

samagazine

MARCH 2012

Understanding the OECD Programme for International Student Assessment

European School Heads Association

ESHA magazine is the official magazine of the European School Heads Association, the Association for school leaders in Europe. ESHA magazine will be published eight times per school year. You are welcome to use articles from the magazine but we would appreciate it if you contacted the editor first.

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We are proud to present the new ESHA magazine for March 2012. We hope it will give you a lot of information about what is going on in the world of education.

I've just returned from a trip to Seattle, attending the annual convention of NAESP (National Association of Elementary School Principals). Besides a very successful conference, there were two speakers that gave the convention an outstanding character: Andy Hargreaves and Diana Ravith. Diana worked at the start of the Federal US legislation called "no child left behind", a law that leads to excessive testing and to huge scrutiny of principals and teachers. Schools must use standardized tests and must improve every year. In her book *The Death and Life of the Great American School System: How Testing and Choice Are Undermining Education* (New York: Basic Books, 2010) she now takes stand against this legislation that increases political influence in education and undermines the quality of education as a whole.



Ton Duif and Diana Ravitch

While I was waiting for my connecting flight to Amsterdam, in Minneapolis, I read the Sunday Star Tribune headline with capital letters: "Like never before, teachers under scrutiny". How teachers perform in the classroom is under unprecedented and intensifying scrutiny in Minnesota, where all of the 52,000 public school teachers will be subject to an annual evaluation, fearing punishment or dismissal if the evaluation is unsuccessful. Andy Hargreaves and Diana Ravith made it perfectly clear; it's not about bonuses or incentive rewards, it's about trust and collaboration. All countries that have standardized tests and public ranking tables have low Pisa results. We see this modern liberal movement in many countries. We must learn from the good performing countries like Finland. This means high investments in professional development for teachers and heads, collaboration between schools, high trust for teachers instead of bullying them, and connecting schools to their social environment; their community. This, together with sufficient resources will lead to better results.

I wish you all a happy Easter.

Ton Duif

ESHA president

Implementation of a New Curriculum in Cyprus Primary Educational System



PANAYIOTIS KYROU
HEAD OF CYPRUS PRIMARY SCHOOL HEAD
TEACHERS ASSOCIATION

The main goal of education in Cyprus, like in every country, is to prepare students to become active and creative people in all areas of their future lives: social, civic, cultural and economic. Being the adults they should participate actively at work, politics, economy and culture with understanding the past and the present and respect for the traditions and values of their ancestors. In some years our pupils will have to take a responsibility for building a new society – a society based on unrestricted freedom, democracy, prosperity and social justice.

In order to fulfill those dreams and to satisfy a diachronic necessity of students, parents, educators and society for the establishment of a democratic and human school environment and to increase the standards of the Education in general, Cyprus Primary Education implemented a new National Curriculum.

It is obvious that the aims of the New Curriculum must be accomplished through the shaping of a democratic and "human" school. It is a school of absolute respect for human dignity, and moreover, a school in which the pupils have the right and the capacity to experience their childhood and adolescence not solely as an arduous period of preparing for adulthood, but as the most creative and happiest period in human life. All the children - regardless of any

The New Curriculum improves the school culture and the pupils' performance.

particularities they may have - study together in order to get prepared for their common future and no child will be excluded, marginalized, stigmatized, disregarded or suffers because of its individuality or dissimilarity.

The new school is organized in such a way as to offer every child the possibility to achieve the educational aims without making any cutbacks in the quantity and the quality of the educational benefits. It is

worth mentioning that in all school subjects more emphasis is now given to teaching and learning.

I would like to indicate some changes in the Timetable which have been introduced (apart from upgrading the existing subjects).

 Four or five additional periods every week have been introduced to the school timetable, aiming at helping pupils to acquire and consolidate the basic part of knowledge and providing assistance to all children, regarding the difference in ability of each child.

- The duration of the second break is increased to five more minutes and the seventh and last periods are decreased up to five minutes per day.
- The subject "Getting to Know My World" is introduced in the 1st Grade and the subject "Physical Sciences and Technology" is introduced in the Grades 1-4
- English language is introduced from Pre-Primary school.
- The thematic areas 'Life Education' and "Environmental Education" are introduced in aiming at satisfying the school needs by providing teachers and children with opportunities to be involved in various interdisciplinary activities and projects related to issues such as Health Education, Consumer Education, Traffic Education, Intercultural Education.

To conclude, it is clear that the New Curriculum improves the school culture and the pupils' performance. It is needless to say that nothing will be changed unless everybody understands the necessity of those changes.

Personally, I strongly believe that the enthusiasm of the people who are involved in this process will continue and all the aims of the New Curriculum will be successfully reached in the future.



March 28-29

Nordic School Leader Conference in Gothenburg, Sweden

May 4-6

NAHT conference in Harrogate

June 28

ESHA board meeting Utrecht

August 2-6

ICP council meeting Johannesburg, South Africa

October 29-31

13th ESHA Biennial Conference in Edinburgh, Scotland

News from International Confederation of Principals (ICP)

SJOERD SLAGTER
PRESIDENT DUTCH SECONDARY EDUCATION COUNCIL
FUROPEAN REPRESENTATIVE OF ICP



Dear European ICP members,

The sun is shining again, spring's approaching. However, financially speaking it's still autumn. Many schools in European countries face cutbacks. The society's expectations of schools in every country are high and the budget is, as an effect of the financial crisis, under pressure. Despite

the financial crisis, the Dutch organization for secondary schools came to an agreement with our Ministry of education about an investment of €500,- million in professional development over the next four years. Schools will invest more or less the same amount of money on professional development in this time. This total budget should lead to a more professional sector. On the other hand however, Dutch schools face serious budget cuts on children with special education needs, on teacher salaries and on books.

Whatever the budget cuts and financial conditions are they do not affect the important goal of all principals and teachers, which is preparing our pupils for a complex and globalized 21st century. We're still aiming to give our students the education they need.

Last month I've met several colleagues in different countries. I went to Belgium and France to meet colleagues from these countries and in Ljubljana I met many European colleagues at the ESHA general assembly. The story seems to be the same in all these countries: despite the financial difficulties, we're giving our students the best possible education. In my view, that's also the difficult duty of educators.

In this ESHA magazine you'll find articles from Ireland and Italy about the effects of cutbacks in their countries which were previously published in the ICP newsletter. Furthermore, there is more information about the council meeting in South Africa. I hope we can discuss the challenges we face in South Africa together. Kind regards,

ICP Council meeting 2012 in Jo'burg

This year's council meeting will be held at the Southern Sun Hyde Park Hotel, Sandton, Johannesburg, South Africa beginning at 9:00am on Friday August 3rd and finishing on the afternoon of Monday August 6th. The organization is aiming for at least two sessions for professional development. The Annual General Meetings of both ICP and PLP will take place. The ICP AGM will see the

election of two of the Regional Executive Representatives to hold office from 1/1/2013 until 31/12/2014. The regions to nominate for the elections are Africa and Europe. In addition, the Executive General Representative will also be elected to hold office also from 1/1/2013 until 31/12/2014.

We will also have speakers on a variety of issues of professional interest as well as a presentation from the locals on South African education. The final day will involve a morning of touring local schools and seeing South African education for yourself.

The partners hosting this meeting are the South African Heads of Independent Schools and the South African Principals Association. The costs for accommodation are being kept very reasonable. Current indications are that 5 nights' accommodation package will cost around R 7,878 (\$1045 US Dollars, €780, £660, AU\$970, CAD\$1040) for the 5 nights (in Thursday 2nd August, Out Tuesday 7th) and this includes breakfast, lunch, dinner, morning and afternoon teas.

There will be an ICP Council Meeting Registration area on the ICP website by the end of March. The Council Meeting Registration Fee will be R3,000 SA Rand: (\$400 USD, €300, £250, AUD \$370, CAD\$396) This covers the cost of meeting papers, room hire, audio visual aids, other meeting costs transport to the formal dinner, predinner drinks, entertainment, the cost of the dinner and VAT.

African delegates can register directly with SAHISA for the ICP Council Meeting if you prefer not to use the PayPal facility on the ICP Website. Delegates are asked to book their accommodation directly with the hotel.

Most importantly, to access the meeting accommodation package, delegates must contact the Reservations Supervisor Patience Mbombela (Tel: +27 11 341 8080 | Fax: 0866367909), Southern Sun Hyde Park, Sandton. Her Email is patiencem@southernsun. com Don't forget to mention BLOCK CODE 0108IS when booking accommodation (and conference package) at the hotel. Hyde Park is a good area of Johannesburg and safety will not be an issue.

For more information please visit the ICP website at www.icponline.org.

Cutbacks in Education Funding in Ireland in 2012

BY GERRY MURPHY,
PRESIDENT OF IRISH PRIMARY PRINCIPALS' NETWORK

As a result of the financial crisis the Irish government had to propose severe budget cuts. These cutbacks have been proposed in the National Recovery Plan. The National Recovery Plan 2011-2014 outlined planned expenditure cutbacks up to 2014. Educationalists would also contend that Education was not particularly favoured during the so-called Celtic Tiger days and only in 2011 the current Minister for Education and Skills said: "Education's share of the national cake has decreased in recent years. A decade and a half ago 19% of gross expenditure went on education, 21% on health and 22% on social welfare. The current figures are 16% on education, 25% on health and 36% on social welfare".

There have been two annual budgets since November 2010 under two consecutive governments. Both budgets were subject to what is called the The Public Service or "Croke Park" Agreement. The Public Service or "Croke Park" Agreement is a commitment by public servants and their managers to work together to change the way in which the Public Service does its business so that both its cost and the number of people working in the Public Service can fall significantly, while continuing to meet the need for services and improve the experience of service users. Contingent on delivery of the savings and compliance with the Agreement, the Government gave certain commitments to serving public servants:

- no further reductions in their pay rates, other than those applied in 2009 and 2010;
- no compulsory redundancies (where they do not currently apply) as long as public servants are flexible about redeployment;
- an extension of the period within which the January 2010 pay reductions are disregarded for the purposes of calculating pensions, now to February 2012;
- A review of the position on public service pay in the Spring of each year of the Agreement.



The two recent budgets have resulted in the following fallout for education provision in Ireland:

2011 budget began a withdrawal of services to children from disadvantaged backgrounds, special needs provision and supports for children from the travelling community

The 2012 education budget – which accounts for 17% of total State expenditure or €8.6bn – is to be cut by €132.3m in 2012, the Minister for Public Expenditure and Reform Brendan Howlin announced in early January 2012:

- a 2% reduction in core funding for higher education
- third-level fees will go up by €250
- Secondary schools being required to manage guidance provisions from within their existing Pupil Teacher Ratio allocations
- a reduction in capitation grants to schools by 2%
- a withdrawal of maintenance grants
- a phased withdrawal from 2012 of supports from disadvantaged schemes
- cuts in trainee and apprenticeship schemes
- changes to fees and supports for post-graduate

The reality on the ground when the detail of the proposals emerged painted a more devastating outcome for children's future prospects:

- Increases to the pupil-teacher ratio in schools serving disadvantaged communities
- Increases to the pupil-teacher ratio in the smaller schools serving Ireland's most remove communities
- Destruction of the Career Guidance/Councillor service available to post-primary students

• Increase in third-level student fees, which would further restrict the country's most vulnerable children from accessing third-level education places

To date the Minister has agreed to review some aspects of the Budget impinging on children attending Ireland's most disadvantaged communities.

Parent and community activists from rural Ireland are organising local meetings in an attempt to retain their small schools Cuts in education budgets risk undermining the economy's growth potential, the EU has warned Ireland as the country moves closer to the bottom of the international league table in spending on schools.

Ireland is one of only three EU countries to reduce spending across a range of education, including student support, teachers and infrastructure, according to the report for discussion by EU Education

Ministers in Brussels on Tuesday 14th February, 2012

This article was previously published in the ICP newsletter.

'Connecting Leadership'

Leadership • Motivation • Working Together



29 - 31 October 2012 • Edinburgh

Keynote Speakers:



Mark Van Vugt: Author & Academic

Mark will talk about the lessons in his book 'Selected: Why some people lead, why others follow and why it matters' — all delegates will get a free copy of his book.



Tony Finn: Chief Executive
General Teaching

Tony will speak about effective school and system leadership and give an insight into teacher education/induction in Scotland.



Dr Frank Dick, President of the European Athletics Coaches Association

Frank has coached many high profile international sports stars. He will talk about teamwork and motivation

Register now at www.esha2012scotland.com

Workshop sessions include:

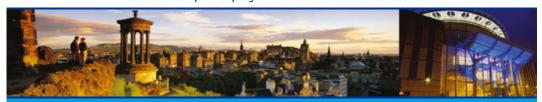
- Leading Change in Challenging Times
- Leading Learning
- Co-operative Learning
- Distributive Leadership
- Leading for wider/personal achievement
- Leading in a crisis
- Motivating a team
- Engaging the disengaged
- Motivation in a high performing school
- Motivating your staff
- Motivating young people
- Motivating for further learning

Workshops with an insight into the Scottish education system include:

- Innovation: Our Curriculum
- Innovation: Cluster connections
- Inspection in Scotland
- Inclusive education
- 3-18 Assessment
- Innovation: Leading in the classroom
- Insight: Healthy schools
- Insight: Outdoor learning
- Insight: Active schools
- Insight: Nurturing schools

For more information and book the conference, a hotel or your travel visit www.esha2012scotland.com

Details of a full partner programme are available on the website.



3 DAY CONFERENCE FROM £375



Relationships leading the learning



BY LUKE MONAGHAN, DIRECTOR, CURAM

Picture the scene – 4pm on a Thursday afternoon, two Croke park hours for staff on teaching and learning.

I've found the school even after the SatNav tried to outfox me. I'm setting up in this huge cold hall when the caretaker sidles up to me with a knowing grin. 'So you've got the graveyard slot... my advice to you, sir, is to tell a lot of jokes and end it early', he vanished stage left.

The teachers 'drip feed' into the hall, noticeably avoiding any eye contact as they fill the seats from the back, they pull their coats tight as they settle in. I venture to connect with some of those near to me...they smile and one pulls down the scarf from her face to add to the caretaker's advice by saying, 'Whatever you do, no group work...and get us out early'...a certain pattern was emerging!

Clearly it was one of those times to skip the prepared PowerPoint and move to 'direct action' – deal with the mood by recognising it and then progress to connect personally by using my own professional story as a means to address the theme of the session.

It was in my story that I could explore my passion, my values, why I love what I do... this served to counteract the 'mood' and to reposition the staff to explore why they do what they do and to examine

I learned again that effective learning gains so much from the relationship developed.

what they could improve and develop! They relished the group activity as they were shaping the relevance of the task by connecting to it personally and professionally.

For that short time I was leading learning for that staff, I learned again that effective learning gains so much from the relationship developed... this staff in their work during that session pointed out that they needed to move on a number of fronts to address teaching and learning. They

agreed to examine the quality of relationships between students and staff and in this regard they proposed a stronger pastoral approach especially through the further development of the class tutor role.

They wanted to look at increasing collaborative approaches among staff to maximise each other's strengths in curricular and related areas. They agreed to explore new approaches to students with learning challenges through linking with new programmes and initiatives such as mentoring and differentiated learning. Not bad for

a two hour session. Much as I might like to take credit as a brilliant facilitator, it was really only about being relational that made the difference.

In leading learning the requirements are around:

- Competence in the professional aspects;
- Confidence to communicate, collaborate and lead;
- Conviction in what values guide you;
- Connection the relational dimension that binds the teaching and learning experience together.

Let me explore further this third aspect – connection. Who was it for you? Mine was my history teacher, Patsy McGeogh. He had the 'it', that combination of passion and compassion that is within us all – which, when released, is a powerful force. Passion for his subject – history and compassion for us his students. He demonstrated both these core qualities in unremarkable but deeply effective ways. His unrelenting enjoyment of the characters of history, his constant awareness of, and respect for, each student's ability were the characteristics of his approach – nothing more nothing less. His innate grasp of the tools, frameworks and theories of pedagogy communicated themselves each day. While I could never get him to give a master class as he wouldn't recognise himself in that guise, I could at least translate his skills into my own teaching efforts and speak of his approach in my professional development programmes.

His connection to the subject was palpable, he never lost the ability to spark our interest in the significance of history – the life lessons, the necessity of a critical and reasonable mind, sympathy and empathy for the victors and victims of our shared past, the creative and innovative future that is built upon a real appreciation of history and so much more. His connection to his students was

no less vibrant – we too became living characters to him, we knew he 'knew' us, he 'saw' us. He seemed to pitch each of us at the level that was just right for us – a level that always gave us the confidence to stretch ourselves as we knew he would be there if the stretching turned to a nasty snap! This was never about spending great amounts of time with us collectively or individually, it was always about the quality of even the minute long interaction that mattered.

So how can leaders access these everyday champions of teaching and learning without any form of preferment, unhealthy competition, or professional envy?

By creating opportunities through subject departments, themed curricular events, inspection reviews, teacher mentoring, induction for the many strengths of staff to surface both within and without the classroom.

As Patsy McGeogh connected to each of us specifically without in any way creating a hierarchy, so, too, the Principal, as leader of the learning, can do likewise by connecting in a specific, capacity-building, appreciative and issue-addressing form. This depth connection is then invaluable when each is asked to 'stretch' their contribution.

Where this connection is not present, we know how much more challenging is the task of leading the learning.

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Understanding the OECD Programme for International Student Assessment

This March, the ERC will be visiting schools to administer the latest PISA tests. Mindful of the dramatic drop in Irish achievement levels, recorded in the 2009 PISA tests, Jude Cosgrove of the Education Research Centre [ERC], Drumcondra, and Chief Inspector at the DES, Harold Hislop, conclude their post mortem on those results and stress the need for focussed concentration by schools and by pupils alike in the forthcoming tests.

This article is an abbreviated version of the presentation which they made to last year's NAPD Conference. It also includes a number of questions that came from the floor and the replies by the speakers. [Editing by Derek West]

Harold Hislop



[In the previous two articles] Jude Cosgrove has given a flavour of some of the declines in achievement that have been seen and some of the reasons behind that, or the characteristics that are associated with students. But having been a country where we had students in the highest performing categories for reading and in the average performing category for mathematics, it was a shock to the system to find

your cohort reported now as being average for reading across the OECD and below average for mathematics.

"When the early data sets came back, we genuinely did believe that somebody had sent back the wrong file!"

When we were faced with that as an issue, we had a certain set of responsibilities, the most important of which was a very basic one: to confirm whether the data was correct or not. That was speedily done. [I have to be honest and say that, when the early analysis data sets came back to the ERC, we genuinely did believe that somebody had sent back the wrong file!] We also wanted to understand why the declines might have happened and to come to

a judgement about the extent to which we should attribute importance to those reported declines, to understand better why they might have happened. We knew there would be a big job to share and to communicate that understanding, such as we could establish, to the rest of the educational system and to people who make decisions within the educational system.

That's why an event like this is as important as it is, because we're living – and will live – with this for at least three years, and for more, because to tackle any of issues that come out of PISA is a longterm process. Also, I think that there are a number of factors that raise legitimate questions about the standards that students are achieving in reading, science and mathematics.

"There are a number of factors that raise legitimate questions about the standards that students are achieving in reading, science and mathematics "

It was no surprise to anyone in the Irish educational system that we had problems with mathematics. We've been talking about that for a very long time and, well before PISA 2009 was published, the Project Maths initiative had already been designed at the NCCA, and was starting its roll-out and development phase in schools.

But it's not just mathematics at the post-primary level that we have to be concerned about. Reports from inspections, reports from the National Assessment of Reading and Mathematics [at primary level] on a sample of schools, were showing consistently, for a long period, weaknesses in areas such as shape, space, measures and problem-solving. That said, the drop that was being seen in PISA was worrying and there was evidence there that not all was rosy with literacy either.



Much of the evidence that we have had in recent years has been concentrated on schools serving areas of socio-economic disadvantage. Our own inspectorate report in 2005, on a number of disadvantaged schools, was shocking in the level of literacy and numeracy that was being reported and it led to many of the programmes which were designed in the DEIS initiative that followed it. There have been others, some of them done by Jude's colleagues at the ERC, and also analyses by NESC on early childhood and literacy, which show worrying patterns.

You may wonder if the drop in PISA is as unexpected as it might be, given all that background. There's half a century of educational research that says we simply do not see drops of the magnitude that were reported in PISA 2009 for Ireland. There

still isn't available any corroborating evidence of major declines in achievement. Since the initial data on the reading tests have come, we know that the performance of students in Ireland on the Electronic Reading Test was much higher than it was on the paper-based test. There's conflicting evidence here, so we have to delve into, and make a judgement about, how real or significant the PISA declines actually are.

And that's what we set about. Initially we've been focusing on the reading data, though there's work to be done on the maths data as well. Checks were made on the basic data, the way it was handled, the way it was collected and so on, between the ERC, between the OECD and ACER, the body that actually does the work for the OECD.

Almost immediately, upon getting the data, we established two separate strands of enquiry: One by the ERC, to try and understand the data better, and another, completely independent one by Statistics Canada, and a leading organisation in the world on statistical research in education.

Those initial reviews started in the summer and autumn and then went on into the winter of 2010. The initial response was to treat the thing cautiously and do further analyses, to understand it properly, and to understand that you're dealing with something that is very complex, to begin with, and that there are many factors that could have influenced the outcomes.

"The same basic message: we had a decline in reading performance in Ireland between 2000 and 2009 in the PISA tests. And there's no way of getting away from that. The decline actually occurred."

Statistics Canada has looked at the performance in Ireland, using three methods: It's looking at the percentage of correct scores [the number of times children or students got items correct or incorrect]; it's also looking at recalculating the scores [would it make a difference if you looked at national, rather than international, item difficulties?] and it's also looking at how the trend over time was calculated.

The decline actually occurred, but the magnitude of that decline is likely to have been very significantly exaggerated.

These three methods give you the same basic message: we had a decline in reading performance in Ireland between 2000 and 2009 in the PISA tests, and there's no way of getting away from that. The decline actually occurred, but the magnitude of that decline is likely to have been very significantly exaggerated.

So, it's not possible to come definitively to what the

decline actually was: it's too complex, because there are several factors interplaying with each other. But we have to be honest and say, yes, we have had a decline here.

What we managed to rule out

We did manage to rule out some factors: There weren't problems with the sample design, or with the test materials, or with the sample of schools that we took. There weren't any significant problems with the achieved sample, the one we actually got, and there were also no problems, regarding the samples, about the terms of socio-economic composition or the gender or of the assessment instruments themselves.

Jude Cosgrave



Jude Cosgrave looks at five areas that have had a significant impact on the data:

- · Demographic changes;
- · Changes in reading habits;
- The selection of the sample schools;
- · Student engagement;
- The reporting of trends.

Demographic changes

There has been a significant increase in the percentage of migrant students, and students speaking a language other than English or Gaeilge, and there has also been a change in the characteristics of these students. Back in 2000, the tiny proportion of students who didn't have English or Irish as a first language recorded slightly higher average scores than students who spoke English or Irish, whereas in 2009 they scored significantly less well. So, it's not just the size of that group that has increased, it's the composition that has changed as well.

We've also recorded a slight decrease in early school-leaving in the PISA-eligible students since 2000. Now, it's only minute [in the region of 0.5%], but still it's something to take note of, because we would imagine that among the students, who previously would have left school early, and are now staying on, there would likely to be a number of lower-achieving students.

We also note that, since the partial enactment of the EPSEN Act, we would expect a greater inclusion of students with special educational needs in the mainstream system. However, we can't quantify this, because the information that we need to do so wasn't collected in 2000.

This next change is the interplay between demography and the structure of the system. There's been a change in the distribution of students across year levels. You see, because PISA samples students who are aged 15, they can be in Second or Third Year [about 60%] and the remainder in Transition and Fifth Year. Since 2000 is that there's been a jump in the number of PISA students enrolled in Transition year, [from about 16% to 24%].

What we noticed, when we compared the mathematics scores of those students, is that the maths scores of students in Transition Year have gone down since 2003. That could relate to what students are actually experiencing day-to-day in school, because it would make sense that mathematics knowledge would decline more than a more generic skill such as reading.

These changes are likely to account for some, but not all, of the declines, partially because we're talking about small percentages of students.

People might ask, 'Why didn't science change? Why is it the same?' Well, it's possible – though very hard to quantify – that recent improvements to the science curricula at primary and post-primary levels have somehow mitigated what otherwise might have been a decline in science as well as for mathematics and reading.

Changes in reading habits

We don't know how big a factor this is. There's been a significant decrease in the percentage of students who report reading in their spare time; also, females report lower levels of enjoying reading. This is an attitudinal scale – the relationship with achievement is a bit shaky – but there are some changes in engagement behaviours, which in turn are related to achievement.

The selection of the sample schools

In terms of the factors external to the mechanics of how PISA scale scores are made, this is probably the most complex one. We found in PISA 2009 that we had eight low-performing schools [those that achieved 100 points or more below the national average on PISA]. Previous cycles didn't give us any such schools.

We thought that maybe these are schools that have a broader range of socio-economic characteristics, or are disadvantaged schools, or have, for whatever reason, changes in catchment-area characteristics, or are schools that have very high percentages of students with another language relative to 2000, but, in fact, when we looked at the average scores in reading, mathematics and science for these schools, and after we adjusted for socio-economic characteristics and for gender, the difference still remains. So, there's something about these eight schools that we need to delve into further.

Student engagement

We think this is the big one in terms of explaining the decline in achievement. We had to scratch our heads for a long time to try and come up with a way to figure out how to show this numerically. But what we conclude is that there's strong evidence to indicate that students were simply investing less effort on the PISA print assessment in 2009 than they did previously.

How we did this: we capitalised on the fact that the PISA test booklets, which are two hours long, are organised into four half-hour blocks, and each block contains reading, maths or science.



"I there's strong evidence to indicate that students were simply investing less effort on the PISA print assessment in 2009 than they did previously."

Now, given that two different students are given the same set of reading items at the beginning of the test and the end, what might we expect if we compared performance on those two blocks of items? To get the significance of the analysis, we need to make a distinction between proficiency and effort. So this was our thinking: If the observed decline in overall achievement is largely due to decreases in proficiency or ability, we would expect to see a decrease in performance on a block of items regardless of whether they appeared at the beginning of the booklet or the end, when students are getting more tired.

Now, if the observed decline is more symptomatic of students disengaging, or giving up on the test, we would expect similar performance across cycles on the first quarter of the test, but a large fall off in performance at the end of the test. See slide below.

Evidence of Disengagement, Decline in Proficiency, or Both?

 Results support a systematic disengagement with the test:

Percent correct

Position 1			Position 4	
	Ireland	OECD	Ireland	OECD
2003	65.1%	65.6%	59.9%	54.4%
2009	64.4%	65.9%	46.5%	52.4%

Percent skipped

	Position 1		Position 4	
	Ireland	OECD	Ireland	OECD
2003	3.5%	6.3%	7.9%	17.5%
2009	4.9%	5.8%	19.6%	18.4%

So this is for a block of reading items. In Ireland, in 2003, 65% of students got a particular block of reading items correct; in 2009, it was almost the same percentage: 64%. The OECD averages are shown there as well, just to show you that the percentage correct, when a block of items is in the first quarter of the booklets, is relatively stable.

If we look to the last position in the booklet, we can see that because of student fatigue, boredom, disengagement, whatever, the percentage correct tends to be a bit lower than when they do it in the first quarter of the booklet. But what's very striking about these numbers is that in Ireland there has been a decline when the students attempt the test questions in the last quarter of the booklet. In 2003 they got 60% of the questions correct, and in 2009 this has gone down to 47%. So that's a huge drop relative to the OECD average.

This was also mirrored in the massive increase in the percentage of questions that students skipped in the fourth quarter of the booklet. So, in 2003, in the fourth quarter of the booklet, 8% of items are skipped, and in 2009 this was up to 20%.

If you look at these figures on the surface and if the 'percentage correct' is the same in position one, in 2003 and 2009, it could mean that the students had about the same proficiency. But it could also be that students simply cannot engage in a sustained way on a two-hour test, so we still cannot rule out a decline in proficiency, even though we see a decline in disengagement. We think this is a key to understanding the changes in 2009 on top of the demographic changes.

The reporting of trends.

There are issues around methods employed by PISA to produce and report trends. An examination of the procedures used to summarise the achievement data and link results across cycles provides some indications as to why the reported results over-estimate the differences between 2000 and 2009.

Suffice to say that PISA, like any other assessment isn't perfect;

it's very ambitious and the computation of trend-information is extremely complicated. There are a number of assumptions underlying the method that PISA uses to make trends: one is that when new reading questions are introduced into the test that they are the same as the old ones – and they are not. In fact, this assumption has resulted in an underestimate of student performance, and this has been shown by experts in *Statistics Canada*.



Another thing among these technical points, is that, for greater stability in measuring change across time, it makes common sense to have a large number of questions, so that, if the wobbles are random, they cancel each other out. But, in fact, the PISA reading link component consists of a very small number of questions. So this makes

that link inherently unstable. Indeed, the way in which the OECD reports the results ignores this. It just reports two end-points with adjustments for measurement error, 2000/2009. It doesn't adjust for the accumulation of random error in 2003/2006. In other words, the OECD overestimates the precision of the trend estimates; trend estimates in PISA, like any other study of its kind, are not perfect.

Conclusions

"They don't end up in the same place, because each time you make trend calculations you have a certain error."

Harold Hislop

PISA is making links across time, between 2000 and 2009 – that's how it's reporting the trend. So we were at such and such a place in 2000 and we were lower in 2009. But, mathematically, what's going on is that the trend is calculated from 2000-03, then from 2003-06, and from 2003-09. You may well ask, 'Shouldn't they end up in the same place?' Well, I'm not a mathematician, but they *don't* end up in the same place, because each time you make trend calculations you have a certain error.

So now, as policy -makers, we are faced with a situation where one half of the world's mathematicians seems to be saying that it's perfectly legitimate to go from 2000 to 2009 in the way that PISA does, and the other half is saying, 'Hang on a minute', because there's an error each time the calculation is done, the error compounds and therefore the reliability of the trend that's reported from 2000 to 2009 is questionable. As to the extent to which it's questionable – the mathematicians would sit here for the next three days and argue over that!

It's just one illustration of the challenge there is in looking at data like PISA. At one level, when you raise that question, you're seen to be blaming the messenger. Do you know what I mean by that? If you start to question it, you say, 'Ah yeah, but isn't that what France did when the first lot of PISA came out and they did so poorly.' And it's not doing that. In fact, the published report from *Statistics Canada* is actually a critically important piece of research about the validity of the PISA methodology. The government has actually sent it to the OECD as part of their consideration of PISA.

"The declines reported in PISA are almost certainly much larger than actually occurred."

But to draw the lessons: put simply now, we have to say we had a decline. The declines reported in PISA are almost certainly much larger than actually occurred. There are limitations to international assessments like PISA. Even the fact that fewer than 30 items out of a huge number of items are actually used to calculate the trend across time in reading is a very severe limitation. And while other international assessments have equal limitations, they still have an enormous value, because they do make us ask questions and they do make us look at a lot of our practices.

It is also true that we can only explain some of the decline by changes in our population. It was a natural reaction to say, 'Ah but, look, in 2000 we had no migrants and by 2009 schools had huge EAL numbers.' But when you look at the numbers, they actually explain only a very small part of the decline.

"There is a really worrying question about boys. Boys are doing much worse than they did in 2000."

There is a really worrying question about boys. Boys are doing much worse than they did in 2000, but they're even doing proportionately worse than girls are doing. So we are not capturing something regarding literacy for boys in the lower end of the achievement scale. And it's interesting to see how much better those boys are doing in the electronic reading. Maybe there's part of the solution there too.

What are the implications for curriculum and its delivery?

One of the important things that come out of this is: we need to remember what PISA is measuring. PISA is measuring the application of a skill of literacy or science or mathematics, not knowledge per se, in the traditional sense. And a lot of our assessment, be it

in Junior Cycle or in the Leaving Certificate, is knowledge-based. What PISA does make us question is, are we actually developing the right set of skills among students here, if we believe that being able to use reading or science skills or mathematic skills is important. Are we preparing students for real life and really using skills rather than the repetition of facts?

That is consistent with what we're trying to do in Project Maths, where the move is towards the application of skills. It's also what's informing the proposals on the Junior Cycle reform. And that will be interesting because in the next round of PISA we're having a specific look at the performance of students who've had substantial experience of Project Maths.

"One of the biggest challenges we faced was the lack of assessment information on Irish student performance."

There are implications for our assessment policy and practice too. One of the biggest challenges we faced when dealing with PISA was the lack of assessment information on Irish student performance. We are actually a data-poor country in terms of assessment information. Yes, we have the Leaving Certificate, we have the Junior Certificate, we have national assessments on a sample basis, but there's a lot of evidence that, at the level of individual schools, assessment data is not handled well and is not used for the potential that it has. Even in the ERC's research at primary level, schools are often found to be using standardised tests, for instance, but never analysing them as to what they tell them.

"At the level of individual schools, assessment data is not handled well."

There is no strong tradition of analysing results and asking serious,

hard questions about what has happened to particular cohorts. What has happened to the cohort in a particular group in your school in its Junior Certificate? In its Leaving Certificate? Did you use a standardised test?

You have to be very careful about assessment because you know that thing about the dog and the tail and assessment: nobody wants a system where assessment drives teaching.

"We have to make sure that we do not leave ourselves as an assessment-poor country."

But assessment should be a proper component of teaching, it has its place. And that's what we were faced with when we simply didn't have that data and didn't have that tradition of practice within our system. And that's why standardised assessment, and other assessments too, have been worked into the national literacy and numeracy strategy. Now, it's been a careful balance. Many countries, when they got PISA results like this, went to the outer end of the spectrum and said, 'We'll test everything, publish everything, league table it all.' Now, we have chosen not to do that. It was very clear in the Minister's address, at the launch of the literacy and numeracy strategy, he wasn't interested in league tabling or the overuse of standardise testing, but we have to make sure that we do not leave ourselves as an assessment-poor country either, and to use a broad range of assessment for learning and assessment of learning in its proper place.

Help with PISA 2012

There's the very practical issue of student engagement. Students don't seem to have engaged in PISA 2009. That's where we'd like your help in 2012, because it's going to be administered in 68

countries in the spring and autumn, and in the northern hemisphere it'll be in the first half of the year, so the ERC is going to be out there doing PISA in schools this March.

There's going to be an emphasis on mathematics this time but also on reading and science. So we'll be able to establish mathematics trends from 2003, once we get the 2012 data. There'll be an electronic reading test as there was in 2009. The hope is that December 2013 is the date for the publication of the information.

"Getting the right national sample is terribly important."

About 75% of those schools which were approached by the ERC to participate had already responded in October 2011. That's extremely good because getting the right national sample is terribly important. It's a very good experience for the school, you can learn a lot from it, because you get you own individual data back as a school as well. But it really is important for your school to participate in the sample, because, if schools don't, the construction of an accurate and valid sample across the country is difficult, as we have a relatively small number of post-primary schools.

"Now, it's important that you impress on students that they need to participate as well."

Now, it's not just important for you as a school to participate, but if you're one of the lucky few then it's important that you impress on students that they need to participate as well. This is an important part of the work of the school, and you are the people who can create that impression. If you create the [opposite] impression – that this is nothing at all important – that message will be picked up by students.

"I'm not suggesting that we start with the pipe bands down in Cahirciveen, but..."

There are jokes about countries that play their students into the test with the local brass band, to encourage them, because they're the local heroes for the country's PISA report. Now, they are apocryphal stories and I don't know whether there's a word of truth in them, and I'm not suggesting that we start with the pipe bands down in Cahirciveen or anywhere else, but I do want you to give the message that it *is* important. It will also include a survey of teachers, particularly about mathematics, which will collect important data for us on the progress of Project Maths progress.



Questions and comments from the floor | Answers from the platform

Speaker 1:

"One thing kind of screams at me: I don't think our examination system is accurately reflecting the ability levels."

I think every one of us here would tell you that our teachers have been telling us for the past 10 years, that there's been a decline in literacy and numeracy.

One of the things we are finding very, very hard to contend with is the fact that our own State examination system hasn't been reflecting that decline. We have the same percentages of A's, B's and C's in our maths and our sciences and our English over the last ten years, so there's something very wrong there.

We should be calling on the State Examinations Commission to look at the curve that is being used from year to year, because I don't think our examination system is accurately reflecting the ability levels.

We have been examining these very students for the last 10 years, and somehow, even though we know it on the ground that this has happened in front of us, it hasn't been picked up in our own system, and I think that should make us look at that.

Harold Hislop:

"The SEC could find over the period 2000 to 2009 no decline."

I have to be careful talking about the State exams, because they are the legal responsibility of somebody else, but I would say this: In the initial research for the State Exams Commission we asked the SEC to take down what they call reference marker papers, those are scripts, student scripts and papers that are picked to keep grade levels or track on what grade levels should be at. And they could find over the period of 2000-09 no decline, so there was no they would see no change in the questions they asked or the way they marked the questions.

Speaker 2:

"The readability of the books being used in our schools."

A point that will relate to it is the readability of the books that are being used in our schools, because if there is now a mismatch between the reading ages and literacy of our children and the books that are being produced, I'm just wondering has the ERC, for example, looked at the widespread use of books and what are the reading ages that are coming through on those books?

Speaker 3:

"What does mathematical literacy actually mean?"

Could I ask that there would be a greater connection between primary and second level in terms of understanding what a reading age is and what it actually means for a lot of teachers; and equally, what does mathematical literacy mean? I think that there is a significant gap in the language of teachers themselves in describing what literacy actually means. And what is the significance of a reading age? How does it manifest itself in the actual ability or achievement of a student in particular subject areas?

Harold Hislop:

Can I just pick up the issue about teachers' understanding of assessment and the significant gap in the teachers' own understanding of literacy and things like that. I agree with the sentiment in that question.

We have spent relatively little time and effort in making sure that teachers, particularly second level teachers, in their own education and training, understand the acquisition of literacy, the acquisition of numeracy and how to assess those properly. That's why the biggest single change that the literacy and numeracy [initiative] will give is a change to teacher education.

Because as a country we need to put our effort and resources into improving teachers and teachers' quality. That's why the three-year course for the primary teachers will become a four-year one, and why the second-level qualification will move to a two-year course, because the courses currently are too short for the level of skills and development that teachers need.

Speaker 3:

Valid comparisons between students reading in English, Mandarin or Greek?

I wonder in reading how it's possible to make a valid comparison between students who are reading in English, as opposed to students who are reading in Mandarin or in Greek or in other languages, and using other alphabets.

Jude Cosgrave:

Just to address the question about the language of the assessment, PISA has probably the most stringent quality-control programme of any study of its kind, and with respect to translation, the countries use two source versions, one in English and one in French, to translate into their own national versions, and some research has been done on that and it's shown that having the two source versions results in a much better quality translation.

There are a number of other checks along the way that done. First of all, some of the questions are manually scored within each country and checked in terms of whether the marking of particular questions and answers [which are all translated into English for this particular check] are too lenient or too strict. And if items are behaving in a problematic way from that, they're actually taken out of the equation altogether.

The third thing that's done with regard the language issue is that the results all of the questions in all of the countries are compared, using a sequence of statistical analyses, and if any of the items misbehave in a way relative to the others, the language issue is one of the first checks that's done. And if language is a problem the item is taken out of the scaling. But the removal of questions for these reasons is very low.

I think it's fair to say that regardless of fundamental differences, cultural and structural, between, say, Arabic, Japanese, Asian versus romance languages, I think PISA does as good a job as we might expect in ensuring that the assessment is as equivalent as possible across countries.

The other thing, the content of the existing courses, needs to change radically. And that's what has come out in the strategy statement [about teacher training]: we're saying that we want four very different years, where core skills of the teaching of literacy and numeracy and how to assess those are the absolute critical building blocks. At post-primary level most teachers are teachers of individual subjects [of course they are; they need their subject expertise, and

that should always remain, but also they are all teachers of literacy, to some extent, and many are teachers of numeracy as well. So literacy and numeracy should be understood - how to apply communication skills of language, how to apply mathematics within a subject area – and those are the things that are going to inform the CPD for teachers as well.

Now, it's going to take a long time to roll that out and deliver it. The Principals' courses have already started as part of the strategy and the ones for teachers are to follow.

I would say the biggest focus has to be on teacher practice, teacher education at the initial and post-initial training phases. If you look at the strategy, that's where most of the emphasis is.

More information

Detailed reporting of the issues reported here:

- PISA national report (end 2011/early 2012)
- Teachers' guide to reading literacy (end 2011)
- Technical documents on trends on PISA in Ireland www.erc.ie/pisa
- Previous reports on PISA in Ireland www.erc.ie/pisa
- Various international reports on www.pisa.oecd.org

Contacts

The ERC is happy to discuss PISA and address queries at any time: pisa@erc.ie, www.erc.ie/pisa



Effects of the economic crisis on Italian education

BY ANTONINO PETROLINO

The severe financial crisis clasping the whole world is also lowering school service's level in many countries.

Even though restrictions are necessary and, to some extent, unavoidable, it can nonetheless be observed that a wrong point of view is often adopted by politicians, since school-related expenses are mainly regarded as mere costs rather than as fruitful investments. There exists, in fact, a clear evidence for a strong correlation between population's average level of instruction and economic performance. It would therefore seem quite logical to expect smart political decisions, leading to an increase of resources to prop up the education sector, instead of a dull decrease made without any reasonable appreciation of its consequences.

Italy makes no exception to this general attitude, and its Government periodically decides to cut down school system's costs.

2010' summer financial law, for instance, has frozen all public salaries for three years, preventing the chance of obtaining a better economic treatment through national contracts.

A more recent example of this behaviour is offered by 2011's summer financial laws, directly affecting the number of school leaders in service. Elementary schools and junior high schools – both of them have a long tradition in Italy – have been in fact definitely abolished and replaced by "comprehensive" schools, accepting students from six to thirteen years old. In fact, nothing changes in teaching

There exists, in fact, a clear evidence for a strong correlation between population's average level of instruction and economic performance.

practises. The only difference will be that two schools will be merged in a unique administrative unit. In consequence, there will be one principal (and a common clerical staff) instead of two. This model of school was first introduced more than ten years ago, in order to provide some kind of continuity between elementary and junior high levels: something that was generally felt as positive. The novelty of 2011's decision lies in the fact that these new comprehensive institutions have to comprise at least 1000 students each to be classified as autonomous schools. Only autonomous

schools are entitled to have a principal of their own: the others are "added" to the principal of a bigger school, who will have to lead the two at the same time. Before this new provision, the lower limit for autonomy was of 500 students – that still holds true for secondary high schools.

A few weeks ago, this limit has been raised to 600. As a result of these law provisions, the number of school leader positions has been consistently reduced by approximately 20%. The same rule has been introduced with regard to the administrative officers – since ever, all schools in Italy have had an administrative responsible to help the Principal in managing the budget – and their number has been equally reduced, too.

A significant injection of fresh and highly-motivated human resources will certainly allow the Italian school system to perform better and to cope more favourably with the crisis.

Deputy heads also meet more difficulties than before. In the past, in larger schools, they could obtain a reduction in the number of hours of teaching (no teaching at all in larger schools, half time teaching in middle-sized schools). Nowadays, the size required for obtaining the same reduction has been increased significantly. In consequence, only a little number of deputy heads is now able to devote part of their working time to the cooperation with the Principal.

The perspective for teachers' recruitment has worsened as well as the global number of teaching positions, which has to remain within tight limits according to

the law. This means that more and more students will be packed into the same number of classrooms, since retired teachers will not be replaced by new teacher in almost all cases. As can be easily understood, all the above mentioned restrictions do surely provide some immediate benefit on the expenses' side but their outcomes on longer timescales are much more questionable. A negative fall out on the schools' system organization is indeed very likely to occur, with a general lowering of the service level and of the learning results. A partial improvement to this situation could arise from the enrolling procedure for Principals now being in progress: a significant injection of fresh and highly-motivated human resources will certainly allow the Italian school system to perform better and to cope more favourably with the crisis.

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