

UAE Vision 2021 & The National Agenda for Education

FIRST RATE EDUCATION SYSTEM OBJECTIVES

INDICATOR	DEFINITION	SOURCE	RESULTS	KEY SPONSER
Average TIMSS Score	An indicator that reflects the nation's ranking and score in the TIMSS test, which evaluates the math and science skills of students in grades 4 and 8	International Association for the Evaluation of Educational Achievement	<p>TIMSS 2015:</p> <ul style="list-style-type: none"> Mathematics Grade 4: Rank 35 (452) Science Grade 4: Rank 35 (451) Mathematics Grade 8: Rank 19 (465) Science Grade 8: Rank 22 (477) <p>TIMSS 2019:</p> <ul style="list-style-type: none"> Mathematics Grade 4: Rank 43 (481) Science Grade 4: Rank 41 (473) Mathematics Grade 8: Rank 26 (473) Science Grade 8: Rank 26 (473) 	Ministry of Education

2019 School Scores

Grade	Grade 4	
Subject	Mathematics	Science
TIMSS 2019 Scores	452	434

Our School 2023 Targets

Grade	Grade 4	
Subject	Mathematics	Science
TIMSS 2023 Range	477-482	459-464

Analysis of Performance in 2019 TIMSS by gender

Mathematics	Grade 4	
Subject	Boys	Girls
TIMSS Scores	469	427
Significant difference between the attainment of boys and girls noted.		

Science	Grade 4	
Subject	Boys	Girls
TIMSS Scores	433	434
No significant difference between the attainment of boys and girls noted.		

Analysis of Mathematics Domains

	Content Domain			Cognitive Domain		
Grade 4	Number	Geometric Shapes	Data Display	Knowing	Applying	Reasoning
Average score of our students	460	432	450	450	453	449
Overall average score of schools in Dubai	554	541	554	549	554	545
<p>Skills Needed to Move into Intermediate International Benchmark (475):</p> <p>Students can apply basic mathematical knowledge in simple situations. They can compute with three- and four-digit whole numbers in a variety of situations. They have some understanding of decimals and fractions. Students can identify and draw shapes with simple properties. They can read, label, and interpret information in graphs and tables</p> <p>Skills Needed to Move into High International Benchmark (550):</p> <p>Students apply conceptual understanding to solve problems. They can apply conceptual understanding of whole numbers to solve two-step word problems. They show understanding of the number line, multiples, factors, and rounding numbers, and operations with fractions and decimals. Students can solve simple measurement problems. They demonstrate understanding of geometric properties of shapes and angles. Students can interpret and use data in tables and a variety of graphs to solve problems.</p>						

Analysis of Science Domains

	Content Domain			Cognitive Domain		
Grade 4	Number	Geometric Shapes	Data Display	Knowing	Applying	Reasoning
Average score of our students	439	442	436	444	440	438
Overall average score of schools in Dubai	543	561	548	567	546	538
<p>Skills Needed to Move into Intermediate International Benchmark (475):</p> <p>Students show knowledge and understanding of some aspects of science. Students demonstrate some basic knowledge of plants and animals. They demonstrate knowledge about some properties of matter and some facts related to electricity and can apply elementary knowledge of forces and motion. They show some understanding of Earth's physical characteristics</p> <p>Skills Needed to Move into High International Benchmark (550):</p> <p>Students communicate and apply knowledge of life, physical, and Earth sciences. Students communicate knowledge of characteristics of plants, animals, and their life cycles, and apply knowledge of ecosystems and of humans' and organisms' interactions with their environment. Students demonstrate knowledge of states and properties of matter and of energy transfer in practical contexts and show some understanding of forces and motion. Students know various facts about the Earth's physical characteristics and show basic understanding of the Earth-Moon-Sun system</p>						



Grade 8 Mathematical Skills Targeting for Future 2023

Skills Needed to Move into Intermediate International Benchmark (475):

Students can apply basic mathematical knowledge in a variety of situations.
They can solve problems involving whole numbers, negative numbers, fractions, decimals, and ratios.
Students have some basic knowledge about properties of two-dimensional shapes.
They can read and interpret data in graphs and have some rudimentary knowledge of probability.

Skills Needed to Move into High International Benchmark (550):

Students can apply their understanding and knowledge in a variety of relatively complex situations.
They can solve problems with fractions, decimals, ratios, and proportions.
Students at this level show basic procedural knowledge related to algebraic expressions and equations.
They can solve a variety of problems with angles, including problems involving triangles, parallel lines, rectangles, and congruent and similar figures.
Students can interpret data in a variety of graphs and solve simple problems involving outcomes and probabilities

Grade 8 Science Skills Targeting for Future 2023

Skills Needed to Move into Intermediate International Benchmark (475):

Students show and apply some knowledge of biology and the physical sciences.
Students demonstrate some knowledge of characteristics of animals and apply knowledge of ecosystems.
They show some knowledge of the properties of matter, chemical changes, and a few physics concepts.

Skills Needed to Move into High International Benchmark (550):

Students apply understanding of concepts from biology, chemistry, physics, and Earth science.
Students can apply knowledge of the characteristics of groups of animals, life processes in humans, cells and their functions, genetic inheritance, ecosystems, and nutrition.
Students show some knowledge and understanding of the composition and properties of matter and chemical reactions.
They can apply basic knowledge of energy transformation and transfer, electrical circuits, properties of magnets, light, sound, and forces.
They can apply knowledge of Earth's physical features, processes, cycles, and history, and show some understanding of Earth's resources and their use.



Focus: The quality of data analysis received from N.A.P and the use of it to impact on education					
Action	Responsibility	Desired Outcome	Completed by	Reviewed by	Status
Upload all N.A.P data to the school management system to produce rigorous data analysis	Assessment Coordinator	Complete and accurate database using Power BI that allows all teachers easy access to inform planning	Updated after each Testing session	Principal & Head of Section	
Provide Triangulation of Data Report for Teachers (CAT4, MAP & Term 1 Internal)	Assessment Coordinator and HODs under leadership of Head of Section	To enable teachers to better analyze data and understand students who are underperforming against their measured potential and update their planning to accommodate individual needs and track progress	December 2020		
Analyze MAP data to measure students' attainment against international grade expected norm and identify each cohort based on their attainment and progress and engage staff in Data Talks	Head of Elementary, HODs, and teachers	<p>Build capacity of the leadership team on data literacy through in house and external professional development to effectively and accurately use N.A.P data analysis and promote the data culture across the school</p> <p>By engaging in data talks, teachers of core subjects are able to reflect and review their current progress against National Agenda Target and plan for students making good or below expected progress.</p>	After each testing window	Principal	



Update data cover sheet for lesson plans	HOS, HODs & teachers	Data is used effectively to provide needed accommodations for learning profiles and needed differentiation with the use of flexible grouping using MAP data related to standard being taught Teachers know their students well	At start of each new unit cover sheet updated to reflect flexible grouping for that unit and accommodations needed	Principal	
Focus: Modification of curriculum to address shortfalls					
Action	Responsibility	Desired Outcome	Completed by	Reviewed by	
Review of TIMSS Framework for Math & Science and cross-check Annual Plans for Grades 2-4 and 6-7 to ensure all content is covered and ensure this is updated yearly according to any newly published TIMSS Framework	HoDs Maths & Science	Fully reviewed curriculum mapping document is produced and implemented for Grades 2-4 and Grades 6-7 ensuring TIMSS framework content remains embedded in our curriculum plans each year ensuring each cohort will be prepared.	September 2020	Head of Elementary	
Embed in current Grade 2 and current Grade 6 cohorts (who will be tested in 2023) TIMSS curriculum and curriculum mapping of content they will cover to ensure all completed by time they are Grade 4 and Grade 8	HoDs Maths & Science	Preparation for cohorts who will take TIMSS 2023	September 2020	Head of Elementary	



<p>Create TIMSS Workbooks for use by Grade 2 and 6 students in 2020-2021</p> <p>Create TIMSS Workbooks for use by Grade 3 and Grade 7 students in 2021-2022</p>	<p>HoDs Maths & Science</p>	<p>Allow for practice with TIMSS style questions with practice integrated into Annual Plans</p>	<p>Term 2 & 3 2021</p> <p>Academic year 2021-2022</p>	<p>Head of Elementary</p>	
<p>Review and analysis of TIMSS 2019 Grade 4 Results</p>	<p>HoDs Maths & Science</p>	<p>To conduct gap analysis to address areas of weakness for students currently in Grade 6 (2020-2021) and to review curriculum to address these gaps and update action plan accordingly</p>	<p>Term 3 2021</p>	<p>Head of Elementary</p>	
<p>Embed in timetable for key cohorts (Grade 2 & 6 that will take TIMSS 2023) a designated TIMSS lesson</p>	<p>Head of Elementary & HODs</p>	<p>Dedicated time to cover core domains and train students on cognitive skills so they have needed test taking strategies and aware of style of TIMSS questions</p>	<p>Term 2 2021 – till end of Term 2 2023</p>	<p>Principal</p>	



Focus: Teaching methods to engage students in aspects of their learning that are in need of improvement (e.g. critical thinking or problem solving)					
Action	Responsibility	Desired Outcome	Completed by	Reviewed by	
Embed Scientific skills in lesson	HoD of Science	Mapping out of key scientific skills for each grade level to develop students' ability to think scientifically as well as develop their scientific literacy	September 2020	Head of Elementary	
Embed CGI into Math Department	HoD of Math	<p>Cognitively Guided Instruction (CGI) is an approach to teaching mathematics. CGI depends on the developmental stage of the students. It uses problem solving and rigorous questioning to build the students' conceptual understanding of the essential mathematical concepts and operations.</p> <p>Lesson observations will show consistent use among all math teachers with regular opportunities for students to engage in Math Talks where they explain, and articulate methods used</p>	September 2020	Head of Elementary	
Increase level of challenge in lessons.	HODs and Teachers	Ensure all teachers have the grade level standard, learning objective and success criteria aligned in all lessons, and that they reflect progression in learning with rigor (i.e. they show the progression from understanding and explaining concepts and skills to applying and	September 2020	HODs and Head of elementary.	



		<p>solving high order thinking questions.</p> <p>Monitor planning, lesson observations and drop ins to be conducted on regular basis to ensure that the level of challenge is evident in math and science lessons.</p>			
<p>All teachers to complete Apple Teacher Certification</p> <p>Head of Department to integrate Apple Elements into SOW so it is consciously planned for in the design of curriculum</p>	<p>Teachers</p> <p>Math & Science HoD</p>	<p>Progressive learning by empowered students who think critically and are actively taught 21st century learning skills by incorporating Apple Elements of Teaching into lesson plans</p>	<p>Term 1 2020</p> <p>Curriculum SOW for 2021-2022 – to be added to SOW in June 2021</p>	<p>Heads of Section</p>	
<p>Implement Apple Classroom</p>	<p>Teachers</p>	<p>Teachers are not only able to control student devices but to also facilitate collaboration within lesson despite Covid social distancing regulations</p>	<p>Term 1 2020</p>	<p>Heads of Sections</p>	
<p>Establish BYOD in Grades 1-7</p>	<p>Heads of Sections</p>	<p>Students develop independent learning skills and school's Ed-tech vision can be implemented</p>	<p>Term 1 2020</p>	<p>Principal</p>	
<p>Purchase Showbie and design workflow process</p>	<p>Heads of Sections with HoDs</p>	<p>Marking policy reflects workflow process with regular feedback via Showbie including use of digital verbal feedback enhancing opportunities for students' response to feedback</p>	<p>Term 1 2020</p>	<p>Principal</p>	



Virtual Labs	Head of Science	Students gain expertise and mastery in designing and exploring with projects that cannot be conducted due to safety/time in the lab- students gain a better understanding of abstract concepts, consequently extend or build on a given topic, skill or concepts making clear and concise hypothesis, allowing for Lab work to continue even in Covid	September 2020	Head of Elementary	
Focus: Exam Readiness					
Action	Responsibility	Desired Outcome	Completed by	Reviewed by	
Ensure that assessment questions are rigorous	Teachers and HODs	Assessment reflects depth of knowledge (Knowing, Applying, Reasoning) and integrate TIMSS style questions and target the different cognitive domains.	Half-termly & End of Term assessments	HODs	
Embed performance task assessment and projects.	Teachers and HODs	Learning assessment/ projects that asks students to perform to demonstrate their knowledge, understanding and proficiency of learning objectives for one standard or more.	Ongoing	HODs	
Mock TIMSS Assessments for 2023 TIMSS cohort is embedded as part of each of their end of term assessments for 2021-2022 and term 1 2022-2023	HODs	Students performance in relation to TIMSS Framework is tracked with analysis of performance between different groups of students (boys, girls, Emirati)	Term 1 2021 Term 2 2022 Term 3 2022 Term 1 2022	Head of Elementary	



		Performance over time demonstrates performance in line with set TIMSS targets for all groups of students			
Focus: Increase Awareness of TIMSS Exams					
Action	Responsibility	Desired Outcome	Completed by	Reviewed by	Status
TIMSS Workshop for parents with targeted classes	HoDs & HoS	Parents will be aware of National Agenda priorities and how to support their child in preparation for TIMSS.	September 2021	Principal	
TIMSS Workshop for students with targeted classes	HoDs & HoS	Students will be aware of National Agenda priorities and how to support their child in preparation for TIMSS.	September 2021	Principal	
Create TIMSS awareness video	HoDs & HoS , teachers and students	Students and parents will be aware of National Agenda priorities and how to support their child in preparation for TIMSS.	December 2021	Principal	