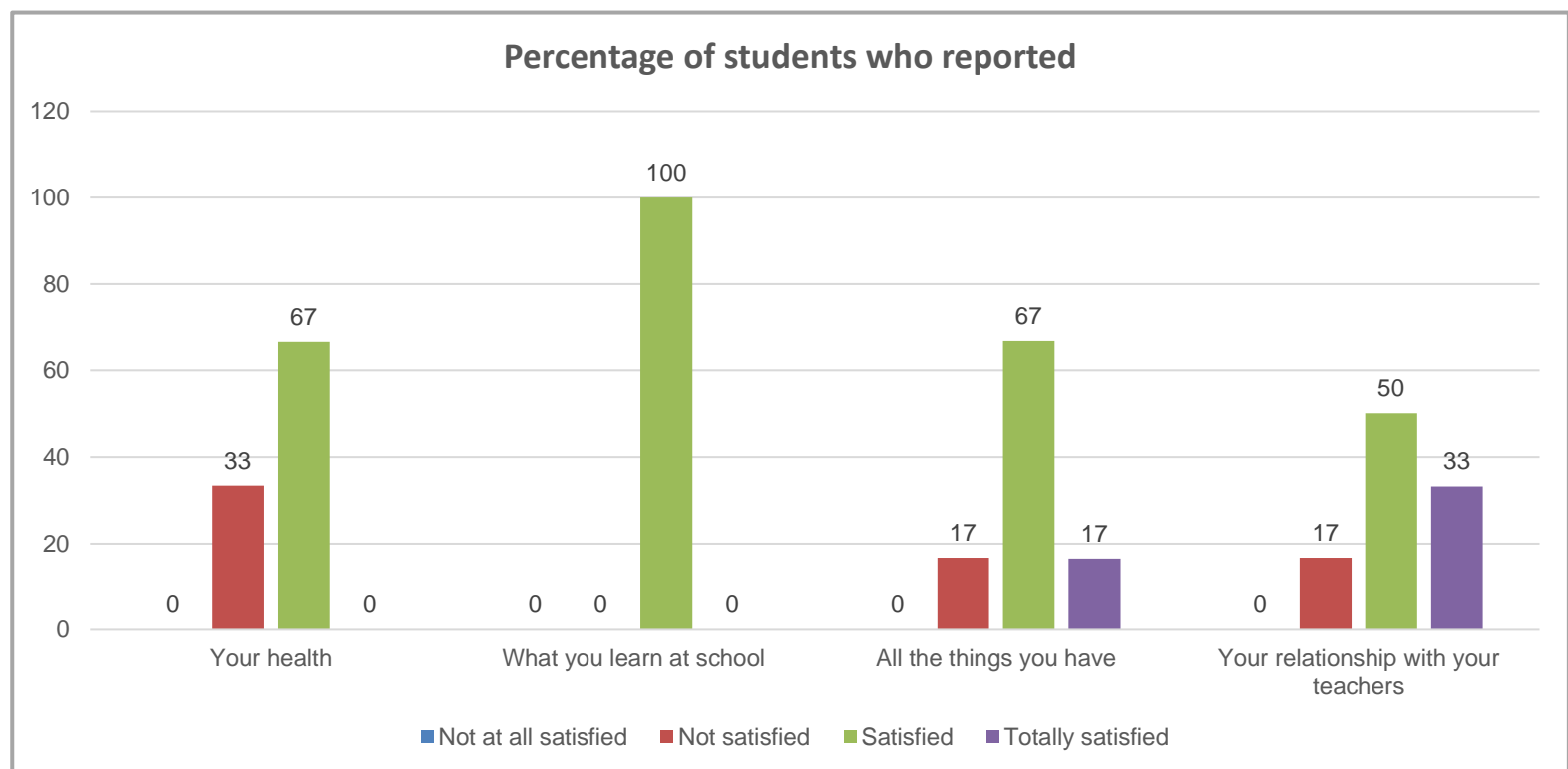**How satisfied are you (the student) with each of the following?**

Percentage of students who reported
- Not at all satisfied
- Not satisfied
- Satisfied
- Totally satisfied

Thinking about your parents or guardians, how often do they do each of the following?

Percentage of students who reported
- Almost never
- Sometimes
- Almost always
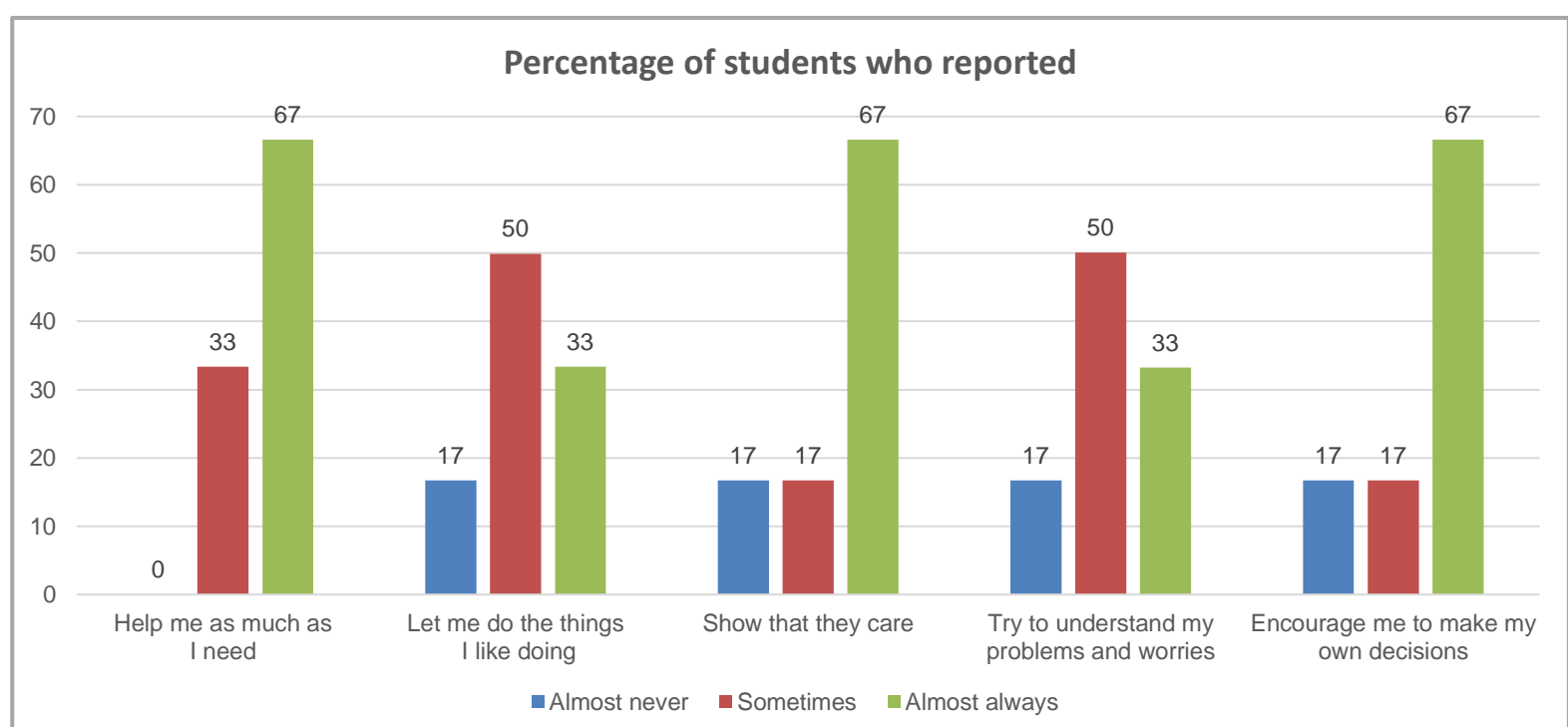
Performance in PISA 2022 Financial Literacy

Financial literacy is defined as the knowledge and understanding of financial concepts, alongside the risks, skills, motivation, and confidence to apply such knowledge and understanding to make effective decisions across a range of financial contexts. This is all with the aim of improving the financial well-being of individuals and society at large, and everyone to participate in economic life.

Possessing financial literacy involves understanding, grasping the concepts of financial principles and the risks that come with them. It also includes having the skills, motivation, and confidence to use this knowledge in financial situations. The main goal of financial literacy is to improve the well-being of individuals and society as a whole while also encouraging active involvement, in economic activities.

Financial literacy is offered as an optional domain in PISA. For 2022, the PISA financial literacy assessment component administered to students included new interactive items, as well as trend items used in prior cycles of PISA; including the 2015 and 2018 cycles.

The OECD, in acknowledging the importance of being financially literate as early as in adolescence,added financial literacy as an international option to be assessed in the Programme for International Student Assessment (PISA) alongside mathematics, reading, and science literacy

How is financial literacy assessed in PISA?

The financial literacy assessment framework is organised around the content, processes and contexts that are relevant for the assessment of 15-year-old students.

Content

The content categories comprise the areas of knowledge and understanding that are essential for financial literacy.
The four content areas are:

- Money and transactions
- Planning and managing finances
- Risk and reward
- The financial landscape.

The content category "money and transactions" includes awareness of the different forms and purposes of money (including digital forms of money); and handling simple monetary transactions, such as online payments, spending, value for money, bank cards, cheques, bank accounts and currencies.

Processes

The process categories relate to cognitive processes. They describe students' ability to recognise and apply concepts relevant to the domain, and to understand, analyse, reason about, evaluate and suggest solutions. In PISA financial literacy, four process categories have been defined in no hierarchical order:
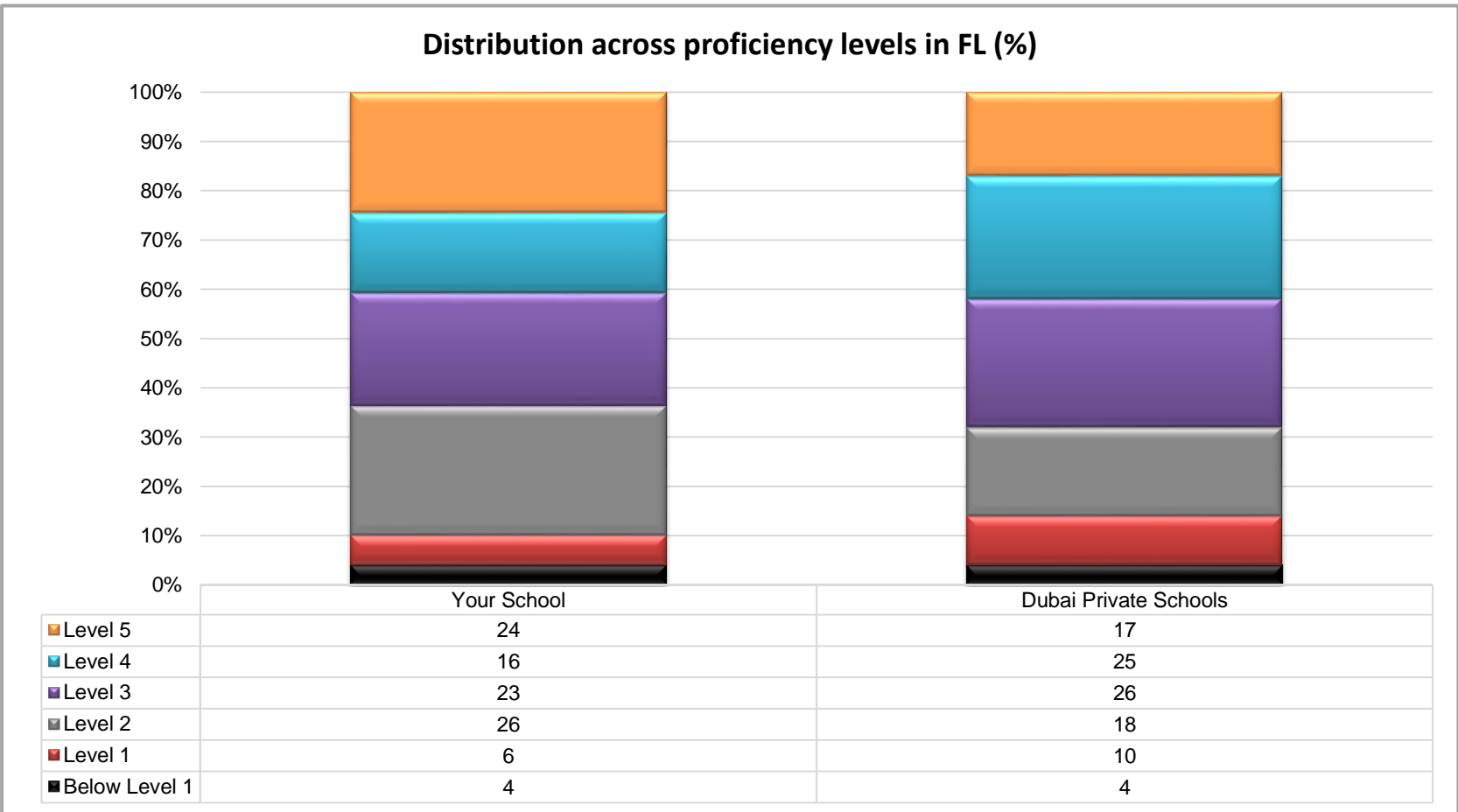
- Identifying financial information
- Analysing information in a financial context
- Evaluating financial issues
- Applying financial knowledge and understanding.
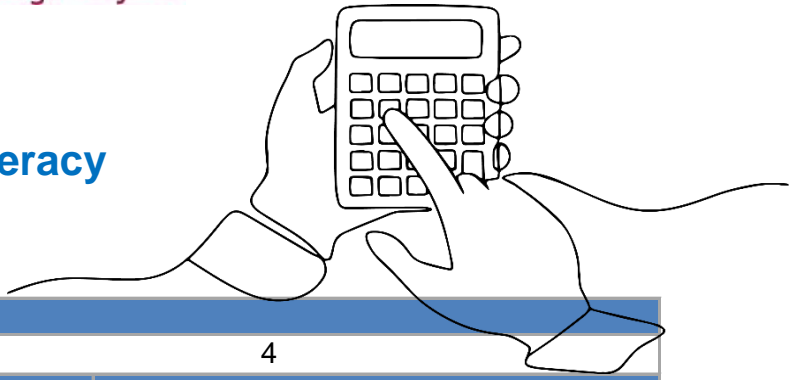
Overall Performance in Financial Literacy

No of students tested in FL	4	
	Score	Proficeincy level
Your School Score	481	Level 3
Dubai Private Schools	522	Level 3

How well did your students achieve against proficiency levels in FL?

Distribution across proficiency levels in FL (%)

	Your School	Dubai Private Schools
■ Level 5	24	17
■ Level 4	16	25
■ Level 3	23	26
■ Level 2	26	18
■ Level 1	6	10
■ Below Level 1	4	4

*The total values might not add up to 100% due to rounding

PISA FL proficiency levels boundaries

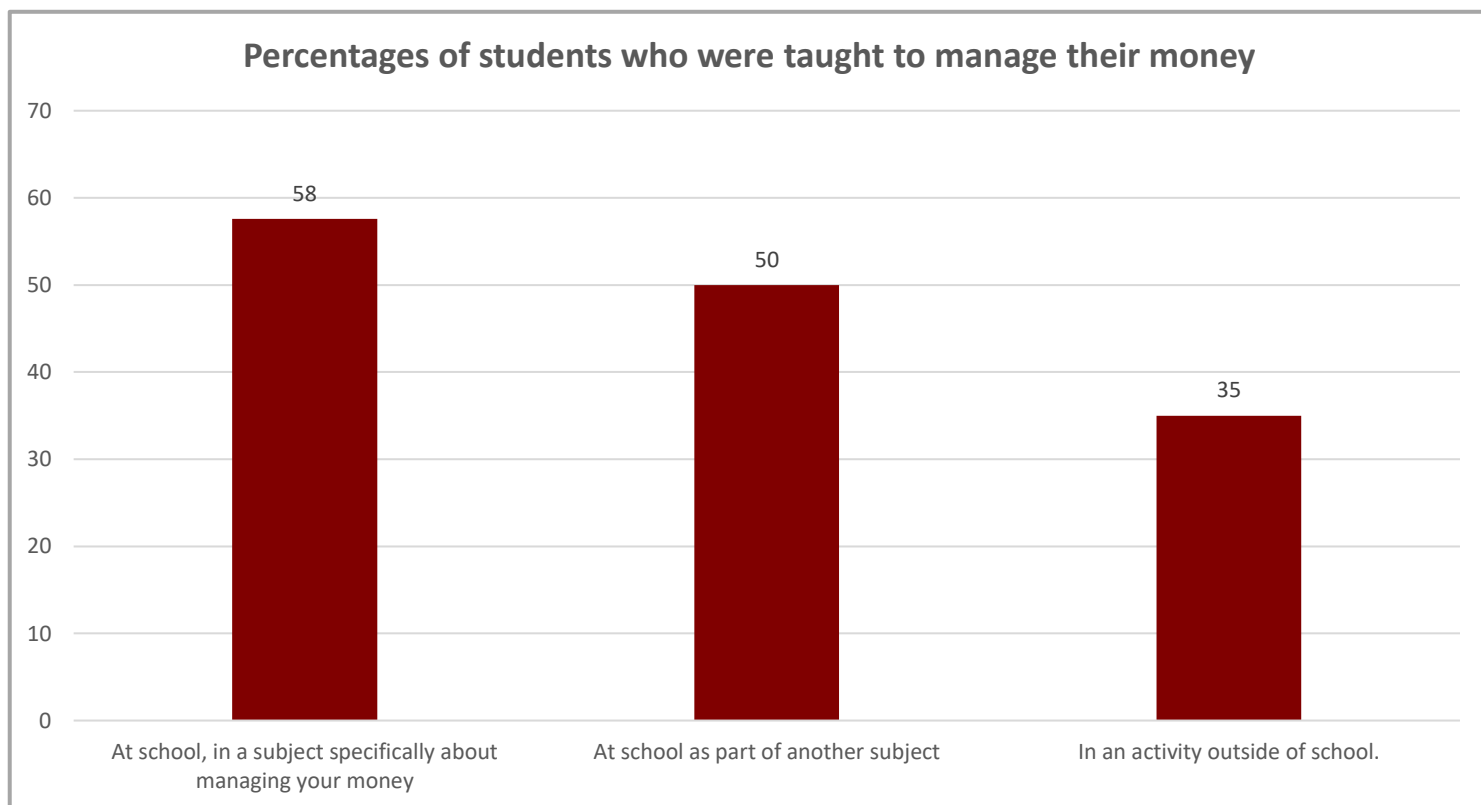| Proficiency levels		Financial Literacy
High	Level 5	625
Middle Performers	Level 4	550
	Level 3	475
	Level 2	400
Low Performers	Level 1	326
	Below Level 1	<326

* Please refer to the Appendix for full descriptions of the proficiency levels

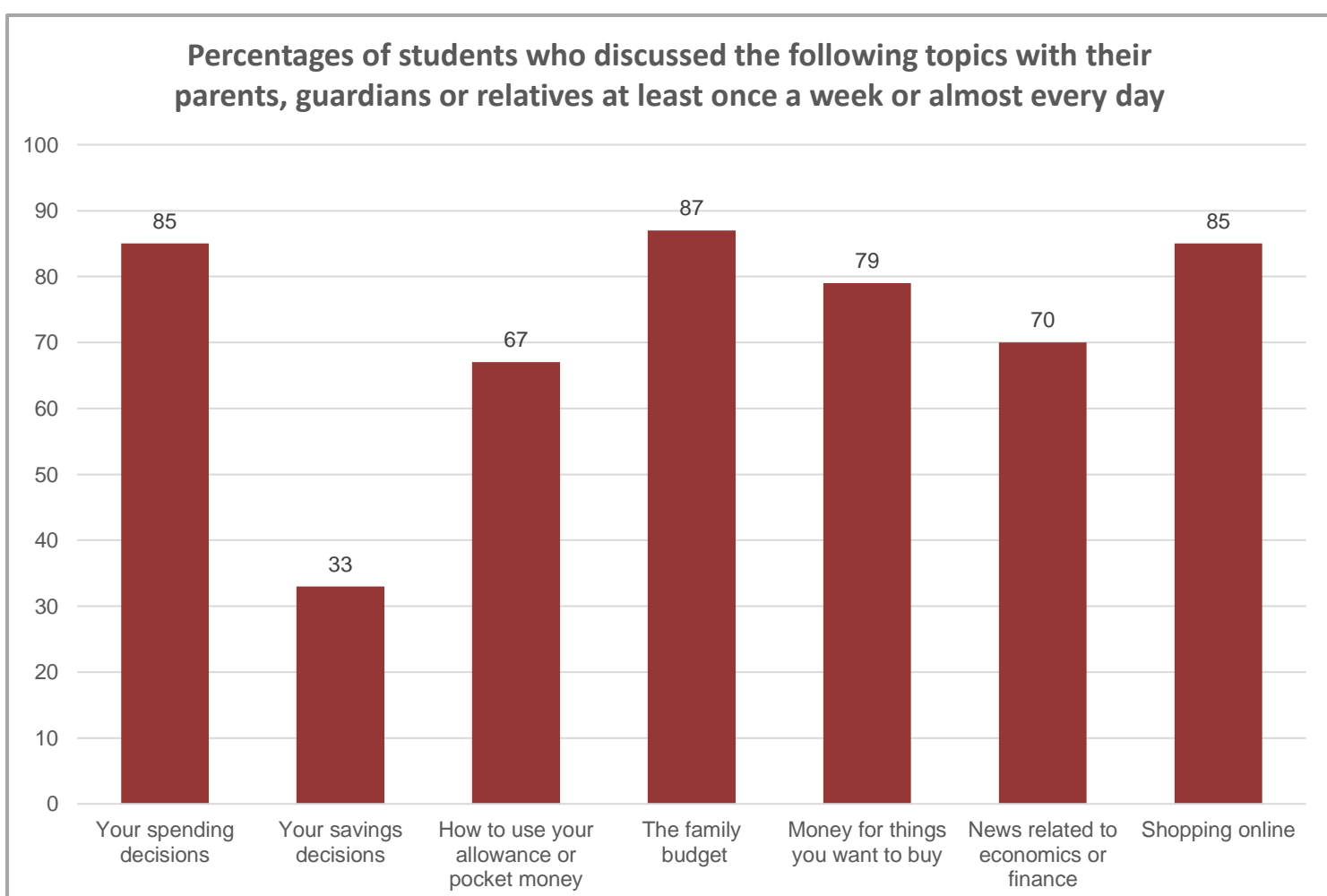# Student access to education in financial literacy

Student exposure to financial education, student access to information through financial programmes, familiarity with finance-related activities and exposure to problems about money matters along with student access to financial information outside of school.

The charts below reflect the percentage of students in your school who answered to the following questions from Financial Literacy Questionnaire:

Learning to manage money

Percentages of students who were taught to manage their money

Category	Percentage
At school, in a subject specifically about managing your money	58
At school as part of another subject	50
In an activity outside of school.	35

Discussing money matters with parents or guardians

Percentages of students who discussed the following topics with their parents, guardians or relatives at least once a week or almost every day

Category	Percentage
Your spending decisions	85
Your savings decisions	33
How to use your allowance or pocket money	67
The family budget	87
Money for things you want to buy	79
News related to economics or finance	70
Shopping online	85

Next Steps

As well as setting out in some considerable detail, the outcomes of your school's performance in PISA 2022, this report has provided you with the new 2025 PISA targets for your school. As such, this report is intended to support you in your action planning to ensure that these new targets are met or exceeded.

Inspection teams in 2024/25 will expect this report to have been explicitly referred to, in your own self-evaluation as well as in your strategic school improvement planning.

Below, you will find a description of some useful documentation generated by OECD, to support schools' work in this area.

Suggested Reading

The two international benchmark assessment regimes that sit in prime position within the UAE National Vision (Education) are of course, PISA and TIMSS. These Two regimes provide a window on the state of education and achievement (mathematics, science and reading), across a range of participating countries every three to four years. These regimes also survey students about their attitudes to school, to learning and to their own progress. In addition, both PISA and TIMSS are, by default, substantive research programmes.

PISA has been assessing grade ten students every three years, since 2000. Each regime has assessed and surveyed millions of students, representing tens of millions of students over the years. PISA is more skills based assessing students' abilities to apply their knowledge and understanding of science, mathematics, financial literacy, problem solving and literacy (reading) to real-world scenarios. Its surveys place a focus on learners, their learning and their attitudes to learning. Conversely, TIMSS is more curriculum and achievement based and its surveys consider more the work of the school, the teacher and teaching.

In addition to generating a significant dataset; quantitative and qualitative, at the levels of student, school and country, OECD also created a wealth of useful documentation that helps to identify the best path for future improvement.

Some of the documentation is of value at national and school-system level, other documentation is more useful for principals and governing bodies. Yet other materials support the work of subject leaders and classroom teachers.This section of the report highlights some of this documentation, outlines its usefulness and signposts it for the most useful audience.

Useful Documentation Generated by OECD

PISA 2022: The State of Learning and Equity in Education

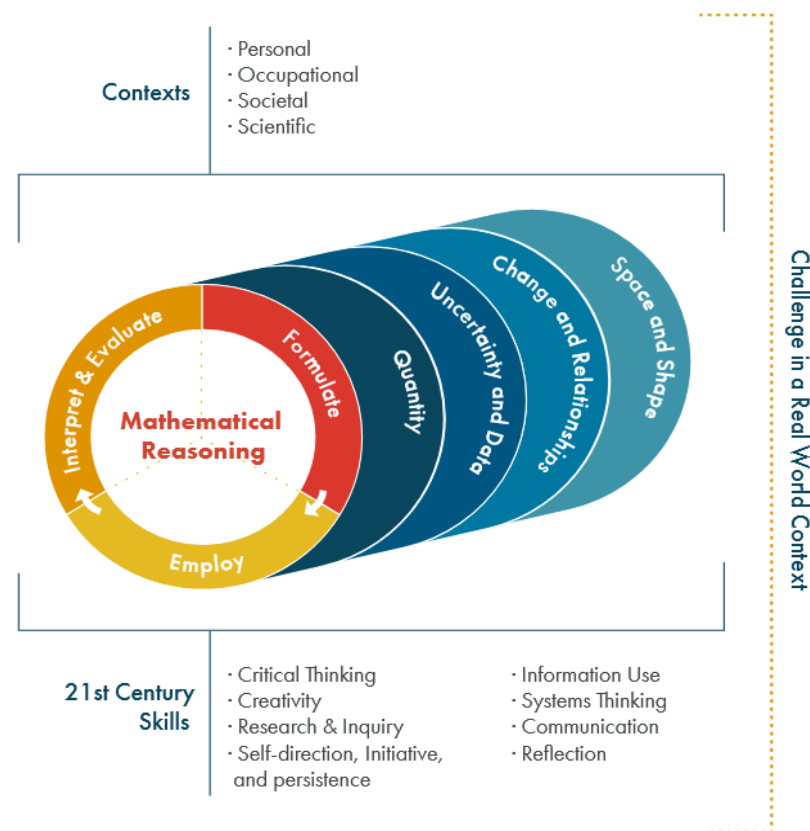https://www.oecd.org/education/pisa-2022-results-volume-i-53f23881-en.htm
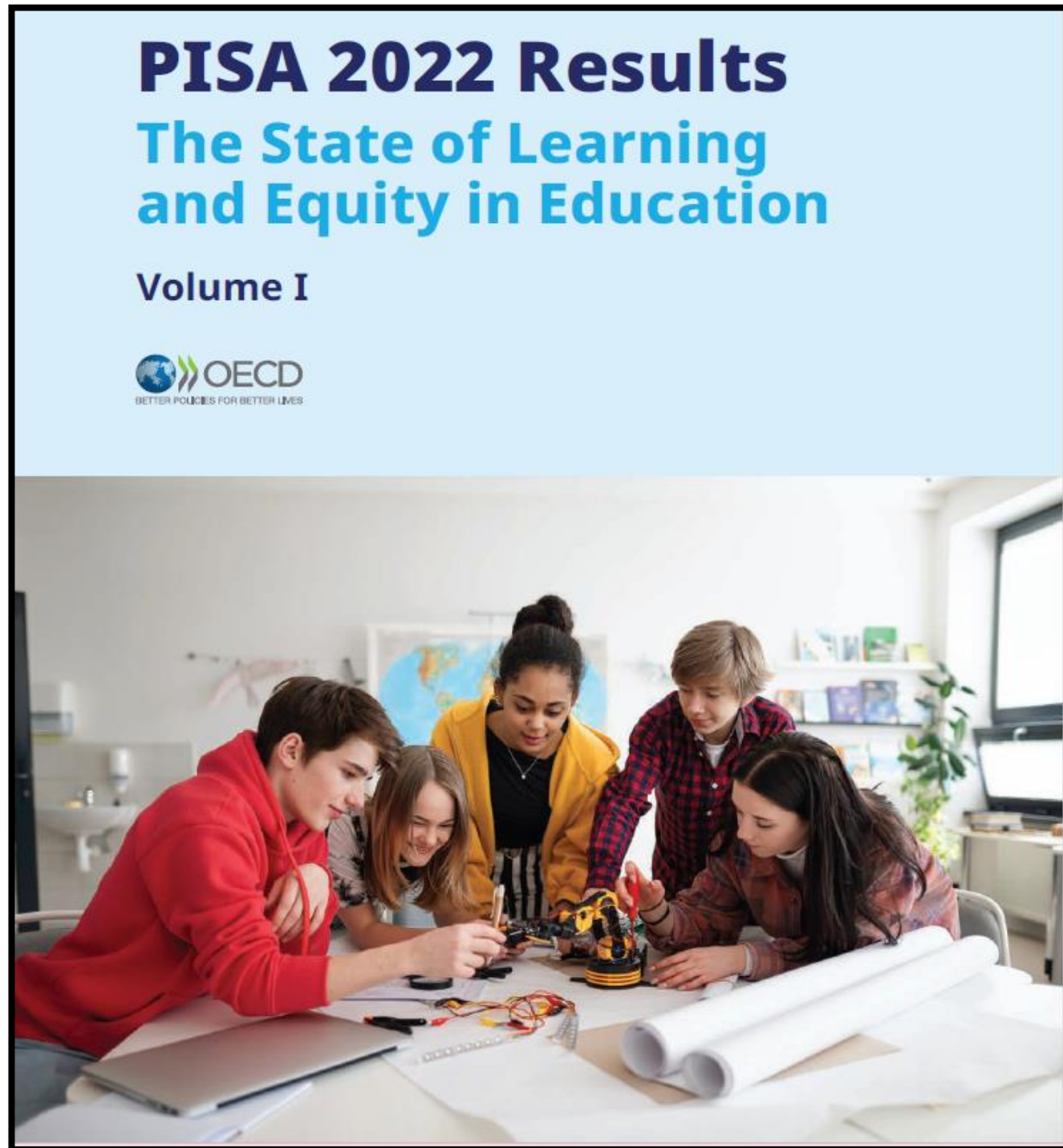
The PISA 2022 Mathematics Framework

This document, that is published every assessment window, provides a substantive summary of the findings of PISA over the years and how these findings have informed the evolution of the assessment regime used by PISA. This framework essentially presents the conceptual foundations upon which the 2022 cycle was to be based. Again, due to the reading emphasis in 2022, in this publication, mathematics literacy is the focus although there are also very detailed and useful sections on science as well as reading and financial literacy along with student questionnaire and student well being questionnaire.

As such, for principals and middle leaders, the document is a worthwhile read for those wishing to understand the emerging, evidence- based thinking behind what makes for relevant and excellent mathematics and science provision and assessment.

For those looking for a better appreciation of the proficiency levels in PISA as well as how the student surveys inform the analyses of the data and what they tell us. The draft 2024 framework, where sceince is the key focus, is also already available online and worth schools accessing in the lead up to PISA 2024.

Mathematics
Level 6 - 669
At level 6, students can conceptualize, generalize, and utilize information based on their investigations and modelling of complex problem situations, and can use their knowledge in relatively non-standard contexts. They can link different information sources and representations and flexibly translate among them. Students at this level are capable of advanced mathematical thinking and reasoning. These students can apply this insight and understanding, along with a mastery of symbolic and formal mathematical operations and relationships, to develop new approaches and strategies for attacking novel situations. Students at this level can reflect on their actions, and can formulate and precisely communicate their actions and reflections regarding their findings, interpretations.
Level 5 - 607
At level 5, students can develop and work with models for complex situations, identifying constraints and specifying assumptions. They can select, compare, and evaluate appropriate problem-solving strategies for dealing with complex problems related to these models. Students at this level can work strategically using broad, well- developed thinking and reasoning skills, appropriate linked representations, symbolic and formal characterizations, and insight pertaining to these situations. They begin to reflect on their work and can formulate and communicate their interpretations and reasoning.
Level 4 - 545
At level 4, students can work effectively with explicit models for complex concrete situations that may involve constraints or call for making assumptions. They can select and integrate different representations, including symbolic, linking them directly to aspects of real-world situations. Students at this level can utilize their limited range of skills and can reason with some insight, in straightforward contexts. They can construct and communicate explanations and arguments based on their interpretations, arguments, and actions.
Level 3 - 482
At level 3, students can execute clearly described procedures, including those that require sequential decisions. Their interpretations are sufficiently sound to be a base for building a simple model or for selecting and applying simple problem-solving strategies. Students at this level can interpret and use representations based on different information sources and reason directly from them.
Level 2 - 420
At level 2, students can interpret and recognize situations in contexts that require no more than direct inference. They can extract relevant information from a single source and make use of a single representational mode. Students at this level can employ basic algorithms, formulae, procedures, or conventions to solve problems involving whole numbers.
Level 1 - 358
At level 1, students can answer questions involving familiar contexts where all relevant information is present and the questions are clearly defined. They can identify information and to carry out routine procedures according to direct instructions in explicit situations.
Below Level 1
Students below level 1 may able to perform very direct and straightforward mathematical tasks, such as reading a single value from well labelled chart or table.

Science

Level 6 - 708

At Level 6, students can draw on a range of interrelated scientific ideas and concepts from the physical, life and earth and space sciences and use content, procedural and epistemic knowledge to offer explanatory hypotheses of novel scientific phenomena, events and processes or to make predictions. In interpreting data and evidence, they can discriminate between relevant and irrelevant information and can draw on knowledge external to the normal school curriculum. They can distinguish between arguments that are based on scientific evidence and theory and those based on other considerations. Level 6 students can evaluate competing designs of complex experiments, field studies or simulations and justify their choices.

Level 5 - 633

At Level 5, students can use abstract scientific ideas or concepts to explain unfamiliar and more complex phenomena, events and processes involving multiple causal links. They can apply more sophisticated epistemic knowledge to evaluate alternative experimental designs and justify their choices and use theoretical knowledge to interpret information or make predictions. Level 5 students can evaluate ways of exploring a given question scientifically and identify limitations in interpretations of data sets including sources and the effects of uncertainty in scientific data.

Level 4 - 559

At Level 4, students can use more complex or more abstract content knowledge, which is either provided or recalled, to construct explanations of more complex or less familiar events and processes. They can conduct experiments involving two or more independent variables in a constrained context. They can justify an experimental design, drawing on elements of procedural and epistemic knowledge. Level 4 students can interpret data drawn from a moderately complex data set or less familiar context, draw appropriate conclusions that go beyond the data and provide justifications for their choices.

Level 3 - 484

At Level 3, students can draw upon moderately complex content knowledge to identify or construct explanations of familiar phenomena. In less familiar or more complex situations, they can construct explanations with relevant cueing or support. They can draw on elements of procedural or epistemic knowledge to carry out a simple experiment in a constrained context.

Level 2 - 409

At Level 2, students can draw on everyday content knowledge and basic procedural knowledge to identify an appropriate scientific explanation, interpret data, and identify the question being addressed in a simple experimental design. They can use basic or everyday scientific knowledge to identify a valid conclusion from a simple data set.

Level 1 - 335

At Level 1, students can use basic or everyday content and procedural knowledge to recognize or identify explanations of simple scientific phenomenon. With support, they can undertake structured scientific enquiries with no more than two variables.

Below Level 1

Students below level 1 usually fail at the basic levels of science that PISA measures. Such students will have serious difficulties in using science for further education and learning.

Reading

Level 5 - 626

At level 5, tasks that involve retrieving information require the reader to locate and organize several pieces of deeply embedded information, inferring which information in the text is relevant. Reflective tasks require critical evaluation or hypothesis, drawing on specialized knowledge. Both interpretative and reflective tasks require a full and detailed understanding of a text whose content or form is unfamiliar. For all aspects of reading, tasks at this level typically involve dealing with concepts that are contrary to expectations.

Level 4 - 553

At level 4, tasks that involve retrieving information require the reader to locate and organize several pieces of embedded information. Some tasks at this level require interpreting the meaning of nuances of language in a section of text by considering the text. Other interpretative tasks require understanding and applying categories in an unfamiliar context. Reflective tasks at this level require readers to use formal or public knowledge to hypothesize about or critically evaluate a text.

Level 3 - 480

At level 3, tasks require the reader to locate, and in some cases, recognize the relationship between, several pieces of information that must meet multiple conditions. Interpretative tasks at this level require the reader to integrate several parts of a text to identify a main idea, understand a relationship, or construe the meaning of a word or phrase. They need to consider many features in comparing, contrasting or categorizing.

Level 2 - 407

At level 2, some tasks require the reader to locate one or more pieces of information, which may need to be inferred and may need to meet several conditions. Others require recognizing the main idea in a text, understanding relationships, or construing meaning within a limited part of the text when the information is not prominent and the reader must make low level inferences. Tasks at this level may involve comparisons or contrasts based on a single feature in the text.

Level 1 - 335

At level 1, tasks require the reader to locate one or more independent pieces of explicitly stated information; to recognize the main theme or author's purpose in a text about a familiar topic, or to make a simple connection between information in the text and common, everyday knowledge. Typically, the required information in the text is prominent and there is little, if any, competing information.

Below Level 1

Students below level 1 tasks require the reader to locate a single piece of explicitly stated information in a prominent position in a short, syntactically simple text with a familiar context and text type.

Financial literacy

Level 5 - 625

At level 5, Students can apply their understanding of a wide range of financial terms and concepts to contexts that may only become relevant to their lives in the long term. They can analyse complex financial products and can take into account features of financial documents that are significant but unstated or not immediately evident, such as transaction costs. They can work with a high level of accuracy and solve non-routine financial problems, and they can describe the potential outcomes of financial decisions, showing an understanding of the wider financial landscape, such as income tax.

Level 4 - 550

At level 4, Students can apply their understanding of less common financial concepts and items to contexts that will be relevant to them as they move towards adulthood, such as bank account management and compound interest in savings products. They can interpret and evaluate a range of detailed financial documents, such as bank statements, and explain the functions of less commonly used financial products. They can make financial decisions taking into account longer-term consequences, such as understanding the overall cost implication of paying back a loan over a longer period, and they can solve routine problems in less common financial contexts.

Level 3 - 475

At level 3, Students can apply their understanding of commonly used financial concepts, terms, and financial plans in familiar contexts. They can make straightforward interpretations of a range of financial documents and can apply a range of basic numerical operations, including calculating percentages. They can choose the numerical operations needed to solve routine problems in relatively common financial literacy contexts, such as budget calculations.

Level 2 - 400

At level 2, Students begin to apply their knowledge of common financial products and commonly used financial terms and concepts. They can use given information to make financial decisions in contexts that are immediately relevant to them. They can recognise the value of a simple budget and can interpret prominent features of everyday financial documents. They can apply single basic numerical operations, including division, to answer financial questions. They show an understanding of the relationships between different financial elements, such as the amount of use and the costs incurred.

Level 1 - 326

At level 1, Students can identify common financial products and terms and interpret information relating to basic financial concepts. They can recognise the difference between needs and wants and can make simple decisions on everyday spending. They can recognise the purpose of everyday financial documents, such as an invoice, and apply single and basic numerical operations (addition, subtraction or multiplication) in financial contexts that they are likely to have experienced personally.

Below Level 1

Students below level 1 has basic knowledge of financial literacy

For more information about Dubai's participation in PISA 2022

https://www.khda.gov.ae/en/publications

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