

Intel World Ahead

Intel Research Day

Brian G. Gonzalez
June 8, 2011



Intel World Ahead

Access

Connectivity

Education

Content



- Targeted platforms
- Shared access

- 3G/4G Wireless
- USF for Rural

- 9M Teachers trained
- PC Classroom Skills

- Publishers & Content
- Skool.com

ICT Spans All Industries

Manufacturing



Construction



Transportation



Energy Supply



Broadband



Government



Education



Healthcare



Sector Solution Focus Areas

Programs that drive Better Health

Africa Cassava Crop Disease

- Relevant Content
- Rural Connectivity
- Ruggedized PCs



Cassava Brown Streak Disease



Mobile Health Workers



Programs to Increasing Technology Benefit in Mature Markets

USA

Telework Act
2M Workers



UK

Digital Divide
270K PCs



France

Digital Passport
Empowering
Small Business



Japan

Tsukuba 3 E's
Initiative



Knowledge Economics

***The opportunity of
Our Times...***



Educational Transformation

-- Enhancing What & How We Learn Matters --

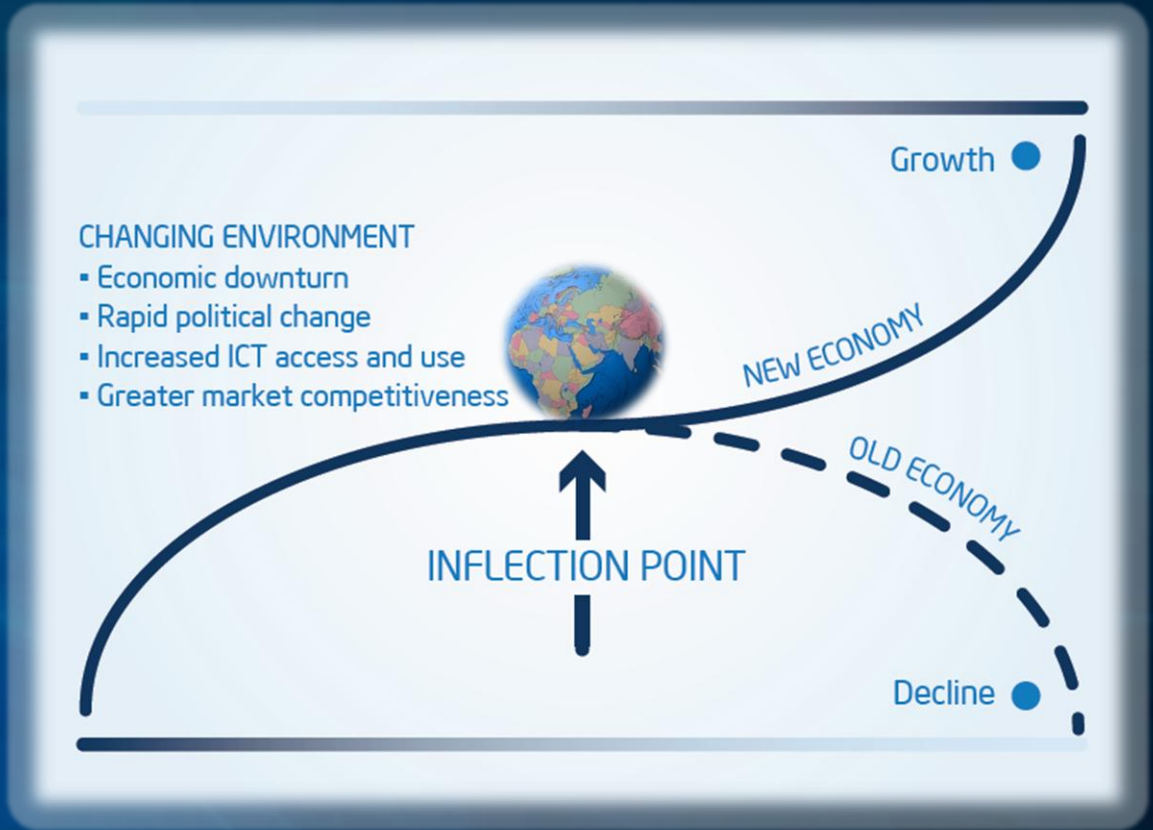
Education → Entrepreneurship → Employability

- **Increases Country Competitiveness**
 - 21st century skills needs enhanced teaching & learning
- **Builds Required Competencies**
 - New job skills & re-skilling
- **Boost Economic Development**
 - Grow ICT industry base, jobs & revenue
- **Enhances Citizenship & Social Cohesion**
 - Narrow digital divide, rural inclusion

The future is here...



Education is key



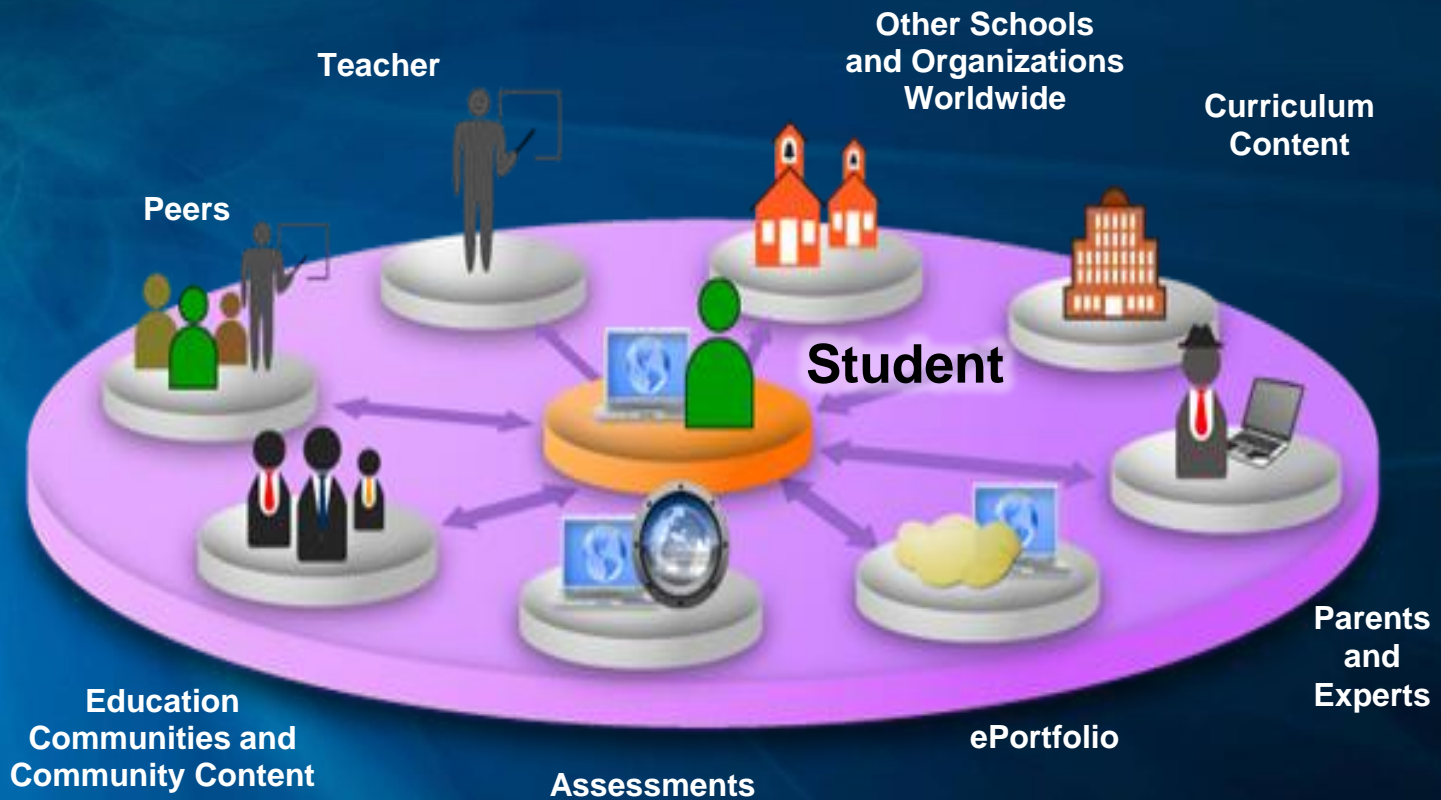
Skills needed for the new economy:



- **Problem solving**
- **Critical thinking**
- **Collaboration**
- **Project management**
- **Technology literacy**

**Teachers and Students ready
for today's requirements.**

Student Centered Personalized eLearning



Transformation Wave... happening Now!



Portugal



Colorado, USA



Bolivia



Republic of Georgia

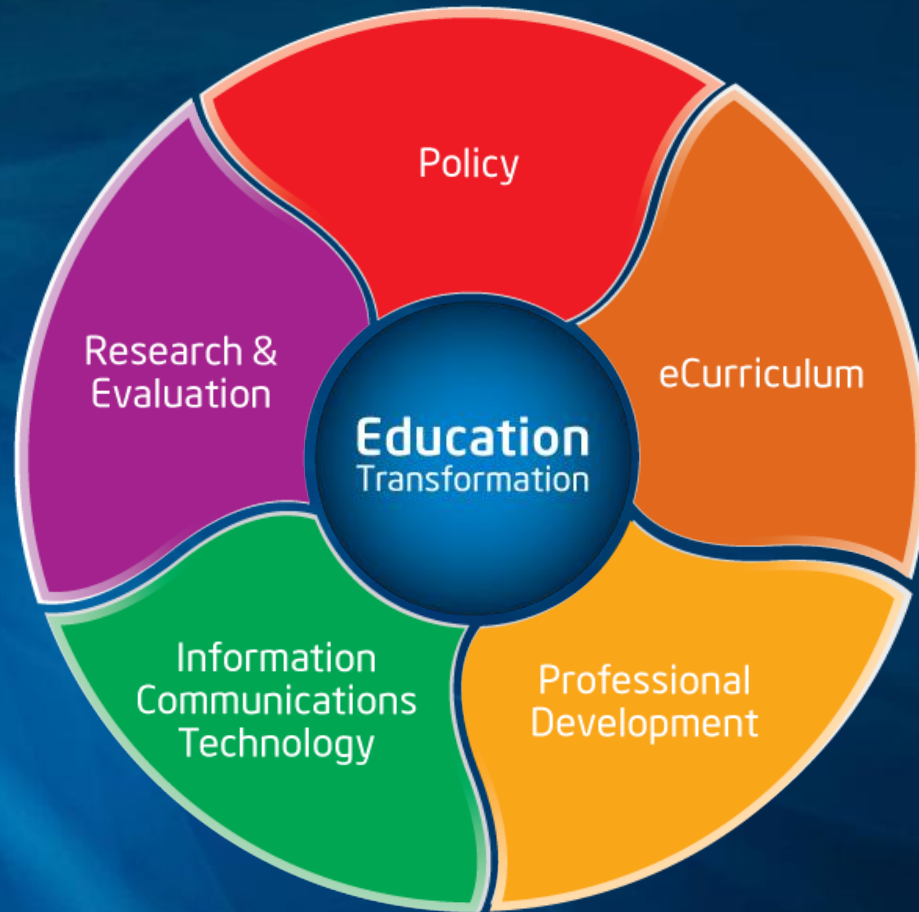


Argentina

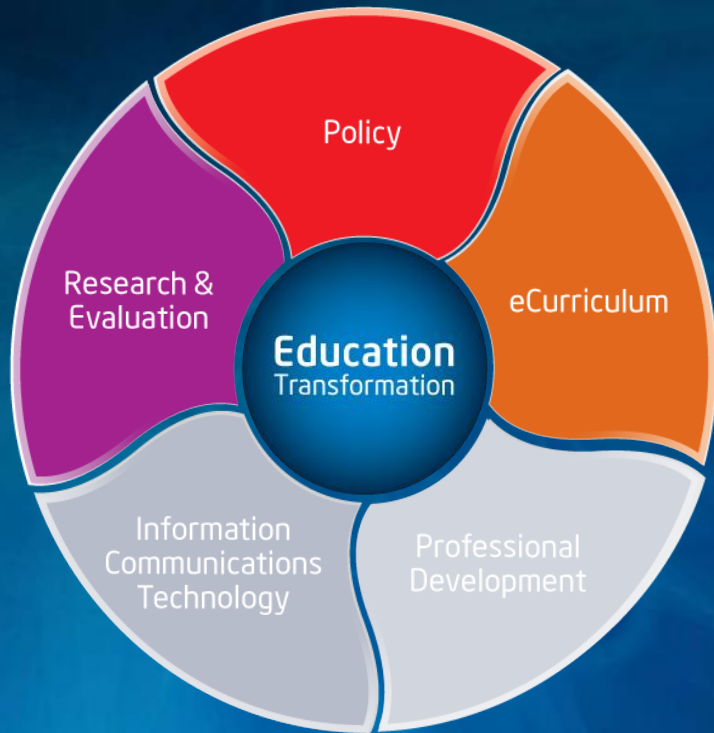


Venezuela

Education Transformation Framework



Education Transformation Framework



Students gain critical 21st century skills through:

- Strong curriculum standards
- Robust assessment approaches
- New digital media tools and resources

Education Transformation Framework



- Teachers training and development to support a student-centric learning environment
- Learning platforms for students, teachers, and administrators
- Connectivity
- Ecosystem relationships for integrated solutions

Transformation Wave... happening Now!



Portugal



Colorado, USA



Bolivia



Republic of Georgia



Argentina



Venezuela

Portugal - Future Ready!



Objectives	2008	2010
Internet Usage	38%	60%
BB Penetration	13%	50%
HH PC Penetration	43%	70%
Students per PC	9:1	1:1
Employees with Internet	25%	40%
Teachers ICT Certification	8%	90%

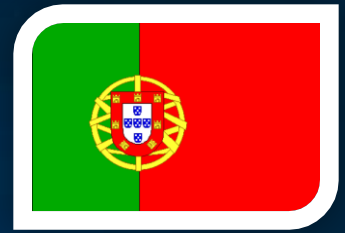


Every child gets a PC

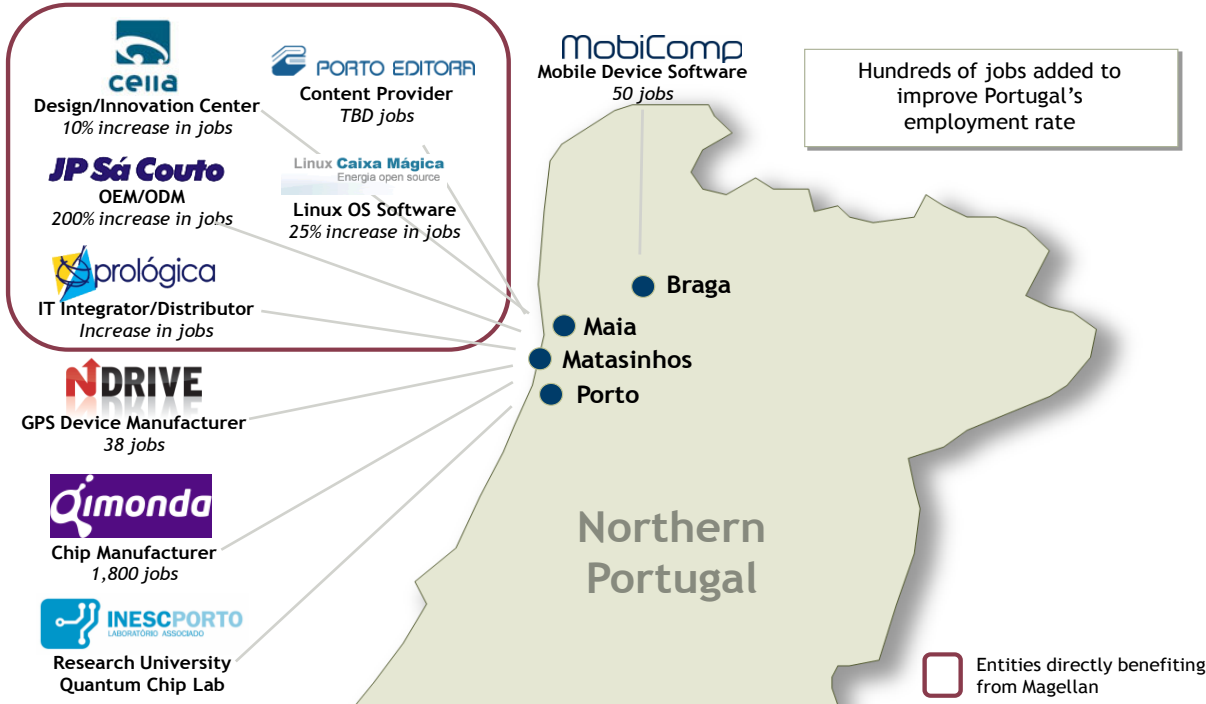
21st Century Skills + Jobs



Industry Collaboration...



Creating the Portuguese Silicon Valley Magellan Gives Boost to Technology Cluster and Jobs



Project Magellan

Direct and Indirect Economic Benefits



Direct Benefits

- Creation of **local jobs** associated with hardware and software production and support services
- Improvements in physical and **Internet infrastructure**
- **Export increase/improvement** in balance of trade

Indirect Benefits

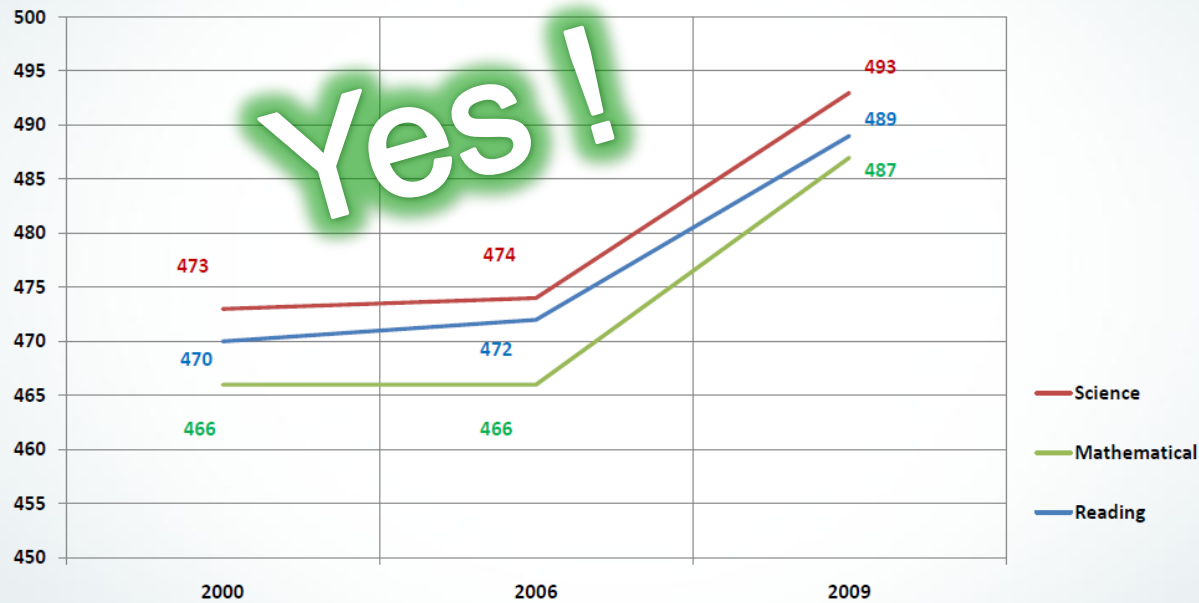
- New production and **service jobs**
- Enhanced ability to **attract foreign investment** due to stronger workforce skills
- Build up of **local IT capabilities** and ecosystem

Educational Impact?



PISA

The PISA (Program for International Student Assessment). Portugal was the country of the OECD that presented the best evolution.



A simple idea can change the future of a country

Knowledge Economics... Lessons from Portugal



PORTUGAL

FINANCIAL TIMES SPECIAL REPORT | Wednesday July 14 2010

Inside
Designers are promoting a passion for fashion
Page 4

Campaign to speed up slow growth

The nation is addressing its lack of export competitiveness on several fronts, writes Peter Wise

Only in children attend the primary school in Vila Real de Santo António, a village perched on a forested hillside in southern Portugal, where spring months, spent by emigration and rural flight, cultivate orchards and vineyards.

In September, a bus will ferry the children eight kilometers to a new school building under a modernization programme that has already seen 2,000 schools with fewer than 20 pupils closed. A further 600 closures are planned.

Like this, the divide between the poor rural interior and more affluent coast is slowly being closed. According to the Organisation for Economic Co-operation and Development figures for the mid-2000s, Portugal is the European country where income is most unevenly distributed.

Here in treatment classes, however, the school in Vila Real de Santo António has achieved international recognition, having been selected last year by Microsoft to join the company's 'hubmaker' network, an elite group of schools chosen from across the world for their innovative use of new technologies.

The achievement reflects Portugal's large-scale investment in education technology, including the issue of laptop computers to every primary pupil - part of a wider effort to address what economists identify as the country's biggest challenge: overcoming slow economic growth caused by a loss of international competitiveness.

Since 2006, gross domestic product growth has been the second lowest in the eurozone after Italy at an annual average

of less than 1 per cent. In June, the government forecast, the economy, which contracted 2.6 per cent last year, would gradually expand to growth of 1.7 per cent in 2010, but even these standards stagnate in terms of the European average. According to figures from Eurostat, GDP per head was the same as in 2006 at 20 per cent of the European Union average, whereas in Slovenia, for example, it had increased from 70 to 80 per cent.

In 2009, investment in education, including a €1.6-billion school rebuilding programme, was also part of government policy to increase public expenditure to help offset the impact of the global recession on jobs and growth.

However, the combined effect of increased spending and falling tax revenue saw the budget deficit soar from 2.4 per cent of GDP in 2006 to a record 9.3 per cent last year.

When plans that Greece might have to default on its debt come to light, the high-profile, €10-billion credit substitution plan in May automatically financed markets were already questioning whether Portugal and Spain would be the next domino to fall in a sovereign debt crisis that threatened to sweep southern Europe.

Portugal's Socialist government was forced to push through a series of increasingly severe packages of austerity measures, reversing plans to delay tough deficit-reduction measures until a recovery was firmly supported.

"Our deficit increased in 2009 because we were responding to the global crisis and that had a positive effect," says José Sócrates, Portugal's centre-left prime minister. The economy, he says, contracted less last year than in most other EU countries in the first quarter of 2010 with growth of 1.1 per cent, because of government support.

"The crisis of market confidence that began with Greece forced Europe to change direction," says Mr Sócrates. "Portugal, like other countries, was obliged to make an additional effort to reduce its deficit."

Additional austerity measures included a 1 per cent point increase in value added tax to 21 per cent and increases of up to 1.4 per cent to income tax.

The country's growth and stability plan, presented in February, had already frozen civil service wages for four years, reduced social spending and cut military investments by 41 per cent.

Markets wanted to be reassured that Mr Sócrates had not only called the right measures, but also had the power to see them through. However, after winning the first-ever elections

Inside this issue

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Obama should look to Portugal on how to fix schools

Posted by: **Don Tapscott** on **24 Jun 2009**

President Obama already knows that the nation's schools are failing a large number of young Americans. One-third of all students drop out before finishing high school. It's a terrible record, and it's even worse in inner city public schools, where only half of blacks and Hispanics graduate from school. This is not a legacy that would make anyone proud: More young Americans on a proportionate basis drop out of school today than at any other time in our history.

This problem is undoubtedly complicated, but one of the reasons why many American youth are unmotivated and not learning well is that they're bored in school. They're grown up in a fast paced, challenging digital world, with the Internet, mobile devices, video games and other gadgets. They watch less television than their parents did and TV is typically a background activity. They are a generation doesn't like to be broadcast to and they love to interact, multi-task and collaborate. Yet, when they get into the classroom, they're faced with stale textbooks and lectures from teachers who are still using a nineteenth century innovation, chalk and blackboard.

American classrooms need to enter the 21st century. Thousands of teachers agree. Earlier this year, several important educational groups urged the president and Congress to spend nearly \$10 billion to improve technology in the classroom, and ensure teachers know how to use computers most effectively.



Knowledge Economics...

Lessons from Portugal



Next Generation of Power Users



Past: Plays & Works



Today: Learns & Collaborates

We must start the journey Now!

Intel World Ahead
www.intel/worldahead.com

Thank You!

