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MINISTRIA E ARSIMIT E SHKENCËS DHE E TEKNOLOGJISË
MINISTARSTVO OBRAZOVANJA NAUKE I TEHNOLOGIJE
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

KOSOVO IN PISA 2015

THE EFFECT OF STUDENTS' ASSESSMENT ON EDUCATION QUALITY

SCIENCE • MATHEMATICS • READING • COOPERATIVE PROBLEM SOLVING

on the 6th-7th May 2014
at Hotel Emerald, Pristina

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

15 Years of German-Kosovar Development Cooperation

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DEUTSCHE ZUSAMMENARBEIT

THE EFFECT OF STUDENTS' ASSESSMENT ON EDUCATION QUALITY

ON THE 6TH-7TH MAY 2014 AT HOTEL EMERALD, PRISTINA

Pristina, July 2014

Acknowledgments
The 'Capacity Development in the Basic Education Sector in Kosovo' (GIZ-CDBE) Programme expresses its thankfulness to the members of the MEST-CDBE Task Force and the conference moderators: Azem Guri, Mustafë Kadriu, Fatmir Elezi, Vjollca Ymerhalili, Ferit Idrizi, Njomza Ibrahimi, Igballe Cakaj, Dagmar Fuchs-Schmitz, Enkeleta Halili, Linda Ukimeraj, Anna Laura Tosolini, Artane Rizvanolli and Resul Sinani.

All conference contents and the photos of the event are available under:
www.kosovoinpisa2015.com

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6 MAY 2014
CONFERENCE OPENING

Prof. Dr. RAMË BUJA

Minister of Education, Science and Technology, MEST

Dear Ms Bradshaw, OECD representative in Paris
Dear ambassadors and senior representatives of the accredited embassies in Kosovo,
Dear education experts from international partner organisations,
Dear participants,
Ladies and gentlemen,

On behalf of the Ministry of Education, Science and Technology, I have the honour of welcoming you to the Republic of Kosovo and to the international conference 'Kosovo in PISA 2015: The Effect of Student Assessment on Education Quality'.

Today's conference is a very special and important event for the education system in Kosovo, with Kosovo undergoing PISA international assessment for the first time.

Importance of participating in PISA

Participation in PISA is important because the results can be used to provide answers to two key questions:

- How well are students in Kosovo prepared at this stage of their school education?
- What aspects do our schools, governing systems and educational policies need to improve in the future?

The participation of our country in this important international assessment requires achievements and reforms in education to be measured and compared with international developments.

PISA assessment contents

PISA assessment evaluates the ability of 15-year-old students to use the knowledge they have gained in schools in the real-life situations they will face as adults.

PISA is the biggest international educational assessment in the world. It assesses student performance in reading, mathematics and science.

What have we achieved so far?

Kosovo has conducted educational reforms relating, among other things, to curricula, external assessments and legal frameworks. It is important for Kosovo to reflect on the impacts of these changes and to compare results following the PISA assessment.

By taking part in the PISA assessment process, we aim primarily to understand how relevant the knowledge, skills and abilities attained over several years of schooling are to the real-life challenges faced by a 15-year old student, and how capable students are of applying what they have learned in daily life. We consider this to be the main goal of the new competency-based curricula.

It was with these considerations in mind that Kosovo made a bid to the Organisation for Economic Co-operation and Development (OECD) to participate in the international PISA assessment. It was also important to us to become part of ongoing international development processes.

"THE PARTICIPATION OF OUR COUNTRY IN THIS IMPORTANT INTERNATIONAL ASSESSMENT REQUIRES ACHIEVEMENTS AND REFORMS IN EDUCATION TO BE MEASURED AND COMPARED WITH INTERNATIONAL DEVELOPMENTS."

The final report of the 2015 International PISA Assessment, which will be published in 2016, will serve as policy guidance for the Ministry of Education in the further development of Kosovo's education system.

During the two days of the conference, we will discuss the importance of student assessment in improving education quality and exchange relevant practices and knowledge.

> THE FINAL REPORT OF THE 2015 INTERNATIONAL PISA ASSESSMENT, WHICH WILL BE PUBLISHED IN 2016,WILL SERVE AS POLICY GUIDANCE FOR THE MINISTRY OF EDUCATION IN THE FURTHER DEVELOPMENT OF KOSOVO'S EDUCATION SYSTEM.

Ladies and Gentlemen,

The 'Kosovo in PISA 2015' conference is organised in cooperation with MEST and GIZ and has the purpose of informing and sensitising the public about the 2015 International PISA Assessment. At the workshops being held on the second day, you will have the opportunity to discuss the challenges that lie ahead of us, and to provide recommendations which will help conclude the process successfully.

The Ministry of Education, Science and Technology, via the Division for Evaluation, Standards and Monitoring, carries out all activities that arise from the international PISA assessment. The recommendations of this conference will provide additional assistance to their mission.

This assessment was successfully piloted on 23 April 2014 in 27 assessment centres, where a total of 1,100 students were assessed. The final test will take place in April 2015. The results of this test will show where Kosovo ranks compared to other participating countries.

Dear participants,

The conference programme is very extensive, including international student assessment expertise, examples of education systems from around the world and a good overview of the development of Kosovo's education sector.

The programme will provide each participant with the opportunity to actively engage with the conference speaker and gain a deeper insight into the subject matter, either during the discussion sessions after each presentation or during workshops on the second day.

I would like to invite you to participate fully and actively in this conference. Let us work together to develop education in Kosovo.

In conclusion, I would like to thank you for your commitment and express my gratitude to all those who contribute to making education in Kosovo a success. I would also specifically like to thank the German Federal Ministry for Economic Cooperation and Development (BMZ), which facilitated the organisation of this conference through the GIZ-CDBE project.

6 MAY 2014
CONFERENCE OPENING

Dr. PETER BLOMEYER
Ambassador of the Federal Republic of Germany

Ministers,
Excellences,
Ladies and Gentlemen,

Every pupil, every student knows this precarious, scary, expectant sensation preceding the turnout of grades for examinations by professors, grades which judge his performance in math, physics, languages or whatsoever. It is his efforts, his diligence in studies which determines whether this sensation turns into joy or frustration when receiving the grades. It is a sensation which we usually associate with our time in school or university.

> WE ALL HAVE TO LEARN; INSTITUTIONS NEED TO LEARN. AND IF YOU LEARN, YOU NEED FEEDBACK FOR THE SUCCESS OF YOUR EFFORTS.

Actually though, it is a sensation which we should associate with learning. And learning should not be limited to the time in school or university. Today, we are aware of the need of lifelong learning, learning on the job. Professors have to learn not less than students, politicians, civil servants, technicians: we all have to learn; institutions need to learn. And if you learn, you need feedback for the success of your efforts.

> THE FAILURE OF PUPILS AND STUDENTS IS NOT ONLY THEIR INDIVIDUAL PROBLEM BUT A PROBLEM FOR STATE, SOCIETY AND ECONOMY OF A COUNTRY.

The feedback for our education systems is PISA. The logic is simple: the failure of pupils and students is not only their individual problem but a problem for state, society and economy of a country. It is all too comfortable to leave the blame to the student. However, for a country it takes some courage to expose itself to international standards and comparison. It can shutter your confidence.

This was true for Germany. When it took part in the PISA test for the first time, the results came as a shock. They were worse than expected and we had to realize that many reforms were needed. It turned out that our educational system gave fewer opportunities to children from families with migration backgrounds as well as those from poorer families. These findings initiated a reform process in Germany which yielded much progress in the past years. I am very satisfied that Dr. Prenzel from the Technical University of Munich, one of the foremost education experts in Germany, came to Kosovo to present to you the effects of PISA on this reform process in Germany. He is our so-called "Mr. Pisa", and one month ago he was also elected as chairman of the German Council on Science and Humanities (Wissenschaftsrat). Welcome and congratulations!

Now, Kosovo decided to participate in PISA. This will enable also Kosovo to measure the quality of its education and to compare it with the standards of other countries. However, PISA tests should be em-

> NOW, KOSOVO DECIDED TO PARTICIPATE IN PISA. THIS WILL ENABLE ALSO KOSOVO TO MEASURE THE QUALITY OF ITS EDUCATION AND TO COMPARE IT WITH THE STANDARDS OF OTHER COUNTRIES. HOWEVER, PISA TESTS SHOULD BE EMBEDDED IN REGULAR NATIONAL STUDENT ASSESSMENTS SO THAT QUALITY OF EDUCATION CAN BE MONITORED ALSO IN BETWEEN THE THREE YEARS RHYTHM.

bedded in regular national student assessments so that quality of education can be monitored also in between the three years rhythm within which PISA tests are taking place. This one of the recommendations of last year's conference devoted to the correlation of quality of education and economic development, and it is the subject of this conference.

Please allow me to use this occasion for mentioning that 2014 is a special year of Kosovar-German cooperation: we are celebrating its 15th anniversary. Our cooperation started with emergency assistance and transformed into long term support towards sustainable development. Since 2009 basic education has been one of the focus areas of German development cooperation with Kosovo. Also in Education we can see the changes in cooperation. After the war 45% of school buildings were destroyed and needed rebuilding. Now we are shifting from infrastructure to quality of education. This conference is part of this effort, and I wish all of us an interesting and fruitful learning process throughout these next two days in preparation of PISA 2015.

Thank you very much for your attention.

6 MAY 2014
CONFERENCE OPENING

NEHAT MUSTAFA

Deputy Minister of Education, Science and Technology, MEST

Dear Minister Buja,
Dear Ambassador Blomeyer,
Dear Chair of the Parliamentary Committee,
Dear representatives of the Government of the Republic of Kosovo,
Dear representatives of the World Bank, European Commission and OECD,
Dear participants,

In this address, I would like to talk about our journey towards becoming a part of the International PISA Assessment and to outline the challenges we face and the targets we have set ourselves.

During the 1990s, as you will be aware, education in Kosovo was run under very difficult conditions and with the sole purpose of 'surviving'. After the liberation of Kosovo, and as a result of the overall changes that had taken place, the education system was reorganised in accordance with both the national needs of the time and international trends. The aim was to recuperate lost time. Over the last decade, besides meeting emergency needs, such as improving the largely destroyed infrastructure, MEST focused on continuing its efforts to improve quality assurance by utilising international models and best practices, such as those relating to curricular changes, the organisation of external standardised tests, etc.

Against the backdrop of these changes, we began to implement and strengthen the external assessment system, with particular emphasis on the assessment of grade 9 and grade 12 tests. By using external assessment instruments, we aimed not only to gauge the current situation, but also to encourage teachers, schools and Municipal Education Directorates to move on from an unsatisfactory situation. Now, around a decade later, we can safely conclude that our initial goals have been achieved, including the mobilisation of students, teachers, school management and Municipal Education Directorates, and, for the first time, the sensitisation of parents and society in general. All these factors together, along with considerable investment in Teacher Professional Development and infrastructure, have brought about a continuous improvement in results.

Dear participants,

Despite the great significance attached to external assessments organised by the Ministry of Education, Science and Technology, there was a need to conduct a debate on whether it was the right moment to take on new challenges, including the possibility of participating in international assessments. It should be noted that our general orientation as a country and as a society over recent years has been to seek further integration into the European family. This inspires us to venture into new territory, and creates an incentive to open ourselves up to international comparison.

In 2008, a debate was initiated on the possibility of Kosovo becoming part of international assessments, with a particular emphasis on three major international assessments: PISA, TIMMS and PIRLS.

Since 2008, we have considered it more beneficial for Kosovo to become part of the international PISA

> BY USING EXTERNAL ASSESSMENT INSTRUMENTS,WE AIMED NOT ONLY TO GAUGE THE CURRENT SITUATION, BUT ALSO TO ENCOURAGE TEACHERS, SCHOOLS AND MUNICIPAL EDUCATION DIRECTORATES TO MOVE ON FROM AN UNSATISFACTORY SITUATION.

> IT SHOULD BE NOTED THAT OUR GENERAL ORIENTATION AS A COUNTRY AND AS A SOCIETY OVER RECENT YEARS HAS BEEN TO SEEK FURTHER INTEGRATION INTO THE EUROPEAN FAMILY. THIS INSPIRES US TO VENTURE INTO NEW TERRITORY, AND CREATES AN INCENTIVE TO OPEN OURSELVES UP TO INTERNATIONAL COMPARISON.

study. It is the largest study in the world in the field of education and aims at measuring the achievements of 15-year-old students in the areas of reading, mathematics and science. The assessment is supported by the Organisation for Economic Co-operation and Development (OECD). According to OECD, the focus here is on 'knowledge, skills and competencies that are relevant for personal, social and economic well-being'.

Despite our strong desire to take part, it was decided, in 2008, that we were not in a position to make a request to undergo PISA assessment in 2012. This was also due to the fact that we had not built satisfactory capacities within the Ministry, and that there was insufficient awareness among teachers, schools, Municipal Education Directorates and society in general. Despite the 2008 decision, there was no cessation of debate on the matter, and these debates took on more concrete form during 2011 and 2012. We faced a number of dilemmas relating to Kosovo's inclusion in PISA assessment. On one hand, the Government of Kosovo and, respectively, the Ministry of Education realised that a possible unsatisfactory ranking would create opportunities for a frontal attack by experts, pseudo-experts and the political opposition on the state of education, and that the Government would be the target of these attacks. On the other hand, the Government would take this risk consciously, in full awareness of which responsibilities lay within its remit and which lay outside it, and in the knowledge that facing the challenge could be better for Kosovo, as this represented a great opportunity for us to assess the real state of our education system.

Faced with this dilemma, the Ministry of Education decided on the second option, which, though more difficult and more of a risk to the prestige of the Ministry, held great potential to make a positive impact on the country's future. Minister Buja therefore gave his consent for us to make a request to the PISA Board, and thus show our readiness to fulfil all the obligations arising from the assessment, which would take place in 2015. The PISA Board approved our request and, at this juncture, I would like to thank the World Bank for the assistance we received during the application stage.

We are aware that international test results have been shocking for many countries whose results did not meet their expectations. In this regard, we should first mention the unsatisfactory results of countries with great economic development, such as the United States and, as the Ambassador himself mentioned, the case of Germany. But we must be clear that the assessment has helped these countries to analyse the state of their education system in relation to other countries, and that they soon managed to recover from a disappointing result owing to new policies and the support of society as a whole.

Today, one hears a variety of opinions on PISA and other international assessments, with some people offering different interpretations on what we can learn from these assessments and some even disputing the significance of the assessments in general. To many, PISA is merely a comparison between different countries or a kind of competition where there are losers and winners in simple terms. But experience has shown that there are no losers in PISA, and that the ranking is both an accurate indication of the current situation of the respective countries

> BUT EXPERIENCE HAS SHOWN THAT THERE ARE NO LOSERS IN PISA, AND THAT THE RANKING IS BOTH AN ACCURATE INDICATION OF THE CURRENT SITUATION OF THE RESPECTIVE COUNTRIES AND AN OPPORTUNITY FOR REFLECTION ON HOW THINGS CAN BE IMPROVED.

> THIS EDUCATIONAL REFORM MUST BE VIEWED FROM A LONGER-TERM PERSPECTIVE AND ITS PARTICULAR IMPORTANCE TO THE COUNTRY MUST BE RECOGNISED.

and an opportunity for reflection on how things can be improved.

A brief analysis of the PISA results shows that 25 of 64 countries participating in PISA between 2003 and 2012 have achieved improved performance levels in mathematics, and that 32 of these countries have improved their performance in reading. For these countries, PISA results represented a direct source of guidance when developing new policies to improve performance in the subjects assessed.

In any new education policy, one should be clear on the main expectations. Our main objectives in relation to PISA 2015 are:

- to accurately gauge the state of the pre-university education system;
- to identify educational reform outcomes over the last decade;
- to map out our future course ; and above all
- to better ascertain the extent to which our education system is succeeding in preparing students, not for the reproduction of learned material, but for applying what they learn in real-life situations – in a globalised knowledge economy, it is essential that we ensure our students are able to adapt to the new situations.

We are prepared to take the risk that such international level assessments could bring, in the belief that our participation will expedite the modernisation of our education system, which has already begun in the shape of a major five million euro-project entitled 'Modernisation of the education system in Kosovo through e-learning and digitising the maturity exam'. We will engage in continuous capacity building in order to fulfil all obligations we are mandated with by the PISA Board, and will determinedly pursue the goal of ensuring our results are credible internationally. The cooperation of all stakeholders will be of key importance to us in this process.

This educational reform must be viewed from a longer-term perspective and its particular importance to the country must be recognised. MEST has assumed its responsibility by engaging in the international assessment process on its own initiative. We are optimistic that the international assessment will prove that the reforms implemented by Kosovo over the last decade have been effective in the context of a regional comparison, which is also our goal for the 2015 PISA Assessment. At the same time, it will prepare the ground for even more favourable comparisons in the context of PISA 2018.

Dear participants,

Allow me to extend our particular gratitude to the German Government, which through our permanent partner organisation GIZ, has supported us in organising this conference. We are pleased to be welcoming experts from a variety of countries, who will be sharing their experience and providing examples of international best practice. I would also like to say a special thank you to UNICEF and the Assessment Centre of Albania, who have supported us since the beginning by placing their experience and all the necessary materials at our disposal.

I would like to invite all of you who are participating in the working groups to make your contribution to our efforts. Experience from other countries shows that the first visible effect of the PISA assessment has been putting education at the centre of a public debate and public policy, where it belongs. The fact that we are starting our journey towards PISA involvement with an international conference is the best evidence that we are on the right track, and we know exactly what we want to achieve.

I wish all participants a successful conference!

> THE FACT THAT WE ARE STARTING OUR JOURNEY TOWARDS PISA INVOLVEMENT WITH AN INTERNATIONAL CONFERENCE IS THE BEST EVIDENCE THAT WE ARE ON THE RIGHT TRACK, AND WE KNOW EXACTLY WHAT WE WANT TO ACHIEVE.

6 MAY 2014
CONFERENCE OPENING

Dr. DAGMAR FUCHS-SCHMITZ
GIZ-CDBE Manager

Honoured guests,
Ladies and Gentlemen
Përshëndetje, Mirëdita, Mirëmëngjes,
Welcome to the PISA conference here in Pristina, Kosovo.

I am sure we will have an enjoyable and rewarding time together.

Dr. Blomeyer mentioned the PISA shock in Germany – the results were not as we anticipated. We were so taken aback, because we in Germany are convinced that education is one of the most important sectors in any society. Education is the key to development and to economic prosperity. It is the force that drives active citizenship and the source of an informed and educated workforce. Without education, no country can function properly.

Within education as a whole, basic education is the starting point and the major priority. It is like a house, and if the foundations are not strong enough, anything that is built on this initial building block will be weak and unstable. That's why all of us, and that applies to both Kosovo and Germany, must first prioritise basic education in order to make it strong enough to support further levels of education, to drive the economy, and to promote democratic change and stability.

> "EDUCATION IS THE KEY TO DEVELOPMENT AND TO ECONOMIC PROSPERITY. IT IS THE FORCE THAT DRIVES ACTIVE CITIZENSHIP AND THE SOURCE OF AN INFORMED AND EDUCATED WORKFORCE. WITHOUT EDUCATION, NO COUNTRY CAN FUNCTION PROPERLY.
> WITHIN EDUCATION AS A WHOLE, BASIC EDUCATION IS THE STARTING POINT AND THE MAJOR PRIORITY."

Last year's conference on the economics of education looked at the connections between education and economic growth. All those interesting PowerPoint presentations and contributions from the plenary sessions and the workshops have since been compiled in a publication that can be downloaded from our website: http://www.education-economics-kosovo.org. Please note that all of the information is available in three languages: Albanian, Serbian and English.

Coming back to our conference today, I am very happy we have been able to reach out to so many different groups in society, and I am thrilled that so many different stakeholders in education have joined us here. I am particularly pleased, because one of the main objectives of this conference is to share and disseminate information about PISA. Having said that, PISA is not all we want to talk about – we would also like to draw attention to student assessment, an ongoing task of the education sector that we need to look at very closely and systematically in order to establish where we stand at present before deciding how we can move forward to achieve our goals.

Our objective is to raise stakeholder awareness with respect to the major significance of education for society. Sometimes other targets might appear

to be more important, but ultimately if we do not invest sufficiently in education then other gains and achievements will not be sustainable, and we will not be able to benefit from them in the longer term. Furthermore – and now we come to what is perhaps for me the most important objective of this conference – we also aim to strengthen discussion and public debate about education, student assessment and the up-coming PISA: Education, led by the Ministry of Education (MEST), the Municipal Education Directorates (MEDs), school directors and teachers, is in fact for the benefit of society as a whole. Everybody is affected by education and everyone experiences it in some form or other, be it as a parent, a student, a member of a civil society organisation or indeed just by being a member of society. We are all affected by education, because it is all around us. And it is very important that all sectors of society engage in a debate – an inter-disciplinary, inter-ministerial debate – on education that brings together different stakeholders to discuss where we are, where we want to go, and how we can get there. If we wish to improve education, we have to join forces and make it our number one priority – and that goes for each and every political party and each and every government. And we have to make sure it stays our main priority, both in terms of policy and resources.

> WE ARE ALL AFFECTED BY EDUCATION, BECAUSE IT IS ALL AROUND US. AND IT IS VERY IMPORTANT THAT ALL SECTORS OF SOCIETY ENGAGE IN A DEBATE ON EDUCATION.

I would like to thank everybody for coming here today. I believe we can help set the agenda and improve the status of education, both politically and socially. Before I finish, I would just like to share with you a quote from Nelson Mandela – whose words touched me very deeply: *'Education is the most powerful weapon which you can use to change the world.'*

> IF WE WISH TO IMPROVE EDUCATION, WE HAVE TO JOIN FORCES AND MAKE IT OUR NUMBER ONE PRIORITY – AND THAT GOES FOR EACH AND EVERY POLITICAL PARTY AND EACH AND EVERY GOVERNMENT.

On that note, I would like to welcome all of you again, and wish all of us two days of intensive and productive discussions and exchanges. Moving forward, I hope this broader public debate will help strengthen education in Kosovo and promote the reform process in this sector.

Thank you very much!

6 MAY 2014 - KEYNOTE SPEECH I

PISA: CHALLENGES AND CHANCES

Dr. JENNY BRADSHAW
OECD Paris, France

First of all I would like to start by thanking GIZ and the Ministry of Education for inviting me here. I am going to start by just generally telling you a little bit more about the background of PISA and particularly about PISA 2012 which was the most recent cycle. Some of you may have seen the PISA 2012 international report published in December, which had a lot of media coverage and a lot of publicity worldwide.

First of all I'd like to say something about exactly what PISA is. Over a half a million students worldwide took part in PISA 2012 and they were representing 28 million 15-year olds in 65 countries in total. They took a two-hour test and the aim of this test is that it should go beyond just what they have learned in the curriculum, certainly beyond what they have learned just in that year or in their most recent education. PISA is looking at the whole education system over the course of a young person's life, and not just what they have learned in school but what they have learned with all the experiences that they have had in their life, in school and out of school. Something that is very important in PISA is the questionnaire; the students respond to a 30-minute questionnaire. That questionnaire has questions on their background, very important aspects related to their parents and home. It also asks them questions about their learning, what they have done at school and what they do out of school, what they think about what they're learning and do they enjoy what they're learning. As well as asking the students questions, there is also a very important questionnaire for schools, which is answered by the school principal and by other senior people at the school. That is very important, because in that way we can find out more about aspects to do with the education system and particular policies of schools. These different measurements, measurements of the students' achievement in the tests, their background and attitude in the questionnaires, what happens in the schools and the school policies means that in the analyses PISA can look at the interactions between all of those different factors and find out how they connect and how they vary across the different countries which take part in PISA.

> "OVER A HALF A MILLION STUDENTS WORLDWIDE TOOK PART IN PISA 2012 AND THEY WERE REPRESENTING 28 MILLION 15-YEAR OLDS IN 65 COUNTRIES IN TOTAL."

> PISA IS LOOKING AT THE WHOLE EDUCATION SYSTEM OVER THE COURSE OF A YOUNG PERSON'S LIFE, AND NOT JUST WHAT THEY HAVE LEARNED IN SCHOOL BUT WHAT THEY HAVE LEARNED WITH ALL THE EXPERIENCES THAT THEY HAVE HAD IN THEIR LIFE, IN SCHOOL AND OUT OF SCHOOL.

For a country like Kosovo which is taking part in PISA for the first time and is looking towards the future development of its education system, it is important to take full advantage of the opportunities which participation provides. The aim of PISA is not that it is an assessment imposed from the outside by a faceless body in Paris called OECD, because PISA is formed by the countries which participate in it. The most important thing in PISA is that it is guided by the governments of the countries which take part in PISA. That's particularly the OECD countries, who are members of the PISA Governing Board, but there are in fact as many and I think possibly now more countries which are not part of OECD and which are taking part in PISA and the policy needs of those governments are as important. As well as the governments that are involved there is a large number of experts around the world involved in PISA.

What PISA makes possible is a triangulation of looking at policy needs, looking at integration of the views of students, of parents, of principals, of the system leaders and the policy makers, so it is able to take all of those into account.

The way PISA works is that each time PISA takes place the main subject changes. So we have mathematics, reading and science and with each successive survey one of those is the main subject and the others have less extensive assessment. As you can see in figure 1 the main subject in 2000 was reading and in the cycle which we are in at the moment the main subject will be science, while in the next cycle the main subject will go back again to reading. As well as the main subjects in each cycle of PISA there are other elements as well, some of which are options that countries can choose from. In PISA 2012 there was an assessment on problem solving, which was reported a month or so ago, an optional assessment on financial literacy, and an optional computer-based assessment of reading and mathematics.

2000	2003	2006	2009	2012	2015
Reading	Reading	Reading	Reading	Reading	Reading
Mathematics	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics
Science	Science	Science	Science	Science	Science
	Problem Solving		Digital Reading	Problem Solving, Financial literacy, Digital Math, Digital reading	Collaborative Problem Solving, Financial literacy

FIGURE 1. The structure of the PISA assessment

I mentioned before that there are various questionnaires and as well as the student and school questionnaire there are also optional questionnaires, which countries could do if they wish to. For example there was a questionnaire on ICT (Information and Communication Technology), there was also an education career questionnaire, a parent questionnaire, and so on. Those are generally reported separately after the main reporting.

Of course an important part is the assessment itself and here I just want to show a couple of examples of test questions. First we have a question in mathematics from the PISA 2012 assessment (see slide 6), which is a very straightforward question and it is aimed at level 2 of achievement in PISA. Level 2 is considered to be the level which a young person is equipped to take

> WHAT PISA MAKES POSSIBLE IS A TRIANGULATION OF LOOKING AT POLICY NEEDS, LOOKING AT INTEGRATION OF THE VIEWS OF STUDENTS, OF PARENTS, OF PRINCIPALS, OF THE SYSTEM LEADERS AND THE POLICY MAKERS.

part productively in future life and future employment; so it is considered to be a basic level of achievement.

The graph below (see figure 2) is an illustration of how countries achieved at level 2 of achievement in PISA. The PISA reporting of course reports the overall scores, but it also reports a lot beneath that top level of the scores. It looks at how countries achieved at the lower levels of achievement and how they achieved at the higher levels of achievement. On this graph we have the higher achieving countries on the left side, like Shanghai, Hong Kong, China, Singapore, etc. which were very high-scoring countries overall. As you can see very high proportions of students in those countries achieved the basic level.

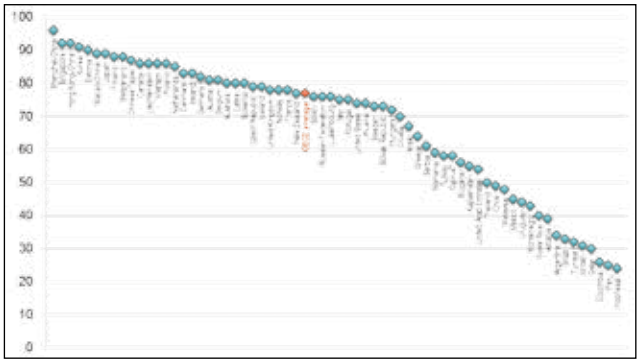


FIGURE 2. Percent of 15-year-olds who scored level 2 or above

The next question (see slide 8) is a much more difficult one and a different type of question compared to the first question, which was a multiple-choice question where students simply have to tick the right answer. In this question, however, they have to write their answer and they also have to show how they worked out the answer. So in some cases they may not get full marks, because they may not get the right answer, but they may still get some marks for having done some of the calculations correctly. This is an example of a question that aims at the top level of PISA, which is level 6, and the graph below (see figure 3) similar to the last one for level 2 shows how students in different countries achieve at level 6. As you can see there is obviously a very different shaped graph and again the very high achieving countries are on the left, but actually there is a very large number of countries which only have a very small proportion of students achieving at level 6.

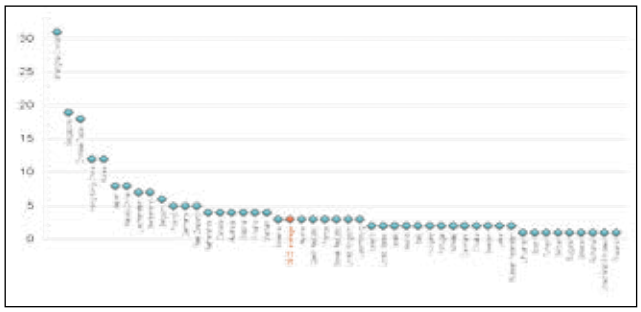


FIGURE 3. Percent of 15-year-olds who scored level 6 or above

What this illustrates is that PISA doesn't just look at the average scores, but also looks at the distribution of scores, to see if there needs to be a concentration on high or low achievers. Sometimes countries may have a reasonable average score, but as this particular graph shows, they may not be pushing students enough to achieve what they're capable of. On the other hand for some countries the problem might be that they don't have enough students achieving in basic levels, and so on.

The following figure (see figure 4) shows the part that is often reported in the media, which is the table of achievement of countries. The scores are reported in relation to the average and on this graph, you can see in the middle a yellow area which shows the average performance, with a certain number of countries performing around that average. Above that line are countries which are above the OECD average and obviously there is another group which are below that average. There are certain countries which came lower than that and there was actually one province of China that came above all the countries shown on this graph, which was Shanghai.

FIGURE 4. Table of achievement of countries in mathematics

But what is most important, wherever a country comes on that line, is how the country has improved since the last time mathematics was fully assessed in PISA 2003. The next graph (see figure 5) shows the difference in performance in 2003 and 2012. On the left you can see countries whose performance was below the OECD average in 2003 and on the right you have countries which were above the OECD average. Their position also shows you how much improvement they have made in 2012. On the left side of the graph in the higher positions (up in the top left) you can see some countries which, although they are still relatively low-performing countries, have made a lot of progress since PISA 2003. So not necessarily how do they compare with the top-performers, but how do they compare with themselves back in 2003. You can see for example that Brazil has made a lot of progress, that Turkey, Tunisia and Indonesia, all of those countries are still not on the top of the PISA ranking tables, but they're going in the right direction.

Interestingly what you can see on the right (the bottom right hand corner) is that a lot of the higher performing countries are still higher performing, but their performance has declined since 2003. So this particular figure gives you a very interesting picture of development on the one hand but of some countries not improving further, or even perhaps, in some cases, their mathematics performance not being as good as it was in 2003. So for both types of countries there are obviously a lot of policy lessons to be drawn from that.

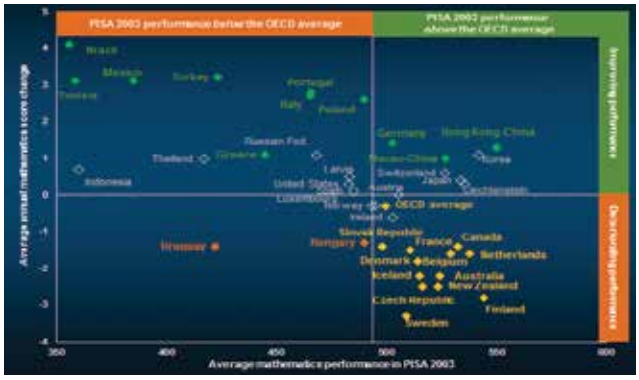


FIGURE 5. Change in performance between PISA 2003 and PISA 2012

On the next figure (see figure 6) you can see how many countries had made an improvement in at least one subject compared with PISA 2003. So you can see that there are quite a lot who made improvement in all three subjects and again there you can see the countries that I mentioned, such as Tunisia, Brazil, Turkey, Dubai whose overall score is quite low, but they are making progress.

FIGURE 6. Improvement of countries in the respective subjects

The PISA analysis looks at the interactions between all these variables, between aspects of performance, the information that comes from the questionnaires, and so on.

Here is one example of the variations PISA looks at (see figure 7). On this pie graph what you can see is the amount of variation which is between countries, meaning the differences between countries; the amount that comes from the differences between students and the amount that comes from the differences between schools. Between the 34 OECD countries actually only about 10% of the variation come from differences between the education systems as a whole, which is quite interesting, because quite often PISA shows the differences between countries, but actually the majority of the differences are between the students and the schools and the differences within the country rather than between countries. As you can see on the pie graph on the right if you look at all the countries then the difference between countries does become larger. What this illustrates is that PISA is looking at differences in schools and differences in students, as well as differences between countries.

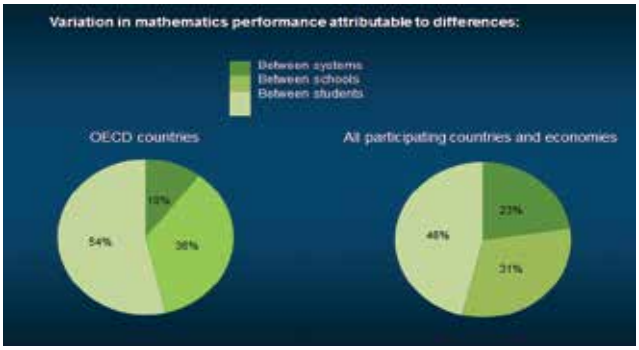


FIGURE 7. Variation in mathematics performance between systems, schools and students

The next graph (see figure 8) again shows an example of change across time. Both students and school principals were asked about the discipline in their schools and what you can see on this graph is a group of countries where discipline in schools improved between 2003 and 2012, and another group of countries on the left where disciplinary climate declined. One thing which is actually very encouraging is that in the majority of countries the climate and the discipline improved.

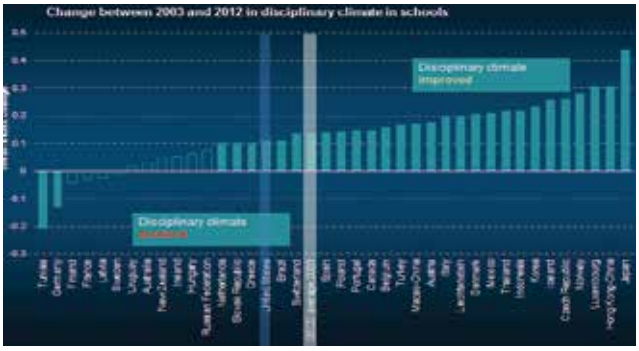


FIGURE 8. Disciplinary climate in schools

The graph below (see figure 9) looks at gender differences in performance in mathematics. In mathematics it tends to be the case (in the majority of countries) that boys tend to perform better than girls. It is interesting to look at countries where that is not the case and to think if this has something in particular to do with mathematics, or if we can see generally across the education system that girls are performing better than boys. The countries that you can see on that graph where girls are performing better are Jordan, Qatar, Thailand, Malaysia and Iceland; so a fairly diverse group of countries. It is possible to examine if there is something different that those countries are doing. Is there a particular difference which applies to mathematics or is there something that they are doing in particular with girls' education that is leading to that performance?

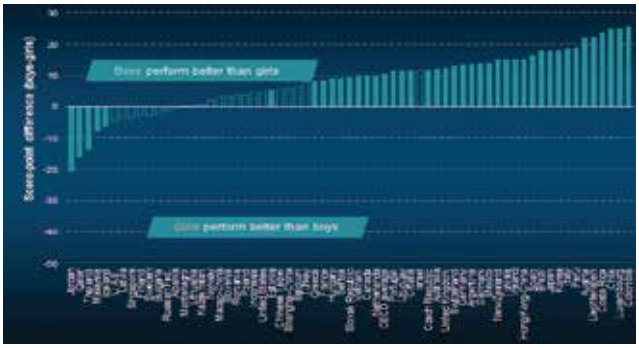


FIGURE 9. Gender differences in mathematics performance

A thematic report which is being developed at the moment is going to look specifically at what the PISA 2012 results tell us about the differences between boys and girls. So this is something else that PISA can do: look at particular themes in more depth.

Information about resources and spending in education comes from outside the PISA survey itself. OECD has a lot of information on OECD countries and on other countries that are taking part. Here we can look at the connections between spending on education and mathematics performance.

In the next graph (figure 10), if you look at the line which shows the connection between spending on education and mathematics performance, you can see on the left of the graph a group of countries where there is a strong relationship between spending on education and performance in PISA. You then see that level out, so in other words, to a certain extent spending on education makes a difference, and lack of resources is going to affect the output of education, but after that point money itself does not necessarily make a big difference. You can see for example that some of the highest spending countries, such as Luxembourg, Switzerland, Austria, Denmark, Norway and United States, are not necessarily the highest performing countries.

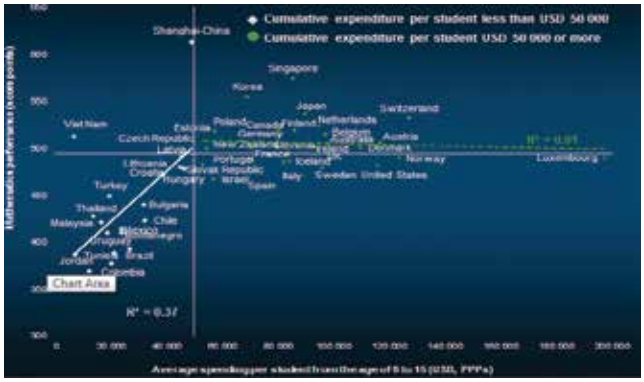


FIGURE 10. Spending per student from the age of 6 to 15 and mathematics performance in PISA 2012

Where is it best to spend the resources? The graph (see figure 11) shows us that there are more problems in a lot of countries – perhaps not surprisingly – with resources for disadvantaged schools, so here we are not just looking at the spending on the system level (top-level), but we are looking also how the resources are distributed across schools. This comes from the information which we get from the school principals'

questionnaires. It is also possible to measure the socio-economic background of the students, based on the student questionnaire, and to look at the connections between resources and students' socio-economic background; and also to consider school governance, and the differences between public and private schools. What this shows is that there are a small number of countries where the schools where students have more disadvantaged backgrounds report better education resources, but we have quite a large number of countries where the schools with more advantaged students have better resources.

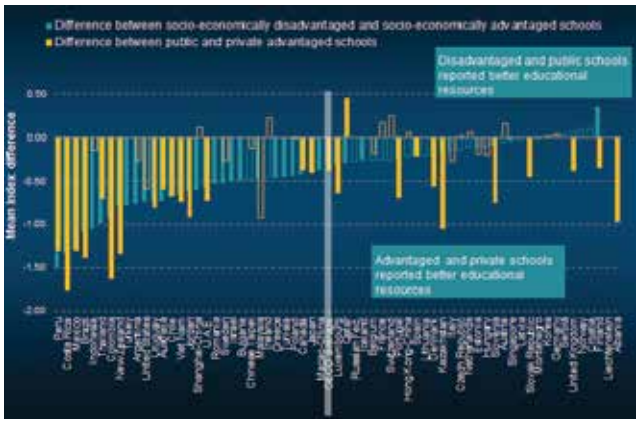


FIGURE 11. Allocation of educational resources

One thing that we have found is that (see slide 23) the higher performing countries tend to be ones which pay their teachers more, and there appear to be connections between how well the teachers are paid, how well they are supported and how well they are respected in society, and the students' performance. These connections, as with any connections found in the PISA data, have to be treated carefully, because one cannot assume the direction of cause and effect and cannot necessarily say that if you pay teachers more you will get better results, because paying teachers more won't necessarily lead to that. A combination of things appears to be linked with better performance, and this is discussed further in the PISA reports.

The next graph (see figure 12) shows that in higher performing countries there seems to be a tendency to allocate resources more equitably, in other words that the schools which have the more socio-economically deprived young people tend to have a better allocation of resources than schools with more advantaged young people; whereas some other countries with less equitable resource allocation are not achieving so highly.

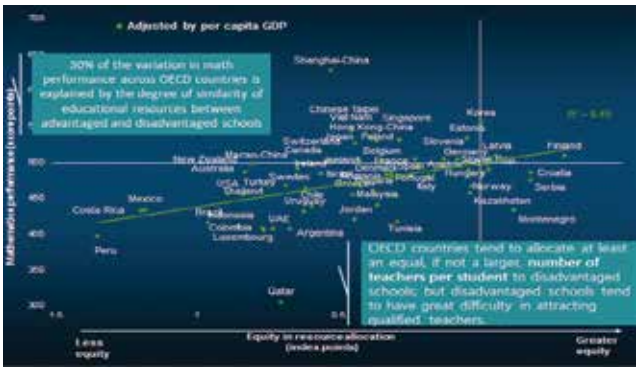


FIGURE 12. More equitable allocation of educational resources

I mentioned earlier some countries which have made a lot of progress since PISA 2003 and I want to look at one of them (slide 26), which is Brazil. Their performance was low the first time they participated in PISA and they are still below the OECD average, but what is interesting, looking at the figures here, is how their scores have changed. In mathematics there is a difference of 30 points between 2003 and 2009, and as a very rough indication it is often said that 40 points in PISA is equivalent to around one year of education, so an increase of 30 points, as you can see, is very good progress.

> TO GET THE MAXIMUM BENEFIT FROM PISA, WHAT'S VERY IMPORTANT IS TRANSPARENCY AND PUBLIC DIALOGUE. SOME OF THE COUNTRIES WHICH HAVE MADE THE MOST PROGRESS ACROSS PISA CYCLES, HAVE BEEN ONES WHICH HAVE TAKEN AN OPEN AND TRANSPARENT APPROACH TO THOSE RESULTS WHETHER THEY WERE HIGH OR LOW.

How did they do this? They used the results of PISA and other research to introduce a lot of reforms. Firstly there has been a large increase in funding across the education system as a whole, from 4% GDP in 2000 to 5.2 % in 2009. They raised teachers' salaries and they looked at spending more equitably across schools, so the poorest of the states are now getting more funding, to reduce the inequality in resources across the country. They have also introduced a new accountability assessment.

If you want to find out a bit more about the countries which have improved in PISA, please visit the following link: http://www.pearsonfoundation.org/oecd, where a video series is available, which was done after PISA 2009, looking at some of the countries which have made a lot of progress.

We are in the middle of PISA 2015 at the moment. Here in Kosovo the field trial has just finished and preparations are about to start for the main survey next year, and as I mentioned earlier the main subject in PISA 2015 is science. The number of countries or economies participating at the moment is 72 and the results will be released in 2016.

> "TO MAKE THE BEST USE OF PISA PARTICIPATION IT IS IMPORTANT TO PREPARE FOR THE RELEASE OF THE RESULTS."

Why is PISA 2015 important for Kosovo? Because it is a way to engage with policies and colleagues worldwide and this conference gives an example of that. The number of people that we have here from different countries and different PISA centres is the sort of thing that goes on across the whole PISA cycle: people coming together and learning from each other. Something I think other countries have found out is that, to get the maximum benefit from PISA, what's very important is transparency and public dialogue. Some of the countries which have made the most progress across PISA cycles, have been ones which have taken an open and transparent approach to those results whether they were high or low. They have looked at what the results are telling them about their system and what they can do with these results. To make the best use of PISA participation it is important to prepare for the release of the results, to decide what is going to happen with the results, how is this dialogue going to happen. How is Kosovo going to make the maximum benefit out of these results? That needs to involve everybody and I think is very encouraging that all of the various groups which need to be involved are also represented at this conference: policy-makers, teachers, schools, students, parents, the media and the research community all need to be involved.

Programme in International Student Assessment (PISA)

Jenny Bradshaw

OECD
BETTER POLICIES FOR BETTER LIVES

2 PISA in brief

- **Over half a million students…**
  - representing 28 million 15-year-olds in 65 countries/economies

… took an internationally agreed 2-hour test…

- Goes beyond testing whether students can reproduce what they were taught…
- … to assess students' capacity to extrapolate from what they know and creatively apply their knowledge in novel situations
- **Mathematics,** reading, science, problem-solving, financial literacy
- Total of 390 minutes of assessment material

… and responded to questions on…

- their personal background, their schools and their engagement with learning and school

- **Parents, principals and system leaders provided data on…**
  - school policies, practices, resources and institutional factors that help explain performance differences .

3 PISA in brief

- **A shared learning tool for all involved**
  - **'Crowd sourcing' and collaboration**
    - PISA draws together leading expertise and institutions from participating countries to develop instruments and methodologies…
    - … guided by governments on the basis of shared policy interests
  - **Cross-national relevance and transferability of policy experiences**
    - Emphasis on validity across cultures, languages and systems
    - Frameworks built on well-structured conceptual understanding of academic disciplines and contextual factors
  - **Triangulation across different stakeholder perspectives**
    - Systematic integration of insights from students, parents, school principals and system-leaders
  - **Advanced methods with different grain sizes**
    - A range of methods to adequately measure constructs with different grain sizes to serve different decision-making needs
    - Productive feedback, at appropriate levels of detail, to fuel improvement at every level of the system .

4 The structure of the PISA assessment

2000	2003	2006	2009	2012	2015
Reading	Reading	Reading	Reading	Reading	Reading
Mathematics	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics
Science	Science	Science	Science	Science	Science
	Problem Solving		Digital Reading	Problem Solving, Financial literacy, Digital Math, Digital reading	Collaborative Problem Solving, Financial literacy,

5

Questionnaires

- PISA 2012:
  - Student and school questionnaires
- Options:
  - ICT questionnaire
  - Educational career questionnaire
  - Parent questionnaire

6

PISA 2012 Sample Question **1**

Climbing Mount Fuji

Mount Fuji is a famous dormant volcano in Japan.

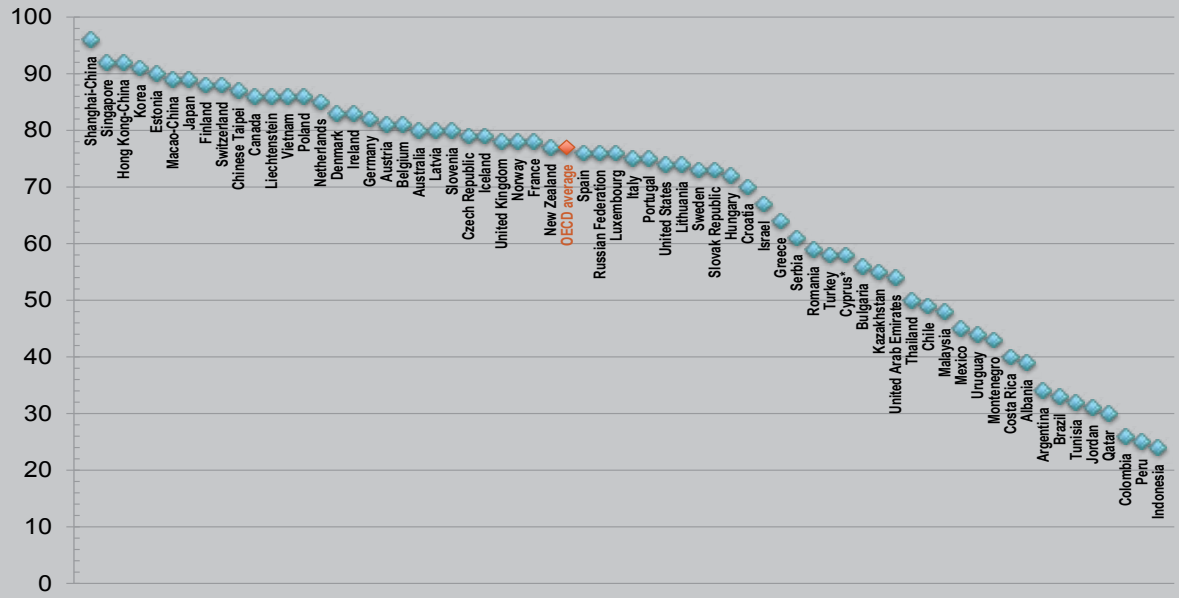
Mount Fuji is only open to the public for climbing from 1 July to 27 August each year. About 200 000 people climb Mount Fuji during this time.

On average, about how many people climb Mount Fuji each day?

A. **340**
B. **710**
C. **3400**
D. **7100**
E. **7400**

7 PISA 2012 Sample Question **1**

Percent of 15-year-olds who scored Level 2 or Above

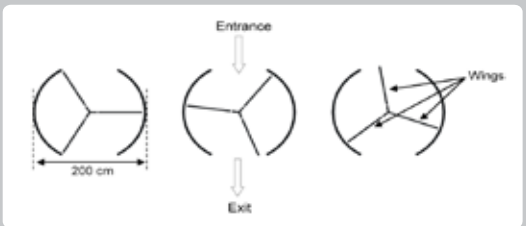


8 PISA 2012 Sample Question **4**

Revolving Door

A revolving door includes three wings which rotate within a circular-shaped space. The inside diameter of this space is 2 metres (200 centimetres). The three door wings divide the space into three equal sectors.

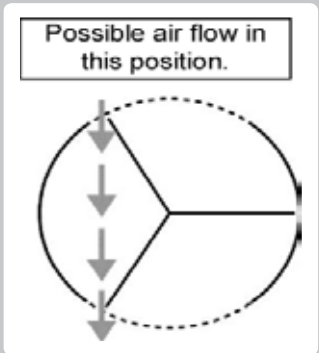
The plan below shows the door wings in three different positions viewed from the top.



The two door openings (the dotted arcs in the diagram) are the same size. If these openings are too wide the revolving wings cannot provide a sealed space and air could then flow freely between the entrance and the exit, causing unwanted heat loss or gain. This is shown in the diagram opposite.

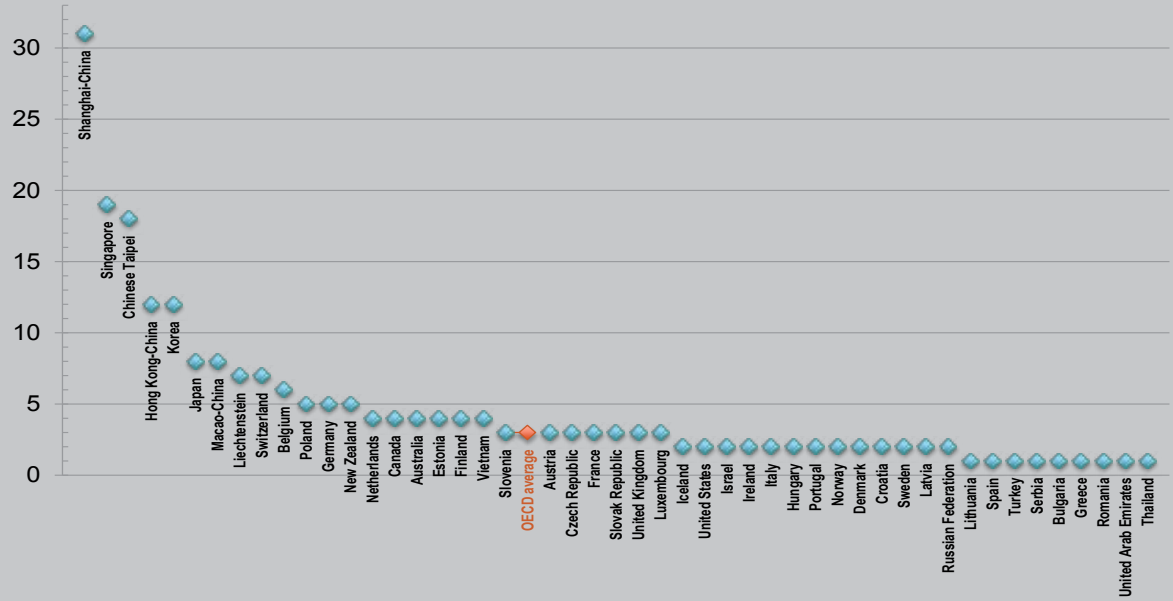
What is the maximum arc length in centimetres (cm) that each door opening can have, so that air never flows freely between the entrance and the exit?

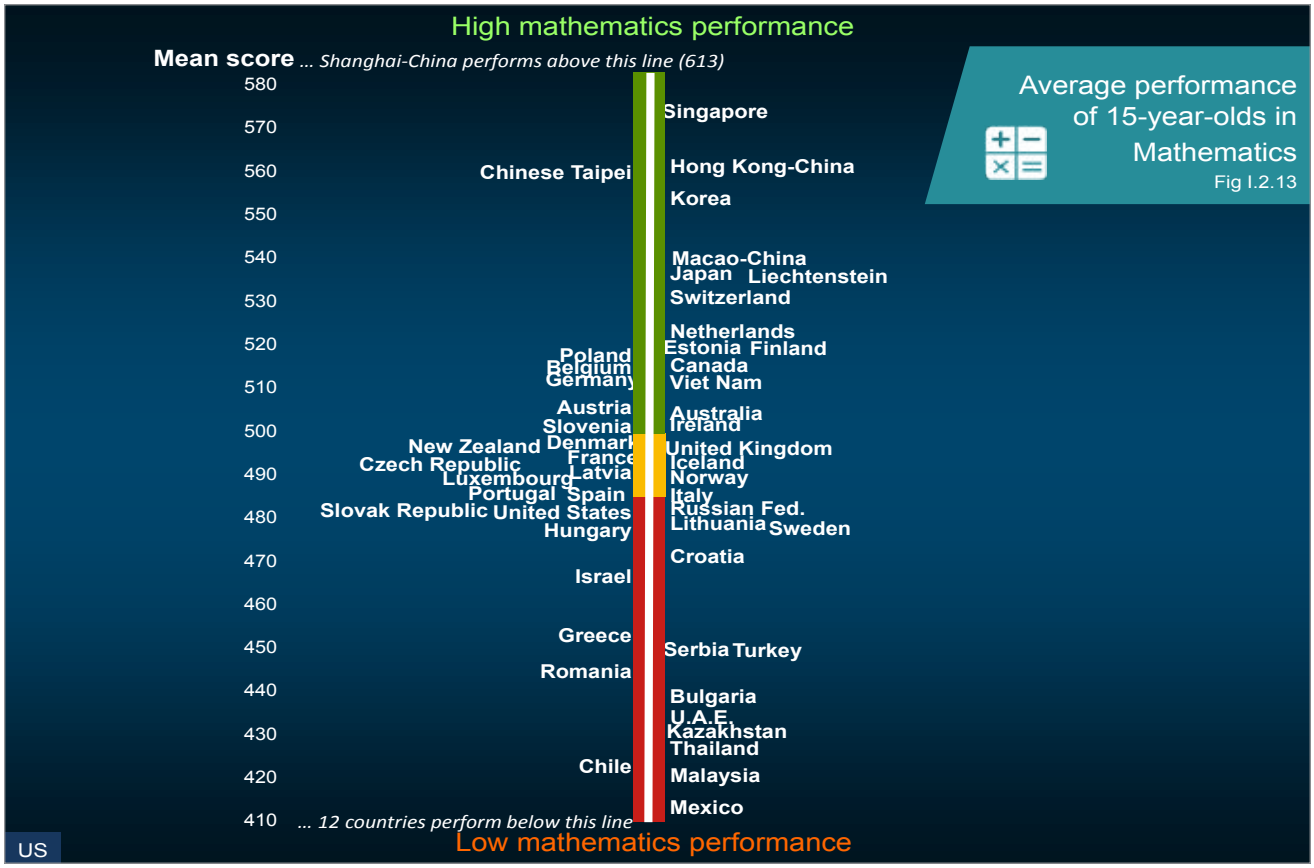
Maximum arc length: _____ cm



9 PISA 2012 Sample Question 4

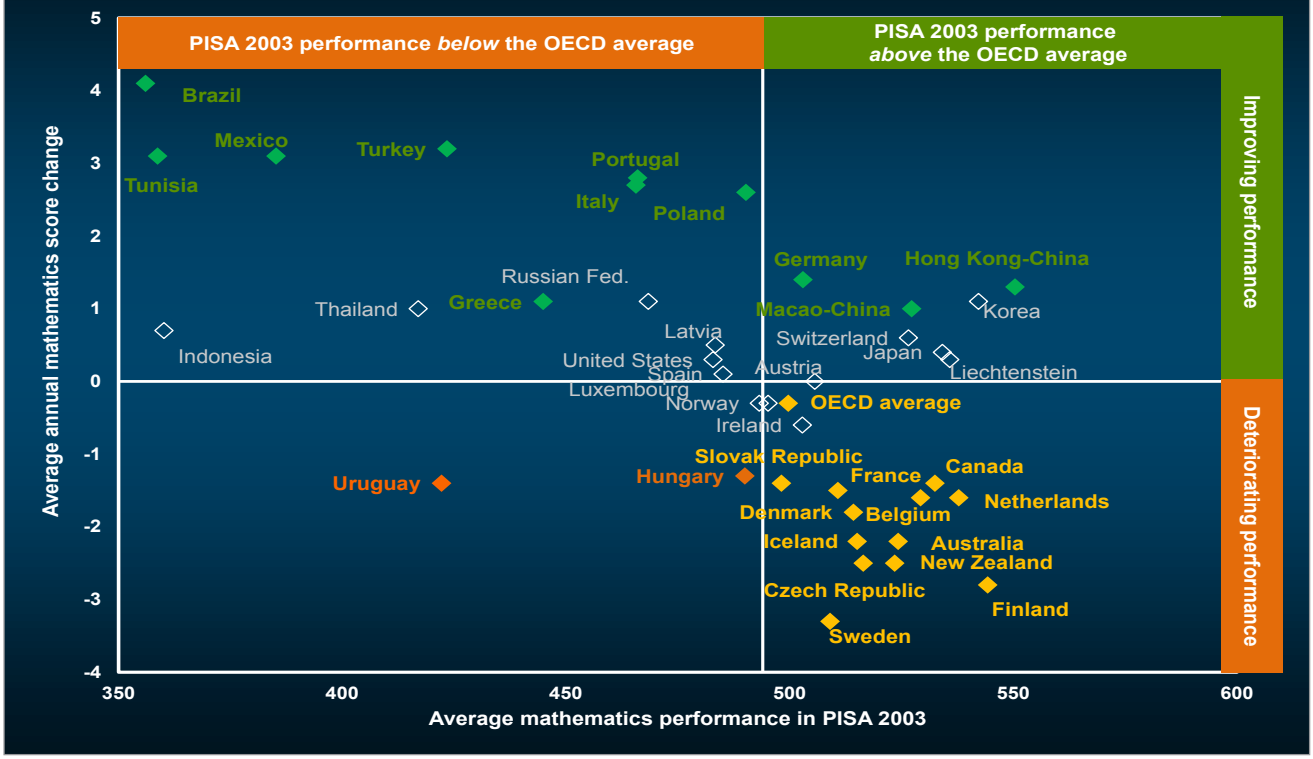
Percent of 15-year-olds who scored Level 6 or Above





11 Change in performance between PISA 2003 and 2012

Fig I.2.18



12 Of the 65 countries 45 improved at least in one subject

Mathematics, reading and science	**Israel, Poland, Portugal, Turkey, Brazil, Dubai (UAE), Hong Kong-China, Macao-China, Qatar, Singapore, Tunisia**
Mathematics and reading	Chile, Germany, Mexico, Albania, Montenegro, Serbia, Shanghai-China
Mathematics and science	Italy, Kazakhstan, Romania
Reading and science	Japan, Korea, Latvia, Thailand
Mathematics only	Greece, Bulgaria, Malaysia, United Arab Emirates (ex. Dubai)
Reading only	Estonia, Hungary, Luxembourg, Switzerland, Colombia, Indonesia, Liechtenstein, Peru, Russian Federation, Chinese Taipei
Science only	Ireland

3

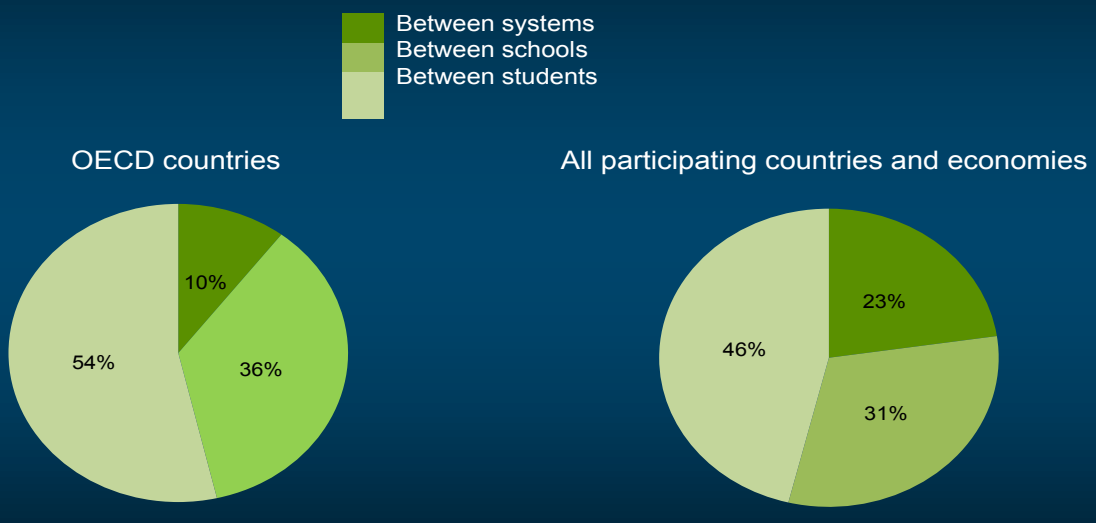
What accounts for variation?

14

Variation in mathematics performance between systems, schools and students

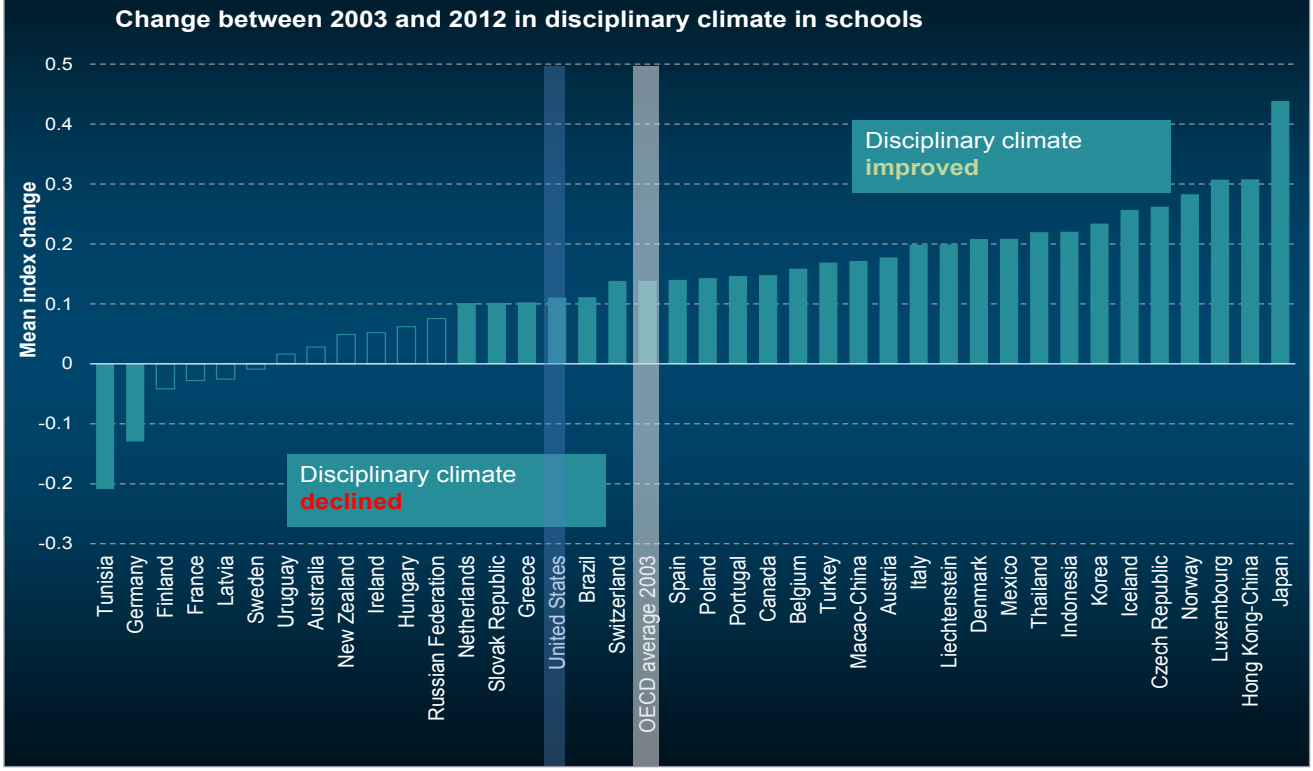
Fig IV.1.2

Variation in mathematics performance attributable to differences:



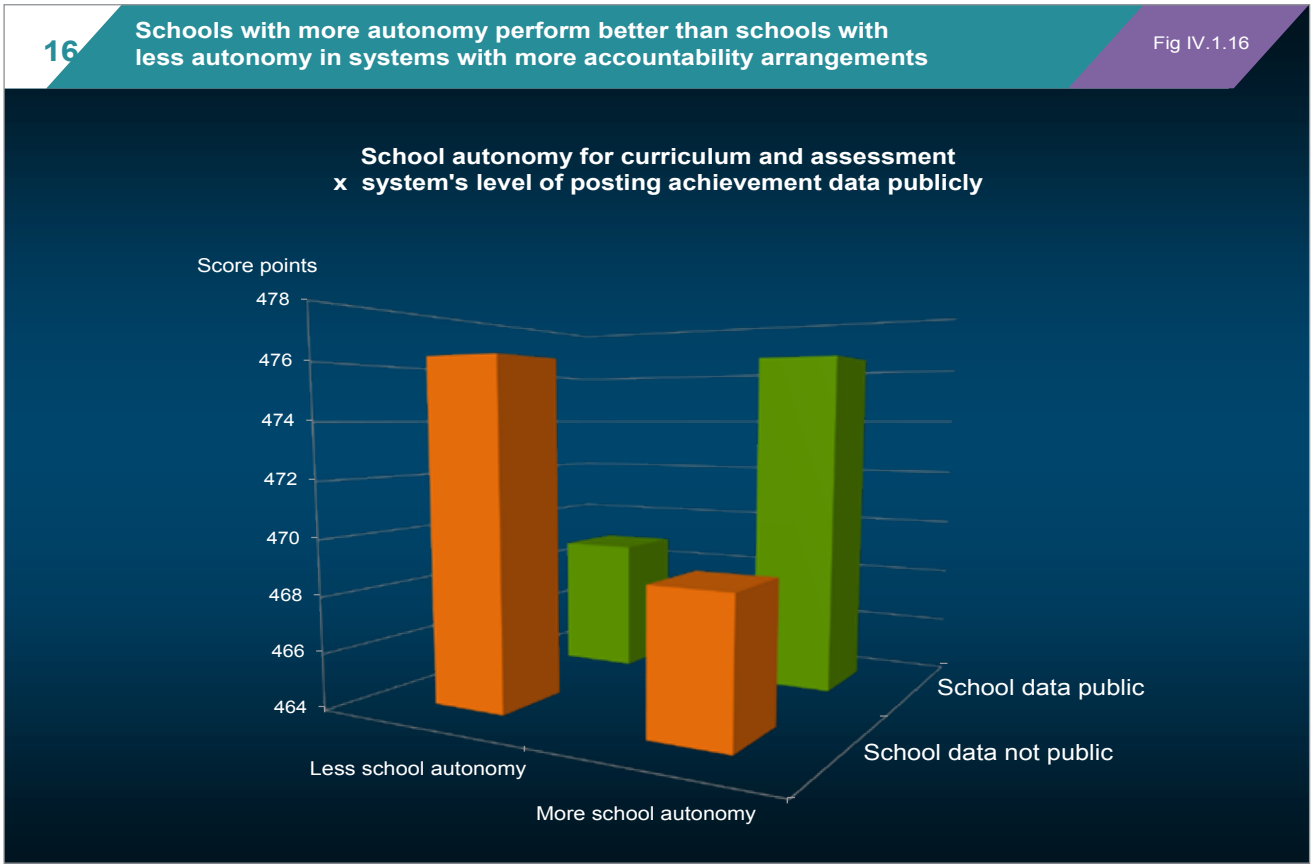
15 In most countries and economies, the disciplinary climate in schools improved between 2003 and 2012

Fig IV.5.13

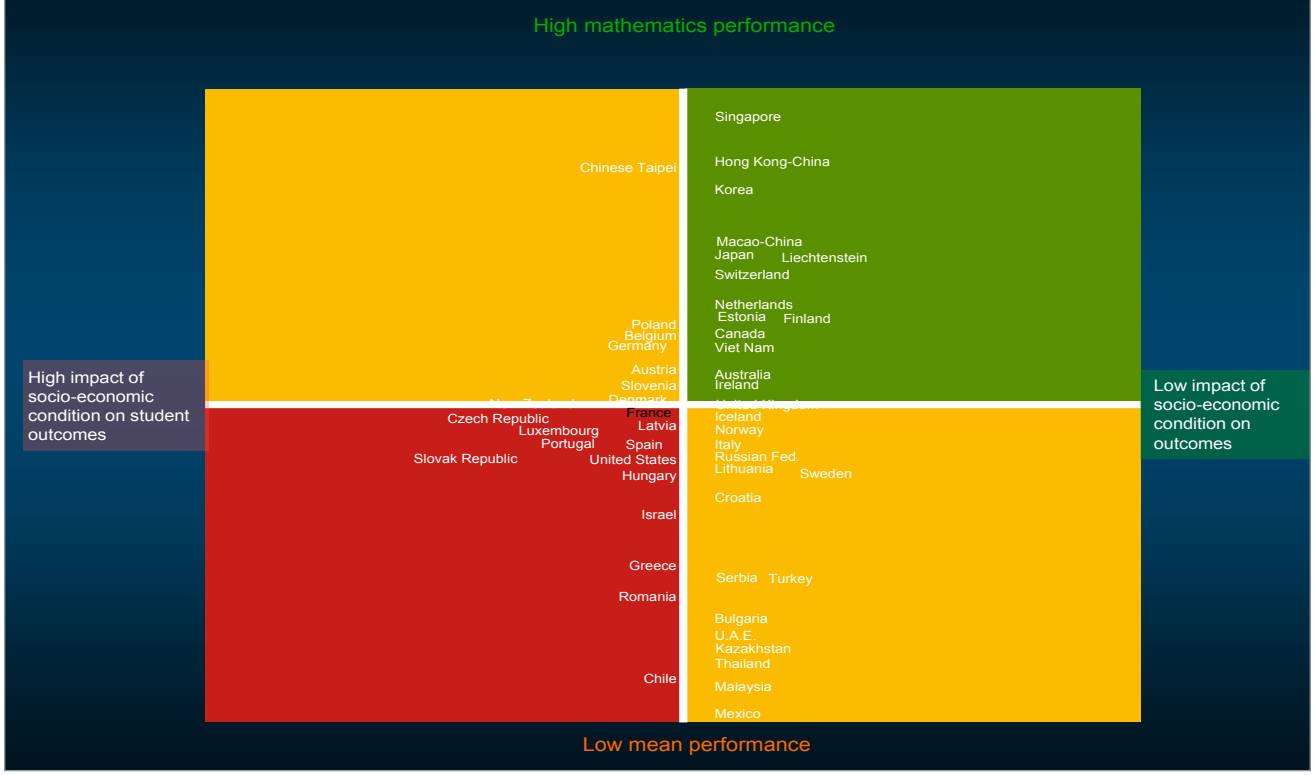


16 Schools with more autonomy perform better than schools with less autonomy in systems with more accountability arrangements

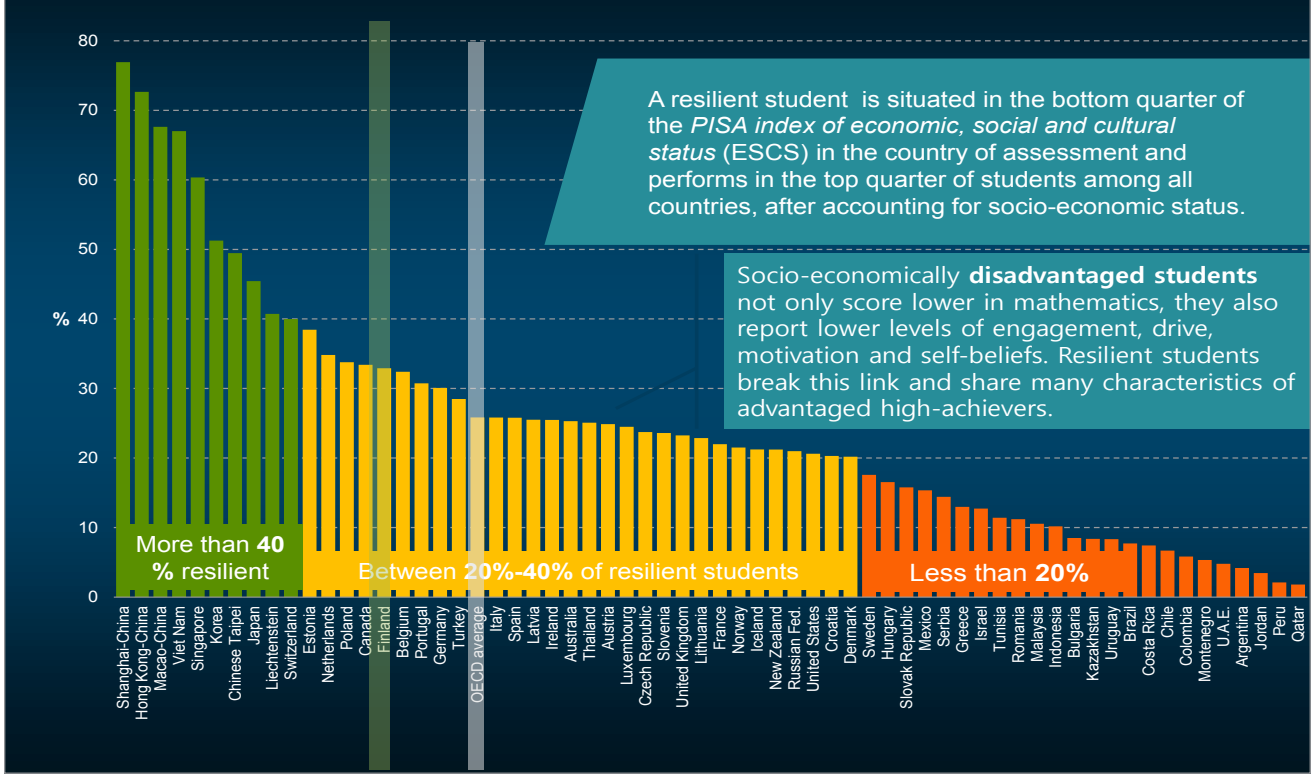
Fig IV.1.16



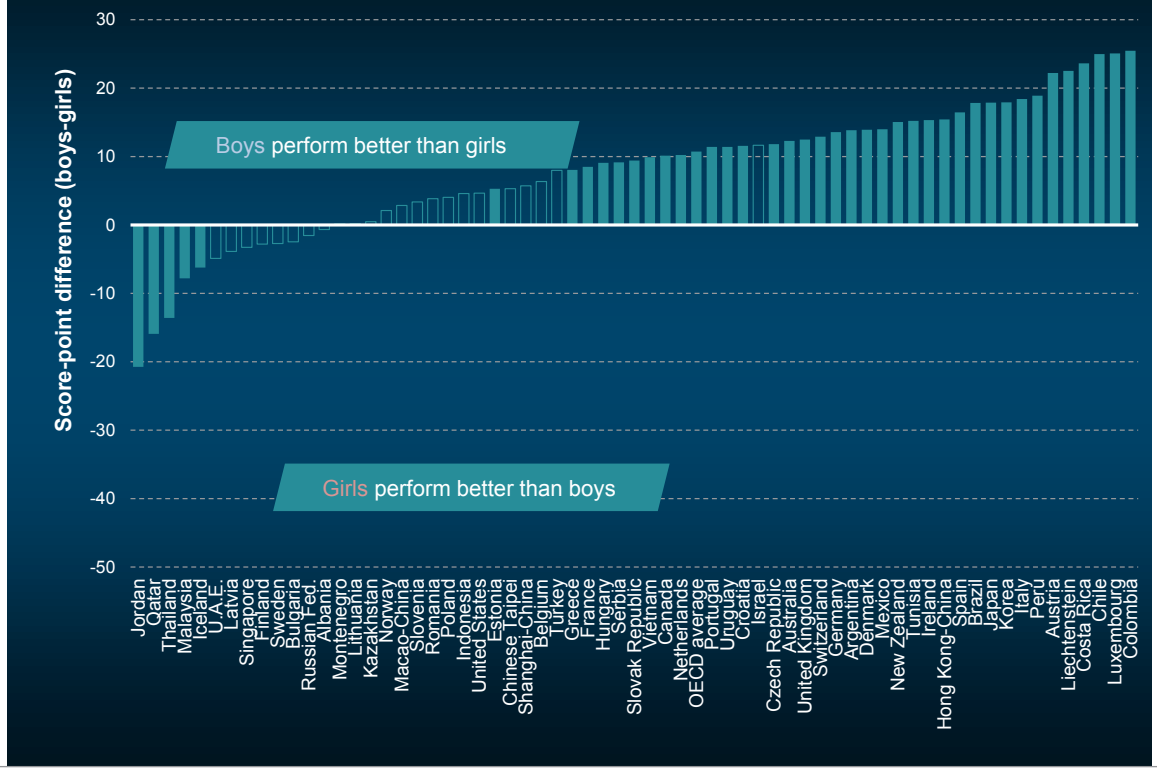
17 **Performance and equity: a tradeoff ?** Fig I.2.13



18 **Percentage of resilient students** Fig II.2.4



19 **Gender differences in mathematics performance** Fig I.2.25

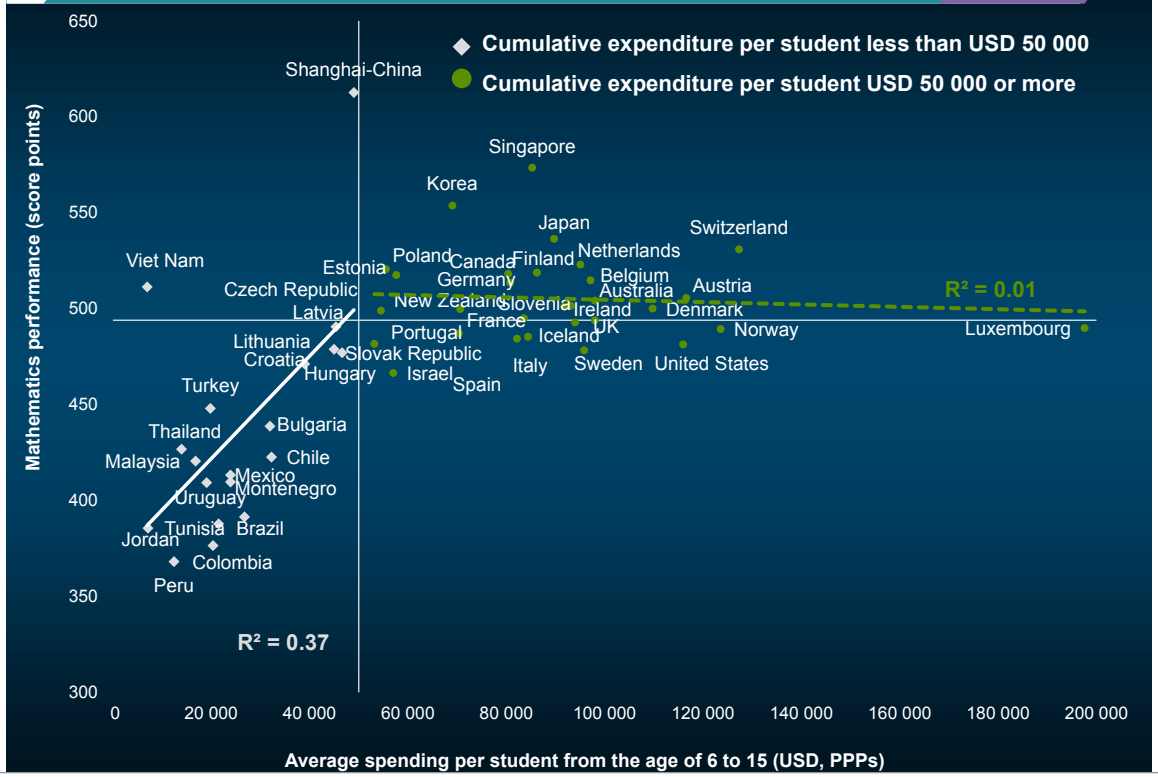


Resources make a difference…

…but only up to a point

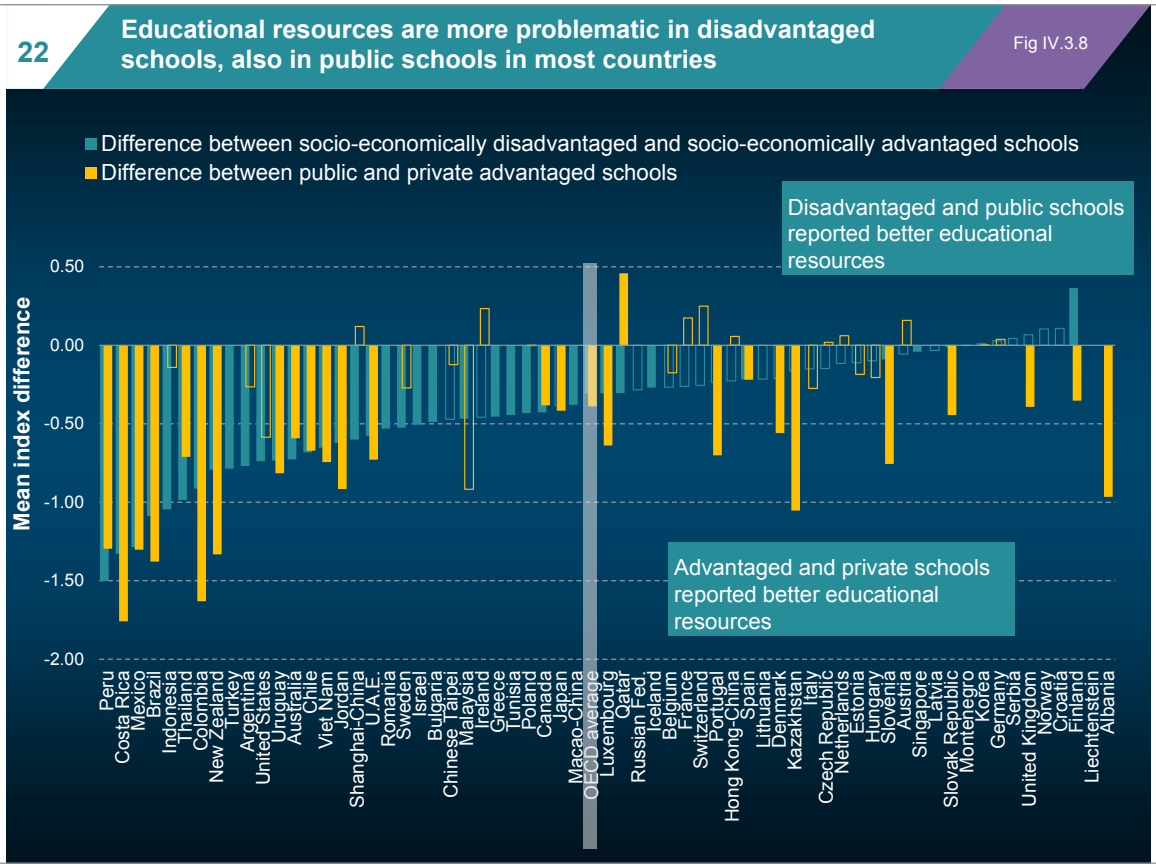
21 **Spending per student from the age of 6 to 15 and mathematics performance in PISA 2012**

Fig IV.1.8



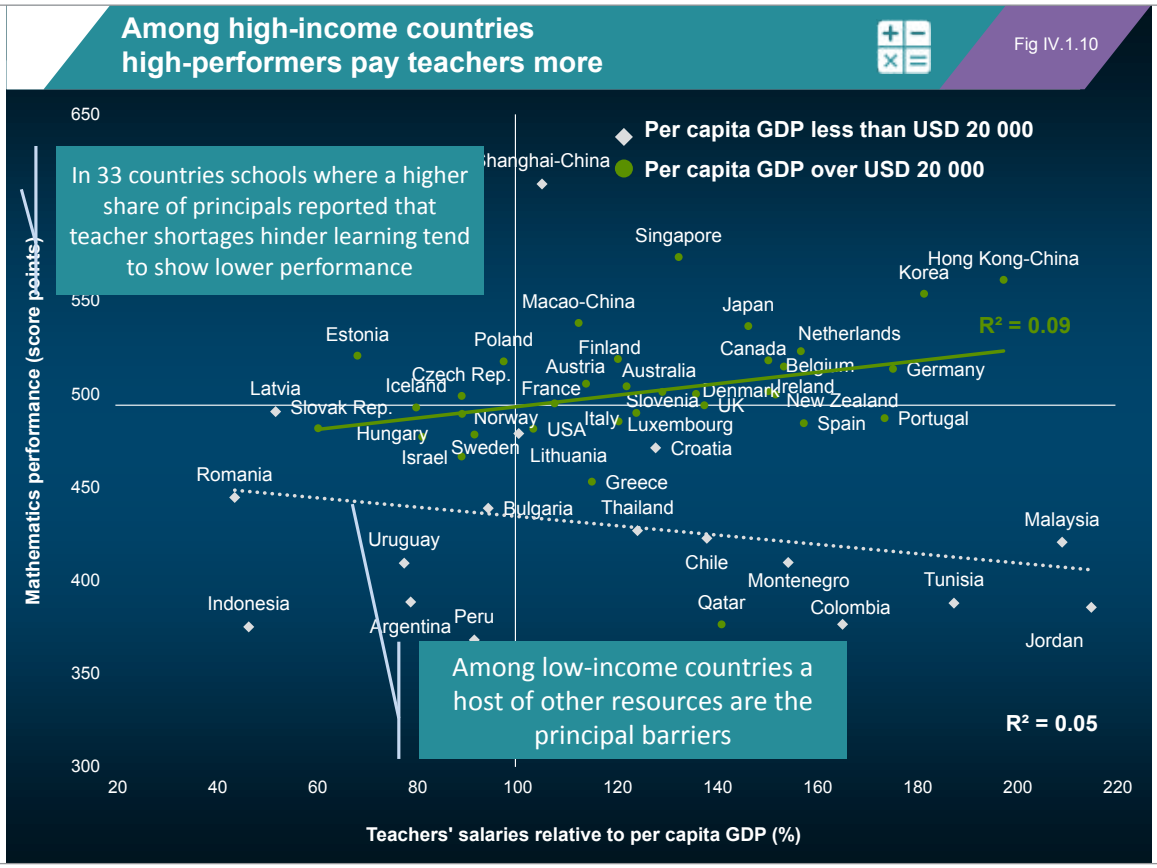
22 **Educational resources are more problematic in disadvantaged schools, also in public schools in most countries**

Fig IV.3.8



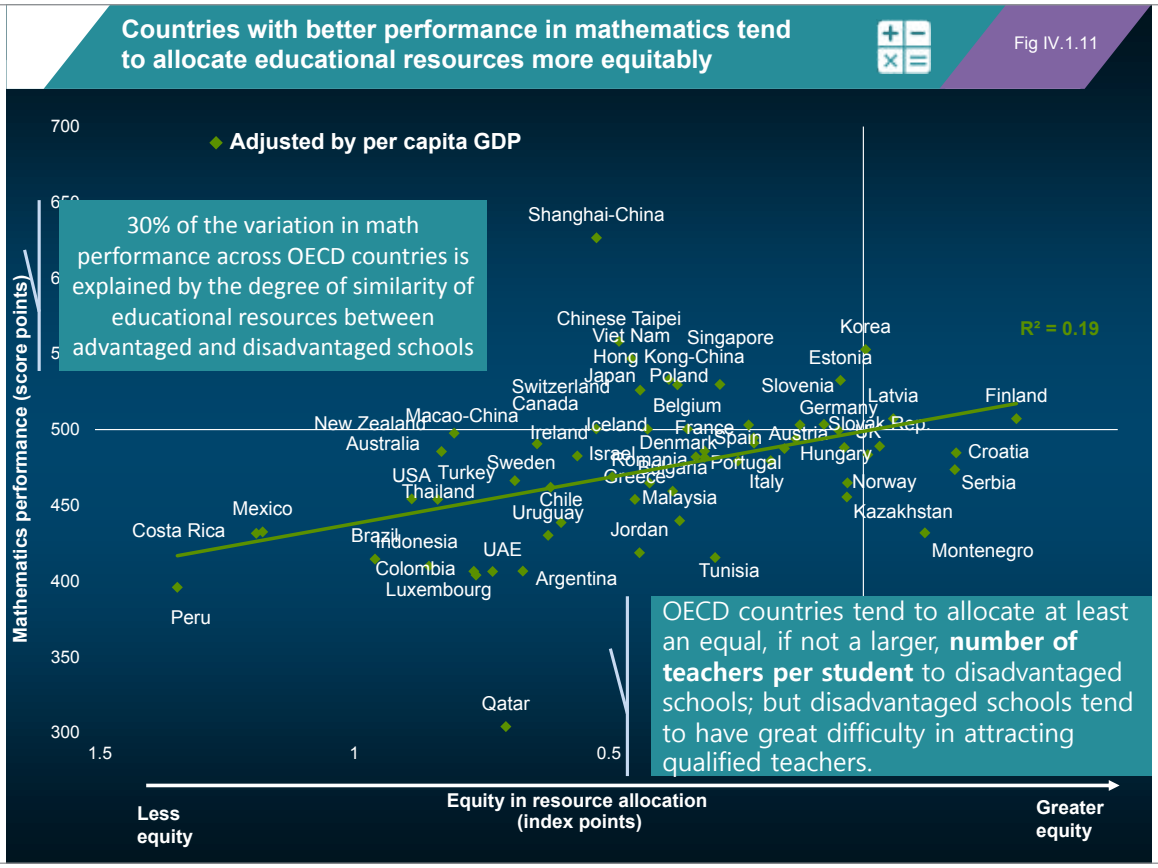
Among high-income countries high-performers pay teachers more

Fig IV.1.10



Countries with better performance in mathematics tend to allocate educational resources more equitably

Fig IV.1.11



Which systems have improved…

… and how have they done it?

Country case study- Brazil

Brazil's average scores in PISA assessments

	2000	2003	2006	2009
Reading	396	403	393	412
Mathematics		356	370	386
Science			390	405

- PISA 2000 – lowest ranked country; over 50% of students scored below Level 1 in reading.

- Since then Brazil has improved in all PISA subjects

27

Some actions taken by Brazil

Significant increase in funding

- raising spending on educational institutions from 4% of GDP in 2000 to 5.2% of GDP by 2009
- allocating more of those resources to raising teachers' salaries
- spending more equitably and more efficiently
  - Federal funds are now directed towards the poorest of the country's 26 states, providing schools in those states with resources comparable to those available to schools in wealthier states.

Accountability systems development

- PISA-benchmarked Basic Education Development Index (IDEB), created in 2005

Video series on

Strong Performers and Successful Reformers in Education

http://www.pearsonfoundation.org/oecd

What's next?

PISA 2015

30 **PISA 2015**

- **Main subject: Science**
- **Number of participants : 72**
- **Field trials in 2014**
- **Main survey 2015**
- **Results released in December 2016**

31

PISA 2015 in Kosovo

- An opportunity to engage with educational policies and educational colleagues worldwide
- For maximum benefit, transparency and public dialogue is essential
- Preparation before the results are released, and early planning of dissemination, are important

32

- Engagement of all is important:
  - Policy-makers
  - Teachers and Schools
  - Students and Parents
  - Media
  - Research community

Find out more about PISA at www.pisa.oecd.org

- National and international publications
- The complete micro-level database

Thank you !

Email: Jenny.Bradshaw@oecd.org

6 MAY 2014 - KEYNOTE SPEECH II

THE EFFECT OF PISA ON GERMAN EDUCATION REFORM

Prof. Dr. MANFRED PRENZEL
PISA National Centre & TUM School of Education Munich, Germany

Ladies and Gentlemen

First of all I would like to say that it is an honour and pleasure for me having the opportunity to contribute to this conference on PISA in Kosovo. Thank you very much for inviting me.

In the next minutes I would like to talk about experiences in our country with PISA, and as our Ambassador already mentioned the experience was no fun. It was very painful from the beginning, but we learned quite a lot from PISA, which for us is a very important instrument for feedback, for identifying problems in an educational system and for getting into a public debate on the quality of an educational system.

I would like to start with a few remarks on the education system in Germany. You may know that Germany is a country in the middle of Europe with about 80 million inhabitants, but it is important to know that our country is structured into 16 Federal States, so called "Länder" and these Federal States are responsible for their education system and schools. So from the national perspective it's very important or it's a challenge to bring all these different Federal States together and to find common ideas and common understanding how to improve an educational system.

I myself come from Bavaria, from Munich, the capital of Bavaria where I live. There is also the Technische Universität Munich, a university with a very strong profile in engineering and science, but it also has a very strong interest in education and in teacher training. That is also the reason why the international centre for student assessment is located at this university. For us from the centre it is a pleasure to cooperate with Kosovo in preparing the PISA assessment 2015 and it is also very interesting to see the starting initiative in a country to begin with this long-term assessment like PISA.

> "WE LEARNED QUITE A LOT FROM PISA, WHICH FOR US IS A VERY IMPORTANT INSTRUMENT FOR FEEDBACK, FOR IDENTIFYING PROBLEMS IN AN EDUCATIONAL SYSTEM AND FOR GETTING INTO A PUBLIC DEBATE ON THE QUALITY OF AN EDUCATIONAL SYSTEM."

The structure of the German school system is quite difficult as it is very differentiated. After Kindergarten there is the primary school time of normally four years, in some Federal States it takes six years, and afterwards there is a differentiated secondary level school system aiming at different certificates. One certificate is Matura (Abitur), the entrance exam for the university level, but there are other certificates like the secondary diploma and modern school qualification coming out in other tracks. So we have different tracks in the secondary level, and these different tracks are organised in different school types. Nowadays we tend to have only two types of schools: one is the Gymnasium and the other is some kind of secondary school integrating two maybe three tracks. It is also important to see that we further have a differentiated school system at the upper secondary level, especially in the field of vocational education. Maybe you know the dual-system where the students and prentices have a lot of training in companies, but they also have part-time school engagement. So it's very helpful for qualifying young people for the work places.

We also have systems of schools for students with special educational needs, which account for about 5% of the student population. Grade repetition is still very high in our country; we are arguing to reduce that, but it's only slowly coming down. School is compulsory from age 6 to age 18, and there are only very few private schools; only 6% of the students are visiting private schools. The personnel and material resources for public schools are quite similar across the Federal States and also across schools and almost all of the teachers are civil servants; they are paid very well and have academic degrees on a master level. There are very good conditions available for having qualified teachers.

With regard to the assessment in Germany until now there are no national high-stakes assessments; still teacher-made tests play a major role in decisions concerning the allocation to educational tracks and for marking. Most of the Federal States have common elements in the final graduation exams, in the Abitur resp. Matura. Only during the last years we started to have nation-wide assessments, some kind of feedback system referring to educational standards.

Let us take a little view back at PISA 2000: PISA is very well-known in Germany because of the PISA-shock caused in the publication of the findings in the first PISA cycle, in 2001. When you take a look at the table (see figure 1) you can see that Germany performed below the OECD level. This was from the German perspective some kind of surprise; because the feeling was that the quality of schools is good in Germany. Germany didn't take part for decades in international assessments, so the findings coming out of TIMSS and, later on, out of PISA caused really a shock, because nobody, especially on the level of authorities, thought that Germany will perform as poor as it did.

Country	Mean	SD
Japan	557	87
Korea	547	84
New Zealand	537	99
Finland	536	80
Australia	533	90
Canada	533	85
Switzerland	529	100
United Kingdom	529	92
Belgium	520	106
France	517	89
Austria	515	92
Denmark	514	87
Iceland	514	85
Sweden	510	93
Ireland	503	84
OECD Average	500	100
Norway	499	92
Czek Republic	498	96
USA	493	98
Germany	490	103
Hungary	488	98
Spain	476	91
Poland	470	103
Italy	457	90
Portugal	454	91
Greece	447	108
Luxembourg	446	93
Mexico	387	83

FIGURE 1. PISA (2000) Mathematics performance in OECD countries

PISA led to a hot public and political debate on the quality of education in Germany. Main reasons for the debate was a very high percentage of students performing on the proficiency level I. Proficiency level I could be translated as performance on the level of primary schools, so about ¼ of the 15-year old was on the level of the final grades of primary school in mathematics and reading. That was seen as one of the biggest problems from our perspective. Another issue that has to be mentioned here was a very strong relationship between social background as well as migration background and performance. But it was also very interesting to see that we had very high differences between the Federal States, so differences inside of

> PISA LED TO A HOT PUBLIC AND POLITICAL DEBATE ON THE QUALITY OF EDUCATION IN GERMANY.

Germany were nearly as high as inside the OECD. So there have been very high performing Federal States, like Bavaria and very poor performing Federal States like Berlin or Bremen.

The reactions of policy and public can be crystallised in two questions. One question was: "Why?" They asked for explanations. Why is Germany performing so poor? The second question was: "What can we do?" or "What do we have to do?" in order to improve the situation.

Concerning the first question "Why?" there was from the beginning the decision to have additional studies linked to PISA, for example to extend the sample by over samplings, to get a better information about the differences between the Federal States, to get more information between differences of students with migration background. So we used over samplings to get more and detailed information about the background. What we also did were video analyses of the teaching quality in science and mathematics; it was very interesting for us to see that there have been problematic patterns of teaching that did not sufficiently support students' learning processes. I would also say that if you are confronted with poor findings on performance it is very important to have a look at the quality of teaching, because that's the most relevant factor for the differences in the end. Also a quite a number of additional studies were done using all the methods of empirical research to get deeper insights in reasons for poor performing classes/classrooms; the quality of leadership in schools for example and a lot of other variables that were of high interest for us.

The question "What to do?" at the level of educational policy was answered by certain measures like the introduction of educational standards. It was first of all important to make sure that nearly all students could perform up to certain basic standards and to give feedback to teachers where the level of their classroom is located concerning to these educational standards. There had been also the introduction of quite a number of measures of quality assurance inside schools and a number of special programmes to increase the quality of teaching and learning.

I also want to mention that there had been a broad acceptance of the PISA approach and findings from the beginning. Many teachers and principals expressed that the findings of PISA corresponded to their own experience and this experience was different to the perception of the authorities or stakeholders. There was also the hope from teachers and different groups, also parents, to change and better locate resources for the improvement of the quality for everyday teaching and learning. There have been also controversies between different groups, like teacher unions and other groups concerning the need to change the system or whether it could be better to change inside the system the quality of teacher training for example or the quality of teaching.

The conference of the Ministers of Education defined seven fields of action (see slide 19) that aimed at a general improvement. First of all it was intended to improve the language competencies, which means not only in reading but also the understanding of languages, especially in the kindergarten age and in primary schools. Another aim was to better connect the preschools and the primary schools, in order to support cumulative learning between these different institutions. There has been the field of improving the first reading experience in primary schools, especially with respect of students of lower socio-economic background and migration background. I mentioned already the need of implementing quality assurance, for example educational standards, but also external school evaluations that did not take place before

> IF YOU ARE CONFRONTED WITH POOR FINDINGS ON PERFORMANCE IT IS VERY IMPORTANT TO HAVE A LOOK AT THE QUALITY OF TEACHING, BECAUSE THAT'S THE MOST RELEVANT FACTOR FOR THE DIFFERENCES IN THE END.

PISA 2000. Another aim was to improve the professional competencies of teachers in the field of diagnosis and also in the field of fostering and dealing with different student' prerequisites. The last point was the expansion of all-day schools, so that students could spend more time inside of schools and have more opportunities to get support there.

One example in the field of early education is the "Little scientists' house". Until now more than 27.000 kindergartens in Germany became "Little scientists' houses" which is half of the kindergartens here, where the children get more opportunities to engage not only in experiments, but also to develop language in the context of science or mathematics, not as a kind of preschool, but in enriching the educational environment of children.

Another very important step was the implementation of educational standards. That relied on a collaboration between researchers and policy to develop an approach defining standards as educational goals, to make them transparent and visible, to make them very concrete for teachers so teachers could get an idea of what a student at the end of primary school or at the end of secondary level really has to know and also should be able to apply successfully in different situations. Linked to these standards are feedback systems, for example assessments that teachers can use to see where the level of their classroom is in comparison to the level of other schools. Additionally there is some kind of national monitoring every three years in certain domains.

Until now a series of national educational standards have been decided by policy and implemented. It was highly important in our Federal Republic that all the Federal States agreed to follow these standards. We have standards for first language German, for mathematics in the primary level, but also for the secondary level for a quite a number of domains, and now we also have standards for the upper secondary level.

Also a new institute was established in Berlin, which is an Institute for Educational Quality Improvement (IQB). This institute is responsible for the national standards, for the development of frameworks and proficiency models and also for the development of assessments as well as for the administration of these assessments comparing differences between these Federal States.

> "IT IS IMPORTANT TO GET A COMMON UNDERSTANDING OF THE PROBLEMS AND TO SEE HOW DIFFERENT GROUPS, TEACHERS, PRINCIPALS, SCHOOL INSPECTIONS CAN WORK TOGETHER, FOR EXAMPLE IN THE DEVELOPMENT OF THE CURRICULA OR NEW APPROACHES TO TEACHING AND LEARNING."

Another approach that had been already started shortly after the TIMSS 1995 publication of findings (in 1998). A programme was started to develop and improve the quality of teaching and learning. In this programme we tried to identify quite a number of problem areas in the German mathematics and science teaching. It was not so difficult to find these problem areas from the perspective of researchers. But what we tried was to develop together with teachers ways to deal with these problem areas and to exchange these ideas in models and approaches that could improve certain areas of the everyday teaching. With regard to this also a network of schools was created where the ideas and materials were exchanged. When you take a look on these problem areas (see slide 26) that had been tackled in this approach, for example the quality of the task in mathematics teaching and learning, the quality of experiments in the scientific inquiry in science, you can see the scope if these issues. Problem areas like learning from mistakes or dealing efficiently with mistakes in the classrooms or approaches how it can make sure that all the students get and achieve the basic levels of proficiency that we need represent other examples. Other areas had been how cumulative learning across class grades 7, 8, 9 and so on could be improved. What are the basic concepts that students have to understand that could form the basis for the on-going learning processes? Also an issue had been the promotion of the boys' and girls' interests in mathematics and science. The differences of

> EVEN IF PISA FINDINGS AND OUTCOMES SEEM TO BE PROBLEMATIC THIS IS VERY HELPFUL INFORMATION AND A REASON TO ANALYSE THE PROBLEM.

outcomes in mathematics are highly related to the self-concept of the students. There is a big gender difference and there had been these problem areas where the classrooms and teachers worked together.

We started with about 180 schools in 1998. After five years there had been an evaluation where we saw that this approach was very helpful for improving teaching and learning in science and mathematics. It was decided to disseminate the programme to 1750 schools with about 7000 teachers on the secondary level. Additionally, a transfer programme to field of primary schools was established where we also tried to address schools with the new ideas of quality development and new approaches into teaching and learning. Associated to that new curriculum were developed incorporated ideas of this programme and a lot of materials from the different fields of didactics.

The question of what has been achieved until now, twelve years later rises. When we look at the last report of PISA we can see a quite interesting picture (see figure 2). In PISA 2000 Germany performed in all these domains below the OECD average with 484 points in reading, 490 points in mathematics and 487 points in science. If you take a look now to the PISA 2012 findings there had been continuous improvement attaining now the level of 508 points in reading, in mathematics 514 points and in science 524 points.

For us it's very interesting to see that it seems that the different approaches to improvement seemed to be successful. It is important to get a common understanding of the problems and to see how different groups, teachers, principals, school inspections can work together, for example in the development of the curricula or new approaches to teaching and learning. We are quite happy that the progress could be made so far, but we are still struggling and engaging for improving the system although in the next time.

	Reading		Mathematics		Science	
	Points	OECD average	Points	OECD average	Points	OECD average
PISA 2000	**484**	**below**	**490**	**below**	**487**	**below**
PISA 2003	491	equal	503	equal	502	equal
PISA 2006	495	equal	504	equal	516	above
PISA 2009	497	equal	513	above	520	above
PISA 2012	**508**	**above**	**514**	**above**	**524**	**above**

FIGURE 2. PISA results for Germany from 2000 to 2009

The debate on education, schools and PISA is still going on in Germany. It is very important to have a normal debate on education and appreciation of education, especially from the perspective of parents. It was for us very interesting to see that also the parents are highly interested that the school system improves. But there is still the need for new initiatives. Last year we started for example a new initiative, some kind of a national programme to improve reading literacy, especially in certain groups that need more support compared to others. We are still in the situation that we need to optimise the use of national standards, because not all the teachers until now use the possibilities of these instruments for quality development on the level of classroom and school, but we try to improve that. We also try to improve the all-day school programmes quality and a new issue of course is the inclusion of students with special educational needs; these things are going on. My message is: Even if PISA findings and outcomes seem to be problematic this is very helpful information and a reason to analyse the problem. From the German perspective it was quite good to start quite low in the ranking, so we had enough possibilities to improve. It is less fun to start very high in a ranking and then have to go down. When PISA 2015 will be reported I'm sure that also in Kosovo hot discussions will take place, but I'm convinced that these discussions will help to improve the education system here.

Thank you very much!

Prof. Dr. Manfred Prenzel
TUM School of Education

Effects of PISA on education reforms in Germany

Conference on Student Assessment and PISA
Pristina, May 6th, 2014

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Technische Universität München

Overview

1. **The education system in Germany**
2. From PISA 2000 to PISA 2012: The “PISA-shock” and its consequences
3. What has been achieved and what still has to be done

The Federal Republic of Germany – (approx. 80 million inhabitants)

The 16 Federal States ("Laender") are responsible for their education system and schools

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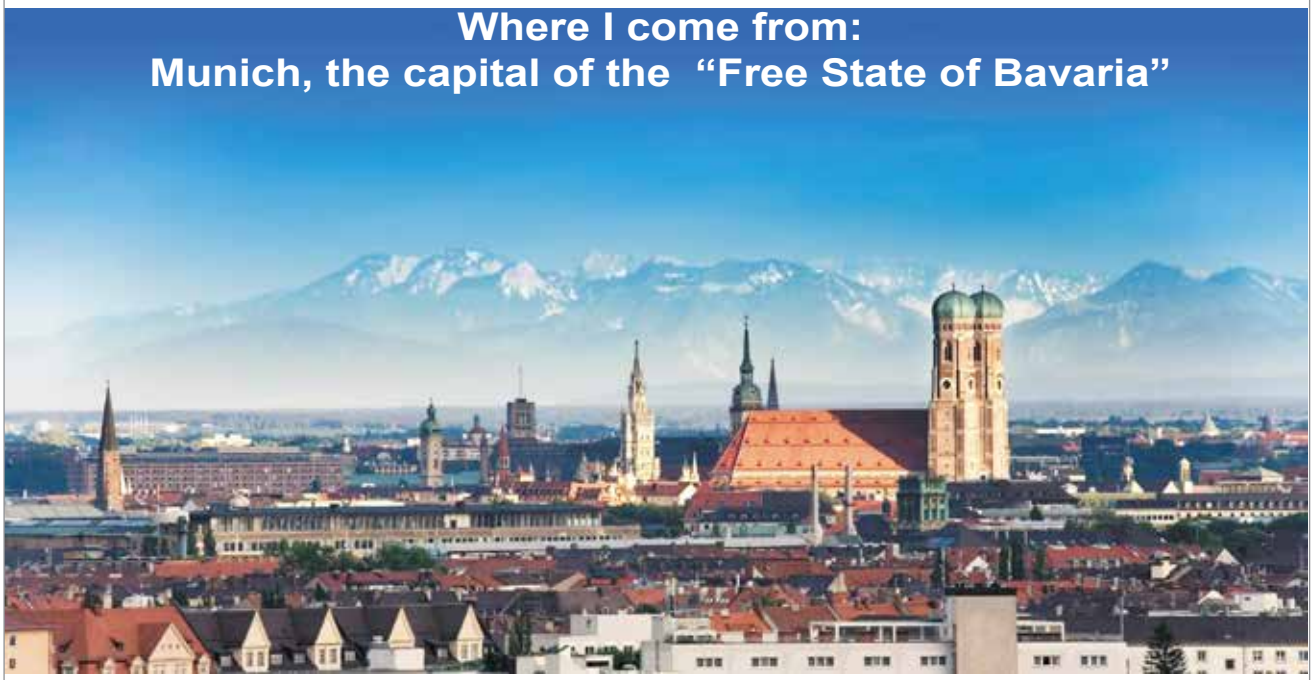
Where I come from:
Munich, the capital of the "Free State of Bavaria"



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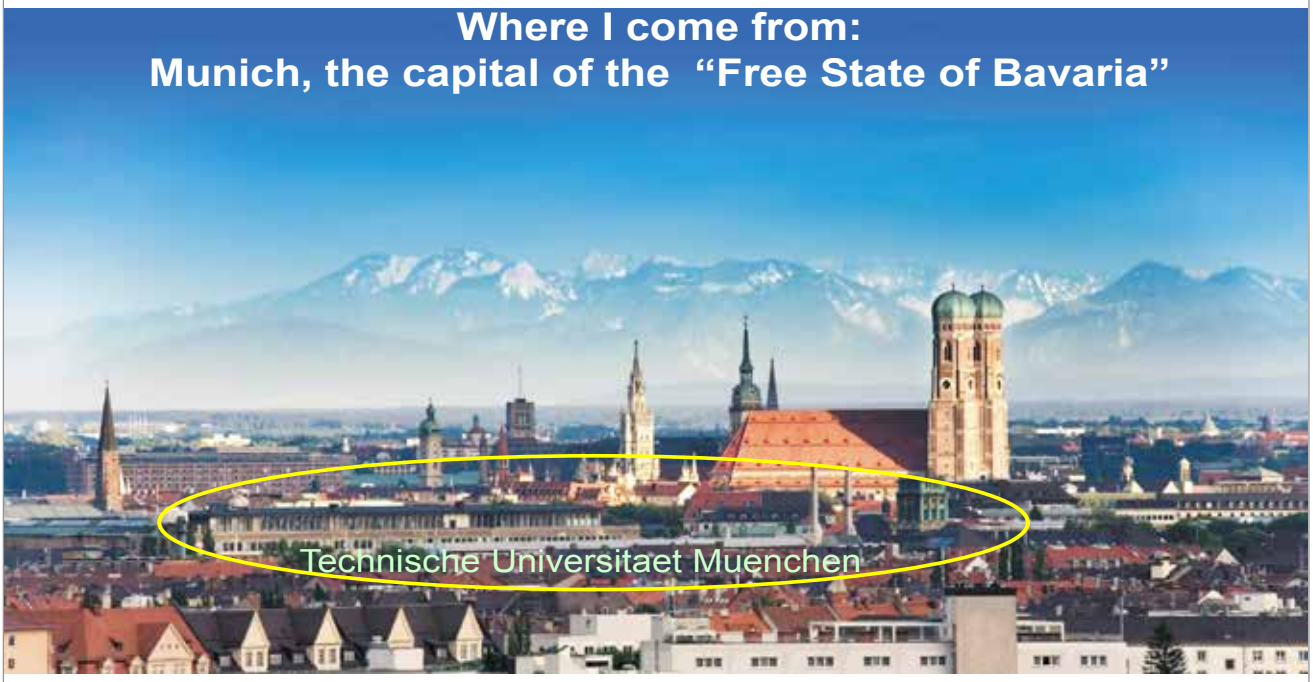

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Das Zentrum für internationale Bildungsvergleichsstudien e.V.

Centre for International Student Assessment

Large-scale Assessments

In the Centre for International Student Assessment (ZIB) three of the top-class institutes in German educational research - namely the School of Education of the Technische Universität München, the Leibniz Institute for Educational Research and Educational Information and the Leibniz Institute for Science and Mathematics Education - have the aim of conducting their educational research together in the area of large-scale assessments.

A further objective is the scientific promotion of youth in this field. The ZIB is an affiliated institute of the Technische Universität München, and it is promoted by the German federal government and the federal states.

DIPF Bildungsforschung und Bildungsinformation — TUM School of Education — IPN

http://zib-cisa.de/en/home.html

The structure of the school system in Germany

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Grade
12
11
10
9
8
7
6
5
4
3
2
1

Upper secondary level

- Vocational Training (3 years)
- Vocational Schools
- Gymnasium Grade 10 to 12 (13)

Secondary level
Schools with 1, 2 or 3 educational tracks

- Hauptschule Grade 5 (7) to 10
- Realschule Grade 5 (7) to 10
- Gymnasium, Grade 5 (7) to 10

Primary school
(Grades 1 to 4; in 2 federal states: 1 to 6)

Kindergarten
(Age 3 to 6)

8

The structure of the school system in Germany

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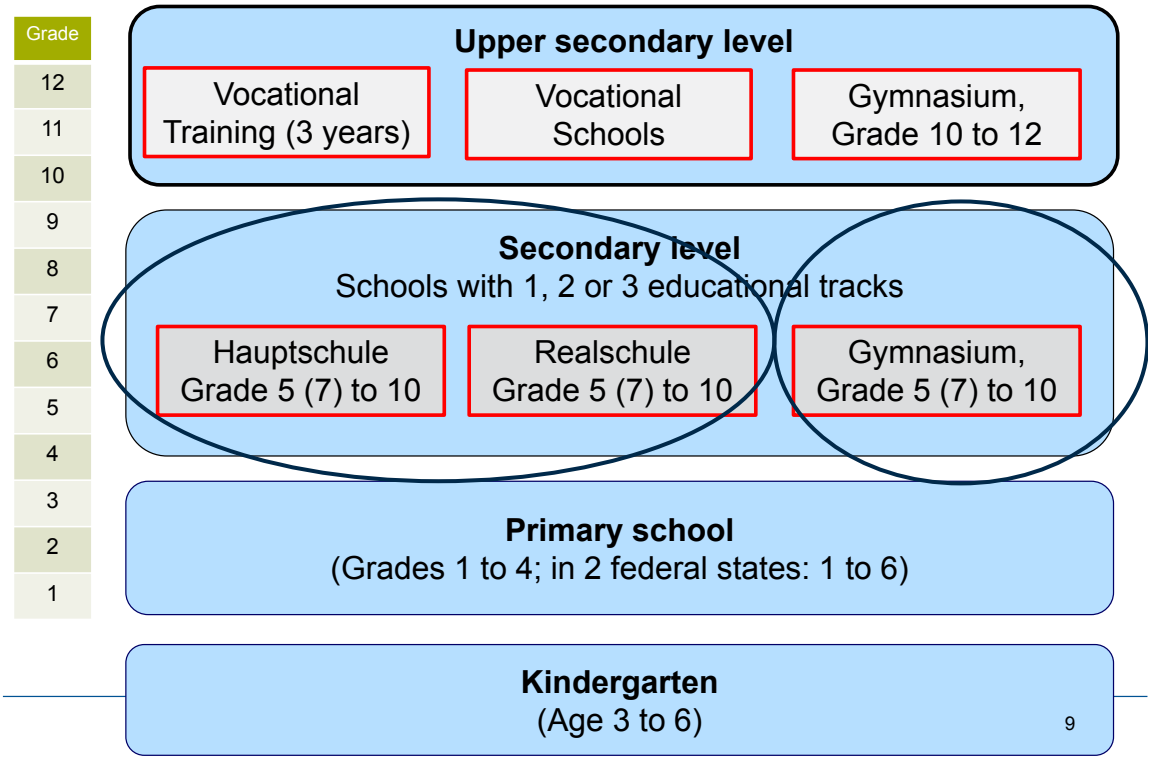

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Some basic features

- An additional systems of schools for students with special educational needs (~5% of students)
- Grade repetition is usual (21% of 15 years-old had to repeat a grade at least once)
- School is compulsory from age 6 to age 18
- Only a small proportion of students (~6 %) visits private schools
- Personal and material resources for public schools are similar across the federal states
- Almost all the teacher are civil servants and have academic degrees on master level; salaries are high from an international perspective

10

Assessment in Germany

- Until now there is no national "high-stakes"-assessment in Germany
- Teacher-made tests play a major role in decisions concerning the allocation to educational tracks
- Most of the federal states have common elements in the final graduation exams ("Abitur" = general qualification for university entrance)
- Nation-wide assessments related to the national educational standards (in grade 3 and grade 9) are administered and revised by the teachers (the outcomes should be used for quality assurance)

Overview

1. The education system in Germany
2. **From PISA 2000 to PISA 2012: The "PISA-shock" and its consequences**
3. What has been achieved and what still has to be done

"PISA" is very well-known in Germany

The prominence of PISA started with the so called (and famous) "PISA-Shock", caused by the publication of the findings of the first PISA cycle in 2001

OECD (2001). *Knowledge and skills for life. First results from PISA 2000*. Paris: OECD.

PISA (2000) Mathematics performance in OECD countries

PISA points for Germany in Reading: 484 Science: 487

Country	Mean	SD
Japan	557	87
Korea	547	84
New Zealand	537	99
Finland	536	80
Australia	533	90
Canada	533	85
Switzerland	529	100
United Kingdom	529	92
Belgium	520	106
France	517	89
Austria	515	92
Denmark	514	87
Iceland	514	85
Sweden	510	93
Ireland	503	84
OECD Average	500	100
Norway	499	92
Czek Republic	498	96
USA	493	98
Germany	490	103
Hungary	488	98
Spain	476	91
Poland	470	103
Italy	457	90
Portugal	454	91
Greece	447	108
Luxembourg	446	93
Mexico	387	83

PISA findings led to a hot public and political debate on the quality of education in Germany

- Performance in all domains below the OECD average
- High percentage (about 22 – 23 %) of low performing students (proficiency level I and below)
- Strong relationship between social as well as migration background and performance
- Huge differences in the average performance between the federal states

Baumert, J., Klieme, E., Neubrand, M., Prenzel, M., Schiefele, U., Schneider, W., Stanat, P., Tillmann, J. & Weiß, M. (Hrsg.). (2001). *PISA 2000. Basiskompetenzen von Schülerinnen und Schülern im internationalen Vergleich*. Opladen: Leske & Budrich.

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Reactions of policy and the public

- Question "why": Explanations and more data
- Question "what to do" – on the level of educational policy and schools

Reactions of policy and the public

- Question "why": Explanations and more data
  - ➔ Extensions of PISA (oversampling, additional tests)
  - ➔ Video analyses of teaching quality
  - ➔ References to research on teaching and learning
- Question "what to do" – on the level of educational policy and schools
  - ➔ Introduction of educational standards
  - ➔ Quality assurance
  - ➔ Programmes, e.g. to increase the "Efficiency of Mathematics and Science Teaching"

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Reactions of teachers and teacher unions

- Broad acceptance of the PISA approach and findings (helpful: national extensions with additional instruments)
- Many teachers and principals expressed that the findings corresponded to their experiences
- Hope that the PISA shock could help to attribute more relevance (and resources) to education and to appreciate the work of teachers
- Controversies between teacher unions about necessary changes on the system level (structure of school system)

Seven fields of action (Conference of the Ministers for Education, 2001)

(1) Improve language competencies already in preschool
(2) Connections between preschool and primary school
(3) Improve primary school reading literacy
(4) Promotion of low SES and migration students
(5) Quality assurance and quality development in schools on the basis of national standards and outcome related evaluation
(6) Improve professional (e.g. diagnostic or didactical) competencies of teachers
(7) Expansion of all-day schools

Early education: The "Little scientists' house"

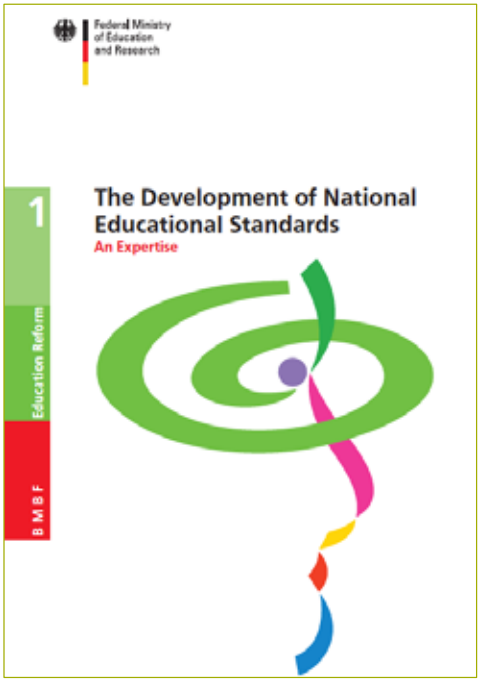
More than 27.000 kindergartens (play schools, pre-schools) became "Little scientists' houses" providing age-appropriate opportunities for every child to get access to nature, early science and mathematics

(Supported by Federal Ministery of Education and Research, Helmholtz Association, Telekom Foundation, Siemens Foundation)

http://www.haus-der-kleinen-forscher.de/en/

Klieme, E., Avenarius, H., Blum, W., Döbrich, P., Gruber, H., Prenzel, M., Reiss, K., Riquarts, K., Rost, J., Tenorth, H.-E. & Vollmer, H. J. (2003).

The Development of National Educational Standards. An Expertise. (BMBF Education Reform 1). Bonn: BMBF.



Education standards passed by the standings conference of the ministers of education (KMK)

	Primary Level	Secondary Level I	Secondary Level II
German	✔	✔	✔
Mathematics	✔	✔	✔
First Foreign Language (English, French)		✔	✔
Sciences (Biology, Chemistry, Physics)		✔	

Corresponding frameworks and achievement tests have been developed by a new national centre (Institute for Educational Quality Improvement (IQB), established in 2004

The Institute for Educational Quality Improvement (IQB) is responsible for ….

- The development of frameworks and proficiency models
- The development of tests assessing the attainment of educational standards
- The organization and analysis of regularly assessments comparing the performance levels between the "Laender" (federal states)
- The development of state-wide comparative assessments (providing feedback for teachers and schools)

https://www.iqb.hu-berlin.de

A quality development programme in Germany

The publication of the results of TIMSS in 1997 prompted the authorities in Germany to initiate a programme for the improvement of mathematics and science instruction in Germany.

Prenzel., M., Stadler, M. Friedrich, A., Knickmeier, K. & Ostermeier, Ch. (2009).
Increasing the efficiency of mathematics and science instruction (SINUS) – A large scale teacher professional development programme in Germany.
https://www.ntnu.no/wiki/download/attachments/8324749/SINUS_en_fin.pdf?version=1&modificationDate=1251384255000

A nation-wide programme to "increase the efficiency of math and science instruction"

The framework was written by an interdisciplinary expert group. It is based on four principles

- From problem-areas German mathematics and science instruction towards work packages ("modules")
- Introduction of quality development processes at the participating schools
- Creating a network for the Cooperation of schools / teachers & researchers on learning / instruction
- Providing ideas, material, support, advice from research on science and mathematics education

Ostermeier, C., Prenzel, M., & Duit, R. (2010). Improving science and mathematics instruction - The SINUS-project as an example for reform.... *International Journal of Science Education, 32(3),* 303-327

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Problem areas and modules

(1) Development of the task culture
(2) Scientific inquiry and experiments
(3) Learning from mistakes
(4) Securing basic knowledge
(5) Cumulative learning: Experiencing competence gains
(6) Integrative features of instruction
(7) Promoting girls and boys
(8) Developing tasks for cooperative learning
(9) Strengthening responsibility for learning
(10) Tests and feedback
(11) Quality development within and across schools

Ostermeier, C., Prenzel, M., & Duit, R. (2010). Improving science and mathematics instruction - The SINUS-project as an example for reform.... *International Journal of Science Education, 32(3),* 303-327

1998-2003
SINUS
180 Secondary schools
750 Teacher

2004-2013
SINUS-Transfer Primary
850 Primary schools
4.500 Teacher

2003-2007
SINUS-Transfer
1.750 Secodary schools
7.000 Teacher

Overview

1. The education system in Germany
2. From PISA 2000 to PISA 2012: The "PISA-shock" and its consequences
3. **What has been achieved and what still has to be done**

Twelve years later ....

Prenzel, M., Sälzer, Ch., Klieme, E. & Köller, O. (Hrsg.). (2013). *PISA 2012: Fortschritte und Herausforderungen in Deutschland*. Münster: Waxmann. .

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PISA results for Germany from 2000 to 2009

	Reading		Mathematics		Science	
	Points	OECD average	Points	OECD average	Points	OECD average
PISA 2000	**484**	**below**	**490**	**below**	**487**	**below**
PISA 2003	491	equal	503	equal	502	equal
PISA 2006	495	equal	504	equal	516	above
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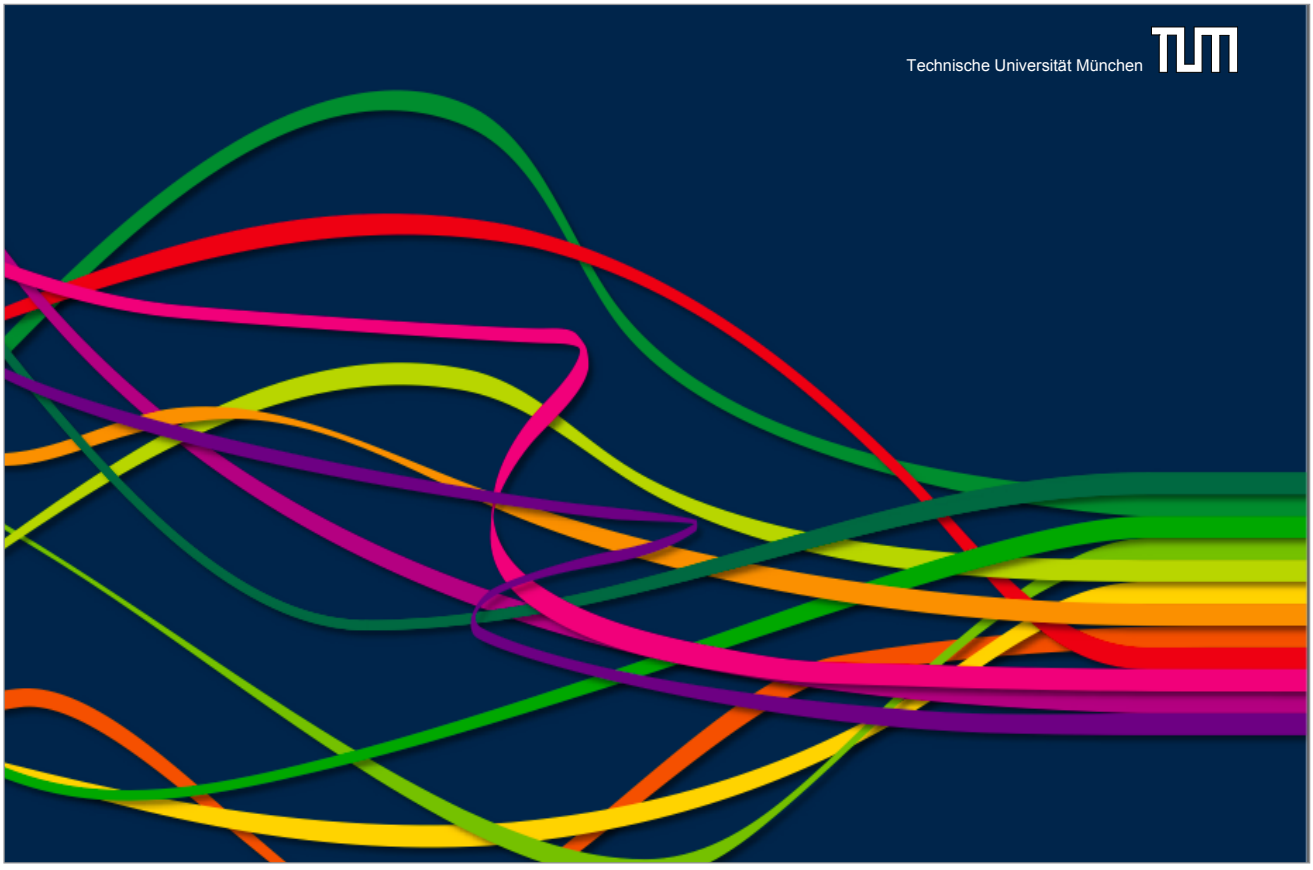
Debate is still going on....

The progress in terms of PISA findings is highly appreciated by the public and policy. There are still challenges, however:

- Need of more national initiatives and funding
- Implementation of a national programme to improve reading literacy
- Optimizing the (use of) national standards and evaluation approaches (school evaluation, school inspection)
- Implementing all-day school programmes
- Inclusion of students with special educational needs
- Simplifying the school system



6 MAY 2014 - KEYNOTE SPEECH III

ASSESSMENT SYSTEMS AND EDUCATION QUALITY

Dr. KELVIN GREGORY
Australian Curriculum, Assessment and Reporting Authority Sydney & Flinders University, Australia

You have heard from earlier presentations of learning's importance for a country's health, wealth and well-being. You also heard how international assessments can help promote improvements to education. I want to build on these presentations by recognising that you have a long history of problem-solving and finding your own solutions. I will suggest where you might look and what questions you might ask, but I will leave answering these and other questions to you.

I will start by introducing what I mean by an integrated assessment system and explain how these components need to work together. I will embed the integrated assessment system within a cultural setting. Culture is something which has not been directly addressed in this conference but is of paramount importance when improving education. I'll move from culture to the legal environment, acknowledging some of the work already done within Kosovo. Then I will explore major summative components of the assessment system. Finally, I will offer some closing thoughts on where Kosovo might focus its efforts to improve assessments.

Education is a very expensive endeavour primarily focused on young people's basic and essential learning. This learning is crucial not only for their own future, but for the country's growth and well-being. Assessment is fundamentally connected with learning. Formative assessment is classroom-based assessment, conducted by teachers (and sometimes students) to guide, facilitate, enable, motivate, and drive learning. Formative assessment is a crucial component of learning. Summative assessments come at the end of a curriculum unit or topic, at the end of learning. Summative assessments, including teacher's end of topic tests, national examinations and international assessments, are focused on de-

> "CULTURE IS SOMETHING WHICH HAS NOT BEEN DIRECTLY ADDRESSED IN THIS CONFERENCE BUT IS OF PARAMOUNT IMPORTANCE WHEN IMPROVING EDUCATION."

> EDUCATION IS A VERY EXPENSIVE ENDEAVOUR PRIMARILY FOCUSED ON YOUNG PEOPLE'S BASIC AND ESSENTIAL LEARNING. THIS LEARNING IS CRUCIAL NOT ONLY FOR THEIR OWN FUTURE, BUT FOR THE COUNTRY'S GROWTH AND WELL-BEING. ASSESSMENT IS FUNDAMENTALLY CONNECTED WITH LEARNING.

termining what has been learned. Consequently, if you really want to improve learning using assessments your immediate focus would be to find ways of improving formative assessment practices. You would also ensure that the other assessment practices, especially the summative assessments, do not detract from sound learning practices.

FIGURE 1. Integrated assessment system

Looking at the diagram (see figure 1) you see that integrated assessment systems are focused on formative assessment, a component which has been worked on in Kosovo for the last three years at least. Around the formative assessment circle there are five types of summative assessment: classroom or school based summative assessment, benchmark assessment, examinations, national surveys, and international surveys. Classroom and school assessments should be familiar to all within this room.

Many of you may not have heard of benchmark assessments and so I will describe benchmark assessments in a little detail later on. Examinations are typically high-stakes assessments that come at the end of a phase of education. You have two types of examinations; year 9 and the Matura in Kosovo.

National survey assessments include the grade 5 reading and mathematics study conducted by the Ministry of Education on two occasions. That national survey assessment has many features in common with international assessments. International assessments include the Programme for International Student Assessment (PISA), Progress in International Reading Literary Study (PIRLS) and Trends in International Mathematics and Science Study (TIMSS). Outside of the circles you have the legal environment and cultural frameworks. The laws, policies and directives passed by the Ministry of Education (MEST), the Municipal Education Directorates (MED) and other governing agencies provide the legal framework for Kosovo education. The legal framework is in turn embedded within a cultural setting. All of the components in the diagram need to work together; they need to be very carefully and critically linked together and aimed at achieving the same set of goals. They should be pulling in the same direction. It lowers the efficiency and effectiveness of education if one component is pulling in a different direction. It will lessen the focus on learning, limit growth and wellbeing, and make the educational system dysfunctional to some degree if the overall system has components aimed in different, competing directions. I will now address the key features of the diagram, leaving formative assessment largely to one side.

Culture may be defined as: '… the set of norms, belief and values, rituals and ceremonies, symbols and stories that make up a social group'. You already know much of culture. It pervades your life from the everyday greetings through to all aspects of family, business and social interactions. Culture governs how you know what is right and wrong, how you believe things should be done and even what should be done. You have seen the power of culture and cultural leadership throughout your life. You have seen what happens if the culture is at odds with other parts of the social system and you have also seen how strong cultural leadership can change a social group. If you are a teacher, think of the worse class you ever experienced. That class would almost certainly have a culture that was not focused on learning for all. It might have been focused on power, maybe on control, but certainly it was not focused on learning for everyone. While

> WHAT STAGE OF DEVELOPMENT IS YOUR EDUCATIONAL SYSTEM? HAVE ALL PEOPLE BEEN ENGAGED, BEEN ABLE TO OPENLY DISCUSS AND ARGUE CORE EDUCATIONAL ISSUES, AND HAVE THEY SETTLED ON A COMMON VISION FOR KOSOVO EDUCATION?

some people in that class almost certainly valued learning, there were others that were valuing something else and thus learning suffered. On the other hand, the best class would have been focused on a specific goal, typically of learning as much as they can within a curriculum area.

To further illustrate the power of culture, think of a law or policy that many people are resisting. When I first came to Kosovo in 2009, people were smoking in restaurants. In a later visit, there was a new law and signs in restaurants saying 'No smoking', but some people smoked under the signs. On this trip, smoking is even less evident. Thinking back over this period, you can see how the smoking culture resisted the law and, in this case, how the law is winning. You know better than I do how this contest between a smoking culture and the law played out. You should be able to identify a strong leader or two who decided that a cultural change was necessary and how he or she led that change. You might also think of the history of this country in the last twenty years, or even the past centuries and reflect on how competing cultures clashed, the leadership that was provided and the eventual outcomes.

Studies from the 1980s and onwards show that if you want to improve an organisation, would that be a factory, a classroom, a school, or a country, you need to focus on cultural change. The discord that comes when all people within an organisation do not focus on the same goals, when the culture is contested and in a state of flux, can be part of normal and necessary democratic processes but when it becomes pervasive and long lasting, everyone suffers. Classes and groups in general, go through stages of growth including forming, storming, norming and performing. Forming and storming are very early stages, characterised by discussion, argument and even conflict. A school class which is characterised by disruption, where the learning goals and processes are frequently being challenged or changed, is likely to be in one of these two early stages. The norming stage occurs when the cultural values of the group focus to reward, encourage and value specific actions and goals. This norming stage is characterised by the lowering of conflict and a general shared feeling or knowledge of what the group needs to achieve and the processes necessary to achieve these goals. If the group has progressed through the norming stage, they will be able to work together in a highly efficient, cooperative manner, to achieve common goals in the performing stage. So, a key questions here: what stage of development is your educational system? Have all people been engaged, been able to openly discuss and argue core educational issues, and have they settled on a common vision for Kosovo education?

I want to briefly share with you some comments about Singapore. If you look back to the earlier presentations you will find that Singapore is one of the top-performing countries in PISA. There are other countries in that region that share the same Chinese heritage including Hong Kong and Taiwan and they are also top performing countries. Singapore started as a very poor country in the 1960s ruled by an European power. Then it was one of the poorest countries in the world. Now, less than fifty years since its independence, it is one of the richest countries. Singaporean Ministers of Education and Prime Ministers have deliberately shaped education in order to improve the well-being of all its citizens from the very first days of independence. They have made key statements, supported by laws and policies that have shaped the beliefs and vision of Singaporean people. The statements include the following:

- 'A nation's wealth in the 21st century will depend on the capacity of its people to learn'. You heard the German Ambassador say that this morning. It is well known that the safe future of country, its well-being, rests on the capacity for all people to learn and keep on learning throughout their lives.

- 'We need a mountain range of excellence, not just one peak, to inspire all our young to find their passions and climb as far as they can'.

Singapore is not focused on working out who is the best learner, who knows the most. They are interested in making sure that each and every learner becomes passionate about learning, and learns as much as they can. A country is strongest when everyone's potential is reached and the country can utilise that potential.

- 'You are the one who can determine your own success – yes, life may be hard on you, but if you try, you can succeed, and others have'.

Life in Singapore was, and can be, hard. Singapore wants all citizens to work hard, to not give up and depend upon hand-outs. The leaders value people who are resilient and who can work towards being productive citizens.

- 'To live well in the present, we need to know the past (we need to recognise it) and have a sense of the future (we need to be future-orientated)'.

This is important. The Singaporean leaders want their citizens to focus on creating a positive, healthy and prosperous future. The sense of where people have come from, including their struggles, needs to be recognised, but it should not paralyse progress.

> WHAT THE QUESTIONNAIRES DO NOT CLEARLY SHOW IS THAT THESE TOP-PERFORMING COUNTRIES HAVE AN EDUCATION CULTURE FOCUSED ON EVERYONE LEARNING. THEY EACH HAVE A VERY STRONG CULTURE WHICH VALUES LEARNING AND THAT CULTURE PERMEATES THE HOME, THE SCHOOL AND INDEED THE WHOLE SOCIETY. EVERYONE, INCLUDING TEACHERS AND PRINCIPALS, ARE EXPECTED TO LEARN.

You could use these as a stimulus for the examination of your own culture. There are many questions that can be asked of Kosovo's education culture. Does Kosovo education expect everyone to learn? If so, how does it convey that expectation? What characterises, and what should characterise, the Kosovo education culture? What are the current educational norms, beliefs and practices? Are these learning-oriented or are they interfering with learning? What short statement, of only one or two sentences, would summarise Kosovo's education culture? Is this statement similar or different from the Singaporean statements? If they are different, does it matter? These questions could be asked of all levels of the Kosovo education system?

Looking at the PISA and TIMSS results you can see that the top countries have a number of characteristics which you can explore using the PISA and TIMSS questionnaires. What the questionnaires do not clearly show is that these top-performing countries have an education culture focused on everyone learning. They each have a very strong culture which values learning and that culture permeates the home, the school and indeed the whole society. Everyone, including teachers and principals, are expected to learn. No single person is excused from learning, and everyone within the education system is accountable for ensuring that these learning goals are achieved. How would you describe the education culture of Kosovo? Are all people involved with Kosovo education learning expected and enabled to learn? How accountable is each and every person for learning? Can you think of learning leaders, the heroes of Kosovo education? But also, can you describe people who harm the learning culture of Kosovo?

You can easily get a sense of the educational culture of each level through the major stories told at that level. Walking around the classroom or schools you can see cherished symbols. For example, in many Australian schools the major symbols are actually about sport, not learning, and so you will often see sports trophy cases just outside the principal's office. And if you refer to the earlier presentations, you will notice that Australia is not one of the leaders in TIMSS or PISA. You can also see what is valued in the names of Kosovo streets, schools, buildings and towns. What do you think is being

valued through these symbols? If what is being valued in all these symbols is not future-orientated learning, learning by and for all, should the symbols be changed? If you were to visit a classroom or a school, would you get a sense, a feeling, that learning is highly prized just by the symbols present? If for instance, the schools are predominantly named after men, if the heroes of education are also men, and the sporting accomplishments recognised within the school are also by males, if this really promoting education for all?

> "WITH ANY EDUCATIONAL SYSTEM YOU NEED AN EVALUATION PROCESS. YOU NEED A RIGOROUS, SYSTEMATIC AND PROFESSIONAL WAY OF JUDGING WHAT IS WORKING AND MAKING SUGGESTIONS FOR CHANGE. TEAMS OF EVALUATORS SHOULD VISIT MUNICIPALITIES, SCHOOLS AND CLASSROOMS TO EVALUATE POLICY IMPLEMENTATION."

The Deputy Minister of Education, Science and Technology and others leaders at this conference have said that Kosovo will use the PISA results to reflect on its education system. One of the things to do is to learn from the high performing countries, not just from the questionnaire data, but from their culture. One of the things not to do is what the United States of America and some other countries have tried to do. Singapore performed, and continues to perform, well in TIMSS and PISA, and the Singaporean education system operates through the English language. One of the things that some of the US school systems routinely do is adopting the Singaporean curriculum for their schools and along with any text books they can get. This doesn't work because education is intrinsically embedded within the culture. Indeed, some curriculum experts argue that education is primarily about cultural transmission, passing onto the next generation the learnings, the knowledge, that is held to be very important by that country. Thus, the curriculum is really a cultural blueprint and as such it must be fully embedded within a culture. You cannot simply take something like a curriculum, a text book or any other education artifact, from a country and transplant it into another education system simply because the culture of the adopting country is very likely to reject it! You need to have a more systematic approach, a thorough research program that leads to deliberative change. You have heard an earlier presentation from our German colleague how PISA results can be well used to initiate change. Follow that approach and you will do well.

I know that in my five years of coming here there has been a lot of change in the enabling environment. I will pose some generic questions for you. What legal, policy and financial frameworks support your education system? What enables learning to take place? These questions apply to all aspects of learning including the payment of teachers, the provision of the curriculum, the text books and the teaching, curriculum, learning and assessment standards. The big question of this enabling environment is that, if you look at these laws, policies and practices as they currently exist, would you be able to say that they are focused on 21st century learning for all. Would every one of these laws, every one of these policies, every one of these practices, be saying "We are taking Kosovo into the 21st century, we are going to be the economic powerhouse, we are going be leading the world?" Are these laws and policies enabling the creation of national and world leaders who would be going to other countries as consultants, rather than international experts coming here? Do the teachers and students know what they are expected to teach and learn? Do they understand why they are expected to learn this? Do they own this learning? Do the people intimately involved in education own the curriculum, do they accept it? Are they prepared to work with the curriculum? Have they the skills, knowledge and resources necessary to work with the curriculum?

You also need to have an assessment policy, which says: "What and when we as a country, as a municipality, as a school and a class are going to assess and report students' learning". This policy should clearly state what is meant by assessment, how it will be conducted, interpreted, reported, and used. The policy should shape assessment so it is focused on 21st century learning for all.

With any educational system you need an evaluation process. You need a rigorous, systematic and professional way of judging what is working and making suggestions for change. Teams of evaluators should visit municipalities, schools and classrooms to evaluate policy implementation. Do you have such evaluation processes? Do you have evaluators or could you form groups of professionals into an evaluation team? If you don't have evaluation processes, how will you know whether the policies are working? What systematic systems do you have in place to monitor your legal framework, to make sure polices and directives are being implemented as you desire and need? A key question here: Is the culture you have congruent with your legal framework? Are the laws you have about assessment, curriculum and teaching congruent with the culture? If they are not congruent, what culture leadership do you need and what cultural change will you promote?

I will now briefly focus on three components of the assessment system. Looking back at the diagram, you will see that at the centre is formative assessment. Remember that formative assessment has the primary role of guiding learning, of giving feedback to learners and teachers so they can make informed decisions of what to do to next. I know that for the last few years there has been major project on formative assessment within this country. So I will not focus on this important type of assessment but instead will focus on the summative assessment components. Summative assessment comes at the end of learning. Of these, the classroom and school summative assessments are closest to the student and are therefore in the best position to judge learning at the end of curriculum units. Consequently, school and classroom assessments need to be the best of the summative assessments and should be given the highest credence in any certification system.

However, classroom and school assessments can be limited in many ways including their ability to provide data to evaluate national policies and for national university selection. They have limited capacity to inform larger improvement cycles and selection mechanisms unless you have a system of making these classroom and school assessment comparable. I would almost certainly find differences if I compare assessments from schools in Peja and Prishtina. Further, I might find important differences in the way student learning is reported. So you need a system of standardising the interpretation and use of different assessments. I know that work on standard-based reporting has been started within Kosovo and it would be important for this work to continue so that all classroom and school assessments operated at a consistently high level throughout the country and they conveyed the same meaning, even though there might, and perhaps should, be different ways of assessing learning throughout the country.

> "NATIONAL ASSESSMENTS HAVE GOT TO FEEDBACK TO SCHOOLS SO THAT SCHOOLS, AND THEIR STAFF, CAN REFLECT AND CONTINUE TO IMPROVE THEIR PRACTICES."

Above classroom and school assessments are municipal and national assessments. National assessments, in particular, are typically seeking to assess a large part of the curriculum and are often used for credentialing and selection purposes. These assessments are obviously more distant from the learner and so they are more coarse-grained snap-shots of learning. That is, they cannot assess the entire curriculum in a way that covers all performance or reporting dimensions in the way as ongoing, high quality classroom assessments can. Whereas the classroom assessment can occur every week, and more often if you want, the municipal and national assessments tend to be at the end of a year of learning. Apart from questions related to how well these municipal and national assessments recognise learning and accurately place students into categories, a key question for you would be how is data from these assessments being used to improve teaching? How are the results of Grade 9 or the Matura examinations being given back to schools and teachers so they can improve their teaching practices? National assessments have got to feedback to schools so that schools, and their staff, can reflect and continue to improve their practices. Further, the power of credentialing and selection assessments to shape teaching and learning necessitates that these assessments be transparent and account-

able to the people. Are your assessments transparent? Do people have access to enough information to evaluate the merit, worth, accuracy and appropriateness of these assessments, and can they make informed suggestions for improvement?

The international assessments you have heard about throughout this conference are also very important for leveraging change, for making change happen. You've heard from the Deputy Minister of Education that the PISA results are going to be used to engage in a change process. My main point here is that your within country assessments, the classroom, school, municipality and national assessments, need to be aligned with your learning culture, with what you think is important about learning. They both need to be focused on encouraging and enabling learning. They must not be stopping learning nor encouraging bad behaviours. All of these assessments need to be focused on enabling learning. The international assessments are by definition global and are therefore less connected with your national curriculum. Like Germany, you need to use the results from international assessment very carefully so that learning can be improved.

Some people would say that the primary part of a learning system is the curriculum and philosophically they are correct. The curriculum is the blueprint, the map, which details what should be learned. Those of us who know assessment think that assessment drives learning, not the curriculum. Indeed, some of you would have heard about the dangers of "teaching to the test". But it is also a fact. Assessment does drive learning. If you go to Singapore, you will see assessment driving learning. The challenge then is to make assessment worth driving and so it drives worthwhile learning and the curriculum is achieved. If your assessments are poor, then they will drive poor learning and the whole education system suffers.

The assessment system you have reflects goals and values, and promotes an understanding of what is important and how it is valued. That is crucial, so the assessment system, the assessments you give, are signals of what is important to the teachers, to the students and to everyone. Therefore the assessment has to be good enough ensure that the correct signals are given. If you look at the assessment tasks, whether it would be a national assessment or a classroom assessment, what signals they are giving and what values are underpinning them? Are these assessments really enabling Kosovo to achieve the 21st century based learning for all or are they sending a different signal. What impact does your assessment system have on learning? Is it a positive impact, a negative impact or a neutral impact? How do the assessments shape learning and how do they shape future learning? How do teachers and students engage with the assessment system components? For example, are the assessments, and the people implementing them, encouraging poor behaviour and bad learning or are the assessments encouraging positive learning outcomes?

The assessment system should be transparent. If it is not transparent, how will people, including teachers and students, fully engage with the assessments results? How will they understand the assessment and its results, know it is fair and have any reason to use the assessment? Looking at the PISA documentation you can see hundreds of pages of PISA documenting their assessment practices. PISA has tried to be as transparent as possible in order to allow people to engage with the assessment study as thoroughly as possible. In being transparent, PISA has opened itself to evaluation and to criticisms. You have heard at this conference and elsewhere some comments about PISA, some of which will be accurate and others almost certainly not warranted, justified or based on any factual information. Nevertheless, PISA opens itself to others so that it can develop and better serve the participating countries. How transparent is your own assessment system? How open is it to criticism? How accountable is it to the learners?

From the teachers' and students' perspective the core of a summative assessment system should be clear objectives and standards: a clear curriculum. They should know what to teach and what to learn and how to demonstrate that learning. If that isn't clear then what would teachers and students do? How will students get direction? A comprehensive, modern curriculum engages a range of summative assessment methods, and not just a test. One of the aims of multiple types of assessment is to triangulate. You can get different perspectives by using different assessment technique and thus you have a richer, deeper picture of learning. I do not know the situation in Kosovo, but my question here is what summative assessment methods do teachers use

and how well do they use them. Also, how would the policymakers know what to do to improve summative assessments within schools and what information is needed in order to formulate and evaluate summative assessments policy?

Kosovo has a grading system which goes 1, 2, 3, 4, 5, with 5 being the highest. Many countries have something similar. I wonder how are the results from individual summative classroom assessments are being aggregated and combined to give a school grade? What is the process? How do you know that the process is the same across the whole country or do you allow for some flexibility? But regardless of what you do, how do you know it's fair and equitable? How will you know it is giving the accurate and comprehensive information back to parents and students? Often in the US and other countries, for example, when teachers give a grade to a student, they take into account the student's learning, and also the student's appearance, clothes, attitude and apparent effort. So a grade which is meant to summarise learning includes whole range of things which are not really learning-orientated. That leads to grade problems including grade inflation. Grade inflation occurs when students are awarded high grades that do not reflect their learning. Do you see

> IF TEACHING AND LEARNING ARE POOR, AND THE GRADES (MARKS) ARE HIGH, YOU HAVE A MAJOR PROBLEM.

evidence of grade inflation within Kosovo? If the learning is really good, the grades should be high. However, if teaching and learning are poor, and the grades (marks) are high, you have a major problem. What data, what evidence would you use to diagnose whether you have a problem with grading? Obviously PISA will provide you with some data. Kosovo has had a grade 5 survey test as well grade 9 and Matura examinations. What are these data telling you about school grading? Is school grading working as you want it to or is there a problem? And if there is a problem, what precisely is the problem, who widespread is it and how could you solve the problem? Could you, for example, use Kosovo examples of good grading practice?

PISA lets you benchmark yourself against other countries. In the US they have started developing what they call benchmark assessments. A benchmark assessment is low-stakes external exam that can be given to a student, class, school or a municipality, often at the end of a term. The benchmark assessment is designed to give objective, standardised and calibrated feedback to students, teachers, principals and other school leaders. The benchmarking test is typically not used as a grading device but rather as a way of providing teachers and others within a school with an external reference point that they can use to evaluate their own teaching and learning. For example, you could have grade 5 mathematics benchmark assessments for use at the end of a term. This curriculum-based assessments could be administered by classroom teachers and the results interpreted by teams of teachers with expert guidance. That interpretation might include the setting of 'cut-scores' for grading (what score on the benchmark test would best indicate '3'?), and there might be discussions of common errors students made and the teaching strategies that might be used to limit these errors. The teachers might also evaluate the quality of the benchmarking test itself, identifying its strengths and weaknesses in terms of the information provided about student learning of the curriculum. Thus, the benchmarking assessment becomes a tool for those involved in education to reflect on their own teaching, assessment and grading practices in a safe, constructive, mentoring environment,

In every country I have been the examination and credentialing systems are the sensitive areas and a person has to be very brave to provide leadership to these systems. I know from my Kosovo visits of 2009, the examinations have undergone sustainable changes and there is a plan for even further developments. Most of you would have an opinion on the strengths and weaknesses of these examination systems. My questions to you would include: how do these examination systems recognise learning? Are they sensitive enough to recognise learning in each subject area (e.g., physics, and chemistry)? How do they promote learning? Given the importance of these examinations, how are they shaping how teachers teach and is that what you want? How transparent and accountable are these examination

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systems? During this presentation I gave you an example of PISA being transparent and accountable. PISA releases, on the internet, very detailed reports on how they do their assessments and the results from the assessments. In the US you can go on the internet and see there lots of examples of transparency and accountability in large-scale assessment systems. So, how transparent and accountable are your examination systems? Do you know how the pass scores are set, how examinations are conducted, and the frequency of examination misconduct? You might also ask how congruent is the examination system with cultural values?

There are still many technical things to learn, refine, adapt and adopt from outside of Kosovo. If you look at the PISA technical reports, and especially the way how they scale and analyse student results; there are many very technical things to learn, reflect upon and maybe adopt. You can see the use of these international assessments to promote change in national education systems. We had the examples this morning of Brazil and Germany using PISA results. There are important lessons to be learned from these and other countries about use international assessment results. It is also important that you keep on engaging with new ways of doing things and particularly in making sure that all of your assessment systems are aligned and pulling in the same direction. Keep on acquiring the technical skills in all areas including curriculum design, ways of formative assessment, summative assessment, and ways of teaching. In my experience, I would also explore the organisational cultures you have. Do you have and do you see evidence of disempowerment or empowerment? Can teachers take initiative and move things forward or is there something blocking them? Do you see evidence of isolation or open discussion about education and problem solving? Do you see evidence of cooperation, of people working together? Is the education culture one of reaction or of anticipation and prediction? Are we looking at a culture of blame or problem solving? Is there an isolated individual or a community focus on learning? Do we have individual vision or do we have a shared vision of education within this country?

Finally, given the fact that some international organisations have been here for over a decade, perhaps you might look at why some suggested changes have been slow to be adapted or adopted, and may be actively resisted. Is it because the foreigner is speaking the wrong language, a different cultural language? Or is it because too many people are operating out of self-interest, or there is the absence of a clear, unambiguous vision of 21st century education for all of Kosovo? Regardless of the reason, change in Kosovo education will come largely from within, when enough Kosovo people insist on a particular direction and it becomes impossible to resist. I have suggested some areas where you might look. Other speakers at this conference have given you excellent examples of what you might do, and the Deputy Minister of Education has provided strong education leadership throughout this conference. However, making Kosovo a world leader in education is largely in your hands.

Assessment Systems and Education Quality

Dr. Kelvin Gregory

Structure of presentation

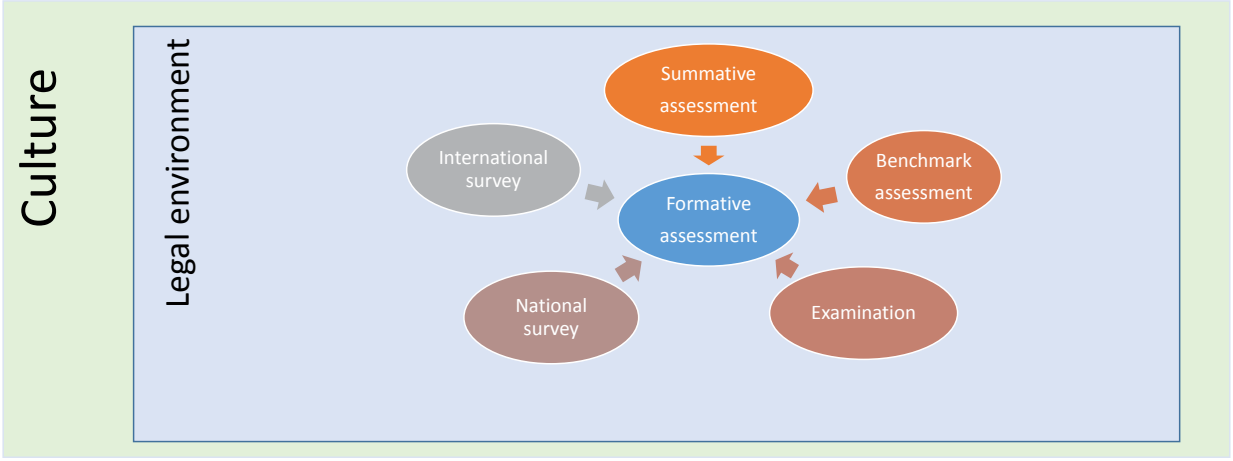
- The integrated assessment system – focused on learning
- The importance of culture
  - Culture, education and personal effort
- The enabling environment
- The layered components of an assessment system
  - Features of the system
  - The layers
    - Classroom assessment
    - Term assessments and benchmark assessments
    - Year assessments (examinations)
- Some closing thoughts
  - Need to develop technical expertise and leadership
  - Need to develop supportive culture
    - Empowerment orientation
    - Need to align components of your education system with core messages

Links with other presentations and Kosovo

- People in this region has a very long history
  - They have shown they can solve problems themselves
    - So, empower the people to identify problems and create solutions
- We know that assessment can drive learning
  - If you want to improve learning, look at your assessments
    - PISA is an assessment for the 21st century
      - PISA is promoting learning for the 21st century
      - Are your current assessment practices promoting 21st century learning?
    - Some countries have used PISA results to re-shape education
      - They have provide teachers with clearer curriculum and better teaching skills
      - Do your educators have a clear, well developed Kosovo curriculum to guide their teaching?
      - Do you have efficient, effective and targeted teacher education programs?

Integrated assessment system – with formative assessment at its centre

Education (and assessment) reflects the laws and culture of the country
Education should be focused on learning which is described in a cohesive, public curriculum
Formative assessment is the assessment most focused on improving and monitoring learning
All parts of the assessment system must work to inform learning; they should work to inform formative assessment



The importance of culture

- Culture is the set of norms, beliefs and values, rituals and ceremonies, symbols and stories that make up a social group.
  - The culture is a main determinant of organizational behaviour
    - A nation's culture will shape its education system
      - And the national culture can be changed by politicians and other leaders
    - A school's culture shapes how teachers, students and parents engage with learning
      - And the school's culture can be changed by strong, insightful leaders
    - A classes culture is shaped by its main actors and determines how students engage with learning
      - And the class's culture can be shaped by the teacher and leading students
    - National education, school and class cultures are shaped by the messages conveyed by the assessment system
      - And especially the test and examination used within the system
- You have seen the power of culture and cultural leadership
  - Dysfunction results if culture is at odds with the organizational system
    - If you are a teacher, think of the worse class
    - If you are an administrator, think of a law or policy that many people are resisting
    - Reflect on the history of this country and region.

Culture, education and personal effort

- Some political leaders have skilfully moulded the education cultural values of a country
  - "**A nation's wealth in the 21st century will depend on the capacity of its people to learn**" (Goh, 1979)
  - "**We need a mountain range of excellence, not just one peak, to inspire all our young to find their passions and climb as far as they can.**" (Shanmugaratnam, 2008)
  - **"You are the one who can determine your own success -yes, life may be hard on you, but if you try, you can succeed, and others have."** (Ng, 2008)
  - **"To live well in the present, we need to know the past and have a sense of the future,"** – (Kiat, 2011)
- Examine the leading countries in PISA
  - A culture that values learning, and has high expectations for all, is common to all high performing countries
  - These countries have strong cultural leaders
    - They have leaders at all levels of their education system who are ensuring that learning is valued
    - They have excellent communication systems to ensure that the leaders' messages are received and understood
    - They learn from other countries but they develop their own solutions
- What characterizes, and what should characterize, the Kosovo education culture?
  - At the classroom, school, district and national levels?
  - How are values, beliefs and practices shaped by Kosovo assessment practice?
    - Is learning really valued? How do you know?
  - What are the expectations for each and every person in the education communities?
    - How are people accountable to each other for learning?
    - What happens if a person subverts learning? What corrective actions are implemented?

The enabling environment

- A lot of work in this area has been done:
  - Law, ministerial directives/orders
  - Curriculum
- Some central questions:
  - Is there a systematic focus on learning for the 21st century?
  - Do all teachers and students know what needs to be taught and to what level? Do they understand why?
  - What are the assessment practices and how do they support learning?
    - Is there an Assessment Policy that frames assessment?
      - Is it implemented? Evaluated?
  - What evaluation system is in place to evaluate the education system?
  - Is the enabling environment congruent with the current culture?
    - Is there a strategy for cultural change? If so, what is the basis of this strategy and how is it being implemented?

Assessment Systems – The need for a layered approach to provide data to inform learning

- Classroom and school assessment
  - Closest to the learner
  - Best position to inform learning
  - Limited ability to evaluate national policies and curriculum attainment, limited capacity to inform larger improvement cycles
- District and National Assessments
  - Distant from learner
  - Can provide data useful for improvement of systems (teacher, school, district, nation)
    - Can be used to align standards within and across schools
    - Can model standard setting and benchmarking
- All assessments within a country should be aligned with the curriculum
  - All assessments must support the core educational message: "Learning is important"
    - Learning is important for each and every individual
    - Learning is important for the well-being of the country
  - Do Kosovo assessments convey the message that learning is important?
    - How do Kosovo assessments support learning? Or do they harm learning?
- International Assessments
  - Furthest from the learner
  - Useful in providing data to evaluate and inform national systems including policies
    - Benchmarking the national education systems against other countries, promoting reflection on the national system

Assessment is an embedded system vital for evaluation, learning, and progress

- Assessment:
  - Reflects goals and values, and promotes an understanding of what is important and valued, and how it is valued.
  - Is vital for improvement, is essential to evaluating , reflecting and reforming educational practices at all levels of an education system and help prevent complacency developing.
    - You have heard how some countries have used PISA to do this.
      - What plans does Kosovo have for using its results from PISA?
    - You have other national assessments (e.g., Year 5, Year 9, Matura)
      - How are you using these assessments to improve teaching and learning?
  - Should be sensitive enough to elicit indicators of achievement and changes in achievement to direct future learning and appropriately certify learning.
- Use the above to reflect upon your current assessment systems (classroom, school, Year 9 examinations, Matura, etc.)
  - What values are communicated though the current assessment systems? What values should be communicated?
  - What impacts do the current assessment systems have on learning? Can these impacts be improved?
  - Are the current examinations and other assessment systems sensitive enough to capture and direct learning? How do you know?

Assessment is an embedded system vital for evaluation, learning, and progress

- Assessment:
  - Must be constructive, enabling reflection, change and growth, and inviting discussion, goal setting and action.
  - Should be transparent, informative and open to evaluation, helping all learners, educators and (assessment) experts reflect and refine their policies, practices
  - Provides data for multi-layered accountability and improvement systems
- Use the above to reflect upon your current assessment systems (classroom, school, Year 9 examinations, Matura, etc.)
  - How do they help build positive learners, enable growth, and invite goal setting and action?
  - Are they transparent and well understood by learners, teachers, parents? Are they fair?
  - Are they used to improve teaching and the formation of better policies and actions

Summative assessment within classes

- The core of a summative assessment system should be clear objectives and standards
  - Do students and teachers know what is expected?
- A comprehensive, modern curriculum requires a range of summative assessment methods
  - What summative assessment methods are used in Kosovo?
    - Is range used to encourage and recognize different styles and types of earning?
  - How skilled are teachers in using a wide range of methods
  - What programs have been used to broaden and deepen the summative assessment skills of teachers?

Summative assessment within a term

- The results from many summative assessment tasks are sometimes summarized in a single achievement report at the end of a term
  - There needs to be clear, documented systems for achieving this summarization
  - And the summary should have a comparable meaning across courses and students
- How are summative assessment tasks merged together to form an overall grade?
  - What policy or procedure directs this?
- Grade inflation occurs when the grade over reports achievement
  - Actual achievement is lower
  - And this distorts the education system
    - Policy and practice based upon bad data is unlikely to be good policy and practice
  - Do you have any evidence of grade inflation with Kosovo?
    - If so, what is the nature of that evidence?
    - What corrective action is being planned and taken?

Summative assessment and benchmark assessments

- A benchmark provides a comparison with the achievement and/or reporting standards
- A benchmark assessment could be ideally used at the end of the term
  - Or another time
- A benchmark assessment can be used to:
  - Gauge progress towards the achieving standards
  - Provide feedback on other assessments and the reporting system
  - Could be set at the end of a term to inform teaching and the standard of learning
- A benchmark test can be externally set and may include international test items
  - Benchmark tests require very fast turn marking and informative feedback systems
    - They could actually be solely administered by the school (but set externally, with external interpretation guidelines)
  - How might Kosovo use benchmark assessments to improve assessment and learning?

Summative assessment for a year

- You have examinations
  - And these have undergone much change since independence
  - You are aware of many of the strengths and weaknesses of the examination system
- The most basic evaluative questions include:
  - How well does this system recognize learning?
  - How well does this system shape learning and teaching?
  - How transparent and accountable is the system?
  - How congruent is this system with cultural and community systems?
    - Is there evidence of a clash or conflict?

Some closing thoughts

- There are many technical things to learn, to refine, adapt and adopt
  - For example, from PISA
    - Yes, there are limitations to PISA so use it wisely
      - The top performing countries do use PISA wisely, interpreting the results within a culture that uses PISA and many other data to inform education policy
  - There are people within Kosovo who already have much of this knowledge
    - But it is not being used. Why?
- And there is much you already know
  - You do have a very long history, after all
  - You have survived many challenges, you have already solved many problems
- For a while think of your best teacher and how he or she formed the class into a learning organization
  - He or she almost certainly had the technical skills to teach
  - And he or she **probably formed the class's beliefs, values, attitudes, behaviors so that overt corrections were seldom needed**
- **Do you need to improve your assessments to improve learning?**
  - **If so, so acquire the technical skills**
    - **But pay attention to the beliefs, values, attitudes, behaviors, and social norms**
      - **You will need to re-shape these as well**

Some closing thoughts

- Keep on engaging with new ways of doing things
  - Use external experts but continue to develop your own internal experts
    - Kosovo leaders should be best placed to make changes to your education
- Research the relationship between Kosovo culture, learning and assessment
  - Do you need to change one, two or all three?
- Examine why the technical expertise is slow to be adapted or adopted, and may be actively resisted
  - Change management strategies may be helpful
  - It almost certainly will not be because more money is needed
  - What characterizes your organizations?
    - Disempowerment or empowerment
    - Isolation or discussion
    - Hindrance or cooperation
    - Reaction or prediction
    - Blame or problem solving
    - Individual or community
    - Individual vision or shared vision

6 MAY 2014 - CONFERENCE PANEL

PLENARY DISCUSSION: THE PISA PROCESS FROM THE BALKAN PERSPECTIVE

Divna Paljevič Sturm
Michelle Braš Roth
Alfons Harizaj
Dejan Zlatkovski
Mojca Štraus
Fatmir Elezi

Ms. Artane Rizvanolli, conference moderator: In this plenary discussion we have invited PISA National Project representatives andmanagers from Balkan countries to share and discuss with us the purpose of their countries' participation in PISA and the experience they have gained with PISA process and assessment.

Ms. Divna Paljevič Sturm, PISA National Project Manager in Montenegro: Montenegro decided to join PISA in 2006. The education reform started in 2000 and its implementation began in 2004. Our Strategic Plan was called the Book of Changes and there was a lot of energy, hope and enthusiasm when the education system was reformed, e.g. the 9-year primary education was divided into three cycles; secondary education remained similar to the previous one with three- or four-year vocational schools and four-year Gymnasia. The external assessment system was introduced at the end of each cycle of primary education, external Matura and professional examination at the end of secondary school. A lot of teacher training seminars were organised based on the new curriculum and textbooks. The first PISA in Montenegro was held in 2006 at the beginning of the reform. The aim of each PISA cycle was evaluation of our education system and monitoring its progress. In 2006 and 2009 no students who attended reformed programmes were involved in PISA assessment, but in 2012 there were about 2/3 of students in PISA that attended one cycle of reformed primary education. Nevertheless, the results are still disappointing. The evaluation of our education reform has shown that it takes time to implement changes, to change the whole education system.

Ms. Michelle Braš Roth, PISA National Project Manager in Croatia: My name is Michelle Braš Roth and I am from Croatia, from the National Centre of External Evaluation of Education. Since 2004 I am work-

ing as PISA National Project Manager and I am the Croatian representative to PISA Government Board as well. Also, I am National Programme Manager for TALIS, the other OECD survey about Teaching and Learning International Survey and I am a Croatian representative in the Board of Participating Countries to TALIS Survey.

What I would like to share with you today is my experience which since last ten years of my life I devoted to PISA. I was somehow convinced to take over this project by my German husband who told me that PISA shock in Germany was so important in relation to educational reforms that I decided to take the chance to do something for my own country. Unfortunately, it didn't happen in Croatia. PISA results probably didn't shock enough neither Croatian public, nor our Ministers. Hereby I also have to mention that in the last ten years we had seven Ministers of Education. This is also one of the reason that neither one of the Ministers of Education didn't have enough time to implement the proposed reforms, smaller or bigger changes in the educational system.

The other fact is the date when we had published our first PISA results. Croatia joined PISA 2006 cycle and that was the first international evaluation of education that Croatia took part in. When it came to the international date of press release, the first possibility to inform the public about our results it was the day before parliament elections. Therefore the Minister of Education could not even attend the press conference, because he had an obligation of election silence and so he could not comment anything about PISA results. PISA story was an attraction for journalists, for newspapers and news only for one day, because the very next day what was interesting were only the results of the parliament elections. This happened to us twice! Therefore, my recommendation is to be careful about timing; when do you want to publish your results and also the second important thing is the way how you present the results to the media. Sometimes journalists do not understand quite well the statistical terms, graph and tables, and they are focussed only on a single number and on the ranking list. Although Croatia is among the countries that are below the OECD average in all three cycles, what is much more important is the distribution of students across the proficiency levels. More details I can give as well tomorrow during the workshop. Thank you!

Mr. Alfons Harizaj, PISA National Project Manager in Albania: My name is Alfons Harizaj and I am currently a National Project Coordinator for PISA 2015 for Albania. I have fulfilled the same role in two previous rounds of PISA assessments in 2009 and 2012. In Albania, PISA is managed by the National Examination Agency. The Agency's main task is to conduct national exams, state Matura exams and end-of-Grade 9 exams. Our most important milestone in PISA assessment was PISA 2009. Albania took part in PISA for the first time in 2000. Comparison of the results of the two PISAs in the main assessment area of reading gave reason to be positive about our progress. Over the time period between the two assessments, we achieved an increase of 36 points, making us one of the three countries with the most improved reading results. Even in other years, we have managed to improveon each previous PISA. In PISA 2000, the most significant success was to be participating in the assessment programme. Albania became part of the international assessment programme PISA 2000 through PISA Plus in 2002. PISA Plus used the same assessment instruments as PISA 2000 and the assessment data were integrated into the overall assessment of all PISA 2000 countries. Our experience has taught us that it is very important to have the participation of other countries in the region, as they provide useful comparisons as regards the speed of development and help to highlight potential shared problems. Albania needs PISA-type international assessments as they provide essential impetus for all the reforms it undertakes and have a galvanising effect on the national assessment system. Having worked on internal national assessments for ten years, my colleagues and I agree that it is necessary to compare the results of national and international assessments, not least because it helps ensure our continuing credibility. Thank you!

Mr. Dejan Zlatkovski, PISA National Project Manager in Macedonia: My name is Dejan Zlatkovski and I am from the Republic of Macedonia along with my colleague Ms. Natasha Janevska who is here in the audience. I am appointed as the PISA 2015 National Project Manager and am working in the area of education for 15 years; from 1999 till 2008 I was working for the Ministry of Education and Science. Since 2008 I am employed in the National Agency for European Educational Programme, who is the competent institu-

tion for implementation of European Educational Programmes, such as Erasmus Plus, Life Long Learning and Youth in Action Programmes. I must say that the PISA assessment is coming to Macedonia in the right moment and this because in the last eight years our responsible and competent authorities were conducting series of important projects aiming to improve the student' attainment and in generally the quality of education in the country. This is probably, if I am not mistaken, our eighth participation in international assessments. Macedonia took part in three rounds of TIMMS assessment, in two rounds of assessment in PIRLS and participated once in PISA, in 2000; probably there is not much rationale or justification behind the decision not to participate in 2004 or 2005. With this round of participation in PISA 2015 Macedonia is building new foundations for future reforms in its educational system. Most of the reforms that took place in our country were meant to the improvement of the curricula for science and mathematics. The number of classes of mathematics in the primary and secondary education was increased; also there were series of projects that were aiming to improve the quality of teaching mathematics; providing guidelines for teachers in teaching mathematics; the same is valid also for the science subjects. In this round of PISA, in the main survey we are testing in three languages, in Macedonian, Albanian and Turkish language and since we don't have the satisfactory number of students for Turkish language we will conduct the Field Trial only in two languages, in Macedonian and Albanian language. I take the opportunity to express our gratitude to our colleague Alfons Harizaj for helping us in translation of the material for students who are studying in Albanian language in Macedonia. What will come after PISA 2015 is that we will be strongly focussed on the reform no matter how the results will be. There will be also a stronger focus on the improvement of the curricula for subjects of mathematics, reading and science and reforms in the area of professional development of the teachers. Thank you!

Ms. Mojca Štraus, PISA National Project Manager in Slovenia: My name is Mojca Štraus and I am from Slovenia. I am the Director of the Educational Research Institute and also the PISA National Project Manager. Slovenia is involved in international studies since twenty-five years, starting with the replication of second study on mathematics and computers in education study, and then with TIMSS and other studies since then. Slovenia has quite an extensive experience on being involved in these studies, but also PISA is a new project for us since 2006 when Slovenia started with PISA. Let me just make few points of what we learnt from PISA. PISA has three domains together: reading, mathematics and science. We learnt from PISA that reading literacy in Slovenia is contra to mathematics and science, which is under the OECD average, the other two, mathematics and science are above the OECD average. This was a sort of surprise for us, a small PISA shock, which is still on-going, because this domain is still below the OECD average and we are trying to find or discover the story behind it. It is not immediately clear why reading literacy in our school system is below OECD average, while the other two; mathematics and science are above that average. Therefore we have started to analyse the data a bit to more extend and at the same time which is also important we started talking together with the Ministry of Education to schools. Since 2009 when the first results showed that reading literacy is below OECD average we prepared some projects trying to boost up the focus on reading, because reading is not a particular subject in our school curricula, so all the teachers of all subjects needed to be aware that students have problems in these areas. These projects are now going on and it is still too early to say what will be shown in the next PISA. We hope that some improvements will be shown, but we are not expecting the above OECD average results or anything like that. A lot is going on and we are very happy to have PISA as well as studies, like TIMSS, PIRLS and others, because all these data is never enough, the education system is so large and complex that all these data cannot explain everything, so we need that data, but we also need the teachers, the students and parents to tell us what they think is the problem and needs to be done and then to do it as well together with us. The lesson for us is that we need to continue and hopefully with all these new data we will learn more and so in this aspect we are also looking forward to PISA 2015. Thank you!

Mr. Fatmir Elezi, Division of Evaluation, Standards and Monitoring, MEST, Kosovo: My name is

Fatmir Elezi. I am an official at the Division of Evaluation, Standards and Monitoring. Firstly I would like to greet all of the participants on behalf of Mr Mustafë Kadriu, Head of the Division of Evaluation, Standards and Monitoring, who was unable to attend today. As stated earlier, Kosovo is taking part in PISA for the first time. Participation in PISA is a new and challenging experience, especially for those of us dealing directly with the assessment process. Our division has experience in dealing with external assessments, namely grade 5, grade 9 and Matura. We have already successfully run a pilot PISA, which gave us the opportunity to familiarise ourselves with content, the format of questions and the organisation of the testing process. Earlier in the conference it was mentioned that the other countries in the region also faced difficulties when participating for the first time. With this in mind, we consider Kosovo to be ready to meet the challenge of applying for PISA. With our new competency-based curricula now up and running, which I believe are in line with the criteria of PISA assessment, the time is right for our participation. In the pilot phase we selected 27 schools each with 43 students, making a total of 1,161 students. Student participation in the pilot phase was high, with over 95% completing the PISA test. In the main phase, we will be committed to following all the procedures established by PISA, and are confident that the process will go well. As we do not have any prior experience in this area, the results will provide an extremely useful indication of where Kosovo ranks compared to other countries in the region and across the world. Thank you!

6 MAY 2014 - CASE STUDY

ASSESSMENTS AND ASSESSMENT PLANNING IN KOSOVO

FATMIR ELEZI
Division of Evaluation, Standards and Monitoring, MEST, Kosovo

I would like to take you through a presentation that was prepared by my colleague Mr Mustafë Kadriu on the topic of 'Kosovo and PISA 2015 – Assessment and Assessment Planning in Kosovo'.

Firstly, it may be helpful to provide you with some general data about Kosovo. Kosovo has a total area of 10,908 km^2. According to the latest census in 2011, there are 1,739,825 people living in the country, of which around 46% are aged between 6 and 26.

There are a total of 1,161 educational institutions in Kosovo; 42 of these are preschool establishments; 998 are primary and lower secondary schools; 115 are upper secondary schools; and 6 are special schools.

According to official data, there are 5,398 children in Kosovar preschools (ages 1-6), 280,596 students in primary and lower secondary (grades 1-9), 103,998 students in upper secondary schools (*gymnasiums* and vocational schools), and 1,221 students in special education, while there are a total of 4,732 students in privately run primary and secondary schools. A total of 22,764 teachers work in these schools, with 17,332 teachers working in primary and lower secondary schools and 5,432 teachers working in upper secondary schools. The average number of students per teacher is around 18. Approximately 80% of teachers are fully trained.

I will now present the assessment being carried out in Kosovo and explain its purpose. The main aims are to:

- strengthen learning;
- evaluate student progress;
- facilitate mastery of the curriculum competencies;
- certify and guide students;
- conduct research into educational processes.

At the first level, grade 5, the assessments carried out by the Division of Evaluation, Standards and Monitoring pursue research aims; at the second level, grade 9, they aim at certification and guidance, and at the third level, the state Matura exam, they aim at certification and enrolment at university. We also conduct tests for student advancement, involving children with special talents, and this year we will also be taking part in the PISA assessment process. Besides external assessments, there are also internal assessments taking place at the classroom and school level.

At the first level of education, i.e. the fifth grade, we

conduct this assessment in two phases: the piloting phase and the main study.

Activities undertaken as part of this testing procedure are as follows:

- appointing an expert group;
- drafting standards;
- drafting competency mapping for assessment;
- building test requirements;
- selecting test requirements;
- preparing questionnaires;
- piloting tests;
- checking pilot tests;
- reading notes;
- analysing data;
- modifying tests;
- modifying questionnaires;
- administering test rules;
- appointing administrators;
- notifying Municipal Education Directorates (MEDs);
- printing tests;
- collecting data;
- reading notes;
- analysing and processing data.

The study is research-oriented and presents country-wide data on student achievement according to nationality, gender, social background and geographical location. Analysis of the results allows all stakeholders to assess levels of performance and the skills and knowledge possessed by students at the end of grade 5, which is the final grade at the first level of pre-university education. The test looks at native language competency and mathematics.

In the table below (Figure 1) we present an outline of the test, which consists of clusters and packages. It should be noted that we were supported in conducting this assessment by the World Bank, and in particular by Professor Kelvin Gregory, who is present here today.

Tabela: Bllogjet dhe pakoja

	Pakoja 1	Pakoja 2	Pakoja 3	Pakoja 4	Koha
Blloku 1	M/01	M/02	Gj/02	Gj/01	60'
Blloku 2	Gj/03	Gj/04	M/04	M/03	
Pushim					20'
Blloku 3	Gj/02	Gj/01	M/01	M/02	60'
Blloku 4	M/03	M/04	Gj/04	Gj/03	

Gj -gjuhë , M- matematikë

FIGURE 1. Test outline

The illustrations below (Figures 2 and 3) present some key statistical data. The first graph (Figure 2) presents the distribution of test scores for the native language test by gender. Earlier we looked at the case of Albania, where, in most subjects, the highest scores were consistently achieved by female students rather than male students at the three levels. The second diagram (Figure 3) also presents the distribution of mathematics scores by gender.

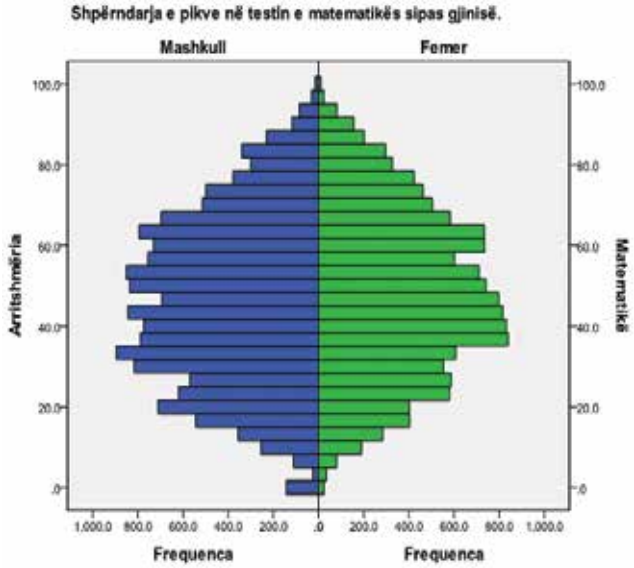


FIGURE 2: Score distribution in native language competency

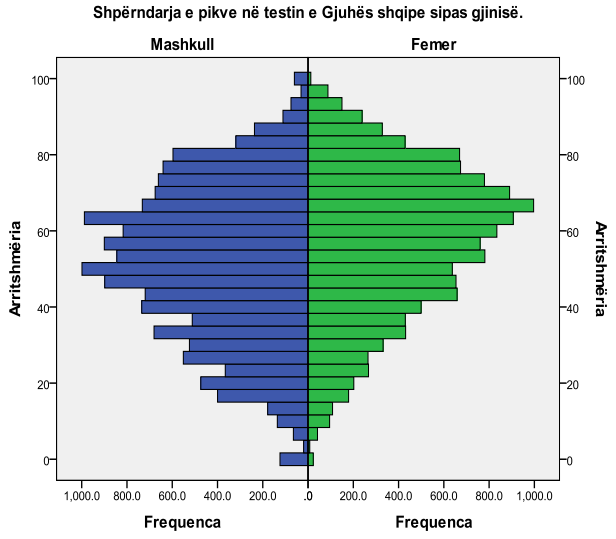


FIGURE 3: Score distribution in mathematics

In the following table (Figure 4), a comparison of the first grade 5 assessment, which took place in 2008, with the most recent assessment in 2013, shows an

improved result. In 2008, the average score was 43.2% in the native language competency test and 26.4% in mathematics. In 2013, the average score in the native language test was 54.7%, while in mathematics it was 34.3%.

VLERËSIMI
KLASA 5-të

Viti	Gjuhë amtare (%)	Matematikë (%)	Totali (%)
2008	43.2	26.4	34.8
2013	**54.7**	**34.3**	**44.5**

FIGURE 4: Grade 5 assessment progress

We also organise tests for grade 9 students called 'achievement tests'. This type of assessment is carried out through a test as a measuring instrument. The test consists of 100 items; so far all multiple choice. The purpose of this test is to gauge the level of students' achievement and provide guidance to further schools, thus facilitating enrolment in secondary schools. This test has taken place every year since 2003. Test questions are prepared by a designated group of experts and professional associates for each subject. This type of test has no pass rate criterion, which means that students do not repeat the grade even if they fail to achieve good results.

The average scores achieved so far have been 53.4% in 2009; 54.8%; in 2010; 57.1% in 2011; 56.9% in 2012, and 61.3% in 2013.

Matura exams have taken place since 2006, and the Law on the Matura Exam has been in force since 2008. As of last year, the Matura exam takes place over two days, with core subjects, such as English, native language competency and mathematics, being tested on the first day, and specific subjects corresponding to the respective tracks being tested on the second day. Students undergoing the first part of the test must also be tested on subjects in accordance with their profiles. Matura exam scores are taken into consideration for the enrolment in respective faculties. The Matura test measures the students' level of knowledge, which is divided into three levels; reproduction A, which implies recognition; reproduction B, which implies memorisation and retention; production, which implies divergent and convergent production; and assessment. The diagram below (Figure 5) shows how the system works, with the base representing features and characteristics of the field. The next level up represents knowledge, skills, abilities, habits, etc., the achievement of which implies competencies. The final step is demonstration of these competencies.

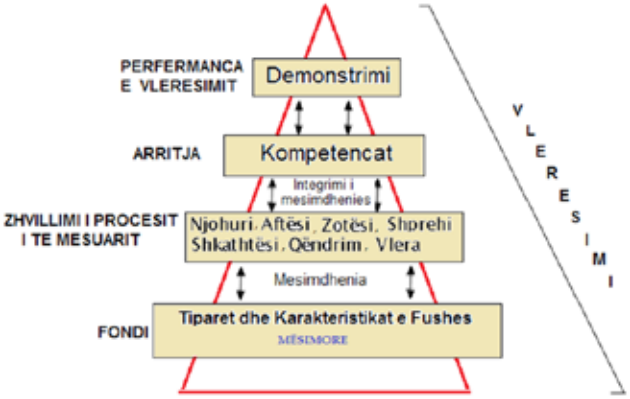


FIGURE 5: Assessment scheme

The three types of tests presented above are organised by the Division of Evaluation, Standards and Monitoring. This year, these are complemented by the PISA assessment.

The Ministry of Education, Science and Technology has made an offer to participate in the PISA project for 15-year-old students. This project was promoted by an international consortium, including ACER (Australian Council for Educational Research), CITO (Dutch Institute for Educational Measurement), ETS (Educational Testing Service in the United States) and WESTAT (a research company in the United States). The Ministry of Education, Science and Technology has authorised the Division of Evaluation, Standards and Monitoring to oversee the implementation of all activities related to PISA assessment. In the chart below (Figure 6), three key questions are posed: What comes after the results? Where do we currently stand? Where do we want to get to?

FIGURE 6: PISA assessment scheme

The PISA assessment objectives are as follows:

- inform policy-makers on student achievement;
- establish learning standards and create a fully functioning student assessment system;
- identify the different variables that affect student achievement, such as geographic location, socio-economic situation, teaching quality, teaching aids;
- increase accountability (more governmental responsibility for education, more functional leadership, more advanced curricula, more practical textbooks, etc.).

Since Kosovo is participating in the assessment for the first time, we have no experience in processing the results. However, these results could be used for:

- determining the profile of students' abilities and skills;
- reforming the curricula;
- defining educational competencies;
- continually assessing levels of student achievement;
- further improving the quality of initial and in-service teacher training;
- determining key demographic, social, economic and educational indicators;
- applying and developing global OECD policy and improving international indicators relating to educational activity.

What happens after the PISA assessment? Questions we may ask ourselves when charting our future course include the following:

- How much are students learning at school?
- What teaching are we delivering?
- What leadership do we have in schools?
- How functional are the textbooks?
- How well do the curricula promote the achievement of 21st century skills?
- How well are we preparing students to be balanced and successful citizens in the future?
- How does the level of education in Kosovo compare to that in other countries?

The Division of Evaluation, Standards and Monitoring has received support from a number of organisations during the PISA process. Our most long-standing partner is the World Bank, with which we have been cooperating since 2003. Last year, we entered into an extended cooperation arrangement with GIZ and UNICEF. We also cooperate with USAID and other donors.

Below you can see an outline of external assessments (Figure 7). As I mentioned earlier, we will be starting to digitise the assessment system this year, and, in 2016, we are considering running a pilot scheme. In 2018, we plan to establish assessment digitisation for the entire education system.

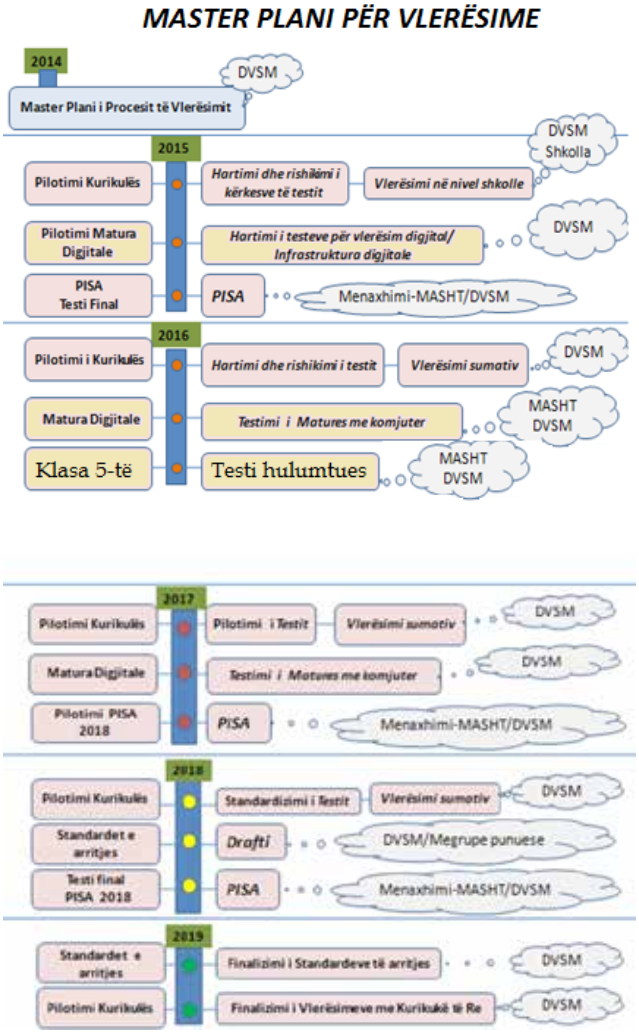


FIGURE 7: Assessment master plan

I will conclude my presentation with a quote from Mother Teresa: *'Not all of us can do great things, but we can do small things with great love.'*

Thank you!

Republika e Kosovës
Republika Kosova-Republic of Kosovo
Qeveria -Vlada-Government
Ministria e Arsimit, Shkencës dhe Teknologjisë

german cooperation
DEUTSCHE ZUSAMMENARBEIT

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Kosovo in PISA 2015

Assessments and Assessment Planning in Kosovo

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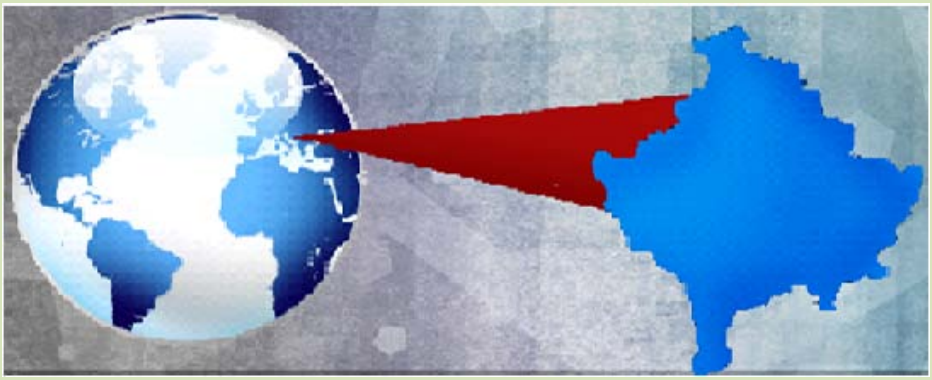
KOSOVO



REPUBLIC OF KOSOVO

- Republic of Kosovo has an area of 10,908 km²
- Population 1.739,825 inhabitants; 46.3% of them are of age 6 to 26

Ministry of Education, Science and Technology - MEST

Total number of educational institutions in Kosovo: 1.161

Preschools: 42
Primary and lower secondary schools: 998
Higher secondary schools: 115
Special schools: 6

Number of students in Kosovo

Preschool (age 1-6): 5.398

Primary and lower secondary (grade 1-9): 280.596 students

Number of students in Gymnasium: 44.582 students or 43.6%

Number of students in vocational education: 59. 416 students or 56.4%

103.998 students

Number of students in private education: 4.732 (2.768 Male, 1.964 Female)

Number of students in special education: 1.221 (732 Male, 489 Female)

Nx. sipas gjinisë: 418.352 (218.912 m, 199.440 f)

Number of teachers in Kosovo education

Number of teachers: 221.108

In primary and lower secondary schools (Grade 1-9): 17.332

In higher secondary schools (Gymnasium and Vocational): 5.432

Average number of students per teacher: 18.3 students

80% of teachers have attended training

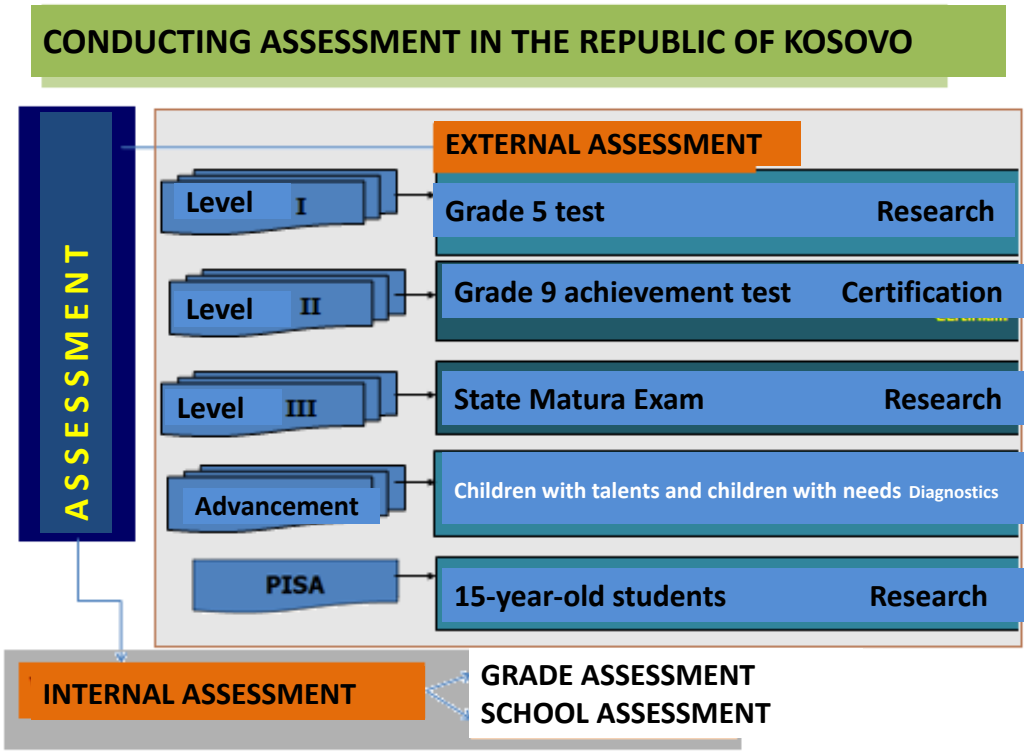
ASSESSMENTS

Republika e Kosovës
Republika Kosova-Republic of Kosovo
Qeveria -Vlada-Government
Ministria e Arsimit, Shkencës dhe Teknologjisë

Assessment purposes

The purpose of the assessment is to:

- **Strengthen l**earning
- **Report** student progress
- **Acquire** curriculum competencies
- **Certify and guide** students
- **Do research** in education processes



ASSESSMENT

First Level of Pre-university Education (Grade 5)

Implementation

Grade 5 student achievement assessment shall be delivered in two phases:

1. Piloting
2. Main study

ACTIVITIES

- **Appointing the expert group**
- **Drafting standards**
- **Drafting the assessment concept map**
- **Building test requirements**
- **Selecting test requirements**
- **Arranging test requirements**
- **Preparing questionnaires**
- **Piloting tests**

- Checking pilot tests
- Analyzing data
- Modifying tests
- Modifying questionnaires
- Assigning test administering rules
- Assigning administrators
- Printing tests
- Correcting tests
- Analyzing and processing data

FINAL TEST

- Result publication
- Preparation of a technical and public report
- Presentation of results

The study has a research character and presents data at the national level on student achievement according to national, gender, social and urban/rural belonging.

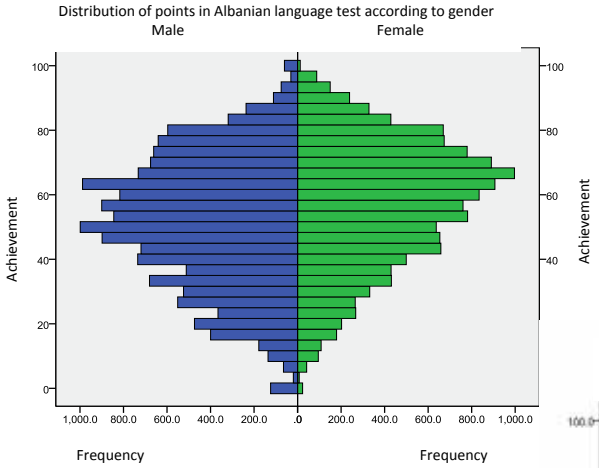
The results and analysing the content of test requirements make it possible for all stakeholders to judge the level of achievement, skills and knowledge possessed by students who are completing grade five, as a final grade of the first pre-university education level for basic subjects, **mother tongue and mathematics.**

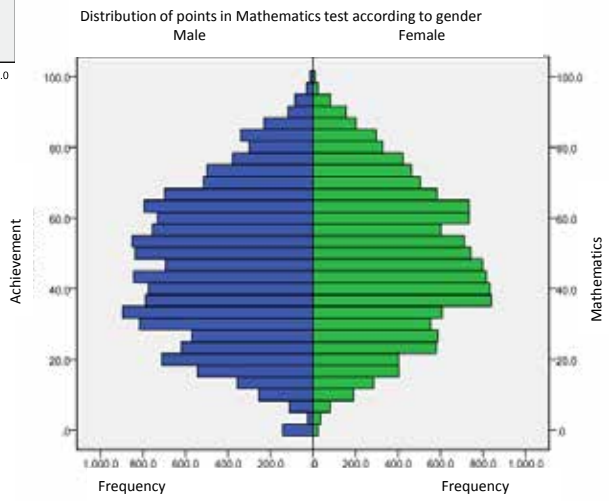
Table: Blocks and package

	Package 1	Package 2	Package 3	Package 4	Time
Block 1	M/01	M/02	Gj/02	Gj/01	60`
Block 2	Gj/03	Gj/04	M/04	M/03	
Pushim					**20`**
Block 3	Gj/02	Gj/01	M/01	M/02	
Block 4	M/03	M/04	Gj/04	Gj/03	60`

Gj – Language, M – Mathematics

Student questionnaire
Teacher questionnaire
Principal questionnaire





Progress in grade 5 assessment

ASSESSMENT

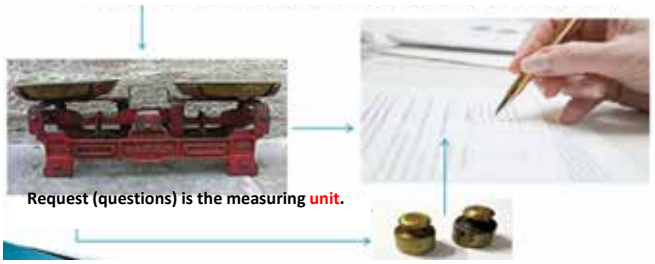
Grade 5

Year	Mother tongue (%)	Mathematics (%)	Total (%)
2008	43.2	26.4	34.8
2013	**54.7**	**34.3**	**44.5**

ACHIEVEMENT TEST

Assessment is delivered through measuring instruments.

Tests are the student achievement assessment instruments.



Request (questions) is the measuring unit.

Purpose:

Student achievement level and guidance for further education.

Being conducted every year since 2004.

Test requirements shall be prepared by the group of experts and professional associates for every subject.

Test contains 100 queries, every correct query is awarded with one point. The results will be published per student, satellite classroom, and school.
The student does not repeat the grade in the Achievement Test.

Achievement Results

In 2009, achievement 53.4%

In 2010, achievement 54.8%

In 2011, achievement 57.1%

In 2012, achievement 56.9%

In 2013, achievement 61.3%

Prej 100 pikëvë të mundshme , mesatarisht secili nxënës ka arritur

MATURA EXAM

Matura exam is organized in two days:

Day one: General subjects
Day two: Subjects as per profile

Day one: General subjects

- All students who have successfully completed final grade shall undergo the test from general subjects

Mother tongue
English language
Mathematics

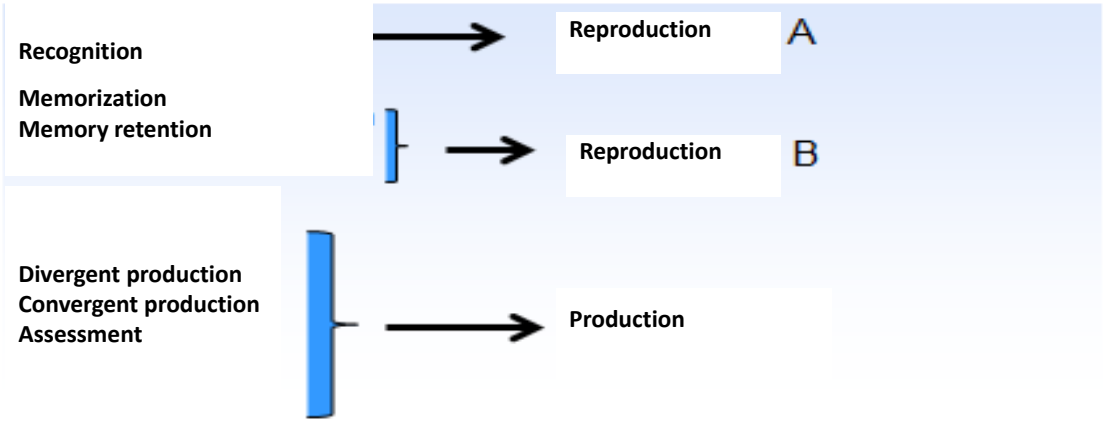
Day two: Subjects as per profile

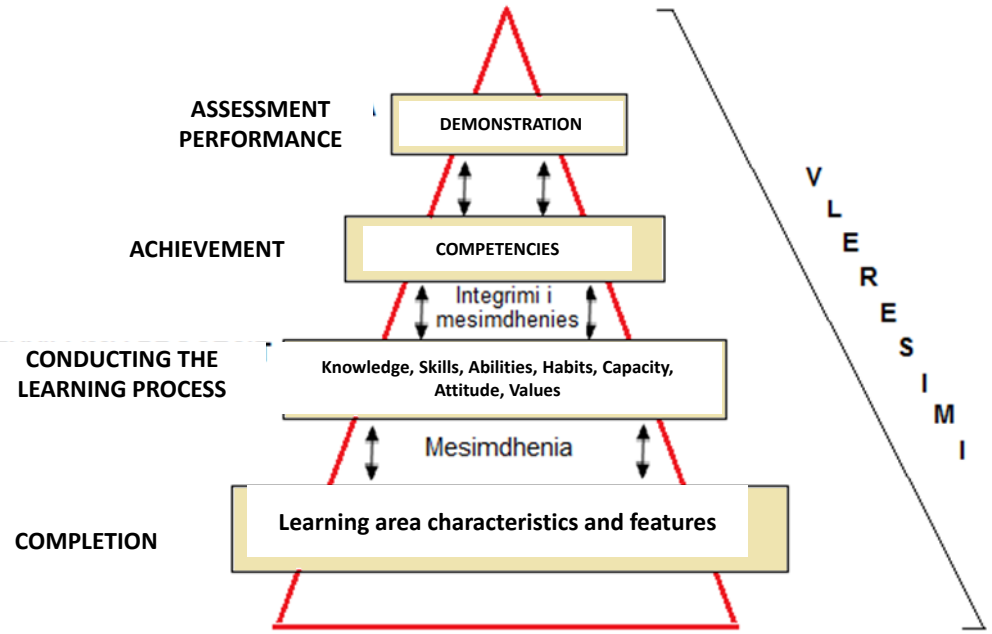
- Students who underwent the first part of the test shall be entitled to undergo the second part of the test too.
- Second part of the test contains specific subjects as per school profile.
- With the number of score points from both parts of the test, students shall be provided with:

STATE MATURA DIPLOMA

This document shall serve for application to university admission.

Test
Repro/Pro: Behavior levels





PISA ASSESSMENT

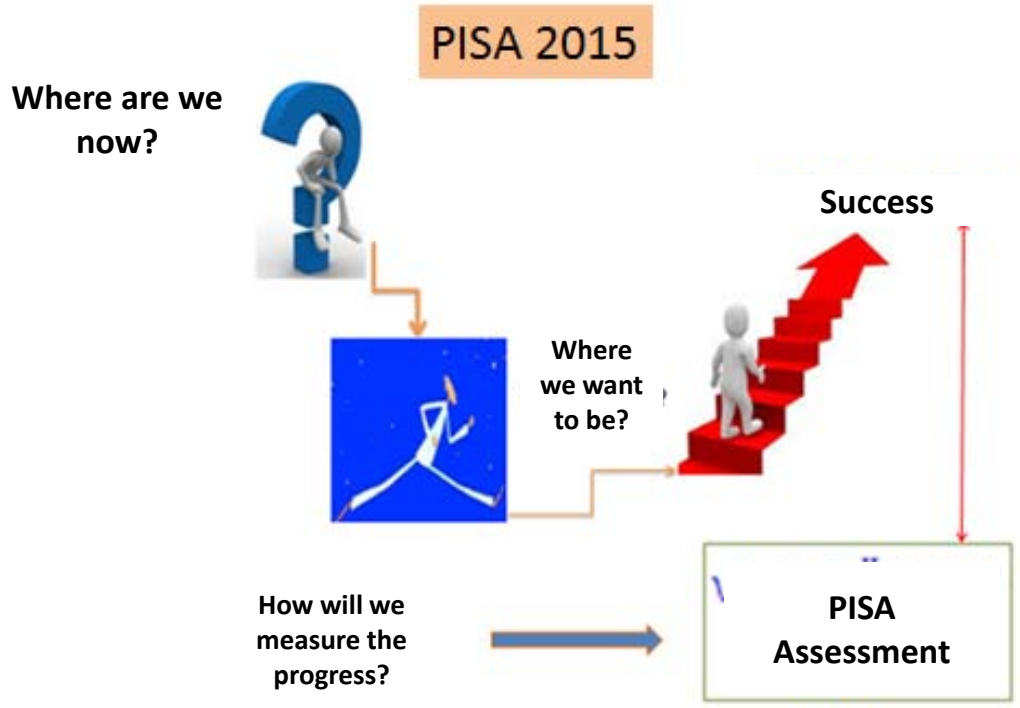
(International Students Assessment Program)

PISA Assessment

Ministry of Education, Science and Technology – Republic of Kosovo has made a bid to participate to the OECD PISA Project for 15-year-olds.

The Project was promoted by the International Consortium:
•ACER – Australian Council for Educational Research / Australia
• CITO – Dutch National Institute for Educational Evaluation / Netherlands
• ETS – Educational Test Service / USA
• WESTAT / USA

Ministry of Education, Science and Technology has authorized the Division for Evaluation, Standards and Monitoring to conduct all activities related to PISA assessment.



PISA assessment objectives

1. Inform policy drafters on student achievement (age 15)
2. Enable setting learning standards and establish proper student assessment system.
3. Produce different variables that affect student achievement (geographical position, social and economic situation, teacher's work, teaching aids etc).
4. Encourages responsibility and accountability (the government becomes more responsible for education, more functional leadership, advanced syllabuses, more practical textbooks, effective teaching etc).

PISA assessment results and their use

PISA assessment results may be used for:

Determining the direction of students' skills and abilities
Reforming syllabuses
Defining learning competencies
Defining the level of continuous student achievement
Teacher professional training

Determining key demographic, social, economic and educational indicators

Global functioning and development of OECD policy for improving international indicators on educational activities

What after PISA assessment

We will get the answers to the following questions from PISA:

- How much are children learning in schools?
- What teaching are we providing?
- What leadership do we have in schools?
- How functional are textbooks?
- How much are syllabuses meeting skills attainment for the 21st century?
- How much we are preparing students for successful citizens in the future?
- What is the level of education in Kosovo compared to the education of other countries?

Support

World Bank

GIZ

USAID

UNICEF

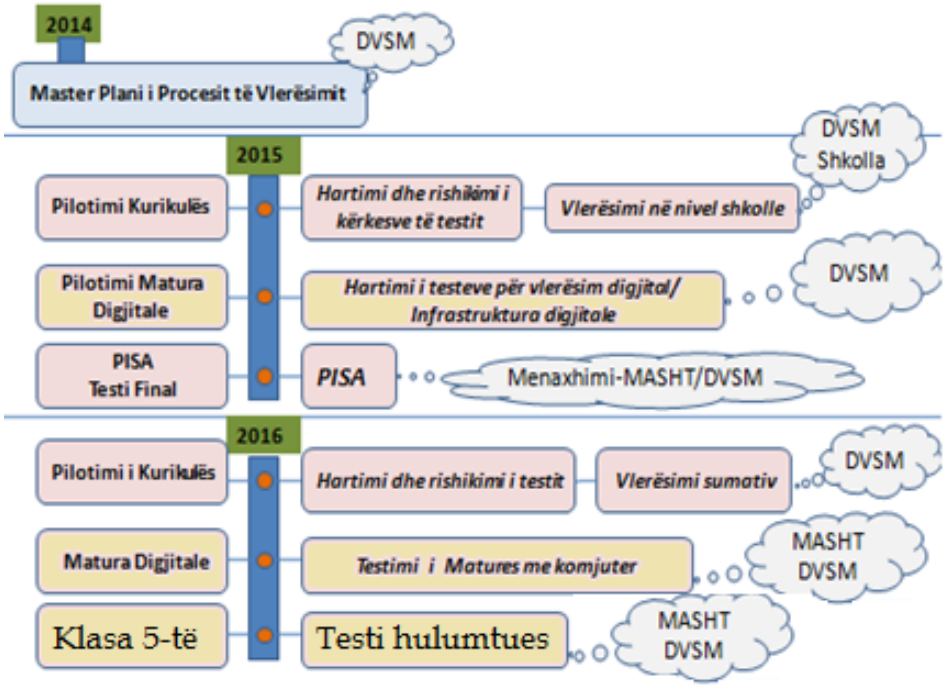
SVAP

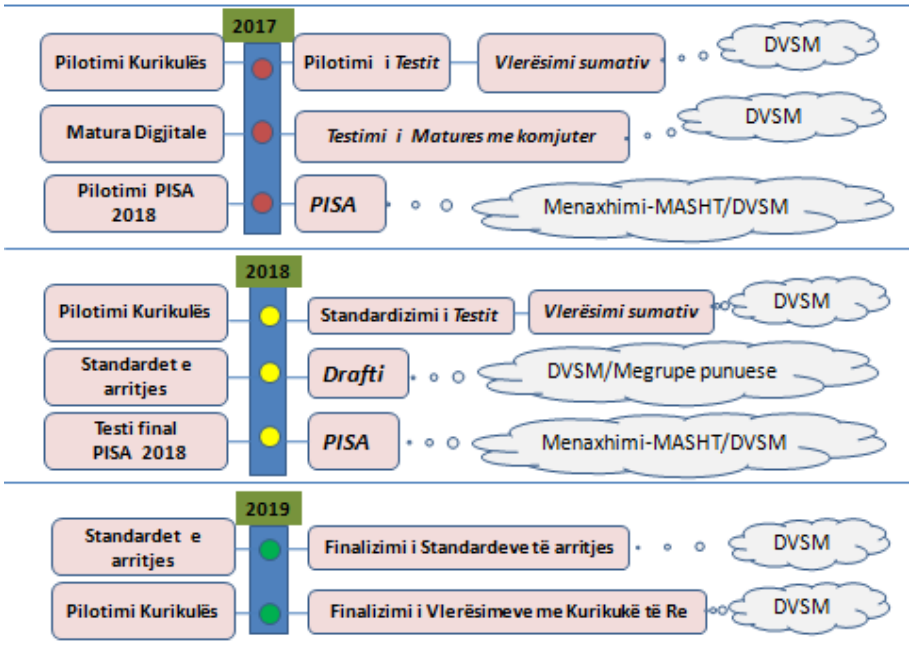
KDP

Etc

Danida

ASSESSMENT MASTER PLAN





"Not all of us can do great things. But we can do small things with great love."

Mother Theresa

THANK YOU

Questions

Comments

6 MAY 2014 - CONFERENCE PANEL

PLENARY DISCUSSION: FIRST DAY'S LESSONS LEARNED PANEL

Nehat Mustafa
Vjollca Ymerhalili
Dr. Jenny Bradshaw
Dr. Kelvin Gregory

Mr. Resul Sinani, conference moderator: I would like to invite two of the keynote speakers of the conference, Ms. Jenny Bradshaw from OECD Paris and Mr. Kelvin Gregory from the Australian Authority for Curriculum, Assessment and Reporting, to give an overview of what we have learned from this first day of the conference. I would also like to invite representatives of the Ministry of Education, Science and Technology (MEST), Deputy Minister Mr. Nehat Mustafa and Ms. Vjollca Ymerhalili of the MEST Division of Evaluation, Standards and Monitoring, to join us in our discussion.

Mr. Resul Sinani: The purpose of this panel is to understand what lessons we can draw from the first day of the conference. I shall therefore pass the floor to the keynote speakers.

Dr. Kelvin Gregory, Australian Curriculum, Assessment and Reporting Authority and Flinders University, Australia: In order to make that claim on any subject you need to have some evidence and to gather that evidence you need a data gathering tool. Assessments are simply data gathering tools which enable us to collect data to make statements about students' learning. Obviously, there is a reasoning link between the assessment data we have gathered and the claim we make, and there are limitations with the data, the assessment we used, and even in the reasoning. The critics of PISA, TIMSS and other large-scale assessment studies typically don't follow this type of argument. They make a claim, but they don't necessarily provide data to support that claim. The main critics of PISA, TIMSS and of any testing system are basically say we are going to make a claim, but we are not going to give you any evidence to support our claim and we will not provide you with a viable alternative. While it is always important to listen to critics, shallow arguments that hold that evidentiary reasoning and measurement have no valid and valuable role in education should not be taken too seriously.

Going back to the earlier question, to make a claim that a certain teacher is good requires some supporting evidence gathered within a framework that clear states the qualities of a good teacher. The evidence is probably not going to come from a test that students or teachers have completed. Teaching is complex,

and to judge teaching quality on the basis of students' performance on an assessment is simply wrong. Further, a teacher test, for example a test of the teacher's subject and pedagogical knowledge, while potentially informative, will not capture the complexity of teaching. You need a system of gathering rich data pertaining to teachers, and that data has to be gathered in a way which lets teachers know what is valued and how to improve him or herself professionally. The gathering and interpretation of that data in order to make a claim that a teacher is "good" should be transparent processes following many of the ideals that shape how we want students' learning to be evaluated and reported.

Dr. Jenny Bradshaw, OECD Paris: One thing that impressed me particularly was the the panel of National Project Managers (NPMs) in the first part of this afternoon. What was interesting about that panel is that what they (the NPMs) were giving was a realistic picture of PISA and what PISA can do and what it cannot do and what you need to do to make best use of PISA. What also came through very strongly from them is that neither PISA nor anything else is ever going to be a magic solution to every problem. What is very impressive about this conference is that it brought together so many different interest groups in Kosovo and abroad; that is really good, because it raised the profile of PISA. Against that of course you need to make sure that you are not raising unreal expectations, in other words that you don't expect PISA to do too much. PISA itself is a measurement and the hard work comes after PISA of deciding what exactly that is telling you about the education system and what policy implications follow from that. Good advice that came from Ms. Mojca Štraus, NPM of Slovenia is not to rush into things, but to think carefully about the best way to act on the results and what is the most efficient and cost-effective way to use the results that are available, not to expect that there is going to be one particular reform that is going to be the answer to all the problems and also not to expect change and development to come overnight. Seeing the representative of the Balkan countries, the National Project Managers (NPMs) in that panel together shows how much cooperation there can be on that level and I think the suggestion to remain in contact is a good one and I hope that is going to happen.

Ms. Artane Rizvanolli, conference moderator: Thank you Ms Bradshaw. I would now like to pass the floor to Ms. Vjollca Ymerhalili from the Ministry of Education, Science and Technology.

Ms. Vjollca Ymerhalili, Division of Evaluation, Standards and Monitoring, MEST: Thank you all for your participation and for your patience instaying until the end. Your interesting and professional presentations, along with the curiosity you have shown in asking so many pertinent questions, are testament to the success and significance of the conference. I would like to sum up with a single quote from Mr. Manfred Prenzel, which I particularly liked: 'PISA findings represent useful information, regardless of whether results are "good" or "bad".' Since we have reached the end of the day and I do not want to take up any more of your time, I would now like to ask Deputy Minister Mr. Nehat Mustafa to take the floor for his closing remarks.

Ms. Artane Rizvanolli: Before we take questions from the audience, we will hear from Deputy Minister Mr. Nehat Mustafa, who will describe what the Ministry of Education, Science and Technology has learned from the conference and whether this will be reflected in policy-making.

Mr. Nehat Mustafa, Deputy Minister of Education, Science and Technology, MEST: Since 2008, I have been directly involved in assessments conducted in the Republic of Kosovo. As President of the Central State Matura Committee, I am proud to say that the Division of Evaluation, Standards and Monitoring, which operates within the Ministry of Education, Science and Technology, has made tremendous progress, despite often working in unfavourable conditions, in terms of surmounting the challenges it has faced in organising assessments for grade 5, grade 9, grade 12 and grade 13.

This conference, along with the various other conferences we have attended and the many study visits we have made to other countries, will help the division to continue its successful work in organising and managing PISA assessment.

It has been, and remains, very important to ensure the general public is aware that PISA is not a simple assessment of performance, but is, first and foremost,

a study, which is carried out by means of an assessment. While the external assessments taking place in the Republic of Kosovo are directly related to students and schools, we have seen that PISA assessments consider information on where the children live, their social status, their parents, their schooling, etc. The fact that economically developed countries were initially faced with similar problems to those experienced by less developed nations and that they were often surprised by their PISA results shows usthat we must be prepared as a society not to get carried away withpassing judgement onour results, and to focus our energies on helping the Division ofEvaluation, Standards and Monitoring, the Curriculum Division and all other departments within the Ministry of Education to develop policies on how to improve the situation in education. This is one of the main things we have learned from the conference.

As the qualified presenters and panellists who spoke this morning rightly pointed out, professional development for teachers is also a very important issue. I must say that the Ministry of Education has done extremely well on this issue over the years. In the presentation made by Mr Elezi, we saw that 80% of teachers have undergone thorough professional development. I am pleased that this conference has been attended by professors, but I would also like to take this opportunity to invite the many other university professors operating in the six public universities in the Republic of Kosovo to take part in these conferences, along with those working in private colleges. It would be useful to hear more about the work they do and their input would be greatly welcomed. The Ministry of Education would be pleased to work together with professors more closely and to jointly draft plans for future guidance.

My proposal that meetings of the countries in the region should take place every two or three months was made in all sincerity. The Republic of Kosovo would stand to benefit greatly from the experience of officials and experts from different countries who have already participated several times in PISA assessments. Thank you!

7 MAY 2014 - CONFERENCE WORKSHOP I

LESSONS LEARNED IN IMPLEMENTING REFORMS AFTER PISA

MODERATOR:
Alush Istogu, Department for Administration of Pre-university Education, MEST, Kosovo

PRESENTERS:
Dr Jenny Bradshaw, OECD Paris, France
Michelle Braš Roth, National Centre for External Evaluation of Education, Zagreb, Croatia, NPM of Croatian PISA Centre

WORKSHOP COORDINATOR:
Sokol Elshani (GIZ/CDBE)

The workshop started 10 minutes later than scheduled due to the late arrival of participants and a problem with the interpreting equipment. Mr Alush Istogu had been expected to lead the workshop, but, as he was unable to attend, this role was taken on by Mr Sokol Elshani. Mr Elshani welcomed the participants of the working group. Ms Igballe Cakaj was selected as the presenter of the group.

The participants agreed that the workshop would consist of two presentations by international experts followed by discussion on the topic at hand.

The first presentation, held by Dr Jenny Bradshaw of OECD, looked at lessons learned in implementing post-PISA reforms in Ireland and Chile, with reference to authentic data describing the situations faced in these countries.

The second presentation, held by Ms Michelle Braš Roth of PISA Croatia, gave an overview of lessons learned in implementing post-PISA reforms in Croatia.

These two presentations gave an insight into the processes in three countries and offered inspiration and food for thought on how to prepare for Kosovo's participation in PISA in 2015.

Discussions focused primarily on the topic formulated below under 'Challenge and Recommendations'.

The workshop conclusions were as follows:

Responding to results

Institutions need to be prepared in advance on how to ensure a constructive follow-up to PISA assessment and how to maintain a positive approach if results are not as expected. Most of the participants

> THE RESULTS SHOULD BE CONSIDERED AS AN ASSET AND AS A VALUABLE TOOL TO BE USED BY THE DIFFERENT STAKEHOLDERS INVOLVED IN EDUCATION POLICY.

expressed concern about how the results would be used. It was agreed that the emphasis should not be on singling out the culprits or putting pressure on teachers but rather on increasing quality of education.

Providing adequate information

How can we ensure that information is communicated in due time? Who needs to be informed in this process? It was clear that the process needs to cover all educational structures at all levels. Target groups include teachers, students, parents and other stakeholders such as the media and the general public. Other key questions are: What efforts are required to convince parents that their children should participate in the test? How should the information be prepared? What type of information should be distributed to the stakeholders? Is there a need to organise meetings with representatives of educational institutions in due time? It was agreed that information on how to prepare needed to be distributed to a broader target audience than only the selected schools. Key information regarding the testing procedure itself includes the length of the test, the time required and the type of questions asked. A further conclusion was that PISA results can help in developing new approaches in education policy. There was also consensus on the fact that teachers need to be given special training in preparation for PISA. This involves providing them with adequate information, e.g. sample tests, in due time. Brochures need to be prepared in advance and distributed to all parties. The internet and social networks such as Facebook can be useful tools in communicating information.

Preparing teachers, parents and students

The process must be supported by all the involved parties. There should be a general awareness of the purpose of PISA and its potential to bring about improvements to education at all levels.

The results should be considered as an asset and as a valuable tool to be used by the different stakeholders involved in education policy.

On the basis of the discussions, the working group formulated the following challenge and recommendations:

CHALLENGE:

1. Ensuring a positive response to the results published in local and international reports.

RECOMMENDATIONS:

1. Provide timely information about the PISA programmes of educational institutions.
2. Incorporate the conclusions of PISA reports into education reform.

Workshop: *Lessons learnt in implementing reforms after PISA*

Jenny Bradshaw

OECD
BETTER POLICIES FOR BETTER LIVES

2

PISA 2015 in Kosovo

- An opportunity to engage with educational policies and educational colleagues worldwide
- Engagement of all is important:
  - Policy-makers
  - Teachers and Schools
  - Students and Parents
  - Media
  - Research community

Dissemination of PISA Outcomes - Ireland

General Principles of Dissemination

- Provide relevant, customised information and feedback to government, media, educational partners, national advisory committee, schools, teachers and the general public.
- Adhere to OECD rules on security/embargoes.
- Stagger dissemination – main results, later reports
- Provide additional analyses relevant to Ireland and issues in Irish education.
- Liaise with Irish Department of Education and Skills on all aspects of dissemination.

Briefing the Media

- Meet with media on afternoon prior to release of first international results
- Meeting attended by Minister for Education, Chief Inspector, and PISA Researchers
- Presentation of results under embargo.
- Television, Radio interviews immediately afterwards
- Press Releases (including releases for OECD thematic reports such as Problem Solving)

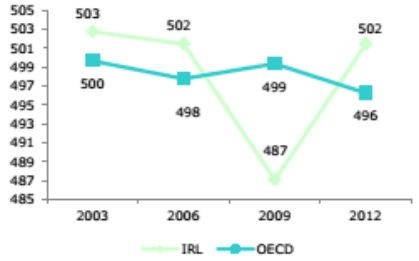
Briefing the Educational Partners

- Coincides with release of international PISA report
- Attended by leaders of teacher unions, members of PISA national advisory committee, university leaders etc.
- Includes question and answers session
- A focus on academic aspects of PISA, which the media might not be interested in.

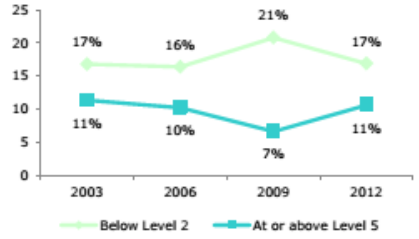
The PISA Brochure (for Schools)

Mathematics

In 2012, students in Ireland have a mean mathematics score of 502, which is significantly above the average across OECD countries (496). The mean mathematics score for Ireland is ranked 13th out of 34 OECD countries and 20th out of all participating countries. Ireland's mean mathematics performance has increased significantly since 2009, but is not different to the Irish scores in 2003 and 2006.



In Ireland, 17% of students have a mathematics score below proficiency level 2, while 11% have a mathematics score at or above proficiency level 5. The proportions of students below Level 2 and at or above Level 5 are about the same as in 2003.



Since 2003, there has been little change in the mean scores of students in Ireland across the four mathematical content areas described in PISA, although performance in the area of Uncertainty & Data has dropped significantly by 8 points. In both cycles, performance on the Space & Shape subscale is considerably lower than in the other content areas.

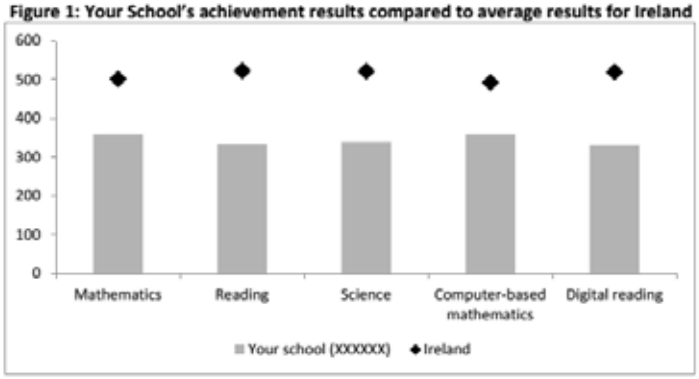
Reporting to Schools

Table 1: Your School's achievement results compared to average results for Ireland

	Your School		Ireland	
Characteristic	Average	SD	Average	SD
Mathematics achievement (paper-based)	360	96	502	85
Reading achievement (paper-based)	335	81	523	86
Science achievement (paper-based)	340	108	522	91
Computer-based mathematics	360	79	493	81
Digital reading	332	91	520	82

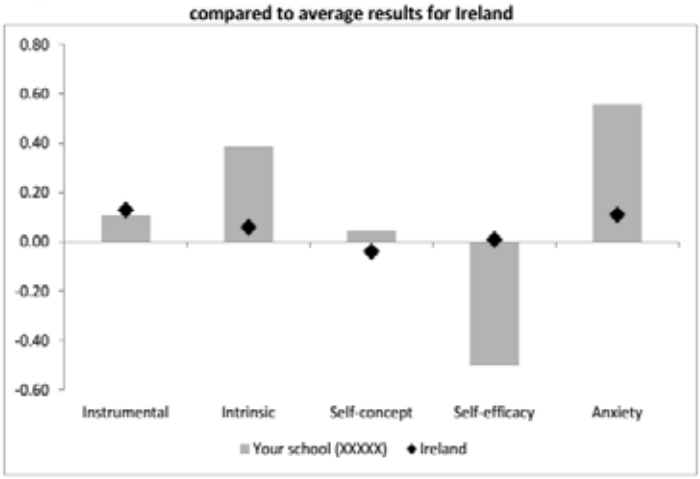
Figure 1 shows the average achievement scores for your school compared to the average scores for Ireland.

Figure 1: Your School's achievement results compared to average results for Ireland



Feedback to Schools: Attitudes, Beliefs and Behaviours

Figure 2: Your School's results on the indices of attitudes, beliefs and behaviours compared to average results for Ireland



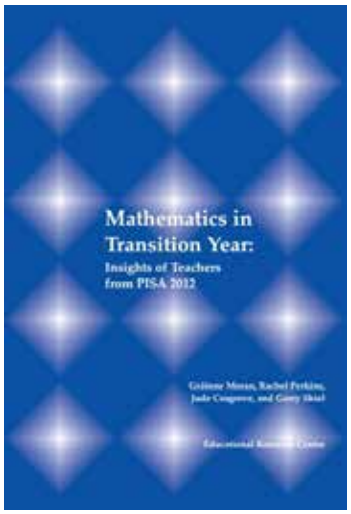
Range of Products

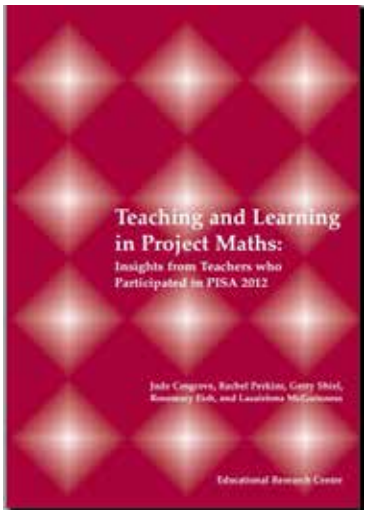
- Print and digital media
- Hard copies of reports – mainly for University Libraries & Education Centres.
- Brochures – e.g., Main Report.
- Electronic reports on website
- Book chapters
- Journal articles
- Social media (not yet!)

National Reporting - 2012

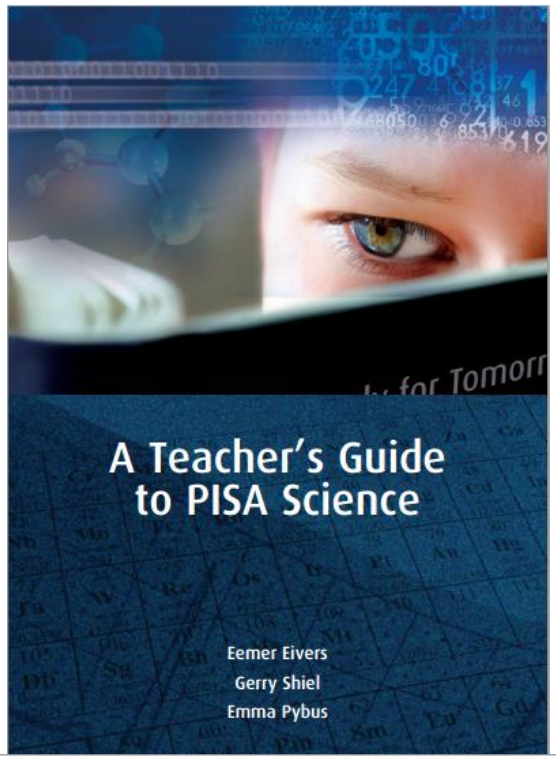
- National Report released to coincide with launch of international reports.
- In 2013, 200 pages plus, but no recommendations (only conclusions)
- Some national analyses

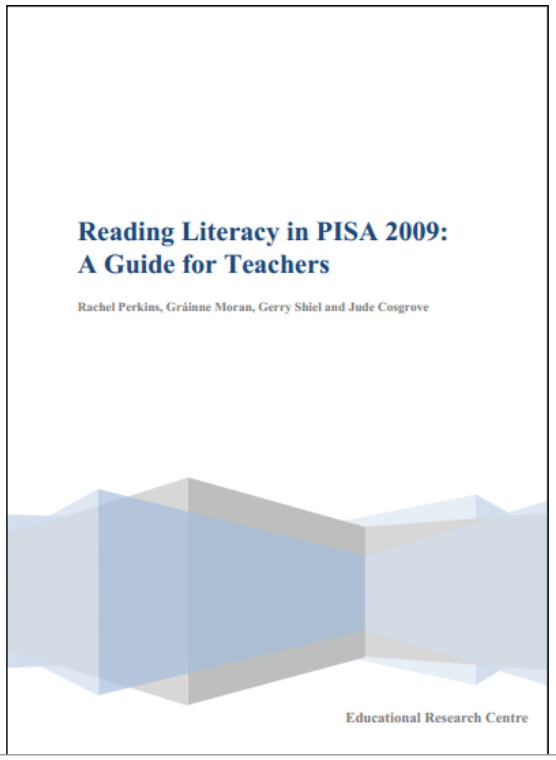
Thematic / Research Reports





The Teacher Guides Series





Teacher Guides Series

- Five guides published to date.
- Guides provide copious examples of PISA test items and information on the performance of students in Ireland.
- Guides incorporate results of nationally-administered teacher questionnaires
- Include recommendations for schools, teachers and curriculum developers

Engaging teachers in Chile

PISA 2009: getting closer to teachers
Researchers and academia

- We developed the book: "*PISA Assessment of Reading Competencies for the XXI century. Assessment framework and test questions*". This book was addressed to teachers and contained:
  - General characteristics of PISA
  - Reading framework
  - Performance levels for printed reading: main scale and subscales
  - Performance levels of digital reading
  - Examples of printed reading tasks
  - Examples of digital reading tasks
  - Examples of constructed answered questions and marking exercises

- We distributed this book among teachers, students studying to become teachers and teachers of these students at universities.

PISA 2009: getting closer to teachers

Regional teacher seminars across the country

These seminars had the purpose to explain to teachers what PISA assesses and how to work with the book contents.

They included presentations about:

1. General explanation of PISA and of its results for Chile.
2. A very simple presentation showing the relation between the PISA reading framework
3. A presentation of the Reading framework nourished by examples of texts and questions
4. A spread sheet with information about several items.
5. An example of the items, including the types of questions asked

PISA 2009: getting closer to teachers

Teacher seminar in the Metropolitan Region

- More human resources were available, so it was possible to carry out a workshop for marking open ended questions.
- Teachers had the opportunity to:
  - Answer the questions of a given text.
  - Get acquainted with the marking guides.
  - Mark real answers of students.
  - Discuss within a group of 20-25 persons and a monitor, how the marking should have been done.

PISA 2009: getting closer to teachers

Key Outcomes

- Invitations were addressed to language school teachers in the region, language teachers in teacher training careers and to language students in faculties of education.
  - Around 200 persons assisted to each of these seminars.
- Interest among participants was very high. They appreciated the information and said they were willing to reproduce their experience within their own schools.
- At the end of the seminars, participants received the book and the presentations
- Teachers appreciated these products and showed more interest than resistance to the contents of the seminars.
- They thought that the marking exercise with students' real answers was very interesting and helpful for the better comprehension of the test.

Find out more about PISA at www.pisa.oecd.org

- National and international publications
- The complete micro-level database

Thank you !

Email: Jenny.Bradshaw@oecd.org

LESSONS LEARNT IN IMPLEMENTING REFORMS AFTER PISA

-the experience of Croatia-

Michelle Braš Roth

PISA IN CROATIA

PISA 2006

5636 students - 168 schools
- **93% student response rate**
- **92% parents response rate**

PISA 2009

5471 students - 160 schools
- **92% student response rate**
- **90% parents response rate**

PISA 2012

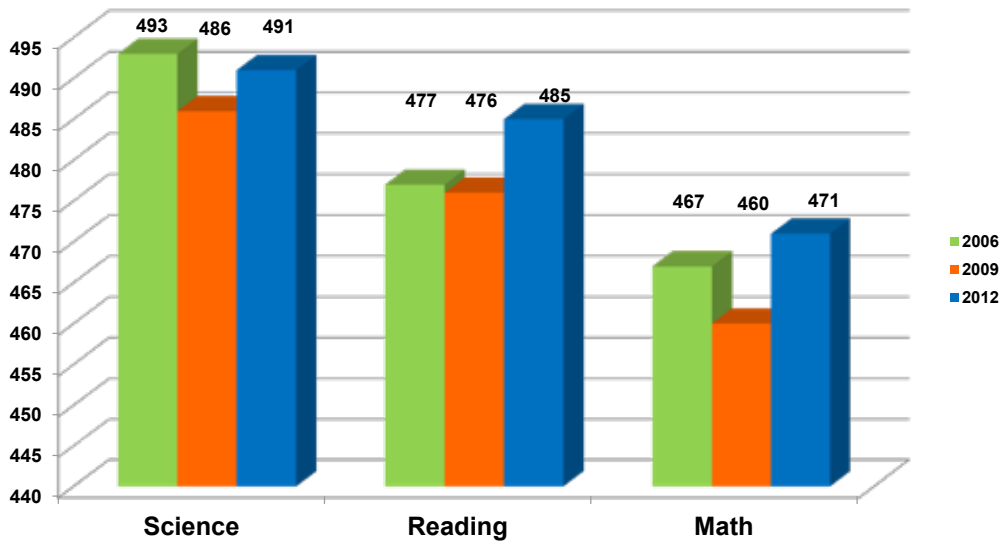
6853 students - 163 schools
- **90% student response rate**
- **95% student response rate**

PISA 2015

6930 students - 165 schools
- Field Trial in March 2014

Michelle Braš Roth, PISA NPM

RESULTS



Mathematical literacy

PISA 2006 28,6% students below level 2;
4,8% students on levels 5 & 6
PISA 2009 33,2% students below level 2;
4,9% students on levels 5 & 6
PISA 2012 30,6% students below level 2;
6,7% students on levels 5 & 6

Reading literacy

PISA 2006 21,5% students below level 2;
3,7% students on levels 5 & 6
PISA 2009 22,5% students below level 2;
3,2% students on levels 5 & 6
PISA 2012 17,2% students below level 2;
4,4% students on levels 5 & 6

Scientific literacy

PISA 2006 17,2% students below level 2;
5,1% students on levels 5 & 6
PISA 2009 18,5% students below level 2;
3,7 % students on levels 5 & 6
PISA 2012 18,6% students below level 2;
4,6 students on levels 5 & 6

Dissemination of results

- *PISA Center* -

- National report
- School reports & student personalized reports for each student/parent
- Conferences for school principals and subject teachers
- Workshops for multipliers and mentor teachers
- Round tables on education
- TV and print media
- Translation of OECD publications

Ministry of Education, Education and Teacher Training Agency & National Center for External Evaluation of Education

- *Croatian National Educational Standard* (HNOS) – between PISA 2006 and 2009
- *National Curriculum Framework* (NOK) 2006-2010 - students assessed in 2009 had been working according to the new program for only 2 years
- The State Graduation Exam
- Final Exams
- Self-evaluation of schools
- Proposal of structural reform 2015 – (9-year compulsory education)

TEACHERS AND TEACHING PRACTICES

- TALIS 2013 – importance of the results and international comparison
- Teaching methods and techniques
  - Student active role
  - Problem-research approach in teaching
  - Teamwork
  - Collaborative partnership of students and teachers
  - Training for lifelong learning
  - Focus on self-evaluation

What next?

WEAKNESSES

- Learning contents- inconsistencies within the subject, inconsistencies between subjects, too extensive, too old, age inappropriate
- Focus on grades – loss of motivation for the development of competencies
- Biased grading of academic performance due to enrollment into secondary education
  (90% students have the highest grade)
- Low rate of grade repetition – parents' pressure

POSSIBILITIES

- Rationalization of the learning contents
- Pragmatism of the learning contents
- Modernization of the learnign contents
- Enriching the learning contents with social, health and emotional skills
- Increase foreign language skills, ICT competencies and development of self-education skills
- Objectify knowledge levels and introduce external evaluation as a means of progress monitoring on all system levels

7 MAY 2014 - CONFERENCE WORKSHOP II

PISA AND THE ASSESSMENT SYSTEM

MODERATOR:
Fatmir Elezi, Division of Evaluation, Standards and Monitoring, MEST, Kosovo

PRESENTERS:
Dr Kelvin Gregory, Australian Curriculum, Assessment and Reporting Authority in Sydney, Australia

Dr Mojca Štraus, Educational Research Institute in Ljubljana, Slovenia, NPM of Slovenian PISA Centre

WORKSHOP COORDINATORS:
Linda Ukimeraj (GIZ/CDBE), Enkeleta Halili (GIZ/CDBE)

Mr Fatmir Elezi from the Division of Evaluation, Standards and Monitoring (MEST) welcomed the participants of the working group and introduced the topic of 'PISA and the assessment system'.

> "LACK OF TRANSPARENCY AND ACCOUNTABILITY IN CURRENT ASSESSMENT PRACTICES IN KOSOVO."

The workshop began with a presentation by Dr Kelvin Gregory from the Australian Curriculum, Assessment and Reporting Authority in Sydney, Australia. Dr Gregory presented core details of an integrated, continuous assessment system focused on learning. During the presentation, the testing of objectives, feedback on teaching and the promotion of learning through assessment were described. The presentation illustrated how important it is for students to have the opportunity to master the given objectives, to know how their learning process will be assessed (through which testing methods) and to have the time and resources to prepare for the assessment. The questions that might be asked in relation to Kosovo include how examinations are being evaluated; how experts are engaged in this area; and what kinds of mechanisms are used for continuously improving the assessment system?

The second presentation was given by Dr Mojca Štraus from the Educational Research Institute in Ljubljana, Slovenia. Dr Štraus gave an overview of the previous Slovenian PISA results in the three assessment domains: reading literacy, mathematical literacy and scientific literacy. Slovenia scored above the OECD average level in mathematics and science, while in reading the country scored under the OECD average, and this presented a concern. The Slovenian PISA re-

sults were more or less stable in all three domains. By comparing the school averages within Slovenia, it was shown that students from *gimnazija* performed best in the PISA tests, while students from vocational schools were the least successful.

After the presentations, Mr Elezi opened the discussion on the assessment system. Most of the discussion focused on the following topics:

Transparency and accountability

The workshop participants discussed the lack of transparency and accountability in current assessment practices in Kosovo. They highlighted the lack of complete and detailed feedback on national assessments to stakeholders in the education sector, including schools (school directors, teachers and students), parents, the curriculum division of the ministry and civil society as a whole. It was stated that a thorough evaluation and public report of each examination would enable major stakeholders a gain a better understanding of the examination processes and lead to ongoing improvement.

Some participants felt that certain examination questions were inappropriate for the students. The need for transparent examinations, where students know what will be assessed and how to prepare for each assessment was discussed and supported.

It was generally felt that current Matura results should be not be used as a key entry criterion to university because of widespread problems with test administration and the inadequate structure of the examinations. A major concern was the lack of analysis and reporting of national examination results that could lead to improvements in teaching and learning at the class level.

> “LACK OF ANALYSIS AND REPORTING OF NATIONAL EXAMINATION RESULTS THAT COULD LEAD TO IMPROVEMENTS IN TEACHING AND LEARNING AT THE CLASS LEVEL.”

> “THE SCHOOL-BASED ASSESSMENT SYSTEM LACKED CONSISTENCY, RIGOUR AND TRANSPARENCY. THE WORKSHOP PARTICIPANTS SPOKE OF INCONSISTENCIES BETWEEN ASSESSMENT, GRADING AND REPORTING PRACTICES.”

It was proposed that Kosovo leaders facilitate the development of clear statements relating to the role and duties of those involved in education in Kosovo. Furthermore, these leaders need to ensure that a rigorous accountability system is developed and implemented that draws on these statements and appropriately holds each and every person accountable for their expected contribution to education in the country.

National test administration

The participants agreed that the current examination administration process was very weak. Their view was that there was widespread misadministration, with many students cheating and working together during the national tests (Matura, Semi-Matura). Consequently, they felt that the scores from these assessments could not be seen as accurate and reliable. It was noted that the PISA study required an administrator-student ratio of 1 to 43, while the Matura test (national assessment) required a ratio of 1 to 15.

Some participants were of the opinion that the inappropriate behaviour of students in test situations, assisted to some degree by their teachers and test administrators, could be corrected by better test administration practices. Furthermore, the pressure to cheat may be alleviated through better school-based teaching and assessment practices supported by adequate resources, including more suitable textbooks. It was also felt that a more thorough knowledge of curriculum goals and classroom assessment strategies may further reduce the frequency of test misconduct.

> ASSESSMENT PRACTICES ARE SELDOM IMPLEMENTED IN THE CLASSROOM AND THAT THERE IS INSUFFICIENT MONITORING OF TEACHING, LEARNING AND ASSESSMENT PRACTICES.

Assessment of the learning within schools

It was widely thought that the school-based assessment system lacked consistency, rigour and transparency. The workshop participants spoke of inconsistencies between assessment, grading and reporting practices. For example, one teacher might use a single assessment for the whole school semester, while another might use a variety of assessment methods. The pressure placed on teachers, in some cases by parents, to award high grades was commented upon. There was a discussion of student promotion, and some participants stated that some students were promoted to the next year group even when they could not complete basic, essential tasks such as simple reading and writing exercises. This observation was disputed and the need for an evidence-based system to demonstrate the extent of students' learning and the appropriateness of grade promotion or retention was discussed.

> READY-MADE SOLUTIONS FROM OTHER COUNTRIES ARE ADOPTED, IMPLEMENTED AND FREQUENTLY FAIL BECAUSE OF A LACK OF ADEQUATE CONSIDERATION, RESOURCES, COMMUNICATION AND TRAINING.

Some participants claimed that evaluation of teacher training in assessment shows that better assessment practices are seldom implemented in the classroom and that there is insufficient monitoring of teaching, learning and assessment practices.

Curriculum (reforms and resources)

The participants noted how the Kosovar education system seems to be continually moving from one reform to another one. They discussed how ready-made solutions from other countries are adopted, implemented and frequently fail because of a lack of adequate consideration, resources, communication and training. They considered there to be a need for a more thorough evaluation of existing practices. In addition, they thought it would be beneficial to develop tailored, Kosovo-focused developmental strategies that would lead to incremental change.

A further point of discussion was that the current school textbooks do not provide sufficient support for learning. Participants commented that the pilot curriculum being implemented in some Kosovar schools is not accompanied by suitable student texts and the students often have to take copious notes from teachers. The lack of adequate textbooks and other learning resources means that learning is often shallow, patchy and unduly restricted.

PISA participation and results

The workshop participants agreed that PISA participation will provide Kosovo with an opportunity to benchmark its own practices. The PISA results will provide Kosovo with an objective, external measure of national learning and these results should be used to aid the evaluation of current education practices in the country. It was felt that Kosovo should develop strategies for communicating the PISA results and for using these results to improve Kosovar education. These strategies could draw from those used in Germany and Slovenia.

On the basis of the discussions, the working group formulated the following challenge and recommendations:

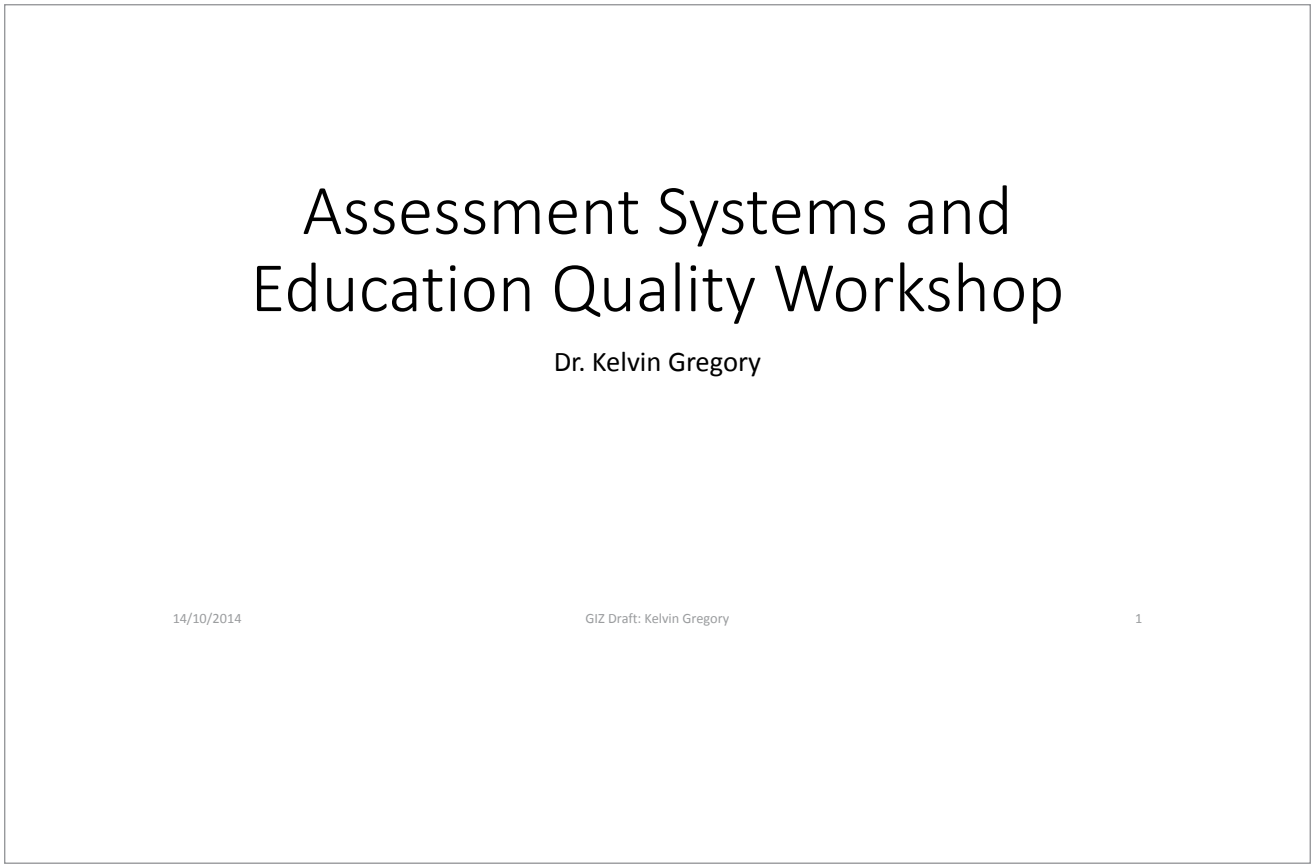
CHALLENGE:

1. The challenge is to develop ways of using external assessments (e.g. Grade 5, Year 9, Matura, PISA) to improve classroom teaching and learning.

RECOMMENDATIONS:

1. Transparency: The first recommendation is to improve the transparency of all assessments and the use of those assessments. This includes classroom assessments and all external assessments. The aim is to ensure that students, teachers and parents can better understand what has been assessed, how and why it has been assessed, and how to interpret the results so as to guide and direct future teaching and learning.
2. Accountability: The second recommendation is that there should be a more comprehensive system of accountability. This will require clear statements on roles and expectations, the allocation of resources to enable people to fulfil these roles, and a system of corrective action should a person fail to adequately perform their duties.

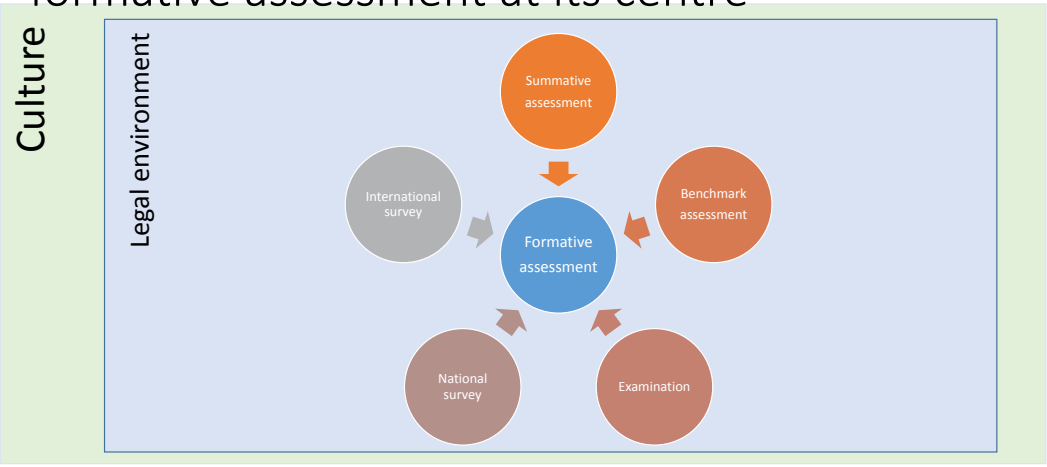
> "THE PISA RESULTS WILL PROVIDE KOSOVO WITH AN OBJECTIVE, EXTERNAL MEASURE OF NATIONAL LEARNING AND THESE RESULTS SHOULD BE USED TO AID THE EVALUATION OF CURRENT EDUCATION PRACTICES IN THE COUNTRY."



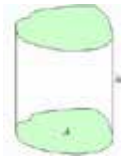
Structure of presentation

- The need for an integrated assessment system
- Testing an objective
  - Multiple items
  - Reporting according to achievement bands
- Testing multiple objectives
  - Term, semester, year
  - Number of questions and sampling
  - Further considerations
- Evaluating an examination
- Feedback to teaching
- Assessment should promote learning
- Workshop
  - Components of a strategic plan
  - Developing a strategic plan to improve examinations

Integrated assessment system – with formative assessment at its centre



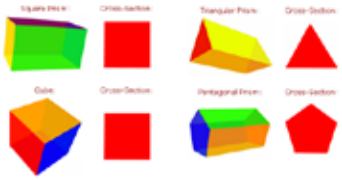
Testing an objective



- Objective: calculate the volume of a prism given its perpendicular height and the area of its cross-section
- Imagine you have one learning objective and you want to categorize people into pass/fail categories on this objective
  - You will need at least one very good task
  - But since it is high stakes, you might wish to have more than one task
    - You want to be sure that people are placed into the correct category
    - And you need a decision rule
      - If you have four questions, how many correct answers would be needed to pass?
        - Why?
        - What does 'pass' and 'fail' mean in this context?

Testing an objective – multiple forms

- Objective: calculate the volume of a prism given its perpendicular height and the area of its cross-section
- Staying with the same objective
  - You may need to have two or more versions of the test
    - For a number of reasons, including a desire to minimize test misconduct
  - But how will you know if the two or more forms have the same difficulty?
    - How will you know if students find the questions equally hard?
    - Are the following questions of equal difficulty?
      1. A square prism with a base of 10 cm^2 and a height of 5 cm.
      2. A square prism with a base of 16 cm^2 and a height of 7 cm.
      3. A square prism with a base of 5.25 cm^2 and a height of 3.25 cm.
  - How will you make fair judgements if the questions do not have the same difficulty?
    - Do you have multiple forms of a test? If so, how do you know if the forms have the same difficulty?
    - What are some of the consequences if the tasks do not have the same difficulty?



Testing an objective – achievement bands

- Objective: calculate the volume of a prism given its perpendicular height and the area of its cross-section
- Staying with the same objective and assuming you will report using bands
  - How many multiple-choice questions would you need to be able to locate a student in a achievement band?
    - One question to distinguish between poor and satisfactory?
    - One question to distinguish between satisfactory and good?
    - One question to distinguish between good and very good?
    - One question to distinguish between very good and excellent?
  - And if you wanted to have some confidence in your location of the student, you might need to have more than one version of each question type
    - This if referred to as 'reliability', a statistical measure with values from 0 to 1
      - We want to know if the student would be located in the same achievement bands if any set of items was used
      - In a high-stakes test, we want reliability to be close to perfect
      - How reliable are your tests?
  - And, perhaps most importantly, you want to know if the student's actual proficiency is correctly indicated by the responses
    - This is referred to as 'validity'
    - This is checked using multiple forms of evidence
      - Very similar to a legal case, you need to collect data and build a case to show that your interpretation of the student's responses are appropriate
    - How do you interpret your test scores? How do you know if you are using the test scores in a valid manner?

Grade	Meaning
5	Excellent
4	Very good
3	Good
2	Satisfactory
1	Poor

14/10/2014 GIZ Draft: Kelvin Gregory 6

Testing a term, semester or year of learning

- Suppose now you wished to test a term, semester and year of learning in a course
  - Assume a term has 5 objectives, a semester has 10 objectives, and a year has 20 objectives
- If it takes at least four multiple choice questions to assess one objective, and ideally you would like to have at least five replications of each question type
  - You need 20 questions for each objective
  - And therefore 100 questions for a term examination, 200 questions for a semester, and 400 questions for a year
- But this is not realistic
  - If each question takes 1 minute to answer, a year examination in a course would require over 6 hours of examination
  - And it would cost too much
- Test designers typically use a systematic sample of all possible questions
  - Test time is limited by cognitive characteristics of the students
    - Approximately 1 hour for year 9, 2 to 3 hours for year 12
  - Questions used in the examination are still designed to enable accurate placement of a student into an achievement band
  - Are your examinations reasonable samples of a year of learning in **a course**?
    - What data do you have to support your claim?

Grade	Meaning
5	Excellent
4	Very good
3	Good
2	Satisfactory
1	Poor

14/10/2014 GIZ Draft: Kelvin Gregory 7

Testing a term, semester or year of learning

- For the test to be a reasonable assessment of learning:
  - Students need to have had an opportunity to learn (to master) what will be assessed
    - How will you know if teachers have appropriately taught the course?
      - How could you use past examination data to feedback to schools and teachers?
      - How would you help a teacher improve their teaching?
  - Students need to know what and how that learning will be assessed
    - They need to prepare (to train) for the assessment
    - If they cannot appropriately prepare, and the stakes are high, they will be under significant stress
      - How will you know if students are under too much stress?
  - The assessment must be neither too short or too long
    - Too short – passing depends more on luck than learning
    - Too long – students will become fatigued
    - How would you know if your assessment of physics, chemistry or any other course was the right length?

Evaluating a test

- Even the best designed assessment will have strengths and weaknesses
  - There are sets of procedures to follow in constructing an assessment to maximize its strengths and minimize the weaknesses
    - How well do your teachers and assessment experts know these procedures?
  - A technical report should be produced after each examination, evaluating its qualities
    - This should be published for public review and comment
      - This builds confidence, aids transparency and promotes democratic values
    - This is conducted by assessment experts, but written to an intelligent (not specialist) audience
    - The report forms a basis for future improvement
    - Do you evaluate your examinations and report on their qualities?

Feedback and high-stakes assessments

- A high stakes assessment is an assessment in which the scores have a significant impact on:
  - Students (the main effect)
  - Teachers (in some teacher accountability systems)
  - Schools (especially if there is school choice)
- Well designed high stakes assessments will positively impact learning
  - They appropriately signal what learning is valued and how it is valued
    - They direct teaching and learning
- Poorly designed high stakes assessments will negatively impact learning
  - They do not appropriately signal what learning is valued
  - They encourage misconduct and subvert education
    - **You can have the best curriculum, most talented teachers and students, but this can be all undone by poor assessments and assessment systems**
- Can you see evidence of positive and negative feedbacks from your high-stakes assessments?
  - What signals are being given by your high-stakes assessments?
    - If you need to, how might you change these signals?

14/10/2014 GIZ Draft: Kelvin Gregory 10

Some closing thoughts

- There are many technical things to learn, refine, adapt and adopt regarding assessments
  - You have experts who have been exposed to these ideas
  - You had had programs to build the technical expertise in all forms of assessment
    - What is the impact of this work?
      - If there are areas of high impact, why?
      - If there are areas of low impact, why?
- How healthy is your assessment system?
  - How will you evaluate it?
    - How will you improve it?
    - What policies do you have in place?
- A healthy assessment system promotes learning
  - Does your assessment system promote learning?

Core components for a strategic plan for improving assessments (and learning)

- Goals
  - These describe the changes to be achieved
  - Goals may be general or specific
- Strategy
  - These describe how the actions to be taken to achieve the goals
  - These are generally high level statements
- Targets or performance measures
  - These describe the a measurable indication of the goal

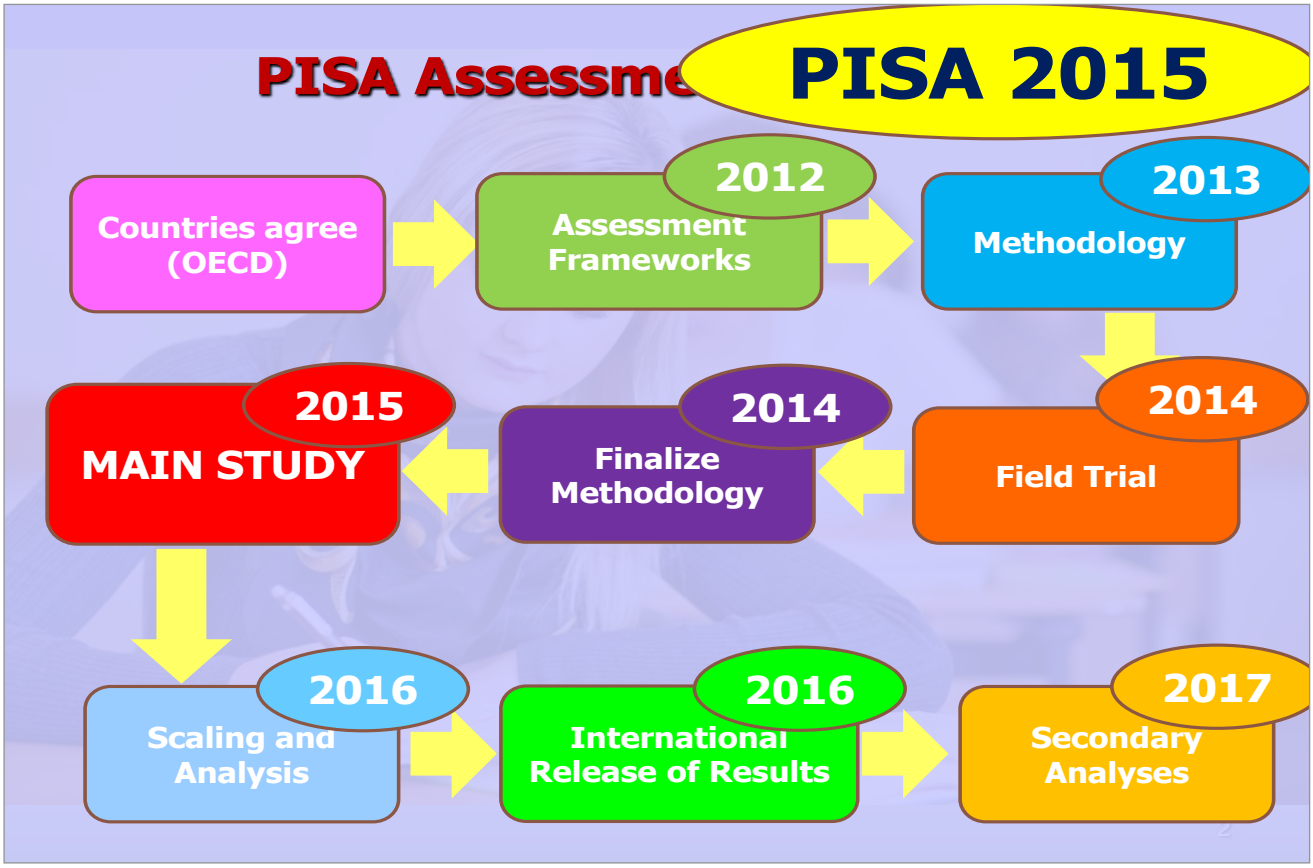
Strategic planning applied to examinations (and assessments)

- Think of an examination:
  - Who are the stakeholders of this examinations?
  - What do these stakeholders expect of these examinations?
    - How do these stakeholders describe the examinations?
    - In what ways are these expectations being met?
    - In what ways are these expectations not being met?
- List two or three changes (goals) that you think could be made to this examination to better meet the expectations.
- For each change:
  - Briefly describe a strategy for making the change and reaching the goal
  - Describe what indicators could be used to monitor progress towards the goal and to assess if the goal has been achieved

PISA in Slovenia

Mojca Štraus
Educational Research Institute, Slovenia

Prishtina, 5-7 May 2014



PISA

Programme for International Student Assessment

Assessment goals

Literacy

International comparisons of knowledge and skills needed for full participation in modern societies by students at the end of compulsory education with emphasis on measurement of progress

Trends

PISA

Programme for International Student Assessment

Assessment domains:

- Reading literacy
- Mathematical literacy
- Scientific literacy

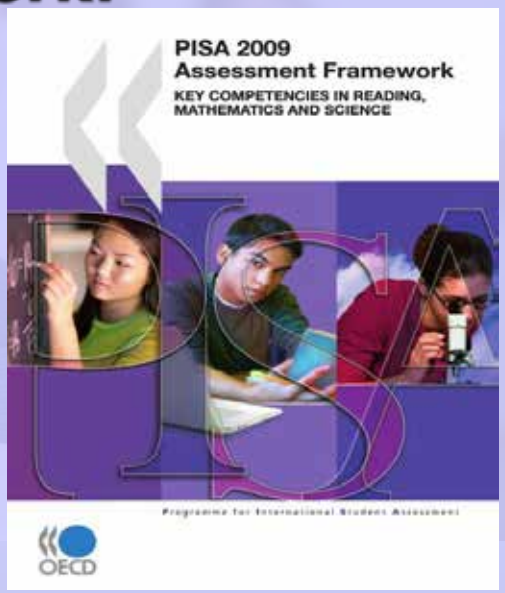
... additional innovative domains: problem solving, collaborative problem solving, financial literacy

PISA

Programme for International Student Assessment

Assessment framework:

www.oecd.org/pisa



PISA

Programme for International Student Assessment

Assessment model:

Challenge in real world context

Mathematical content categories:
Quantity; Uncertainty and data; Change and relationships; Space and shape

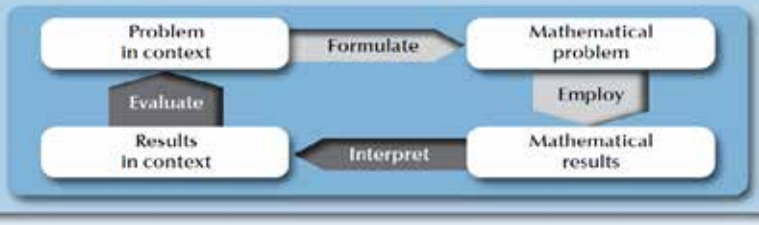
Real world context categories: Personal; Societal; Occupational; Scientific

Mathematical thought and action

Mathematical concepts, knowledge and skills

Fundamental mathematical capabilities:
Communication; Representation; Devising strategies; Mathematisation; Reasoning and argument; Using symbolic, formal and technical language and operations; Using mathematical tools

Processes: Formulate; Employ; Interpret/Evaluate



PISA

Programme for International Student Assessment

Assessment design: major and minor domains

2000:	**Reading**	**Mathematics**	**Science**
2003:	**Reading**	**Mathematics**	**Science**
2006:	**Reading**	**Mathematics**	**Science**
2009:	**Reading**	**Mathematics**	**Science**
2012:	**Reading**	**Mathematics**	**Science**
2015:	**Reading**	**Mathematics**	**Science**
2018:	**Reading**	**Mathematics**	**Science**

PISA

Programme for International Student Assessment

Target population:

… students at the end of compulsory education:

in majority of OECD countries:

15 year-old students

Technical standards:

… at the time of testing between 15 years and 3 months and 16 years and 2 months

PISA

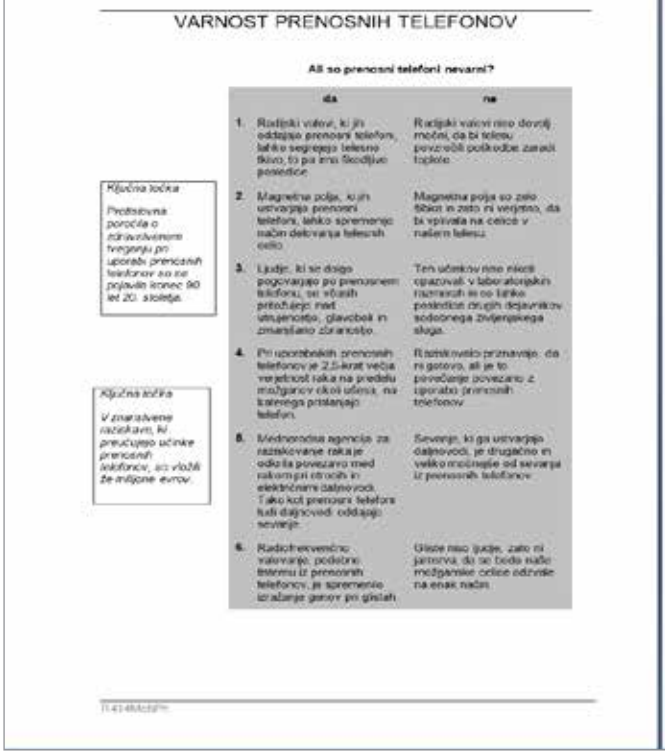
Programme for International Student Assessment

Assessment instruments:

Cognitive tests:
- printed
- computer based

Questionnaires:
- Student questionnaires
- School questionnaires
- Teacher questionnaires
- Parent questionnaires

Example Item Reading Literacy PISA 2009



VARNOST PRENOSNIH TELEFONOV

Ali so prenosni telefoni nevarni?

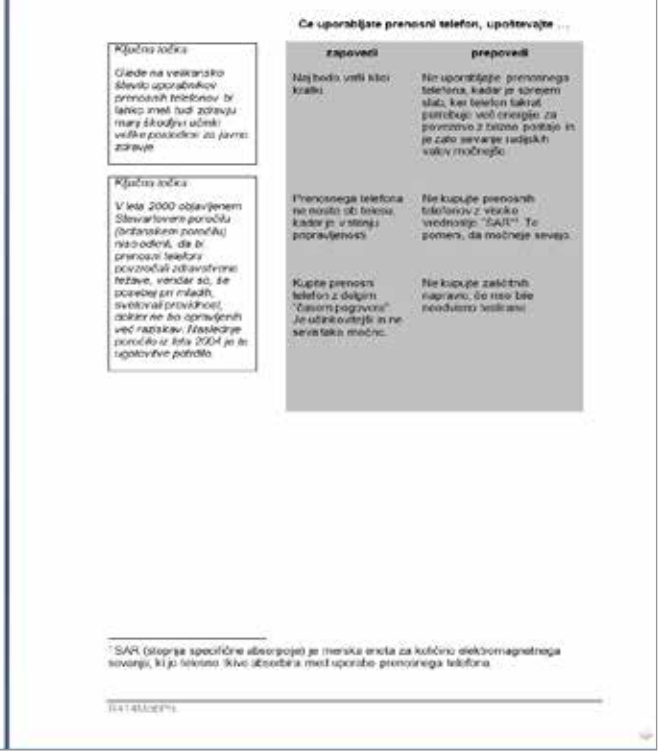
	da	ne
1.	Radijski valovi, ki jih oddajajo prenosni telefoni, lahko segrejejo telesno tkivo, to pa ima škodljive posledice.	Radijski valovi nimajo dovolj moči, da bi telesu povzročili poškodbe zaradi toplote.
2.	Magnetna polja, ki jih ustvarjajo prenosni telefoni, lahko spremenijo način delovanja telesnih celic.	Magnetna polja so zelo šibka in zato ni verjetno, da bi vplivala na celice v našem telesu.
3.	Ljudje, ki se dolgo pogovarjajo po prenosnem telefonu, se včasih pritožujejo nad utrujenostjo, glavobol in zmanjšano zbranostjo.	Ten učinkov nismo nikoli opazovali v laboratorijskih raziskavah in so lahko posledica drugih dejavnikov sodobnega življenjskega sloga.
4.	Pri uporabnikih prenosnih telefonov je 2,5-krat večja verjetnost raka na predelu možganov okoli ušesa, na katerega pritiskajo telefon.	Raziskovalci priznavajo, da ni gotovo, ali je to povečanje povezano z uporabo prenosnih telefonov.
5.	Mednarodna agencija za raziskovanje raka je odkrila povezavo med rakom pri otrocih in električnimi daljnovodi. Tako kot prenosni telefoni tudi daljnovodi oddajajo sevanje.	Sevanje, ki ga ustvarjajo daljnovodi, je drugačno in veliko močnejše od sevanja iz prenosnih telefonov.
6.	Radiofrekvenčno valovanje, poslano telefonu iz prenosnih telefonov, je spremenilo izražanje genov pri glistah.	Glede nas ljudje, zato ni jasnova, da se bodo naše možganske celice odzvale na enak način.

Ključna točka

Protislovna poročila o zdravstvenem tveganju pri uporabi prenosnih telefonov so se pojavila konec 90 let 20. stoletja.

Ključna točka

V znanstvene raziskave, ki preučujejo učinke prenosnih telefonov, so vložili že milijone evrov.



Če uporabljate prenosni telefon, upoštevajte ...

Ključna točka

Glede na veliko število uporabnikov prenosnih telefonov bi lahko imeli tudi zelo majhni učinki velike posledice za javno zdravje.

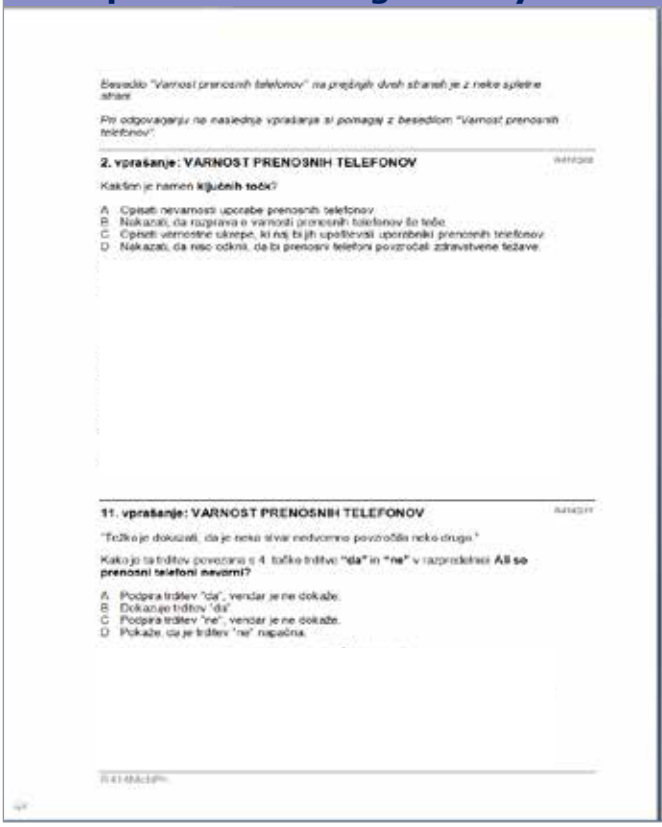
Ključna točka

V letu 2000 objavljenem Stewartovem poročilu (britanskem poročilu) priporočili, da bi prenosni telefoni povzročali zdravstvene težave, vendar so, še posebej pri mladih, svetovali previdnost, dokler ne bo oprtljivih več razlogov. Naslednje poročilo iz leta 2004 je to ugotovitve potrdilo.

zapovedi	prepovedi
Najbodo vrtli kloci kratki.	Ne uporabljajte prenosnega telefona, kadar je signalni slab, ker telefon takrat potrebuje več energije za povezavo z bazno postajo in je zato sevanje radijskih valov močnejše.
Prenosnega telefona ne nosite ob telesu, kadar je v stanju pripravljenosti.	Ne kupujte prenosnih telefonov z visoko vrednostjo "SAR". To pomeni, da močneje sevajo.
Kupite prenosni telefon z dolgim "časom pogovora". Je učinkovitejši in ne seva tako močno.	Ne kupujte zaščitnih naprav, ki niso bile neodvisno testirane.

SAR (stopnja specifične absorpcije) je merska enota za količino elektromagnetnega sevanja, ki jo telesno tkivo absorbira med uporabo prenosnega telefona.

Example Item Reading Literacy PISA 2009



Besedilo "Varnost prenosnih telefonov" na prejšnjih dveh straneh je z neke spletne strani.

Pri odgovarjanju na naslednja vprašanja si pomagaj z besedilom "Varnost prenosnih telefonov".

2. vprašanje: VARNOST PRENOSNIH TELEFONOV

Kakšen je namen **ključnih točk**?

A Opisati nevarnosti uporabe prenosnih telefonov.
B Nakazati, da razprava o varnosti prenosnih telefonov še teče.
C Opisati varnostne ukrepe, ki naj bi jih upoštevali uporabniki prenosnih telefonov.
D Nakazati, da nisc odkrit, da bi prenosni telefoni povzročali zdravstvene težave.

11. vprašanje: VARNOST PRENOSNIH TELEFONOV

"Težko je dokazati, da je neka stvar nedvomno povzročila neko drugo."

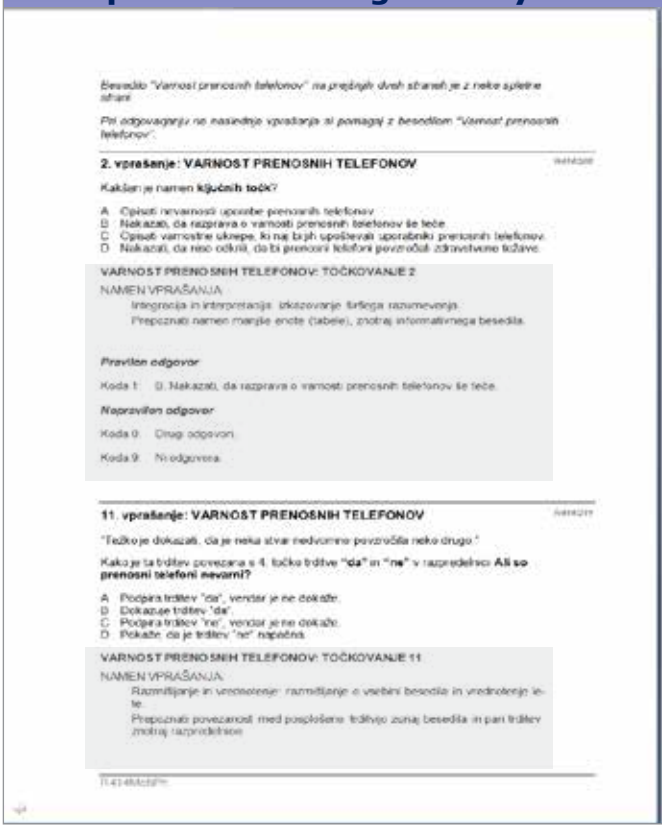
Kako je ta trditev povezana s 4. točko trditve **"da"** in **"ne"** v razpredelnici **Ali so prenosni telefoni nevarni?**

A Podpira trditev "da", vendar je ne dokaže.
B Dokazuje trditev "da".
C Podpira trditev "ne", vendar je ne dokaže.
D Pokaže, da je trditev "ne" napačna.

6. vprašanje: VARNOST PRENOSNIH TELEFONOV

V razpredelnici si poglej 3. točko iz stolpca **"ne"**. Kaj bi lahko bil v takšnih okoliščinah eden izmed teh "drugih dejavnikov"? Utemelji svoj odgovor.

Example Item Reading Literacy PISA 2009



Besedilo "Varnost prenosnih telefonov" na prejšnjih dveh straneh je z neke spletne strani.

Pri odgovarjanju na naslednja vprašanja si pomagaj z besedilom "Varnost prenosnih telefonov".

2. vprašanje: VARNOST PRENOSNIH TELEFONOV

Kakšen je namen **ključnih točk**?

A Opisati nevarnosti uporabe prenosnih telefonov.
B Nakazati, da razprava o varnosti prenosnih telefonov še teče.
C Opisati varnostne ukrepe, ki naj bi jih upoštevali uporabniki prenosnih telefonov.
D Nakazati, da nisc odkrit, da bi prenosni telefoni povzročali zdravstvene težave.

VARNOST PRENOSNIH TELEFONOV: TOČKOVANJE 2

NAMEN VPRAŠANJA

Integracija in interpretacija: izkazovanje širšega razumevanja.
Prepoznati namen manjše enote (tabele), znotraj informativnega besedila.

Pravilen odgovor

Koda 1: D. Nakazati, da razprava o varnosti prenosnih telefonov še teče.

Napačen odgovor

Koda 0: Drugi odgovori.

Koda 9: Ni odgovora.

11. vprašanje: VARNOST PRENOSNIH TELEFONOV

"Težko je dokazati, da je neka stvar nedvomno povzročila neko drugo."

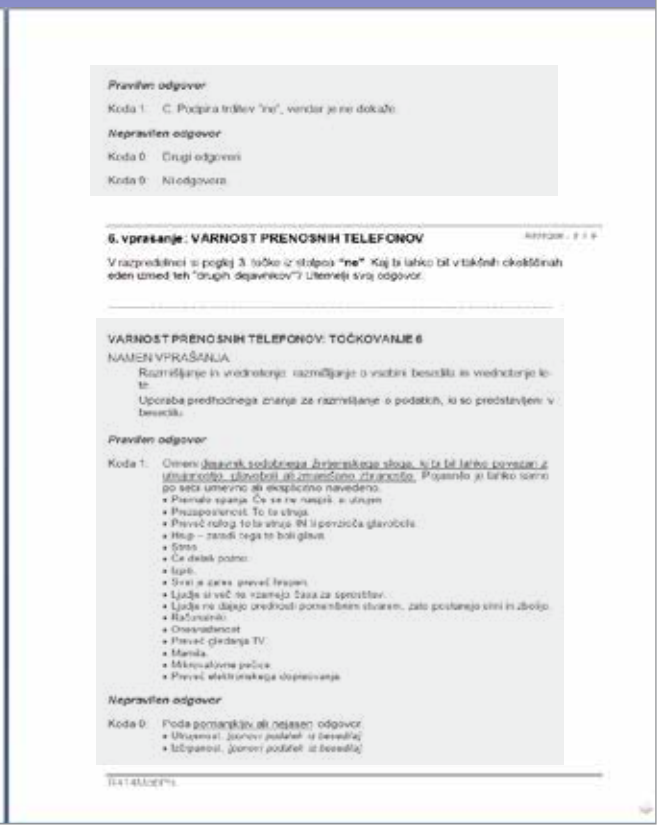
Kako je ta trditev povezana s 4. točko trditve **"da"** in **"ne"** v razpredelnici **Ali so prenosni telefoni nevarni?**

A Podpira trditev "da", vendar je ne dokaže.
B Dokazuje trditev "da".
C Podpira trditev "ne", vendar je ne dokaže.
D Pokaže, da je trditev "ne" napačna.

VARNOST PRENOSNIH TELEFONOV: TOČKOVANJE 11

NAMEN VPRAŠANJA

Razmišljanje in vrednotenje: razmišljanje o vsebini besedila in vrednotenje le-te.
Prepoznati povezanost med posplošeno trditvijo zunaj besedila in pari trditev znotraj razpredelnice.



Pravilen odgovor

Koda 1: C. Podpira trditev "ne", vendar je ne dokaže.

Napačen odgovor

Koda 0: Drugi odgovori.

Koda 9: Ni odgovora.

6. vprašanje: VARNOST PRENOSNIH TELEFONOV

V razpredelnici si poglej 3. točko iz stolpca **"ne"**. Kaj bi lahko bil v takšnih okoliščinah eden izmed teh "drugih dejavnikov"? Utemelji svoj odgovor.

VARNOST PRENOSNIH TELEFONOV: TOČKOVANJE 6

NAMEN VPRAŠANJA

Razmišljanje in vrednotenje: razmišljanje o vsebini besedila in vrednotenje le-te.
Uporaba predhodnega znanja za razmišljanje o podatkih, ki so predstavljeni v besedilu.

Pravilen odgovor

Koda 1: Omeni [jezavek sodobnega življenjskega sloga, ki bi bil lahko povezan z umanjkanjem učinkovitih ali zmanjšano zbranostjo]. Pojasnilo je lahko samo po sebi umevno ali eksplicitno navedeno.
- Psihično opanja. Če se ne naspi, je utrujen.
- Pozabljivost. To ta utruja.
- Prevzel nalog, to ta utruja IN izpovzroča glavobole.
- Hrup – zaradi tega te boli glava.
- Stres.
- Če delaš počasi.
- Izpit.
- Sreti se zares, prevzel fenjem.
- Ljudje si več ne vzamejo časa za sprostitev.
- Ljudje ne dajejo prednosti pomembnim stvarem, zato postanejo sivi in zbolijo.
- Računalnik.
- Onesnaženost.
- Prevzel gledanja TV.
- Mamila.
- Mikrovalovne pečice.
- Prevzel elektromagnetnega sopisovanja.

Napačen odgovor

Koda 0: Podal pomanjkljiv ali nejasen odgovor.
- Utrujenost. (pomeni podatek iz besedila)
- Izčrpanost. (pomeni podatek iz besedila)

PISA

Programme for International Student Assessment

Assessment implementation

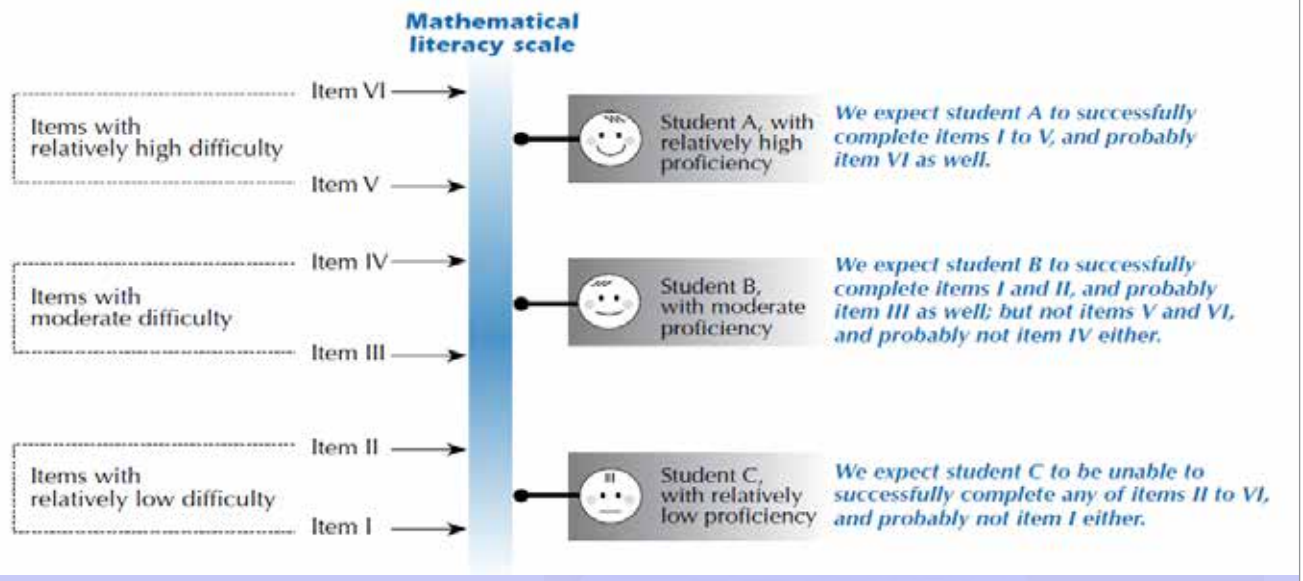

5 4 2006


PISA
PISA
3 4 2006

PISA

Programme for International Student Assessment

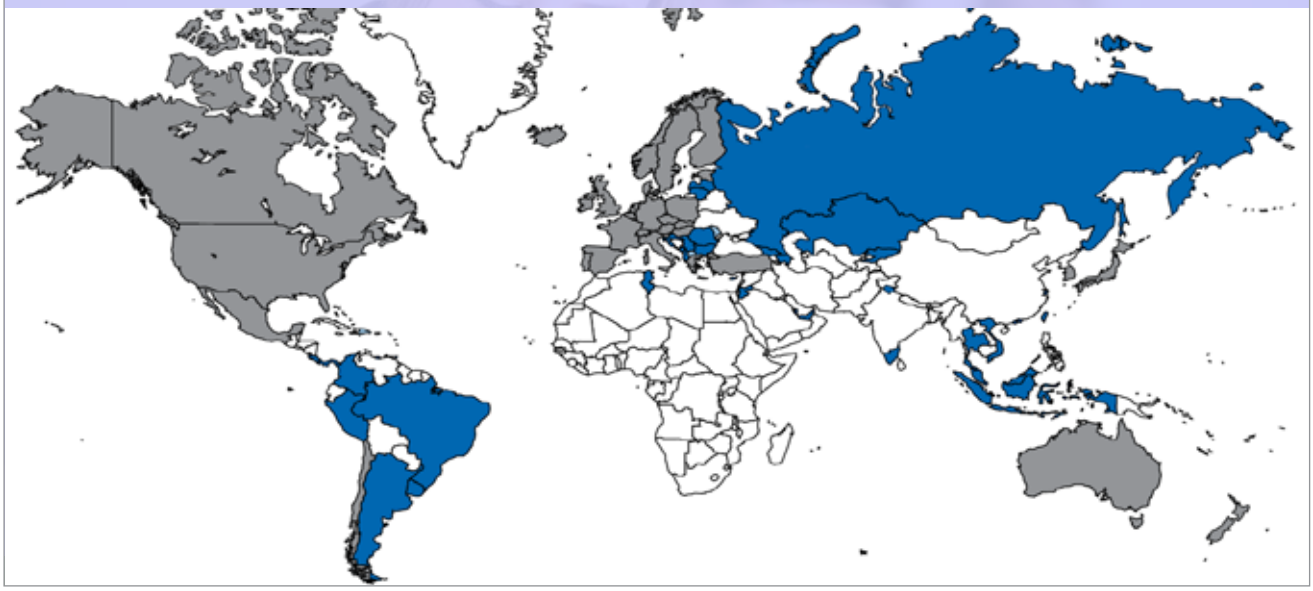
Scaling



PISA

Programme for International Student Assessment

PISA 2012 Results



Mean score	Comparison country/economy	Countries/economies whose mean score is NOT statistically significantly different from that comparison country's/economy's score
613	Shanghai-China	
573	Singapore	
561	Hong Kong-China	Chinese Taipei, Korea
560	Chinese Taipei	Hong Kong-China, Korea
554	Korea	Hong Kong-China, Chinese Taipei
538	Macao-China	Japan, Liechtenstein
536	Japan	Macao-China, Liechtenstein, Switzerland
535	Liechtenstein	Macao-China, Japan, Switzerland
531	Switzerland	Japan, Liechtenstein, Netherlands
523	Netherlands	Switzerland, Estonia, Finland, Canada, Poland, Viet Nam
521	Estonia	Netherlands, Finland, Canada, Poland, Viet Nam
519	Finland	Netherlands, Estonia, Canada, Poland, Belgium, Germany, Viet Nam
518	Canada	Netherlands, Estonia, Finland, Poland, Belgium, Germany, Viet Nam
518	Poland	Netherlands, Estonia, Finland, Canada, Belgium, Germany, Viet Nam
515	Belgium	Finland, Canada, Poland, Germany, Viet Nam
514	Germany	Finland, Canada, Poland, Belgium, Viet Nam
511	Viet Nam	Netherlands, Estonia, Finland, Canada, Poland, Belgium, Germany, Austria, Australia, Ireland
506	Austria	Viet Nam, Australia, Ireland, Slovenia, Denmark, New Zealand, Czech Republic
504	Australia	Viet Nam, Austria, Ireland, Slovenia, Denmark, New Zealand, Czech Republic
501	Ireland	Viet Nam, Austria, Australia, Slovenia, Denmark, New Zealand, Czech Republic, France, United Kingdom
501	Slovenia	Austria, Australia, Ireland, Denmark, New Zealand, Czech Republic
500	Denmark	Austria, Australia, Ireland, Slovenia, New Zealand, Czech Republic, France, United Kingdom
500	New Zealand	Austria, Australia, Ireland, Slovenia, Denmark, Czech Republic, France, United Kingdom
499	Czech Republic	Austria, Australia, Ireland, Slovenia, Denmark, New Zealand, France, United Kingdom, Iceland
495	France	Ireland, Denmark, New Zealand, Czech Republic, United Kingdom, Iceland, Latvia, Luxembourg, Norway, Portugal
494	United Kingdom	Ireland, Denmark, New Zealand, Czech Republic, France, Iceland, Latvia, Luxembourg, Norway, Portugal
493	Iceland	Czech Republic, France, United Kingdom, Latvia, Luxembourg, Norway, Portugal
491	Latvia	France, United Kingdom, Iceland, Luxembourg, Norway, Portugal, Italy, Spain
490	Luxembourg	France, United Kingdom, Iceland, Latvia, Norway, Portugal
489	Norway	France, United Kingdom, Iceland, Latvia, Luxembourg, Portugal, Italy, Spain, Russian Federation, Slovak Republic, United States
487	Portugal	France, United Kingdom, Iceland, Latvia, Luxembourg, Norway, Italy, Spain, Russian Federation, Slovak Republic, United States, Lithuania
485	Italy	Latvia, Norway, Portugal, Spain, Russian Federation, Slovak Republic, United States, Lithuania
484	Spain	Latvia, Norway, Portugal, Italy, Russian Federation, Slovak Republic, United States, Lithuania, Hungary
482	Russian Federation	Norway, Portugal, Italy, Spain, Slovak Republic, United States, Lithuania, Sweden, Hungary
482	Slovak Republic	Norway, Portugal, Italy, Spain, Russian Federation, United States, Lithuania, Sweden, Hungary
481	United States	Norway, Portugal, Italy, Spain, Russian Federation, Slovak Republic, Lithuania, Sweden, Hungary
479	Lithuania	Portugal, Italy, Spain, Russian Federation, Slovak Republic, United States, Sweden, Hungary, Croatia
478	Sweden	Russian Federation, Slovak Republic, United States, Lithuania, Hungary, Croatia
477	Hungary	Spain, Russian Federation, Slovak Republic, United States, Lithuania, Sweden, Croatia, Israel
471	Croatia	Lithuania, Sweden, Hungary, Israel
466	Israel	Hungary, Croatia
453	Greece	Serbia, Turkey, Romania
449	Serbia	Greece, Turkey, Romania, Bulgaria
448	Turkey	Greece, Serbia, Romania, Cyprus[1, 2], Bulgaria
445	Romania	Greece, Serbia, Turkey, Cyprus[1, 2], Bulgaria
440	Cyprus[1, 2]	Turkey, Romania, Bulgaria
439	Bulgaria	Serbia, Turkey, Romania, Cyprus[1, 2], United Arab Emirates, Kazakhstan
434	United Arab Emirates	Bulgaria, Kazakhstan, Thailand
432	Kazakhstan	Bulgaria, United Arab Emirates, Thailand
427	Thailand	United Arab Emirates, Kazakhstan, Chile, Malaysia
423	Chile	Thailand, Malaysia
421	Malaysia	Thailand, Chile
413	Mexico	Uruguay, Costa Rica
410	Montenegro	Uruguay, Costa Rica
409	Uruguay	Mexico, Montenegro, Costa Rica
407	Costa Rica	Mexico, Montenegro, Uruguay
394	Albania	Brazil, Argentina, Tunisia
391	Brazil	Albania, Argentina, Tunisia, Jordan
388	Argentina	Albania, Brazil, Tunisia, Jordan
388	Tunisia	Albania, Brazil, Argentina, Jordan
386	Jordan	Brazil, Argentina, Tunisia
376	Colombia	Qatar, Indonesia, Peru
376	Qatar	Colombia, Indonesia
375	Indonesia	Colombia, Qatar, Peru
368	Peru	Colombia, Indonesia

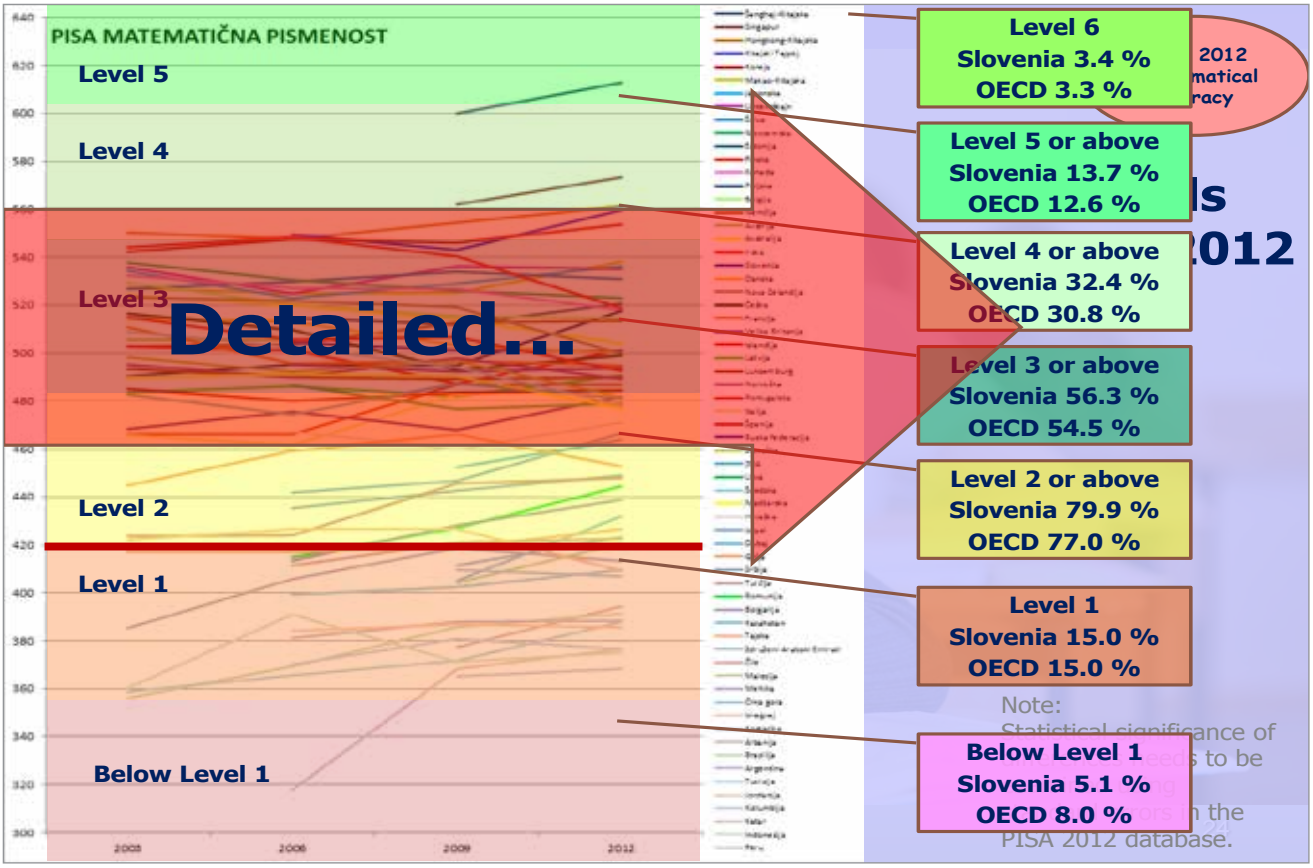
PISA 2012 Mathematical Literacy

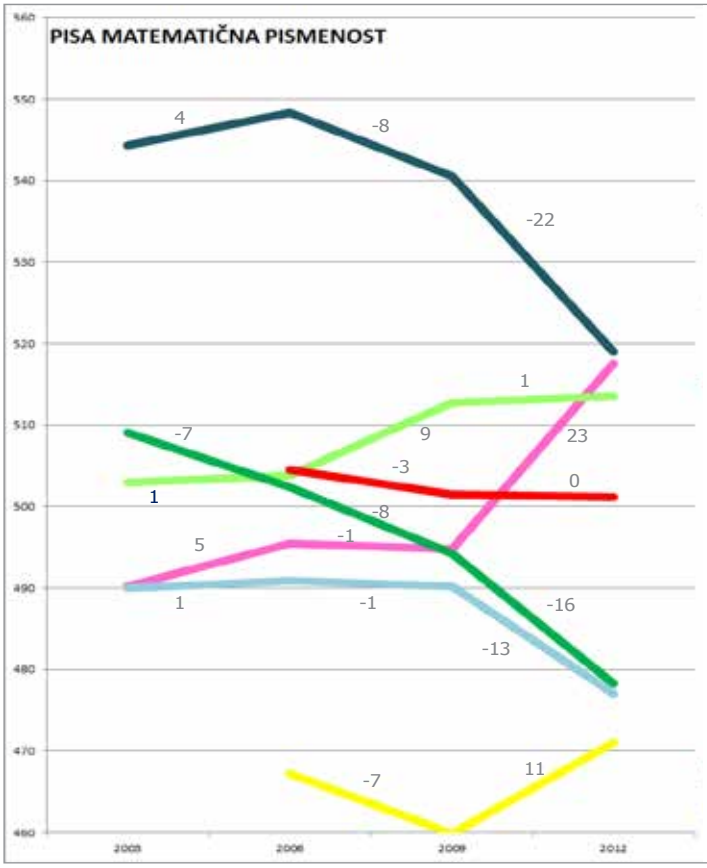
OECD Average 494 points

Statistically significantly above the OECD average

Not statistically significantly different from the OECD average

Statistically significantly below the OECD average





PISA 2012 Mathematical Literacy

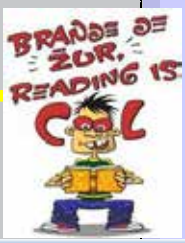
Trends 2003 - 2012

Note:
Statistical significance of differences needs to be examined using standard errors in the PISA 2012 database.

PISA 2012 Reading Literacy

Mean score	Comparison country/economy	Countries/economies whose mean score is NOT statistically significantly different from that comparison
570	Shanghai-China	
545	Hong Kong-China	Singapore, Japan, Korea
542	Singapore	Hong Kong-China, Japan, Korea
538	Japan	Hong Kong-China, Singapore, Korea
536	Korea	Hong Kong-China, Singapore, Japan
524	Finland	Ireland, Chinese Taipei, Canada, Poland, Liechtenstein
523	Ireland	Finland, Chinese Taipei, Canada, Poland, Liechtenstein
523	Chinese Taipei	Finland, Ireland, Canada, Poland, Estonia, Liechtenstein
523	Canada	Finland, Ireland, Chinese Taipei, Poland, Liechtenstein
518	Poland	Finland, Ireland, Chinese Taipei, Canada, Estonia, Liechtenstein, New Zealand, Australia, Netherlands, Viet Nam
516	Estonia	Chinese Taipei, Poland, Liechtenstein, New Zealand, Australia, Netherlands, Viet Nam
516	Liechtenstein	Finland, Ireland, Chinese Taipei, Canada, Poland, Estonia, New Zealand, Australia, Netherlands, Belgium, Switzerland, Ma
512	New Zealand	Poland, Estonia, Liechtenstein, Australia, Netherlands, Belgium, Switzerland, Macao-China, Viet Nam, Germany, France
512	Australia	Poland, Estonia, Liechtenstein, New Zealand, Netherlands, Belgium, Switzerland, Macao-China, Viet Nam, Germany, France
511	Netherlands	Poland, Estonia, Liechtenstein, New Zealand, Australia, Belgium, Switzerland, Macao-China, Viet Nam, Germany, France, Norway
509	Belgium	Liechtenstein, New Zealand, Australia, Netherlands, Switzerland, Macao-China, Viet Nam, Germany, France, Norway
509	Switzerland	Liechtenstein, New Zealand, Australia, Netherlands, Belgium, Macao-China, Viet Nam, Germany, France, Norway
509	Macao-China	Liechtenstein, New Zealand, Australia, Netherlands, Belgium, Switzerland, Viet Nam, Germany, France, Norway
508	Viet Nam	Poland, Estonia, Liechtenstein, New Zealand, Australia, Netherlands, Belgium, Switzerland, Macao-China, Germany, France, Norway, United Kingdom, United States
508	Germany	Liechtenstein, New Zealand, Australia, Netherlands, Belgium, Switzerland, Macao-China, Viet Nam, France, Norway, United Kingdom
505	France	New Zealand, Australia, Netherlands, Belgium, Switzerland, Macao-China, Viet Nam, Germany, Norway, United Kingdom, United S
504	Norway	Netherlands, Belgium, Switzerland, Macao-China, Viet Nam, Germany, France, United Kingdom, United States, Denmark
499	United Kingdom	Viet Nam, Germany, France, Norway, United States, Denmark, Czech Republic
498	United States	Viet Nam, France, Norway, United Kingdom, Denmark, Czech Republic, Italy, Austria, Hungary, Portugal, Israel
496	Denmark	Norway, United Kingdom, United States, Czech Republic, Italy, Austria, Hungary, Portugal, Israel
493	Czech Republic	United Kingdom, United States, Denmark, Italy, Austria, Latvia, Hungary, Spain, Luxembourg, Portugal, Israel, Croatia
490	Italy	United States, Denmark, Czech Republic, Austria, Latvia, Hungary, Spain, Luxembourg, Portugal, Israel, Croatia, Sweden
490	Austria	United States, Denmark, Czech Republic, Italy, Latvia, Hungary, Spain, Luxembourg, Portugal, Israel, Croatia, Sweden
489	Latvia	Czech Republic, Italy, Austria, Hungary, Spain, Luxembourg, Portugal, Israel, Croatia, Sweden
488	Hungary	United States, Denmark, Czech Republic, Italy, Austria, Latvia, Spain, Luxembourg, Portugal, Israel, Croatia, Sweden, Iceland
488	Spain	Czech Republic, Italy, Austria, Latvia, Hungary, Luxembourg, Portugal, Israel, Croatia, Sweden
488	Luxembourg	Czech Republic, Italy, Austria, Latvia, Hungary, Spain, Portugal, Israel, Croatia, Sweden
488	Portugal	United States, Denmark, Czech Republic, Italy, Austria, Latvia, Hungary, Spain, Luxembourg, Israel, Croatia, Sweden, Iceland, Slovenia
486	Israel	United States, Denmark, Czech Republic, Italy, Austria, Latvia, Hungary, Spain, Luxembourg, Portugal, Croatia, Sweden, Iceland, Slovenia, Lithuania, Greece, Turkey,
485	Croatia	Czech Republic, Italy, Austria, Latvia, Hungary, Spain, Luxembourg, Portugal, Israel, Sweden, Iceland, Slovenia, Lithuania, Greece, Turkey
483	Sweden	Italy, Austria, Latvia, Hungary, Spain, Luxembourg, Portugal, Israel, Croatia, Iceland, Slovenia, Lithuania, Greece, Turkey, Russian Federation
483	Iceland	Hungary, Portugal, Israel, Croatia, Sweden, Slovenia, Lithuania, Greece, Turkey
481	Slovenia	Portugal, Israel, Croatia, Sweden, Iceland, Lithuania, Greece, Turkey, Russian Federation
477	Lithuania	Israel, Croatia, Sweden, Iceland, Slovenia, Greece, Turkey, Russian Federation
477	Greece	Israel, Croatia, Sweden, Iceland, Slovenia, Lithuania, Turkey, Russian Federation
475	Turkey	Israel, Croatia, Sweden, Iceland, Slovenia, Lithuania, Greece, Russian Federation
475	Russian Federation	Israel, Sweden, Slovenia, Lithuania, Greece, Turkey
463	Slovak Republic	
449	Cyprus[1, 2]	Serbia
446	Serbia	Cyprus[1, 2], United Arab Emirates, Chile, Thailand, Costa Rica, Romania, Bulgaria
442	United Arab Emirates	Serbia, Chile, Thailand, Costa Rica, Romania, Bulgaria
441	Chile	Serbia, United Arab Emirates, Thailand, Costa Rica, Romania, Bulgaria
441	Thailand	Serbia, United Arab Emirates, Chile, Costa Rica, Romania, Bulgaria
441	Costa Rica	Serbia, United Arab Emirates, Chile, Thailand, Romania, Bulgaria
438	Romania	Serbia, United Arab Emirates, Chile, Thailand, Costa Rica, Bulgaria
436	Bulgaria	Serbia, United Arab Emirates, Chile, Thailand, Costa Rica, Romania
424	Mexico	Montenegro
422	Montenegro	Mexico
411	Uruguay	Brazil, Tunisia, Colombia
410	Brazil	Uruguay, Tunisia, Colombia
404	Tunisia	Uruguay, Brazil, Colombia, Jordan, Malaysia, Indonesia, Argentina, Albania
403	Colombia	Uruguay, Brazil, Tunisia, Jordan, Malaysia, Indonesia, Argentina
399	Jordan	Tunisia, Colombia, Malaysia, Indonesia, Argentina, Albania, Kazakhstan
398	Malaysia	Tunisia, Colombia, Jordan, Indonesia, Argentina, Albania, Kazakhstan
396	Indonesia	Tunisia, Colombia, Jordan, Malaysia, Argentina, Albania, Kazakhstan
396	Argentina	Tunisia, Colombia, Jordan, Malaysia, Indonesia, Albania, Kazakhstan
394	Albania	Tunisia, Jordan, Malaysia, Indonesia, Argentina, Kazakhstan, Qatar, Peru
393	Kazakhstan	Jordan, Malaysia, Indonesia, Argentina, Albania, Qatar, Peru
388	Qatar	Albania, Kazakhstan, Peru
384	Peru	Albania, Kazakhstan, Qatar

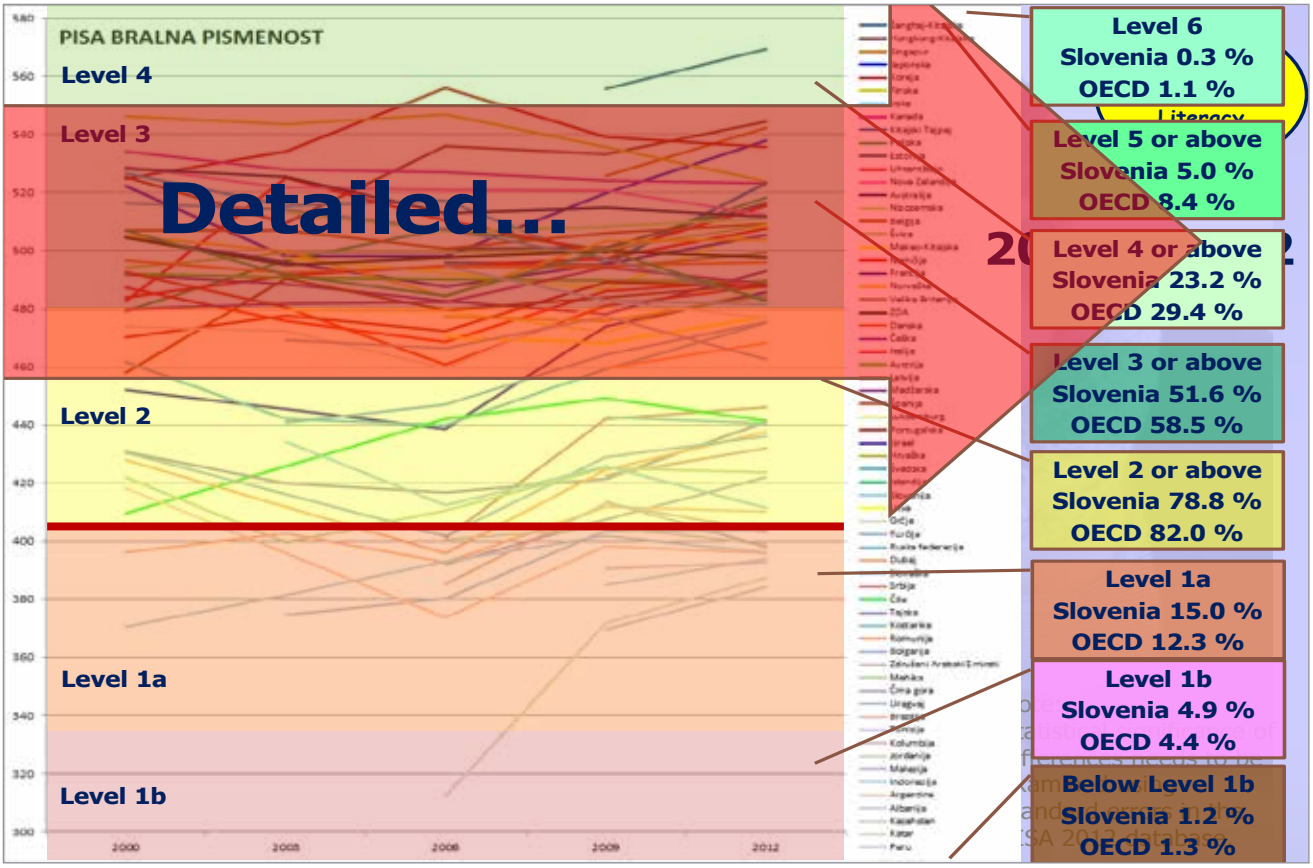
OECD Average
496 points

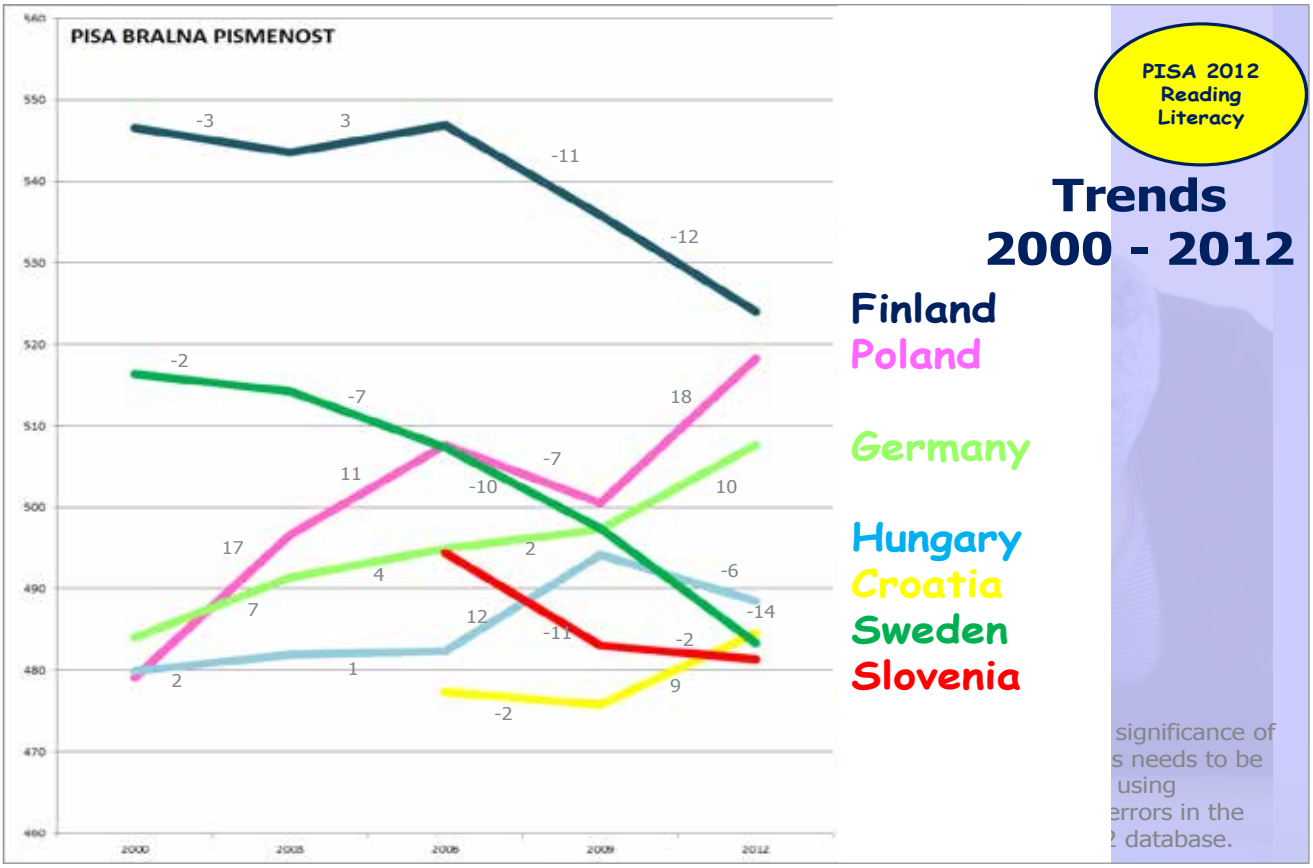


Statistically significantly above the OECD average

Not statistically significantly different from the OECD average

Statistically significantly below the OECD average


PISA BRALNA PISMENOST
Level 4
Level 3
Detailed...
Level 2
Level 1a
Level 1b
Level 6
Slovenia 0.3 %
OECD 1.1 %
Level 5 or above
Slovenia 5.0 %
OECD 8.4 %
Level 4 or above
Slovenia 23.2 %
OECD 29.4 %
Level 3 or above
Slovenia 51.6 %
OECD 58.5 %
Level 2 or above
Slovenia 78.8 %
OECD 82.0 %
Level 1a
Slovenia 15.0 %
OECD 12.3 %
Level 1b
Slovenia 4.9 %
OECD 4.4 %
Below Level 1b
Slovenia 1.2 %
OECD 1.3 %


PISA BRALNA PISMENOST
PISA 2012
Reading
Literacy
Trends
2000 - 2012
Finland
Poland
Germany
Hungary
Croatia
Sweden
Slovenia

Mean score	Comparison country/economy	Countries/economies whose mean score is NOT statistically significantly different from that comparison country's/economy's score
580	Shanghai-China	
555	Hong Kong-China	Singapore, Japan
551	Singapore	Hong Kong-China, Japan
547	Japan	Hong Kong-China, Singapore, Finland, Estonia, Korea
545	Finland	Japan, Estonia, Korea
541	Estonia	Japan, Finland, Korea
538	Korea	Japan, Finland, Estonia, Viet Nam
528	Viet Nam	Korea, Poland, Canada, Liechtenstein, Germany, Chinese Taipei, Netherlands, Ireland, Australia, Macao-China
526	Poland	Viet Nam, Canada, Liechtenstein, Germany, Chinese Taipei, Netherlands, Ireland, Australia, Macao-China
525	Canada	Viet Nam, Poland, Liechtenstein, Germany, Chinese Taipei, Netherlands, Ireland, Australia
525	Liechtenstein	Viet Nam, Poland, Canada, Germany, Chinese Taipei, Netherlands, Ireland, Australia, Macao-China
524	Germany	Viet Nam, Poland, Canada, Liechtenstein, Chinese Taipei, Netherlands, Ireland, Australia, Macao-China
523	Chinese Taipei	Viet Nam, Poland, Canada, Liechtenstein, Germany, Netherlands, Ireland, Australia, Macao-China
522	Netherlands	Viet Nam, Poland, Canada, Liechtenstein, Germany, Chinese Taipei, Ireland, Australia, Macao-China, New Zealand
522	Ireland	Viet Nam, Poland, Canada, Liechtenstein, Germany, Chinese Taipei, Netherlands, Australia, Macao-China, New Zeal
521	Australia	Viet Nam, Poland, Canada, Liechtenstein, Germany, Chinese Taipei, Netherlands, Ireland, Macao-China, Switzerland, U
521	Macao-China	Viet Nam, Poland, Liechtenstein, Germany, Chinese Taipei, Netherlands, Ireland, Australia, Switzerland, United Kingdom
516	New Zealand	Netherlands, Ireland, Switzerland, Slovenia, United Kingdom
515	Switzerland	Netherlands, Ireland, Australia, Macao-China, New Zealand, Slovenia, United Kingdom, Czech Republic
514	Slovenia	New Zealand, Switzerland, United Kingdom, Czech Republic
514	United Kingdom	Netherlands, Ireland, Australia, Macao-China, New Zealand, Switzerland, Slovenia, Czech Republic, Austria
508	Czech Republic	Switzerland, Slovenia, United Kingdom, Austria, Belgium, Latvia
506	Austria	United Kingdom, Czech Republic, Belgium, Latvia, France, Denmark, United States
505	Belgium	Czech Republic, Austria, Latvia, France, United States
502	Latvia	Czech Republic, Austria, Belgium, France, Denmark, United States, Spain, Lithuania, Norway, Hungary
499	France	Austria, Belgium, Latvia, Denmark, United States, Spain, Lithuania, Norway, Hungary, Italy, Croatia
498	Denmark	Austria, Latvia, France, United States, Spain, Lithuania, Norway, Hungary, Italy, Croatia
497	United States	Austria, Belgium, Latvia, France, Denmark, Spain, Lithuania, Norway, Hungary, Italy, Croatia, Luxembourg, Portugal
496	Spain	Latvia, France, Denmark, United States, Lithuania, Norway, Hungary, Italy, Croatia, Portugal
496	Lithuania	Latvia, France, Denmark, United States, Spain, Norway, Hungary, Italy, Croatia, Luxembourg, Portugal
495	Norway	Latvia, France, Denmark, United States, Spain, Lithuania, Hungary, Italy, Croatia, Luxembourg, Portugal, Russian Federation
494	Hungary	Latvia, France, Denmark, United States, Spain, Lithuania, Norway, Italy, Croatia, Luxembourg, Portugal, Russian Federation
494	Italy	France, Denmark, United States, Spain, Lithuania, Norway, Hungary, Croatia, Luxembourg, Portugal
491	Croatia	France, Denmark, United States, Spain, Lithuania, Norway, Hungary, Italy, Luxembourg, Portugal, Russian Federation, Sweden
491	Luxembourg	United States, Lithuania, Norway, Hungary, Italy, Croatia, Portugal, Russian Federation
489	Portugal	United States, Spain, Lithuania, Norway, Hungary, Italy, Croatia, Luxembourg, Russian Federation, Sweden
486	Russian Federation	Norway, Hungary, Croatia, Luxembourg, Portugal, Sweden
485	Sweden	Croatia, Portugal, Russian Federation Iceland
478	Iceland	Sweden, Slovak Republic, Israel
471	Slovak Republic	Iceland, Israel, Greece, Turkey
470	Israel	Iceland, Slovak Republic, Greece, Turkey
467	Greece	Slovak Republic, Israel, Turkey
463	Turkey	Slovak Republic, Israel, Greece
448	United Arab Emirates	Bulgaria, Chile, Serbia, Thailand
446	Bulgaria	United Arab Emirates, Chile, Serbia, Thailand, Romania, Cyprus[1, 2]
445	Chile	United Arab Emirates, Bulgaria, Serbia, Thailand, Romania
445	Serbia	United Arab Emirates, Bulgaria, Chile, Thailand, Romania
444	Thailand	United Arab Emirates, Bulgaria, Chile, Serbia, Romania
439	Romania	Bulgaria, Chile, Serbia, Thailand, Cyprus[1, 2]
438	Cyprus[1, 2]	Bulgaria, Romania
429	Costa Rica	Kazakhstan
425	Kazakhstan	Costa Rica, Malaysia
420	Malaysia	Kazakhstan, Uruguay, Mexico
416	Uruguay	Malaysia, Mexico, Montenegro, Jordan
415	Mexico	Malaysia, Uruguay, Jordan
410	Montenegro	Uruguay, Jordan, Argentina
409	Jordan	Uruguay, Mexico, Montenegro, Argentina, Brazil
406	Argentina	Montenegro, Jordan, Brazil, Colombia, Tunisia, Albania
405	Brazil	Jordan, Argentina, Colombia, Tunisia
399	Colombia	Argentina, Brazil, Tunisia, Albania
398	Tunisia	Argentina, Brazil, Colombia, Albania
397	Albania	Argentina, Colombia, Tunisia
384	Qatar	Indonesia
382	Indonesia	Qatar, Peru
373	Peru	Indonesia

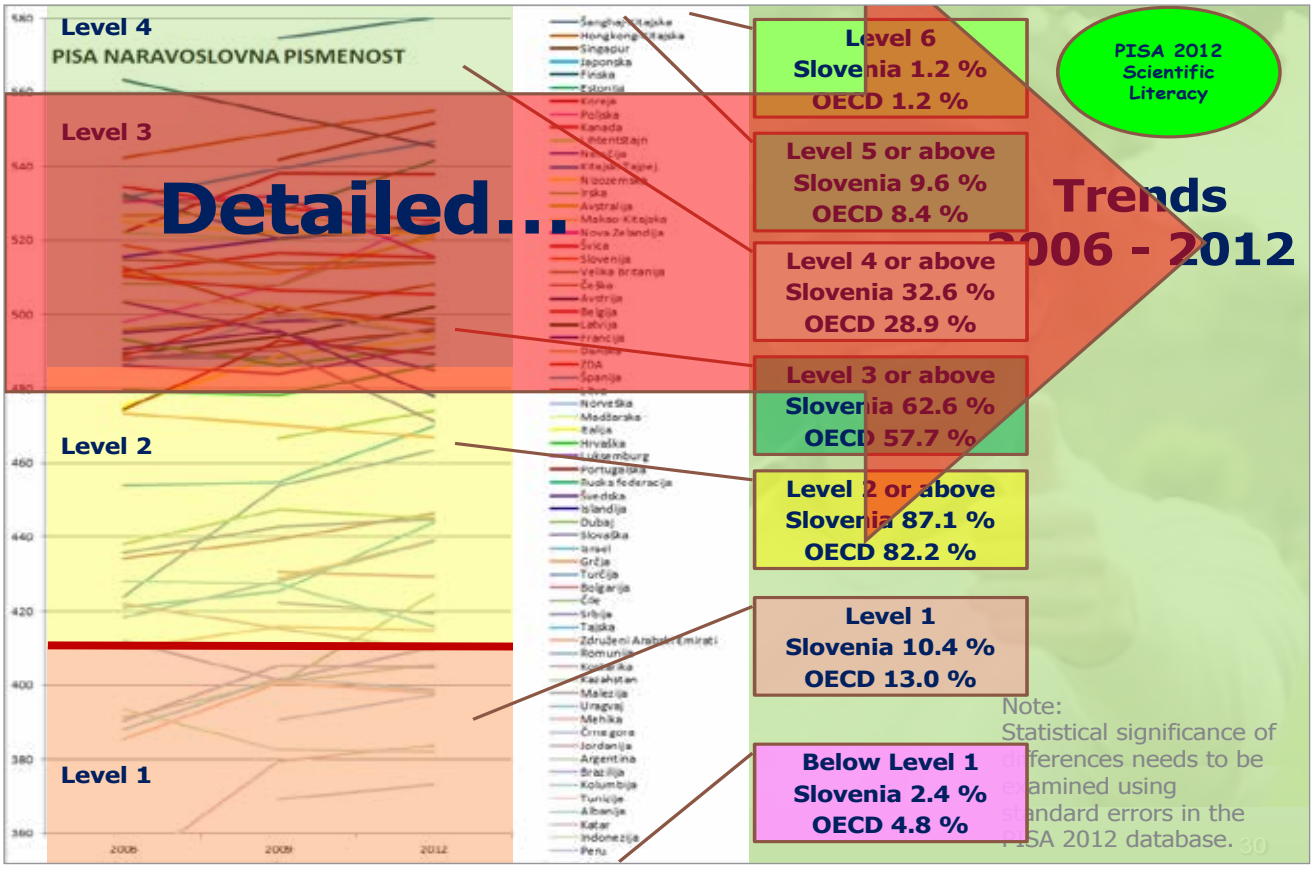
PISA 2012 Scientific Literacy

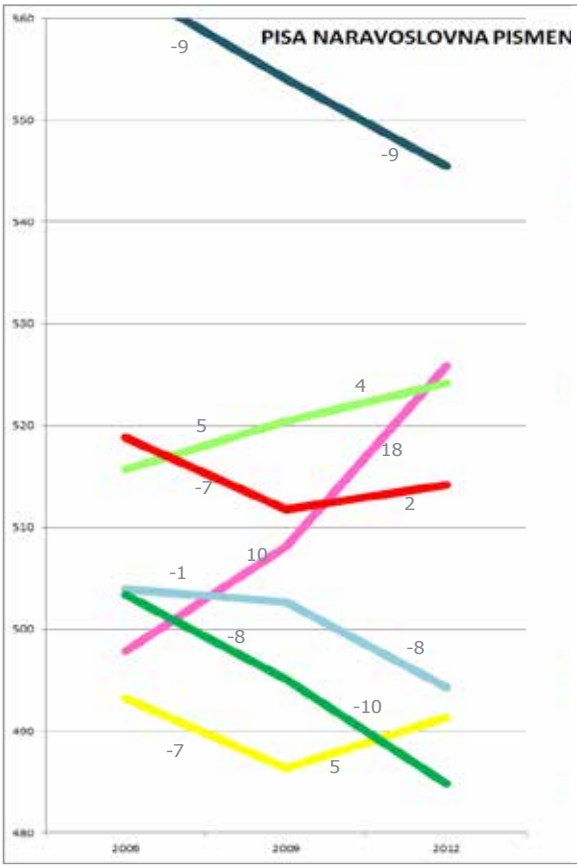
OECD Average 501 points

Statistically significantly above the OECD average

Not statistically significantly different from the OECD average

Statistically significantly below the OECD average





Finland

Poland
Germany

Slovenia

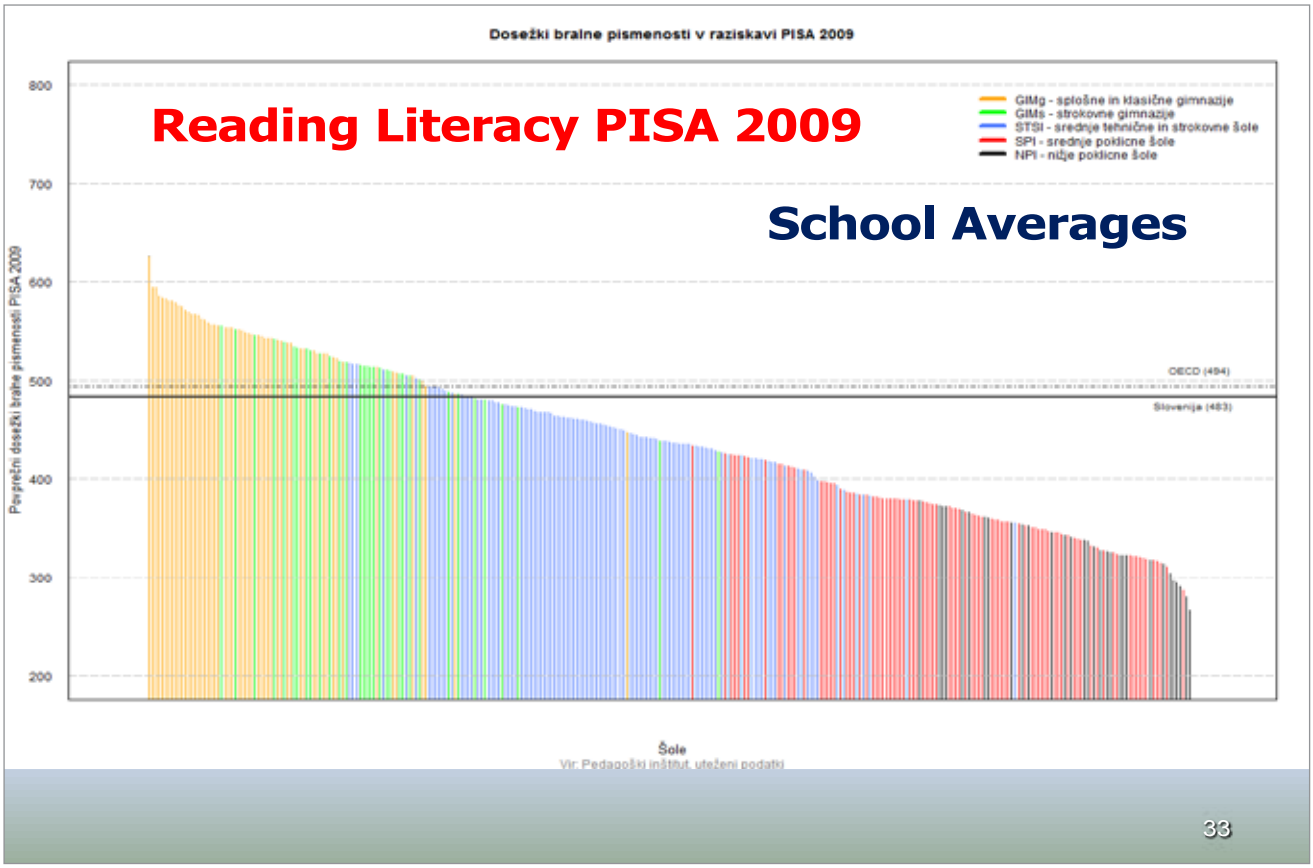
Hungary
Croatia
Sweden

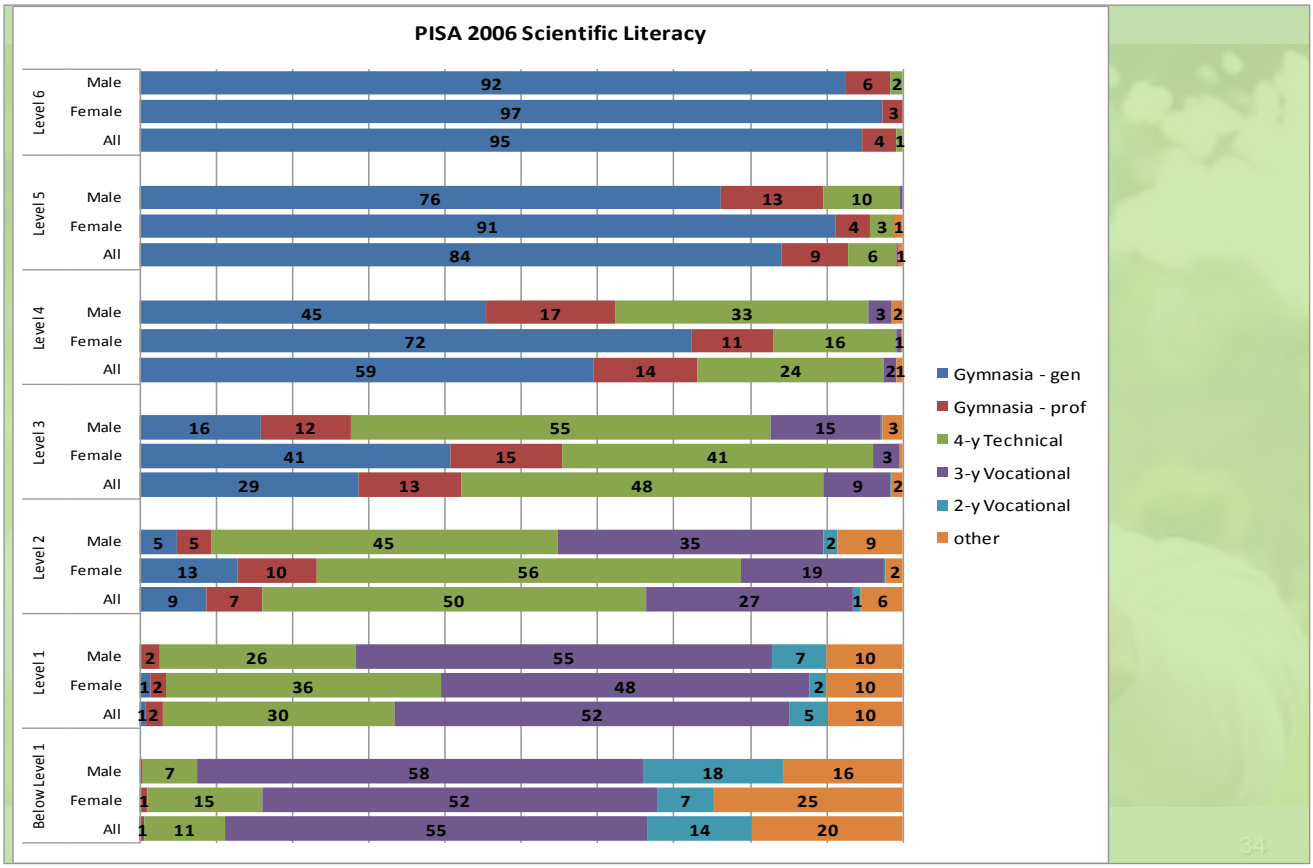
PISA 2012
Scientific
Literacy

Trends 2006 - 2012

Note:
Statistical significance of differences needs to be examined using standard errors in the PISA 2012 database.

Analyses of the PISA results for Slovenia


Dosežki bralne pismenosti v raziskavi PISA 2009
Reading Literacy PISA 2009
School Averages
GIMg - splošne in klasične gimnazije
GIMs - strokovne gimnazije
STSI - srednje tehnične in strokovne šole
SPI - srednje poklicne šole
NPI - nižje poklicne šole
OECD (494)
Slovenija (483)
Povprečni dosežki bralne pismenosti PISA 2009
800
700
600
500
400
300
200
Šole
Vir: Pedagoški inštitut, uteženi podatki
33


PISA 2006 Scientific Literacy
Level 6
Male 92 6 2
Female 97 3
All 95 4 1
Level 5
Male 76 13 10
Female 91 4 3 1
All 84 9 6 1
Level 4
Male 45 17 33 3 2
Female 72 11 16 1
All 59 14 24 2 1
Level 3
Male 16 12 55 15 3
Female 41 15 41 3
All 29 13 48 9 2
Level 2
Male 5 5 45 35 2 9
Female 13 10 56 19 2
All 9 7 50 27 1 6
Level 1
Male 2 26 55 7 10
Female 1 2 36 48 2 10
All 1 2 30 52 5 10
Below Level 1
Male 7 58 18 16
Female 1 15 52 7 25
All 1 11 55 14 20
Gymnasia - gen
Gymnasia - prof
4-y Technical
3-y Vocational
2-y Vocational
other
34

Disciplinary Climate and Student-Teacher Relations

Disciplinary climate and student-teacher relations

	DISCIPLINARY CLIMATE						STUDENT TEACHER RELATIONS					
	A	B	C	D	E	Avg. Index	A	B	C	D	E	Avg. Index
Austria	73	74	71	77	70	0,11	87	59	61	67	77	0,00
Czech Rep	63	66	68	75	70	-0,18	80	67	57	78	72	-0,24
Estonia	70	69	73	80	78	0,05	86	76	60	85	75	-0,04
Finland	60	52	63	80	68	-0,29	87	49	63	84	80	-0,16
Croatia	59	68	69	75	73	-0,13	87	65	60	69	70	-0,17
Japan	92	90	93	87	91	0,75	73	28	63	64	74	-0,42
Korea	90	77	88	90	87	0,38	79	60	57	83	75	-0,27
Hungary	71	71	69	80	78	-0,02	86	68	79	77	74	-0,01
Germany	85	84	78	82	81	0,25	85	58	69	71	77	0,01
Netherlands	68	59	63	81	55	-0,28	87	61	66	85	85	-0,11
Norway	67	61	66	77	67	-0,24	84	57	55	74	74	-0,17
Poland	67	74	74	79	80	0,07	81	35	60	73	71	-0,35
Slovak Rep	67	74	73	81	75	-0,02	85	71	66	79	75	-0,16
Slovenia	59	66	68	78	70	-0,11	80	30	56	74	74	-0,42
OECD	71	68	72	81	75	0,00	85	66	67	79	79	0,00

A. Students do not listen to the teacher.
B. There is noise in the classroom.
C. Teacher has to wait a long time for students to calm down
D. Students can not work well.
E. Students do not start working long after the beginning of the class.

A. I get along well with most of the teachers.
B. Most of the teachers are interested in my well being.
C. Most of the teachers listen to what I have to say.
D. If I need extra help my teachers offer it.
E. Most of the teachers treat me fairly.

36

Disciplinary climate and student-teacher relations

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Croatia	59	68	69	75	73	-0,13	87	65	60	69	70	-0,17
Japan	92	90	93	87	91	0,75	73	28	63	64	74	-0,42
Korea	90	77	88	90	87	0,38	79	60	57	83	75	-0,27
Hungary	71	71	69	80	78	-0,02	86	68	79	77	74	-0,01
Germany	85	84	78	82	81	0,25	85	58	69	71	77	0,01
Netherlands	68	59	63	81	55	-0,28	87	61	66	85	85	-0,11
Norway	67	61	66	77	67	-0,24	84	57	55	74	74	-0,17
Poland	67	74	74	79	80	0,07	81	35	60	73	71	-0,35
Slovak Rep	67	74	73	81	75	-0,02	85	71	66	79	75	-0,16
Slovenia	59	66	68	78	70	-0,11	80	30	56	74	74	-0,42
OECD	71	68	72	81	75	0,00	85	66	67	79	79	0,00

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37

Disciplinary climate and student-teacher relations

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Finland	60	52	63	80	68	-0,29	87	49	63	84	80	-0,16
Croatia	59	68	69	75	73	-0,13	87	65	60	69	70	-0,17
Japan	92	90	93	87	91	0,75	73	28	63	64	74	-0,42
Korea	90	77	88	90	87	0,38	79	60	57	83	75	-0,27
Hungary	71	71	69	80	78	-0,02	86	68	79	77	74	-0,01
Germany	85	84	78	82	81	0,25	85	58	69	71	77	0,01
Netherlands	68	59	63	81	55	-0,28	87	61	66	85	85	-0,11
Norway	67	61	66	77	67	-0,24	84	57	55	74	74	-0,17
Poland	67	74	74	79	80	0,07	81	35	60	73	71	-0,35
Slovak Rep	67	74	73	81	75	-0,02	85	71	66	79	75	-0,16
Slovenia	59	66	68	78	70	-0,11	80	30	56	74	74	-0,42
OECD	71	68	72	81	75	0,00	85	66	67	79	79	0,00

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38


discipline
relations
Europe
Japan
Kazakhstan
Azerbaijan
Albania
Romania
Russian Fed
Shanghai-China
Korea
Kyrgyzstan
Hong Kong
Tailand
Lithuania
Montenegro
Peru
Colombia
Latvia
Indonesia
Germany
Jordan
Portugal
Macao China
Singapur
Austria
USA
Dubai
Turkey
Poland
Spain
Estonia
Italy
UK
Mexico
Israel
Switzerland
Panama
Denmark
Slovak R
Uruguay
Island
Ireland
Hungary
Sweden
Belgium
Australia
Canada
Slovenia
Chile
Croatia
New Zealand
Czech Rep
France
Tunisia
Brazilia
Norway
Lux
Argentina
Finland
Netherlands
Greece
1.00
0.80
0.60
0.40
0.20
0.00
-0.20
-0.40
-0.60
-0.80
-1.00
-1.00
-0.80
-0.60
-0.40
0.40
0.60
0.80
1.00
39


Thank you!
mojca.straus@pei.si
pisa@pei.si
www.pei.si
3. Find x.
x
3 cm
4 cm
Here it is
40

7 MAY 2014 - CONFERENCE WORKSHOP III

PISA: INCLUSION AND EDUCATION QUALITY

MODERATOR:
Ferit Idrizi, Department of European Integration and Donor Coordination, MEST, Kosovo

PRESENTERS:
Dr Markus Gebhardt, TUM School of Education, Department of Empirical Educational Research

Dejan Zlatkovski – National PISA Manager – National Agency for European Educational Programmes and Mobility, Republic of Macedonia

WORKSHOP COORDINATOR:
Edmond Gashi (GIZ/CDBE)

Mr Ferit Idrizi, Department of European Integration and Donor Coordination (MEST) welcomed the speakers (presenters from Germany and Macedonia) and the participants in the working group and introduced the topic of 'PISA: Inclusion and Education Quality'.

The working group was composed of 32 participants from different institutions, including government officials, staff of international donor agencies, NGO representatives, academics and students from local and international universities.

The workshop began with a presentation by Dr Markus Gebhardt of the TUM School of Education and Department of Empirical Educational Research.

Dr Gebhardt presented core details of inclusive education, including the perception of teamwork, the definition of inclusion, its broader meaning and its effects on the education system and society in general. He provided a range of empirical comparative data on students' results in mathematics in EU countries. He also looked at PISA results in Germany, with a focus on mathematics, and provided additional professional instruction on how to treat different student categories in the context of PISA, such as students with learning disabilities, and emotional and social difficulties.

Mr Idrizi summarised Dr Gebhardt's presentation and gave the floor to Mr Dejan Zlatkovski, National PISA Manager and representative of the National Agency for European Educational Programmes and Mobility of the Republic of Macedonia.

Mr Zlatkovski gave an introduction to the overall situation in Macedonia's education system and the implementation of PISA 2015. He presented similarities among ex-YU countries with regard to education and the shared challenges they face, focusing in particular on the difficulties they have faced in their efforts to change their political vision and on effective ways to reform their education system. He also gave a brief history of Macedonia's participation in international studies over different time periods (TIMSS – in 1999, 2003 and 2011; PIRLS – in 2001 and 2006; PISA 2000

and PISA 2015) and presented key data relating to PISA results and the steps undertaken by the Government of Macedonia to improve the results and indicators.

Mr Idrizi summarised Mr Zlatkovski's presentation and opened the debate. The discussion and questions to the speakers were mainly focused on the treatment of students with learning difficulties in the PISA test, the measures Germany and Macedonia had undertaken to improve results, teacher training and professional development, adjustments to the curricula, etc.

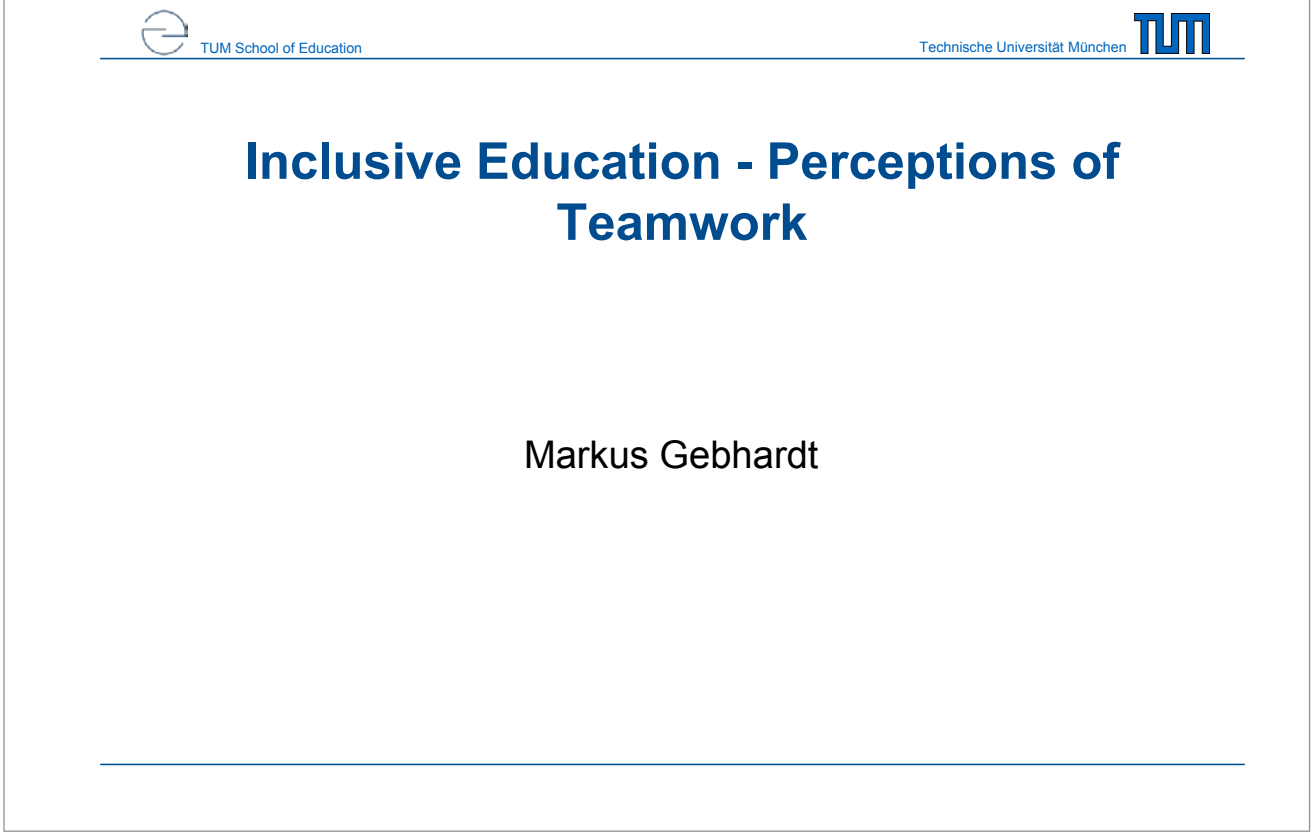
After the presentations and discussions, the following challenges and recommendations were formulated:

CHALLENGE:

1. Addressing the lack of evaluation teams/ diagnostics for children with special needs.

RECOMMENDATIONS:

1. Engagement of professional staff in schools (academic advisor, school psychologist).
2. Engagement of supportive teachers for children with special needs in schools, including teacher training programmes on inclusiveness for regular teachers.
3. Improvement of school infrastructure to facilitate inclusion.



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Inclusive Education

Learning of all Learners (Ainscow, 2006)

Inclusion is about the child's right to participate and the school's duty to accept the child (UN-Konvention, 2006)

Inclusion rejects the use of special schools or classrooms to separate students with disabilities from students without disabilities.
But there a different sets of inclusive settings:
"regular inclusion"; "partial inclusion","full inclusion"

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Students' Achievement in Mathematics (PISA 2000 and 2012)

State	Native Students			Immigrant Students											
				Immigrant Students (Total)			One parent was born in another country			Second Generation			First Generation		
	M	*SE*	+/-	*M*	*SE*	+/-	*M*	*SE*	+/-	*M*	*SE*	+/-	*M*	*SE*	+/-
Germany	531	3.4	3.6	485[a]	4.1	**24.0**	504[a]	5.4	-2.1	476[a]	5.3	**44.9**	461[a]	9.0	5.3
Finland	524	1.9	**-22.9**	485[a]	4.3	**-19.5**	512[a]	5.0	**-16.9**	451[a]	4.8	25.9	426[a]	7.8	**-48.0**
Luxembourg	517	2.1	**7.1**	477[a]	1.7	-1.5	498[a]	3.0	0.0	470[a]	2.5	-7.4	469[a]	4.0	7.4
Norway	496	3.0	-3.9	471[a]	4.9	0.1	494	4.9	4.3	458[a]	9.5	-2.3	441[a]	6.2	2.6
Austria	518	2.8	3.3	473[a]	4.4	-0.6	502[a]	6.3	**-20.2**	458[a]	5.2	-1.5	454[a]	8.6	2.6
Switzerland	552	3.3	5.6	507[a]	3.6	**12.1**	534[a]	4.1	5.2	490[a]	3.8	5.8	472[a]	5.8	**18.4**

Gebhardt, Rauch, Sälzer, Mang & Stanat, 2013

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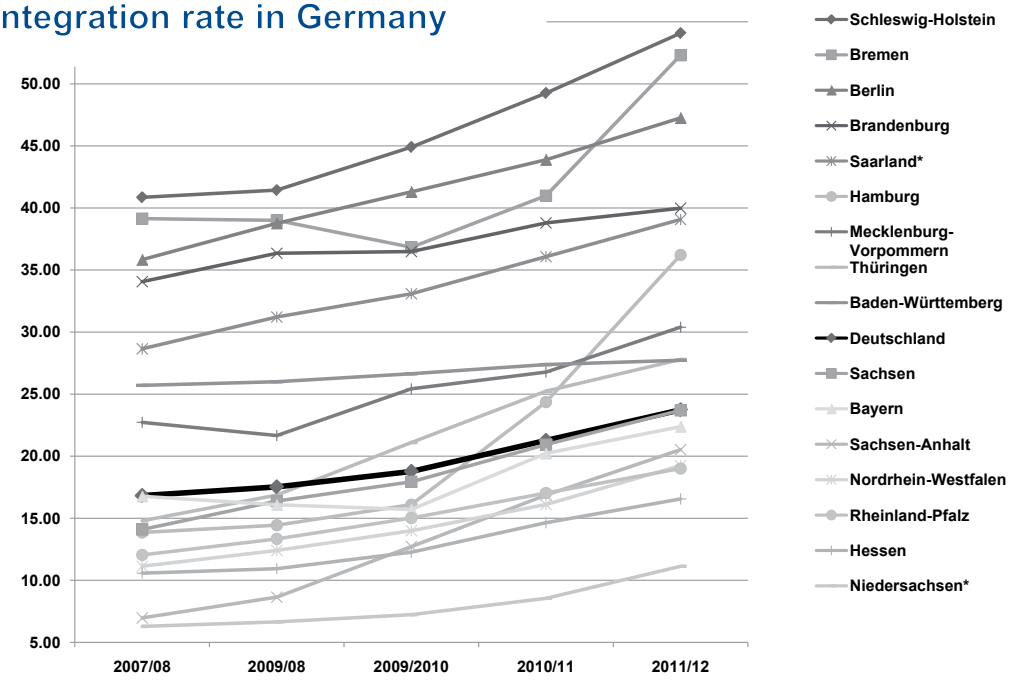
Integration rate in Germany



Gebhardt, Sälzer & Tretter (2014)

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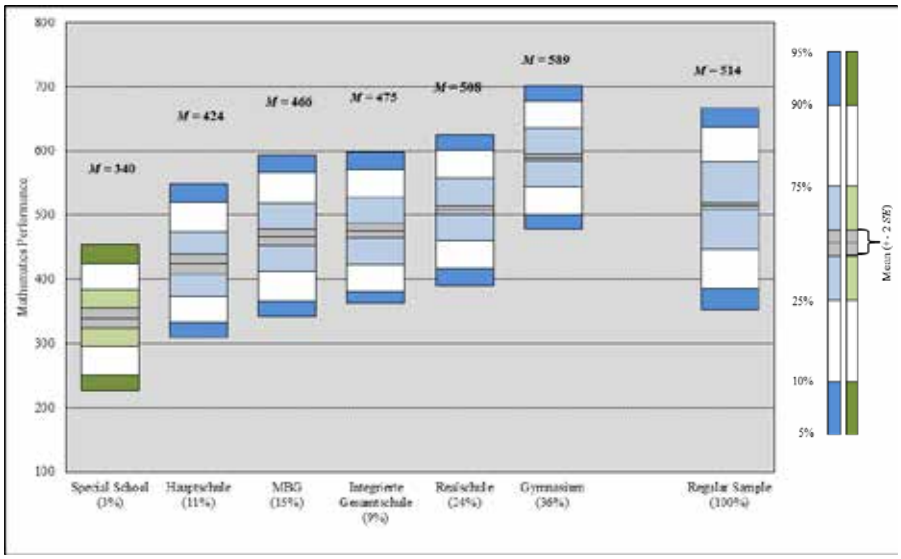
Mathematics Performance in PISA 2012 and SEN Oversample



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All Students in PISA 2012 Gradebased in Germany

Typ of SEN	Student of Special School	Inclusive Student with SEN	Regular Student	Total
None	**0**	**0**	**9695**	**9695**
Learning disabilities	**676**	**59**	**0**	**735**
Hearing-impaired	**0**	**12**	**0**	**12**
Speech-impaired	**1**	**20**	**0**	**21**
Motoric disability	**0**	**11**	**0**	**11**
Mental handicap	**6**	**3**	**0**	**9**
Emotional or social handicap	**79**	**44**	**0**	**123**
Multiple disabilities	**47**	**6**	**0**	**53**
None of the categories	**0**	**4**	**0**	**4**
Total	**809**	**159**	**9695**	**10663**

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Students' Achievement in Mathematics (PISA 2012 Gradebased)

	M	*SE*	*SD*	*SE*
Regular Student	510.222	2.387770	83.274	1.203385
Inclusive Student with SEN				
Learning disabilities	385.270	10.704089	53.901	6.752425
Emotional or social handicap	438.312	11.057974	69.321	10.367024
Functionel disabilities	440.235	18.032328	80.500	13.609626
Students in Special School				
Learning disabilities	337.874	4.478719	83.274	1.203385
Emotional or social handicap	386.009	10.065468	61.483	3.209561

Summary

- Pupils with SEN have very low school performance and are therefore very difficult to test for the Large Scale Assessment.

⇒ Here there is a need to explore other adaptations.

- Integration comes at the secondary level and are currently rare. Impact of inclusion of pupils without SEN in secondary education, is currently seen only as a tendency.

- There is a risk that the integration with pupils with SEN is used mainly in the area of learning for the most powerful students.

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Quality of Inclusive Settings

Instruments

Holzinger, Ebner, Kernbichler, Kopp-Sixt, Much & Pongratz (2011)

Examined one inclusive school district (22 grammar schools, seven secondary I schools and 3 secondary II schools)

The questions were selected from the index for inclusion and adapted to the demands of the Styria school system. The research project of Holzinger et al. (2011) were focused on school development. The psychometrics of the questionnaires were not analyzed.

Implementation in the classroom:	9 Items(α = .82)
Teamwork in the Individual Educational Planning (IEP):	6 Items (α = .95)
Factors at school level:	6 Items (α = .80)

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Sample

352 questionaries

Gender: 85,2% women and 14,2% men

Classroom-experience : 0,5 - 40 years
M= 21,89; *SD*= 11,50

	Primary school	Secondary I	Secondary II
Regular teacher	73	118	29
Special teacher	63	67	1

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Implementation in the classroom

What do you use in your team and in your classroom?	Regular primary-school-teachers	Special teachers in primary-school	Regular teachers in Sec I	Special teachers in Sec I
N	71	63	116	67
Cooperative planning of the instruction	3.18 (0.88)	3.33 (0.82)	2.82 (0.89)	2.67 (0.99)
Cooperative team-teaching	3.13 (0.88)	3.21 (0.85)	2.85 (0.97)	2.97 (0.87)
Cooperative reflexion of the instruction	3.16 (0.83)	3.22 (0.92)	2.68 (0.85)	2.46 (1.17)
Social learning	3.28 (0.72)	3.24 (0.80)	3.02 (0.83)	3.29 (0.81)
Differentiated measurement of performance	3.42 (0.70)	3.48 (0.74)	3.31 (0.81)	3.52 (0.65)
Alternative assessment of performance	3.02 (1.28)	2.93 (1.2)	2.16 (1.15)	2.00 (1.20)
The team knows the individual learning position of all students	3.54 (0.75)	3.52 (0.72)	3.31 (0.75)	3.24 (0.94)
The team supports good students with own tasks.	3.30 (0.80)	3.29 (0.68)	3.00 (0.70)	3.04 (0.95)
The team supports weak students with own tasks.	3.40 (0.80)	3.59 (0.53)	3.15 (0.69)	3.27 (0.90)
Total score	3.27 (0.51)	3.31 (0.48)	2.92 (0.55)	2.94 (0.61)

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Teamwork in the Individual Educational Planning

The Teachers in the subjects Mathematic, German (and in Sec I English) ...	Regular primary-school-teachers	Special need teachers in primary-school	Regular tachers in Sec I	Special need teachers in Sec I
N	*59*	*52*	*106*	*67*
...are involved in the defining of the IEP goals	4.08 (1.21)	3.93 (1.26)	3.01 (1.39)	2.63 (1.42)
...know the IEP oft he students with SEN	4.12 (1.13)	4.13 (1.09)	2.90 (1.42)	2.63 (1.36)
...know the Special Need of the student with SEN	4.32 (0.94)	4.14 (1.00)	3.03 (1.33)	2.94 (1.29)
... work together with colleagues for the methodological and pedagogical implementation of the IEP goals	4.24 (1.06)	3.95 (1.09)	3.22 (1.31)	2.87 (1.43)
...know the pedagogical implementation and discuss this with the special education teacher	4.20 (1.08)	4.03 (0.99)	3.25 (1.33)	2.87 (1.32)
...involve the parents in the IEP work	4.01 (1.11)	4.09 (1.03)	3.06 (1.26)	3.09 (1.38)
Total score	4.16 (0.94)	4.05 (0.96)	3.08 (1.18)	2.83 (1.16)

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Results on the school level

	Regular primary-school-teachers	Special teachers in primary-school	Regular teachers in Sec I	Special teachers in Sec I
N	*70*	*63*	*113*	*67*
Temporally fixed team-meetings	2.66 (1.60)	2.87 (1.57)	2.83 (1.53)	2.81 (1.70)
Small teacher teams	4.12 (1.26)	4.47 (0.84)	3.50 (1.27)	3.51 (1.39)
Teacher teams with a lot of common teacher hours	4.13 (1.24)	4.47 (1.03)	3.38 (1.30)	3.47 (1.40)
Right of co-determination of the team partners	3.18 (1.61)	3.52 (1.54)	2.85 (1.31)	2.83 (1.44)
No concentration of children with behavioral disorders comparing to other classes	3.25 (1.25)	3.42 (1.20)	3.16 (1.33)	3.01 (1.29)
Flexible timing of units of instruction	4.20 (1.15)	4.23 (1.07)	2.57 (1.33)	2.71 (1.50)
Total score	3.59 (0.89)	3.83 (0.69)	3.05 (0.92)	3.06 (1.13)


Vielen Dank für ihre Aufmerksamkeit
markus.gebhardt@tum.de

PISA 2012-2015

- **REALISTIC MODELING** OF THE EDUCATIONAL PROFILE THAT REFLECTS THE SOCIAL NEEDS AND SOCIAL ECONOMIC STABILITY;
- **VISION AND** EFFECTIVE WAY **TO REFORM THE EDUCATIONAL SYSTEM.**

PISA 2012-2015

Republic of Macedonia participates in several international studies:

1. TIMSS – year1999, 2003 and year 2011.
2. PIRLS - year 2001 and 2006.
3. PISA – year 2000 и 2012 -15.

PISA 2012-2015

The first participation of the Republic of Macedonia in the international PISA testing was in year 2000 in the project PISA plus.

The main testing was conducted in year 2002.

The testing was performed in Macedonian and Albanian language.

PISA 2012-2015

- **4736** students over the age of 15 were included as a sample coming from **88 secondary schools** (including private 2 schools) and **3 elementary schools** from different geographic regions in the Republic of Macedonia with a good representation of the schools that came from urban and rural areas.

PISA 2012-2015

The **PISA** testing was conducted by the Bureau for Development of Education-Department for assessment, with support from the Ministry of Education and Science, the Open Society Institute, the Dutch government and the World Bank.

PISA 2012-2015

Obtained results as indicators:

1. Although the educational process is the same for all, girl students showed better results in testing in all three areas from the boy students;
2. Students showed better results in the families with better living conditions;

PISA 2012-2015

3. In families where parents have higher education students show better results;
4. As data for better results in students a crucial role is the education of the mother;
5. Students who have only one parent showed poorer results;

PISA 2012-2015

4. Communication between parents and children in the home is highly important for the success of the students;
5. Boys and girls have different learning approach.

PISA 2012-2015

The following steps that have been undertaken in implementing the PISA survey from 2002 until today

1. A new model of nine year education was introduced;
2. The number of classes for the subject mathematics is increased;
3. Modernized curricula in the native language, mathematics and natural sciences;

PISA 2012-2015

4. There has been some change in the education system where we have a demonstration of knowledge of the students through project development, project assignments, research and experiments;
5. The student is in the center of the teaching process, he is not just a passive listener;

PISA 2012-2015

6. The teacher represents a facilitator of the learning, not only transmitter of the knowledge;
7. Training for professional development were conducted for teachers for this kind of teaching;
8. A reassessment was initiated about the quality of the textbooks in mathematics and natural sciences;

PISA 2012-2015

9. New working methods for learning of mathematics were introduced through Project "Mathematics through thinking";
10. Rulebooks for teaching the subject of mathematics for teachers were prepared;

PISA 2012-2015

11. Training of teachers were conducted for teachers who teach mathematics and science for a new approach to these areas;
12. The teaching process is focused on the applicability of knowledge in everyday life, i.e. how well students are prepared for life after school and not how much they have mastered the content provided in the curriculum;

PISA 2012-2015

13. A new subject for natural sciences that includes biology, chemistry, geography, physics was introduced;
14. The levels of the student achievement were defined;
15. Reforms for raising the quality of university for teachers were initiated.

7 MAY 2014 - CONFERENCE WORKSHOP IV

PISA AND EARLY DIAGNOSTIC ASSESSMENT

> THE STUDIES SHOW THAT CHILDREN WHO ATTEND PRE-SCHOOL PERFORM BETTER THAN THOSE WHO DO NOT HAVE THIS OPPORTUNITY AND THAT GIRLS ATTAIN CONSIDERABLY HIGHER SCORES THAN BOYS.

MODERATOR:
Mirlinda Dehari-Zeka, Division of Evaluation, Standards and Monitoring, MEST, Kosovo

PRESENTERS:
Lena Maechel, Education Advisor, GIZ
Arlinda Gashi-Bajgora, Deputy Chief of Party – USAID BEP programme
Alfons Harizaj, PISA National Coordinator, Albania

WORKSHOP COORDINATOR:
Rrezearta Zhinipotoku-Behluli (GIZ/CDBE)

Ms Mirlinda Dehari-Zeka of the Division of Evaluation, Standards and Monitoring, MEST, Kosovo welcomed the participants of the working group and introduced the topic of 'PISA and Early Diagnostic Assessment', along with the agenda of the workshop and the workshop presenters.

She then introduced the first speaker of the workshop, Mr Alfons Harizaj, PISA National Coordinator for Albania. Through his presentation on 'PISA and Early Diagnostic Assessment', Mr Harizaj provided participants with a general overview of the topic and Albania's experience in regard to the PISA process. He explained that the studies show that children who attend pre-school perform better than those who do not have this opportunity and that girls attain considerably higher scores than boys. Mr Harizaj's presentation looked at some important aspects of diagnostic assessment and illustrated the need for such assessment, explaining some key facts regarding when this assessment should be conducted to ensure it is most effective. The presentation also touched on the issue of policy aspects assessed by performance in PISA, and a discussion was initiated with the group on the important role played by society and especially parents when it

comes to education. The role of professionalism and quality in teaching was emphasised throughout presentation and discussions. High-performing teachers were shown to be crucial to students' level of achievement.

The second presentation was held by Ms Lena Maechel, Education Advisor at GIZ. Ms Maechel introduced the GIZ Sector Programme on Numeracy, which focuses on promoting mathematics competency in pre-school and early grades. After giving an overview of the programme, she introduced the goals, focal topics and outputs of the GIZ Sector Programme on Numeracy and the numerous activities implemented. She continued by outlining the characteristics of diagnostic assessments (non-curriculum, sample or census-based, etc.) and explaining that the purpose of early diagnostic assessment can differ by context and may include such activities as gathering early data, designing early interventions and informing policy dialogue. Ms Maechel mentioned numerous early diagnostic assessment tools such as EGMA, TEMA, ASER, UWEZO, ENT, TEAM, Key-Math 3, ICDM, EMDA and PAL II. She mentioned several criteria that are used to evaluate the appropriateness of early diagnostic tools depending on the expectations and demands of the user and the respective context of implementation.

The third presentation was given by Ms Arlinda Gashi-Bajgora, Deputy Chief of Party – USAID BEP Programme on Albanian Early Grades Reading Assessment (A-EGRA). Ms Gashi-Bajgora guided the workshop participants through EGRA, an individual reading test for grades 1-3. She explained that it is composed of sub-tests, covers different skills and is used in more than 40 countries and 80 languages. EGRA defines the key competencies of successful readers and defines the level of these competencies. She also pointed to the results of a baseline study carried out by the USAID BEP programme, which found that there were almost no non-readers in the sample, phonemic awareness and letter recognition were good, word recognition and decoding skills were generally acceptable and dictation results were very good. The results of this study were used to increase awareness among parents on the importance of encouraging children to become fluent in reading and comprehension and supporting teachers in helping students to master these competencies.

After the presentations, the participants discussed the content of the presentations and agreed that it is important not only that early diagnostic assessment takes place but also that the tool selected suits the demands of the user, especially when there are a large number of students in a class. The participants jointly recommended that PISA tests should be administered based on the OECD standards and that additional preparation is needed for this purpose. The results of the grade 5 test are to be analysed and this data is to be used for further interventions and to ensure that professional assessment for teachers by qualified experts is carried out with the aim of improving quality in education.

On the basis of the discussions, the working group formulated the following challenge and recommendations:

CHALLENGE:

1. Adopting international instruments for early diagnostic assessment in the local context.

RECOMMENDATIONS:

1. Training of teachers (pre-service and in-service) in the use of different tests in early diagnostic assessment.
2. Involvement of different structures (school, family, etc.) in early diagnostic assessment.

PISA

- *PISA and Early Diagnostic Assessment*
- *May 2014*

General goals

- ✓ *The earlier we "diagnose" the quicker we "cure"*
- ✓ *"We cure" with lower cost*

What has PISA diagnosed in early assessment

In general

- *Achievements of students attending preschool education are higher than those who didn't attend it.*
- *This is characteristic for all countries, and emphasized in those countries where this type of education is not spread.*

What has PISA diagnosed in early assessment

For countries of our region

- *Student achievements of girls are considerably higher than those of boys.*
- *Number of students with higher achievements is greater in countries of our region than in other countries (Europe).*

What does PISA assessment suggest?

- *Early diagnosis of the need for improvement*
- *Appropriate and timely action to improve the situation*

What does PISA assessment suggest?

- *Inclusion of all children in this type of education has clearly shown that it raises the level of student achievement to a considerable extent, and alleviates the impacts of socioeconomic inequality on student achievement.*

Diagnostic assessment and the need for it

- *This type of assessment is the most necessary in early education cycles, in preschool cycle and primary school cycle (primary 1-6)*
- *Other assessments measuring the level of achievement according to officially approved plans are more important to higher cycles, e.g. at the end of a chapter, at the end of the school year, school cycle etc.*

Policy aspects assessed by performance in PISA

- *Are parents putting efforts to encourage their children to learn more, longer, or do they allow them to spend time with their peers, in games etc?*
- *How much are educational qualifications valued against other qualifications or factors when applying for a job;*

Teacher and quality

- *Studies that take into account all of the available evidence on teacher effectiveness suggest that students placed with high-performing teachers will progress three times as fast as those placed with low-performing teachers.*

(Barber & Mourshed, 2007)

Specific aspects

- *Optimum level of educational service irrespective of social background and context*
- *Disadvantaged students demonstrate higher recuperating capacity*
- *Disadvantaged school –More important factor than other factors*

Specific aspects

- *Students from urban areas perform better than students from schools of rural areas (an obvious contrast in Albania)*
- *Family background exercises a considerable impact on education*
- *Social – economic factor has no primary impact*
- ***School** factor as the greatest influencer on student performance*

CONCLUSION:

- *Educational system effectiveness remains one of the essential elements and absolutely unconditional on social and economic factor and the level of development.*
- *Equity in education as presented by data from many countries, **is an attainable goal.***

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Sector Program Numeracy:

Promoting Mathematics Competencies in Pre-school and Early Grades

May 07, 2014
Kosovo in PISA 2015, Pristina, Kosovo
Presenter: Lena Maechel, Education Advisor

BMZ Federal Ministry for Economic Cooperation and Development

GLOBAL PARTNERSHIP for EDUCATION

Implemented by: giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Overview

- Introducing GIZ Sector Programme Numeracy
- Activities of BMZ / GIZ in the field of learning outcomes assessments in early grade numeracy
- What are the characteristics of early grade diagnostic assessments?
- What are the purposes of early grade diagnostic assessments?
- Examples of early grade diagnostic assessment tools
- What are criteria that I could use to evaluate the appropriateness of a tool?
- Example criteria (content domains, implementation)
- What different types of assessments exist?
- What is the purpose of the assessment?
- Community of practice / further information

08/08/2014 Page 2

Sector Program Numeracy:

The sector program was commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and is being implemented by GIZ in close cooperation with the Global Partnership for Education (GPE).

Goal:

Application-oriented approaches for strengthening of numeracy competencies in pre-school and early grades in low-income countries are ready for implementation.

Program Duration:

January 2013 – December 2014 (initial phase)

Focal topics and outputs of the GIZ Sector Program Numeracy

Mobile Education for Numeracy:
Advancing opportunities of mobile education for numeracy and use of mobile devices for assessments

Early Grade Development and Numeracy:
Identifying tools, methods and concepts for numeracy skills development in pre-school and early grades

Learning Outcomes and **Assessments in Numeracy**:
Promotion of learning outcomes and assessments for quality improvement and assurance

Utilizing Synergies and Lessons Learnt from Literacy:
Lessons Learnt and critical success factors from reading and writing for fast-tracking numeracy

Activities of BMZ / GIZ in the field of learning outcomes assessments in numeracy

- Coordination of multi-stakeholder "Working Group on Numeracy Indicators" (WGNI) in the framework of the Learning Metrics Task Force (LMTF)
- Landscape review of early grade numeracy assessments (2014, forthcoming)
- Data bank with information on assessment tools in early grade numeracy (2014, forthcoming)
- Desk Study "Early Primary Mathematics Education in Arab Countries of the MENA region" (2014, forthcoming)
- Desk Study "Learning Outcomes Assessments and Numeracy with Reference to Low-income Countries" (2012)

What are the characteristics of early grade diagnostic assessments?

- Non-curriculum based
- Sample or census-based
- Obtain a standardized score
- Once / twice per year
- Often not part of the assessment system in many countries
- Can focus on a few indicators or calculation of a total score

What are the purposes of early grade diagnostic assessments?

- Gather data on early learning
- Examine students' strengths and weaknesses
- Adapt / target instruction based on data
- Design of early interventions
- Place students in remedial programmes
- Inform curriculum design
- Increase parental involvement in childrens' learning
- Inform policy dialogue
- Evaluate programmes

Examples of early grade diagnostic assessment tools

- Early Grade Math Assessment (EGMA)
- Test of Early Mathematics Ability (TEMA-3)
- Annual Status of Education Report - Mathematics (ASER)
- "Capability" in Kiswahili – Mathematics (UWEZO)
- Early Numeracy Test (ENT)
- Tools for Early Assessment in Math (TEAM)
- KeyMath Diagnostic Assessment (KeyMath-3)
- I Can Do Maths (ICDM)
- Others (EMDA; PAL-II)

What are criteria that I could to evaluate the appropriateness of a tool?

Databank will make information with respect to the following categories* available:

- Overview (date, type, grade levels, oral vs. paper/pencil, cost)
- Content (domains, item types, adaptable, alternate forms)
- Implementation (materials, training, time, technology-based)
- Analysis and Reporting (scoring, scaling, reporting, cut-scores, reliability, comparability, technology-based)
- Evaluations (strengths, weaknesses, suggestions)
- Further Information (developer, point of contact, web link)
- User Feedback (rating system, comments)

*Criteria taken from: International Guidelines for Test Use (ITC) & Standards for Educational and Psychological Testing (AERA, APA, NCME).

Example: tools with respect to content domains

Tools	LMTF Pre-Primary and Primary School Domains					
	Number Sense	Operations	Spatial Sense and Geometry	Patterns and Classification	Measurement and Comparison	Math Applications
ASER	X	X				
Uwezo	X	X				
EGMA	X	X		X		X
ENT	X			X	X	
ICDM	X	X	X	X	X	X
KeyMath	X	X	X		X	X
TEMA	X	X		X		X
TEAM	X	X	X	X	X	X

Example: tools with respect to implementation characteristics

Tool	Materials	Administration time	Enumerator Training	Timed items	Technology-based application
EGMA	Instruments, reports, guidance notes, webinar	15 min per student	Guidance notes, webinar	Yes and no	**Tablet, laptop (Tangerine, eEGMA)**
TEMA-3	Examiner's manual, picture books (A&B), record booklets, manipulatives, assessment probes, instructional activities booklet	30 min per student	Examiner's manual	No	**No**
ASER	Administration guide, scoring sheets	10 min per student	Administration guide, video	No	**No**

What different types of assessments exist?

- Public Examinations

For selecting students for higher levels of education

- National Assessments

For system evaluation, trend analysis and instructional improvement – not on individual students

- International Assessments

For system evaluation, international comparison, trend analysis, instructional improvement

- Classroom-based Assessments

For assessment of student strengths and weaknesses, targets classroom instructions, development of materials, instructional and learning improvement

- Diagnostic Assessments

For gathering data on early learning, examining student strengths and weaknesses, targeting instruction, can be used for program evaluation

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What is the purpose of the assessment?

Many assessments exist to measure early numeracy – the most important part of assessment is to define the purpose.

We need to determine whether information is needed for:

- measuring students achievements
- developing/improving classroom instruction
- program/progress evaluation
- policy dialogue

→ Key is to collect useful assessment information for the particular needs and then ensure that it is applied towards a better learning environment for children.

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BMZ Federal Ministry for Economic Cooperation and Development

GLOBAL PARTNERSHIP for EDUCATION

Please join our Community of Practice
Numeracy for Development

http://www.globalpartnership.org/our-work/areas-of-focus/numeracy/community-of-practice/

https://collaboration.worldbank.org/groups/numeracy

Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Save the Children.

08/08/2014

More Information:

http://www.bmz.de/bildung

http://www.globalpartnership.org/our-work/areas-of-focus/numeracy/

http://www.giz.de/expertise/downloads/2013-Sector_Programme_Numeracy.pdf

Contact:

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lena.maechel@giz.de

Albanian Early Grades Reading Assessment (A-EGRA)

Arlinda Gashi Bajgora
Deputy Chief of Party
USAID's Basic Education Program

Part 1 – What is A-EGRA?

- Individual reading test for grades 1-3
- Short sub-tests of different skills
- About 10-15 minutes per test taker
- Designed for use by USAID partner countries
- EGRA has so far been used in more than 40 countries and 80 languages
- Adapted into Albanian by the USAID's BEP

Key Competences of Successful Readers

Listening	Receive a spoken message, extract the important information, assign meaning.
Phonemic awareness	Hear, identify and manipulate the individual sounds that make up spoken words.
Phonics	Connect, blend and segment **graphemes** (writing) and **phonemes** (sound).
Fluency	Read quickly and accurately, grouping words like speech.
Vocabulary	Know and process word meanings; make networks of words based on meaning.
Comp-rehension	Understand factual information; make infer-ences based on knowledge and experience.

Defining Levels of Competence

Level	Meaning	Action Required
Established	Has mastered the competence being assessed.	Low risk of future problems; most likely to benefit from "enrichment" activities.
Emerging	Has progressed beyond a minimal level.	Needs continuing practice, may need some individual attention; but is unlikely to need intensive support.
Deficit	Has achieved at a minimal or insufficient level.	Needs intensive, tailored support, preferably one-on-one

A-EGRA Subtests

- 1. Phonemic awareness
- 2. Letter name/sound knowledge
- 3. Familiar word reading
- 4. Unfamiliar word reading
- 5a. Oral reading fluency
- 5b. Reading comprehension
- 6. Listening comprehension
- 7. Dictation

Sub-Tests 1 and 2

- Assess basic understanding of letters and sounds
- Test the ability to:
  - separate words into their component sounds
  - map each sound to its corresponding letter
- Should be established by the end of grade 1

Sub-Tests 3 and 4

- Assess speed of:
  - sounding out unknown words (“decoding”)
  - recognizing known words (“sight” vocabulary)
- Successful readers use both
- Should be established by early in grade 2

Sub-Tests 5 and 6

- Assess ability to:
  - read accurately, with appropriate phrasing, and at a sufficient rate
  - respond correctly to literal and inferential questions about a text (read or heard)
- Compare reading and listening comprehension scores

The Study

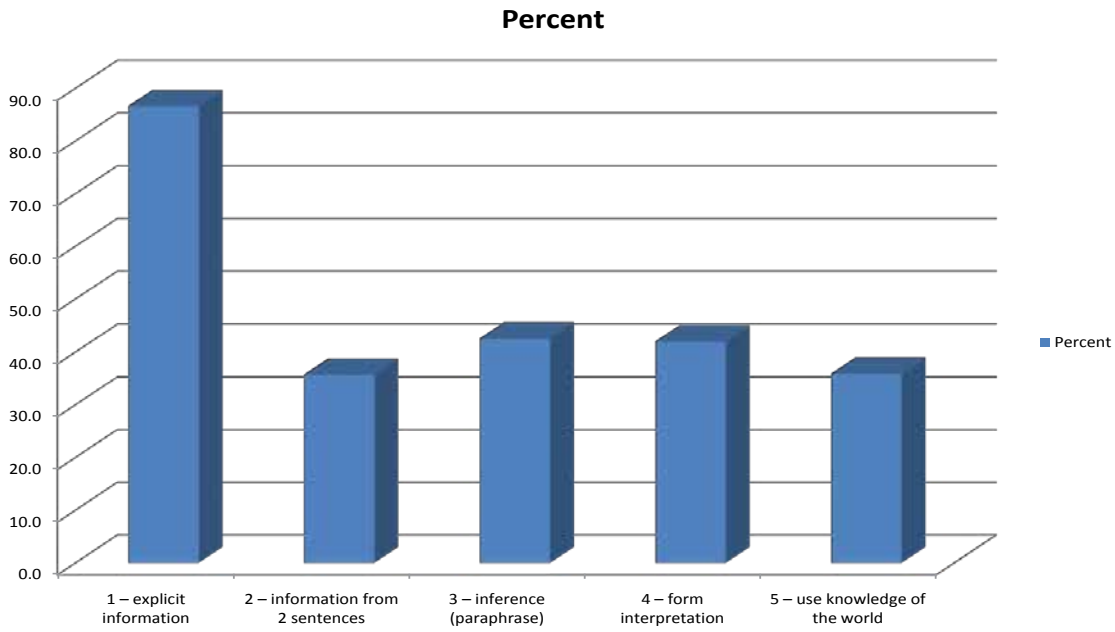
First goal of USAID Education Strategy 2011-15: "Improved *reading skills* for 100 million children in primary grades by 2015".

- A baseline is needed to measure improvement in reading after 2 years' schooling
- Results can also:
  - Inform BEP reading strategy
  - Help create wider awareness of needs and priorities for action

The results

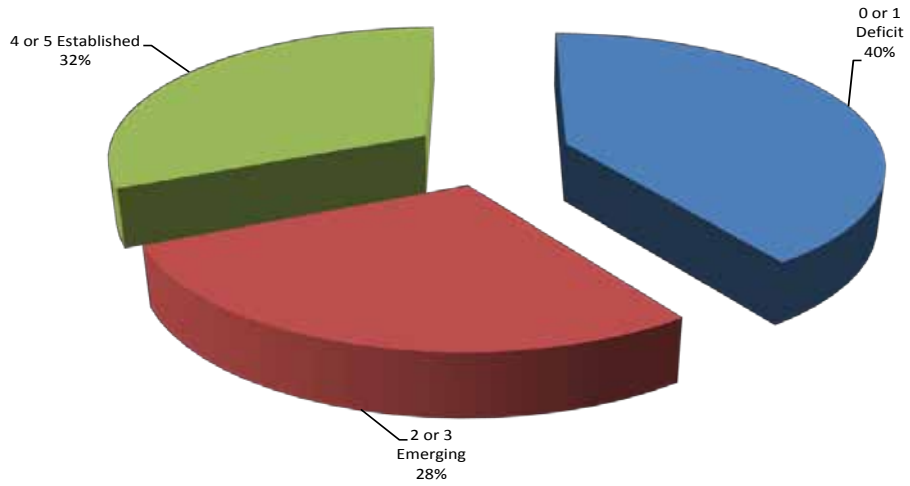
- There are almost no non-readers in the sample
- Phonemic awareness and letter recognition are good
- Word recognition and decoding skills are generally acceptable
- Dictation results are very good

Comprehension – What can students do?



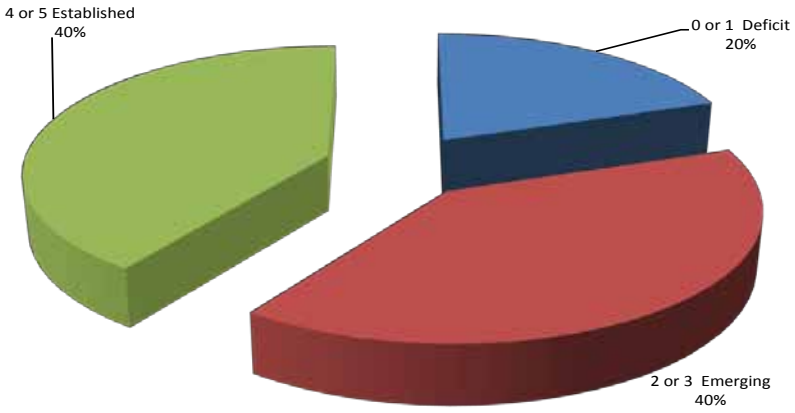
What does this mean?

- About 40% of the test takers had only a very minimal level of comprehension:



Listening Comprehension

- Only about 20% of test takers were in the bottom category on listening comprehension



Recommendations after the study

- Set national reading strategy – emphasis on fluency and comprehension
- Promote awareness amongst parents of the importance of encouraging children to read with fluency and comprehension
- Train teachers to use A-EGRA and encourage them to assess individual students' reading skills
- Provide better guidance materials for teachers on how to teach fluency and comprehension

The Basic Education Program has …

- developed an Early Grades Reading Assessment (EGRA) in Albanian language;
- developed an accredited course in reading instruction, for Grade 1 – 5 teachers
- developed supplementary reading materials, for Grades 1 – 2
- developed an accredited course for teachers in the use of EGRA
- developed a guidebook on reading, for parents, and a training workshop for parent councils.
- developed reading comprehension texts for grades 2-5 and 8-9 based on the PISA descriptors
- organized a round table on Albanian EGRA with MEST officials and came out with recommendations.

An impact study using the EGRA will be conducted in June 2014

7 MAY 2014 - CONFERENCE WORKSHOP V

PISA AND SCHOOL FEEDBACK

MODERATOR:
Agim Bërdyna, Department for the Development of Pre-University Education, MEST, Kosovo

PRESENTERS:
Dr Heike Wendt, TU Dortmund University, Germany
Divna Paljevic Sturm, NPM at the Examination Centre in Podgorica, Montenegro

WORKSHOP COORDINATOR:
Vesel Hoda (GIZ/CDBE)

Mr Agim Bërdyna, Director of the Department for the Development of Pre-University Education at the MEST, welcomed the participants of the working group and invited them to join him in an open discussion of the topic 'PISA and School Feedback'. He stressed that the purpose of the workshop was to discuss options on how to provide feedback based on PISA results to schools that have participated.

The workshop began with a presentation by Dr Heike Wendt of TU Dortmund University, Germany. Dr Wendt's presentation focused on the importance and usefulness of school feedback. She explained that school feedback can be seen as an opportunity to improve quality, but that different proposals and goals should be clearly defined. She also presented a number of key criteria for the production of comprehensive school reports. The presentation emphasised that the purpose of international comparative studies such as PISA is to compare the achievement of students in the participating countries in different subject domains and that the reporting of results at the individual level is not the intention. As a consequence, the study design does not cater for school feedback as such and options for reporting PISA results at school level are very limited; at best they are a carefully calculated 'by-product'. Two solutions to this problem were proposed. Firstly, a comprehensive strategy for education monitoring, as is currently in place in Germany, has been introduced. The underlying assumption of this approach is that, in order to enhance individual school development processes, it is necessary to have in place a 'national strategy' on how to align the different interests and existing examinations in place. Secondly, an instrument has been developed which is designed to address the technical limitations of PISA: the PISA-Based Test for Schools.

Ms Divna Paljevic Sturm – PISA NPM at the Montenegro Examination Centre – presented Montenegro's experiences with PISA assessment. She presented the country's PISA results and described how Montenegro cooperates with other countries in the region. According to Ms Paljevic Sturm, the fact that students

who take part in PISA are 15 years old is a problem as regards school feedback as these students are from the first grade of secondary school. Administration of PISA tests starts in March/April, so the school reports reflect the quality of primary rather than secondary education. She also pointed out that PISA results reflect performance at country level rather than school or individual level. Nevertheless, her presentation made reference to certain advantages of the system, for example that the results can be used by schools for their further development.

The participants were interested to know more about the reliability of the results and were informed that each student only works on a subset of all test items and that booklets are assigned to students at random, meaning copying from another student is virtually impossible. Another concern was raised about differences in the subject matter students are taught and variations in curricula. In addition, many teachers may be surprised by the results and may maintain that PISA assessments do not test the kind of knowledge that students should possess or be taught.

The participants concluded that PISA is primarily designed to give feedback at national level for institutions and policy makers but that schools could also use the results in order to improve their quality of teaching. It was agreed that there should be an internal PISA assessment by which the schools can be evaluated. It is important to use the experience gained by other countries in the region and to inform all stakeholders in advance about the aim of the assessment and how to use the results.

On the basis of the discussions, the working group formulated the following challenge and recommendations:

CHALLENGE:

1. Fully implementing new curricula in all schools in Kosovo.

RECOMMENDATIONS:

1. Set up an orientation platform for schools to enable them to use PISA results to increase their capacities.
2. Raise awareness among pupils, teachers, parents and schools about the importance of using the results of PISA assessments.

PISA AND SCHOOL FEEDBACK

Heike Wendt

Institut für Schulentwicklungsforschung (IFS)

Different functions and purposes of Evaluations

- promote self-reflection,
- supporting learning processes by diagnosis (formative evaluation),
- certification of achieved learning outcomes (summative evaluation),
- accountability about the effect of the resources used (summative evaluation with a balance perspective), and
- monitoring of educational standards with the aim to capture the overall situation (large scale assessment).

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Types of large-scale evaluations

- standardized, national and / or international achievement test,
- centrally organized final examinations,
- school achievement studies at the macro level, and
- standardized, national inspections or audits.

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International Comparative Large Scale Assessments

- The purpose of International Comparative Achievement Studies, such as PISA,
  - is to compare the achievement of students from the participating countries in different subject domains.
  - Note: Reporting results at the individual (student) level has never been the intention of International Comparative Achievement Studies!

(Rutkowski, Gonzalez, Joncas, & von Davier, 2010)

Research on School Feedback

- Feedback may have an positive effect for students learning (Hattie & Timperley, 2007; Schägen et al., 2006).
  - Hattie and Timperly (2007) concluded from their meta-analyses of 196 studies that feedback generally has a positive effect on school performance, especially in in terms of helping teachers and students identify possible strategies for optimizing future learning activities.

Two traditions to discuss the Value of School Feedback

- School effectiveness research (e.g. large scale assessment) focuses on school learning outcomes and the conditions for successful learning outcomes.
- School improvement research (e.g. individual school research) focuses on development processes in the school and the interaction between school characteristics and the environment.

Mirazchiyski, 2013

Value/Purpose of School Feedback on the basis of large scale assessments

Schools

- feedback serves as a "mirror" that enables them to self-evaluate their effectiveness.
  - Opportunity to compare the results of one's own school with other similar schools can help that school improve its work.
    - Should the school identify its performance as satisfactory or poor, it can look for explanations, in general, identify reasons for certain results, in particular, and then take action (based on evidence).

Governments and education authorities (Schägen et al., 2006):

- promoting self-evaluation within schools ("health checks")
- accountability purposes (ranking, using "league tables").

Mirazchiyski, 2013

Institut für Schulentwicklungsforschung (IFS)

School Reports: „Must haves"

Golden Rule: The school must find the information contained in the feedback from relevant to its circumstances

Introduction

- short description of the report and its objectives and a note on confidentiality
- general information about the study (the organization conducting it, the study's objectives, and the number of participating countries in each population)

A general overview of the country sample and its characteristics

- The information included here should cover the number of participating schools and tested students, the average number of students per school, and the percentages of boys and girls per school and overall.

An outline of the structure of the report

- brief explanations of the content of each section of the report.

Information on the sample particular to the school receiving feedback

Descriptions of the background variables used to classify the school and to compare its students' achievement with the achievement of students from the group of similar schools.

Information on the average achievement of the school's students, with comparisons of these students' performance with the performance of students from the group of schools with similar background characteristics and spread of results (heterogeneity).

Concluding remarks

Mirazchiyski, 2013

Institut für Schulentwicklungsforschung (IFS)

School Reports: „Must haves“

Golden Rule: The school must find the information contained in the feedback from relevant to its circumstances

Introduction

- short description of the report and its objectives and a note
- general information about the study (the organization objectives, and the number of participating co

A general overview of the country sample

- The information included here ng schools and tested students, the aver the percentages of boys and girls per school

An outline of th

- brief exp section of the report.

Information to the school receiving feedback

Descriptions o and variables used to classify the school and to compare its students' achiev with the achievement of students from the group of similar schools.

Information on the average achievement of the school's students, with comparisons of these students' performance with the performance of students from the group of schools with similar background characteristics and spread of results (heterogeneity).

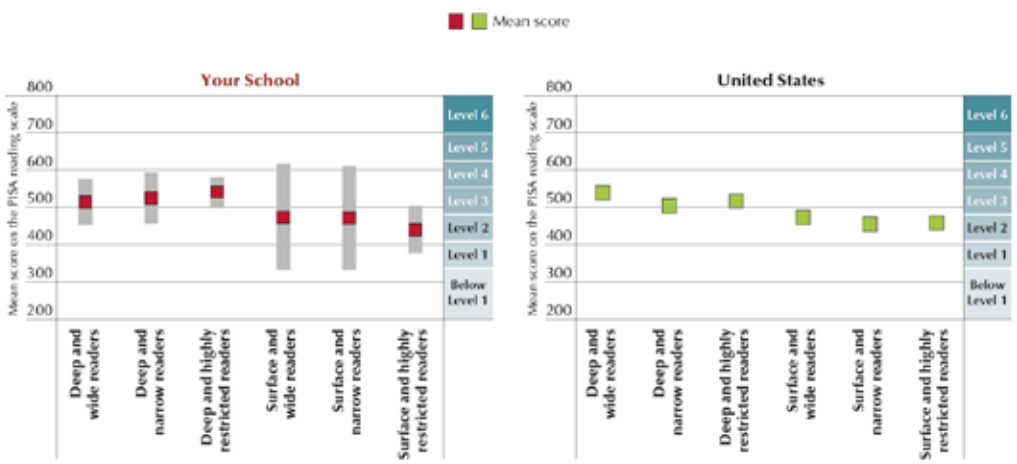
Concluding remarks

One of the most important features of the report should be that its intended readers can easily comprehend the information given

Mirazchiyski, 2013

Example of a school report

Figure 3.7 ▪ **How well different types of readers read at your school, in your country and internationally in PISA 2009**



http://www.oecd.org/pisa/aboutpisa/OECD%20Test%20for%20Schools%20-%20Herndon%20High%20School.pdf

Limitations: Data perspective

- LSA have complex designs, sampling strategies, and data-scaling Procedures
  - to optimize measurement and
  - reporting at national level
  - while reducing the studies' operational procedures and costs.
- As a consequence, as the unit of analysis (region, district, city, school, class) becomes smaller, the risk of obtaining unreliable, or even invalid, results increases.

Mirazchiyski, 2013

Institut für Schulentwicklungsforschung (IFS)

Assessment designs from large scale assessments and their implications

- Two aspects of large scale assessment designs should be considered:
  - sampling design and implications for school-level reporting, and
  - assessment design and implications for school-level reporting.
- Sampling design:
  - PISA used a complex sampling design:
    - First schools are sampled, and than students by age within schools.
  - Selecting students like this the data might not yield a representative sample of the students in the school but across the country.

Mirazchiyski, 2013

Institut für Schulentwicklungsforschung (IFS)

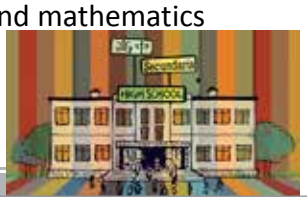
Assessment designs from large scale assessments and their implications

- Assessment design:
  - PISA uses multipel-matrix sampling to assess the students:
    - No student takes all items, and no student receives all items.
  - That is, there is some uncertainty about how well the test measures the content-domain abilities of any one student (measurement error).
  - Depending on the concrete items a student answer, and depending on the school size, the uncertainty is more or less large across different schools.
  - Simulation studies have shown, that when the group size becoms too small (e.g. class size with 15 or fewer students), the measurement error becoms so large that reporting results even on class level is useless (Who been interested in the statement that the class average is somewhere between 300 and 600).

Mirazchiyski, 2013

Solution I: The PISA-Based Test for Schools

- student assessment tool geared for use by schools and networks of schools to support research, benchmarking and school improvement efforts
- provides descriptive information and analyses
  - on the skills and creative application of knowledge of 15-year-old students in reading, mathematics, and science, comparable to existing PISA scales (when administered under appropriate conditions)
  - on how different factors within and outside school associate with student performance:
    - students' socio-economic backgrounds,
    - their attitudes and interests in reading, science and mathematics
    - the learning environment at school schools



source:
http://www.oecd.org/pisa/aboutpisa/pisa-basedtestforschools.htm

Solution II: Comprehensive strategy for educational monitoring: Example Germany

In June 2006, the Standing Conference adopted a comprehensive strategy for educational monitoring which consists of four interconnected areas:

1. participation in international comparative studies of pupil achievement
2. central review of the achievement of educational standards in a comparison between the federal states (Länder)
3. comparative studies within the Länder in order to review the efficiency of individual schools
4. the joint education reporting of the Federation and the Länder

source: http://www.kmk.org/fileadmin/doc/Dokumentation/Bildungswesen_en_pdfs/dossier_en_ebook.pdf (page 225)

(KMK, 2006)

Further References

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PISA and Montenegrin experience

Divna Paljevic Sturm
Examination Centre of Montenegro

Pristina, May 2014

Educational Context - reform

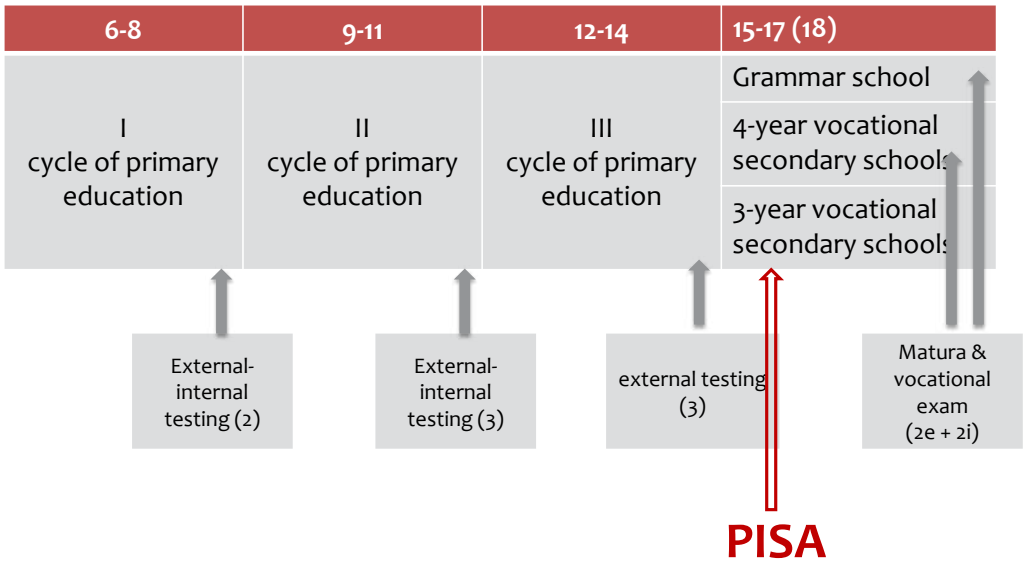
Education reform 2000 –

- *Book of Changes of Education System in Montenegro* (2001)
  1. Pre-school
  2. Primary
  3. General secondary
  4. Vocational secondary
  5. Adult

Educational Context - institutions

- Ministry of Education
- Bureau for Education Services
- Centre for Vocational Education
- Examination Centre

National examinations in Montenegro



Participation in PISA

- 2006, 2009, 2012 – paper-based
- 2015 – computer-based

- 70-80 % of 15-year-olds – PISA participants
- all secondary schools (50)
- two languages in 2009 and 2012
- only one language in 2015

Montenegro and PISA – cooperation with other NCs

Albania

- Translated and verified test-booklets
- Translated and verified student questionnaires

Serbia

- Exchange of translated items (1/2 each country)

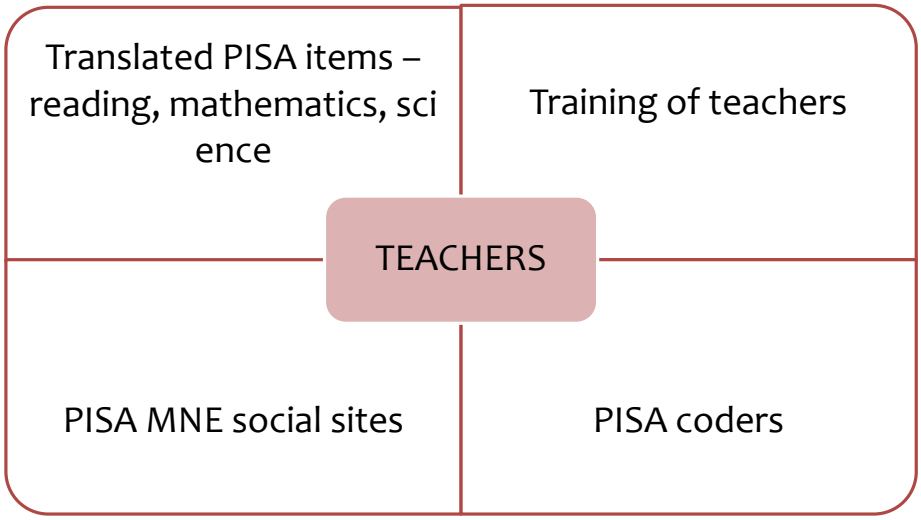
Slovenia

- Advice and solving problems

PISA and schools

- Communication with schools
  - Principals, SCs, TAs
  - Teachers
  - Students

PISA and teachers



PISA and students

PISA MNE social networks in MS 2012

PISA MNE and social networks - MS 2012

- About PISA
- PISA items
- Questions, comments, suggestions

▪Facebook
most successful with students,
pedagogues and teachers

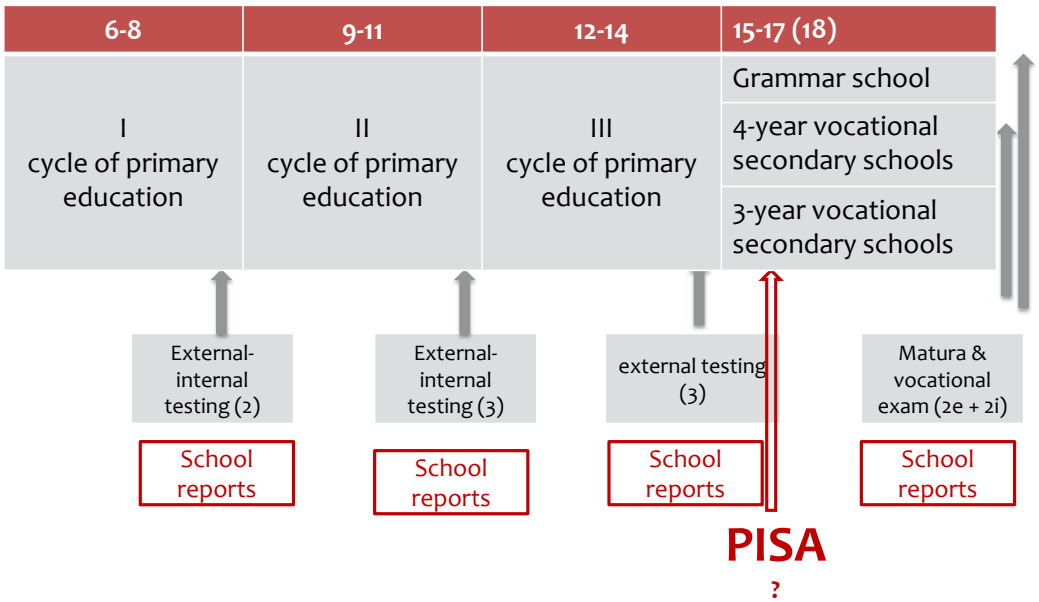
PISA reports

1. **National report –** education specialists, advisors, teachers
   - About PISA
   - Domains – framework, levels, examples of items
   - Equity
   - PISA results
   - Recommendations

2. **Summary report** – policy makers

No **school reports** – why?

School reports in Montenegro



Example of school reports

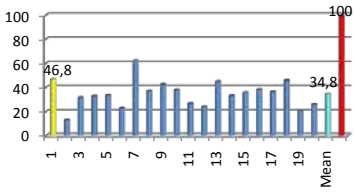
National assessment at the end of cycles 1 and 2 (2008)

- Aims of the assessment
- General description
- Sample
- Instructions how to interpret data from graphs and tables
- Subjects (national and school results and ranking by domains)

Prosječno postignuće iz predmeta engleski jezik – oblast Vokabular, **na državnom nivou je 244,7505.** Prosječno postignuće učenika koji su test radili na albanskom jeziku je **253,76.** Prosječno postignuće učenika **vaše škole je 252,418.**

Pilot of national examination at the end of primary education

- Aims of the examination
- General description
- Sample
- Instructions how to interpret data from graphs and tables
- School results in comparison with national results



PISA school reports – why (not)?

Advantages

- Schools are interested in results
- Results used as part of variety of school plans such as
  - School development plan
  - professional development plans
  - Action plan
- Certain school bodies use results
  - Middle managers, subject areas groups, school councils, individual teachers
- Bureau for education services
  - External evaluation of schools (supervision)
  - CPR

Problems

- Received results at **national level,** but not at school or individual level
- Which schools are assessed – primary or secondary?
  - PISA eligible students are in grade 1 of secondary schools. Administering of PISA starts in March/April – school reports do not reflect quality of instruction in secondary but in primary schools.
    - E.g. Podgorica Grammar School – 400 students from 30 different primary schools.
    - Is the sample representative for each of primary schools?

7 MAY 2014 - CLOSING PANEL

CLOSING PANEL: RESULTS AND RECOMMENDATIONS

At the end of the second day of the International Conference on 'Kosovo in PISA 2015: The Effect of Student Assessment on Education Quality', the spokespersons of the five different workshops were invited to join the Deputy Minister of Education, Science and Technology, Mr Nehat Mustafa in a closing panel discussion of the specific recommendations and challenges elaborated within the themed workshops.

The panellists and their respective workshop recommendations and challenges were as follows:

Ms Igballe Cakaj of the Division for Teacher Training, MEST presented the following challenge and recommendations from Workshop I 'Lessons learned in implementing reforms after PISA':

Challenge

1. Ensuring a positive response to the results published in local and international reports.

Recommendations

1. Provide timely information about the PISA programmes of educational institutions.
2. Incorporate the conclusions of PISA reports into education reform.

Mr Kelvin Gregory of the Australian Curriculum, Assessment and Reporting Authority and Mr Fatmir Elezi of the Division of Evaluation, Standards and Monitoring, MEST presented the following challenge and recommendations from Workshop II 'PISA and the Assessment System':

Challenge

1. The challenge is to develop ways of using external assessments (e.g. Grade 5, Year 9, Matura, PISA) to improve classroom teaching and learning.

Recommendations

1. Transparency: The first recommendation is to improve the transparency of all assessments and the use of those assessments. This includes classroom assessments and all external

assessments. The aim is to ensure that students, teachers and parents can better understand what has been assessed, how and why it has been assessed, and how to interpret the results so as to guide and direct future teaching and learning.
2. Accountability: The second recommendation is that there should be a more comprehensive system of accountability. This will require clear statements on roles and expectations, the allocation of resources to enable people to fulfil these roles, and a system of corrective action should a person fail to adequately perform their duties.

Ms Rukije Vllasa of the Faik Konica School in Pristina presented the following challenge and recommendations from the workshop III 'PISA: Inclusion and Education Quality':

Challenge

1. Addressing the lack of evaluation teams/diagnostics for children with special needs.

Recommendations

1. Engagement of professional staff in schools (academic advisor, school psychologist).
2. Engagement of supportive teachers for children with special needs in schools, including teacher training programmes on inclusiveness for regular teachers.
3. Improvement of school infrastructure to facilitate inclusion.

Ms Afërdita Kryeziu of the Division for Planning and Analysis, MEST presented the following challenge and recommendations from Workshop IV 'PISA and Early Diagnostic Assessment':

Challenge

1. Adopting international instruments for early diagnostic assessment in the local context.

Recommendations

1. Training of teachers (pre-service and in-service) in the use of different tests in early diagnostic assessment.
2. Involvement of different structures (school, family, etc.) in early diagnostic assessment.

Ms Vera Remškar of the Foundation Together Kosova presented the following challenge and recommendations from Workshop V 'PISA and School Feedback':

Challenge

1. Fully implementing new curricula in all schools in Kosovo.

Recommendations

1. Set up an orientation platform for schools to enable them to use PISA results to increase their capacities.
2. Raise awareness among pupils, teachers, parents and schools about the importance of using the results of PISA assessments.

After the presentation of the results of the working groups, there was a lively discussion between the panellists and audience.

The panel was closed by the Deputy Minister of Education, Science and Technology, Mr Nehat Mustafa.

Mr Resul Sinani, conference moderator: I would like to invite the Deputy Minister of Education, Science and Technology, Mr Nehat Mustafa, to take the floor for the closing speech of this two-day conference.

Mr Nehat Mustafa, Deputy Minister of Education, Science and Technology, MEST

On behalf of the Ministry of Education, Science and Technology, the Minister of Education and the whole Cabinet, allow me to thank all the participants who have helped to make this conference a success over the last two days and who have enabled us to gain a clearer idea of what exactly PISA is, what we expect from it, and what challenges are associated with it. Today we have had the opportunity to consider five challenges and more than ten recommendations presented by the working groups. This conference will certainly have a profound effect on our preparation as a country for PISA assessment in 2015.

We have the potential to achieve great things if we do not see this endeavour solely as the responsibility of the Ministry of Education, Science and Technology, but rather as the responsibility of all of us, regard-

less of which institution we belong to. We must now extend our sphere of influence, raising awareness among the public and in our work places. If there are no supportive policies for schools, which would not be chosen by the Ministry of Education, Science and Technology but by the OECD, then there may be no results. We should not focus solely on the coming results or on our ranking, but should be aware that we have taken on a significant responsibility that we have embraced consciously and gladly. We hope that this process will benefit us all.

At this point, may I also reiterate our gratitude to the other countries in the region who shared their previous PISA experience with us, as well as to the international experts who supported us in this process. I would also like to encourage teachers and anyone else involved in education to visit the website of the Ministry of Education, Science and Technology, where they can find a wide range of useful documents, some of which the participants in the working groups were not previously aware of. We have developed a large number of administrative instructions and other documents specifically related to the assessment process. It remains the responsibility of each of us to visit the website and search for and read the documents that are already available. I should also mention that tests organised in Kosovo are now all standardised. This was achieved in close cooperation with donors and relevant experts.

Allow me to specifically thank Ms Dagmar Fuchs-Schmitz and the GIZ-CDBE Project for organising this event. I would like to express our gratitude to the representative of OECD Paris, Ms Jenny Bradshaw, who has been with us at the conference for the full two days. A big thank you also to Mr Kelvin Gregory and the representatives of the Balkan countries for their contribution, and of course to all of you for taking the time to make this conference a success.

Thank you for your participation!