PISA 2015 RESULTS - VOLUME 1 EXCELLENCE & EQUITY IN EDUCATION

CHAPTER 1 - OVERVIEW: EXCELLENCE AND EQUITY IN EDUCATION

CHAPTER 2 - SCIENCE PERFORMANCE AMONG 15-YEAR OLDS

Students' PROFICIENCY Science	PL 1-2 LOW PERFORMERS			PL 3-4	PL 5-6 TOP PERFORMERS		MEAN	SD
VARIATION Science Performance	5%	10%	25%	50%	75%	90%	95%	
GENDER Differences - Science	PL 1-2	PL 5-6	BOYS	GIRLS	DIFF B-G	540,000 STUDENTS		
TRENDS in Students' Science Performance	LOW-Achieving			HIGH-Achieving		35 OECD 37 PARTNERS		
Computer Test 2015 2 Hours	Average 3 Year Trend	CHANGE in Science Performance between 2012-2015				Test & Questionnaire		
	Average 3 Year Trend - Accounting for Changes in Enrolment Raes					COMPARE MEAN Performance		
	Average 3 Year Trend - Adjusted for Demographic Changes					2006 & 2015		
Students' EPISTEMIC BELIEFS about Science - Average Level Support - Scientific Approaches to enquiry.								

CHAPTER 3 - STUDENTS' ATTITUDES TOWARDS SCIENCE & EXPECTATIONS

Current & Future ENGAGEMENT with Science		Career Expectations	Science Activities
MOTIVATION for LEARNING Science	Enjoyment	Interest	Instrumental Motivation
NURTURING Future Scientists:	Role of SKILLS and MOTIVATION		SELF-EFFICACY in Science
Bivariate Associations of ENGAGEMENT with Science and MOTIVATION for Learning with PERFORMANCE			

CHAPTER 4 - READING PERFORMANCE AMONG 15-YEAR OLDS

Students' PROFICIENCY Reading	PL 1-2 LOW PERFORMERS			PL 3-4	PL 5-6 TOP PERFORMERS		MEAN	SD
TRENDS Since 2009	LONG-TERM TRENDS Since PISA 2000							
GENDER Differences -Reading	PL 1-2	PL 5-6	BOYS	GIRLS	DIFF B-G			
VARIATION Reading Performance	5%	10%	25%	50%	75%	90%	95%	

CHAPTER 5 - MATHEMATICS PERFORMANCE - 15-YEAR OLDS

Students' PROFICIENCY MATH	PL 1-2 LOW PERFORMERS			PL 3-4	PL 5-6 TOP PERFORMERS		MEAN	SD
TRENDS Since 2000 & 2009	LONG-TERM TRENDS			BELOW & ABOVE BASELINE				
GENDER Differences -MATH	PL 1-2	PL 5-6	BOYS	GIRLS	DIFF B-G			
VARIATION MATH Performance	5%	10%	25%	50%	75%	90%	95%	

CHAPTER 6 - SOCIO-ECONOMIC STATUS, STUDENT PERFORMANCE and STUDENTS' ATTITUDES TOWARDS SCIENCE

				TRENDS	EQUITY
INCLUSION & FAIRNESS in Education		Performance Outcomes	SES	Mediating Factors	
Successful PERFORMANCE & EQUITY		National Income Spending	SES Heterogeneity		
ACCESS	Population Coverage/ Inclusion	Access Trends Low Coverage	Low Coverage Affect on Results		
SOCIO-ECONOMIC STATUS	Disparities by SES	Performance Differences Relate to SES Disparity			
Differences SCIENCE CAREER EXPECTATIONS		BELIEFS Related to SES Background			
SES and Performances	Between Schools	Within Schools	Resources	Grade Repetitiion	

CHAPTER 7 - IMMIGRANT BACKGROUND, STUDENT PERFORMANCE & STUDENTS' ATTITUDES TOWARDS SCIENCE

Inclusive & Fair Education for IMMIGRANTS		PROFILE IMMIGRANT Students - PISA 2015			TRENDS
MIGRATION & Performances in HOST Countries		Immigrant	NON-IMMIGRANT	RESILIENT	
CAREER EXPECTATIONS	HOME LANGUAGE	CONCENTRATION	RESOURCES		OTL

CHAPTER 8 - WHAT PISA 2015 RESULTS IMPLY FOR POLICY

How universal are basic skills? (Baseline Skills in Science, Reading, Math varies considerably)

Higher public expendiure on education has not always delivered better results.
Access to education is still not universal.

BEYOND LEAGUE TABLES

Countries don't have to choose between nuturing excellence in education & reducing underperformance.

Gender differences in performance persist.

GENDER DIFFERENCES PERSIST (GIRLS STEM)

Policy Implications of results from PISA science assessment.

- Support widespread engagement with science while meeting demand for scientific excellence.
- Improve both skills & atitudes to encouirage lifelong engagement with science.
- Challenge stereotypes about science-related occupations to help all boys & girls achieve potential.

Policy Implications of differences in equity across countries.

INFLUENCE OF SOCIOECONOMIC STATUS

- Design policies based on how well SES status predicts performance and how much differences in student performance overlap with socio-economic disparities.
- Target special resources in schools with high concentraton low-performing & disadvanaged students.
- Encourage positive attitudes towards learning Science among students of all backgrounds.
- Reduce differences in exposure to Science content by adopting regorous curriculum standards.

Education Policies to support immigrant students: Short-term high-impact & Medium high-impact responses.

PISA 2015 VOLUME II - POLICIES AND PRACTICES FOR SUCCESSFUL SCHOOLS

CHAPTER 7 - What PISA 2015 Results Imply for Policy

Account for the differences in student outcomes between schools and education systems.
Give every 15-year-old the opportunity to learn science in school.

OPPORTUNITY TO LEARN!

Ensure that learning time is productive so that students can develop their academic, social and emotional skills in a balanced way.

The most ambitious education reforms aspire to change what happens inside the classroom.

Ensure that science laboratory work is meaningful.

Create a positive learning environment for all.
Encourage schools to use multiple types of assessments.

ATTRACT & RETAIN QUALIFIED TEACHERS

Build a skilled and dedicated teacher workforce. Ensure they continue to learn throughout their careers.

Balance school autonomy with accountability, and develop capacity at the local level.

Strive to have excellent schools in every neighborhood and make them accessible to all students.

Adjust the size of schools and classes if financial resources are limited.

Favour additional support to struggling students rather than grade repetition.
Delay the age at selection into different education programmes.

DELAY AGE OF TRACKING

Provide access to quality early education for all children.
Above all, provide additional support to disadvantaged schools.

QUALITY EARLY EDUCATION FOR ALL

PISA 2015 VOLUME III. STUDENTS' WELL-BEING (Relation Social Life, Learning Attitudes, School Performance)

PISA 2015 VOLUME IV. STUDENTS' FINANCIAL LITERACY (Experience With And Knowledge About Money)

PISA 2015 VOLUME V. COLLABORATIVE PROBLEM SOLVING (Ability to Work With 2 or More to Solve A Problem)