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Eugenio Severin

MEASURING AND TEACHING 21ST CENTURY SKILLS

Summary: It is generally agreed that students should develop new abilities to live, work, and be part of the 21st century society. However, until now, little has been done to clearly define what these skills are, how they can be measured, and how they can be taught. The ATC21S is a global academic alliance, led by the University of Melbourne and sponsored by Intel, Microsoft, and Cisco, that aims to fill this gap. In Latin America and the Caribbean, the IDB and the government of Costa Rica are part of this effort.



Background

In the 21st century society, new technologies and social environments have changed the ways in which we communicate and work. Learning how to collaborate effectively and use technologies as instruments to connect ourselves, locally and globally, are essential for every person living in a knowledge society.

The education that we have in our region today is insufficient for the current and future demands of the labor market; it is also insufficient for countries that can advance in their level of development. Now students should be preparing for jobs and activities that don't yet exist; they need to develop indispensable skills for life in the 21st century.

"ATC21S is working to offer governments the information, the processes, and the materials that allow the measurement and the teaching of 21st century skills" (Dr. Patrick Griffin, ATC21S Executive Director, University of Melbourne).

The Inter-American Development Bank is part of this consortium and is working alongside the government of Costa Rica to adapt this project to a Latin American context so that our countries have new tools that can be incorporated in our educational systems.

A Global Alliance for the Region

The Assessment and Teaching of 21st Century Skills (ATC21S) was announced in London in January 2009. It is led by the University of Melbourne (Australia), with the participation of several universities and academic institutions, and the financing of Intel, Microsoft, and Cisco.

The Inter-American Development Bank joined the Advisory Board of the initiative. It proposed that ATC21S consider the participation of a developing country in Latin America in addition to Australia, the United States, Singapore, Finland, the United Kingdom and Portugal. In October of 2010, the ATC21S added Costa Rica to translate, adapt, and apply the instruments, with the objective of leveraging the conclusions and lessons to benefit the entire region.

The 21st Century Skills

The ATC21S initiative aims to answer five questions:

1. What does “21st century skills” mean?
2. How can they be measured?
3. What does this imply for learning?
4. How can technologies aid this work?
5. What does this imply for educational policies?

The academic work has taken the 21st century’s growing development and use of information and communication technologies as a starting point and considers it a unique opportunity in history to not only measure these skills in a much more precise way, but also develop these new strategies in students.

As a result of the first phase of work, the initiative has proposed definitions for ten competencies grouped into four categories:

Ways of thinking	Ways of working	Tools to work	Tools to live in the world
Creativity and Innovation	Communication	Information Literacy	Local and global citizenship
Critical thinking, problem solving, and decision making	Collaboration	Digital Literacy	Life and career
Learning to learn/ Metacognition			Personal and social responsibility

The results of this initiative will offer a concrete indication regarding what the expected behavior of each student that has developed each competency will be. Without having a clear description of these standards, the conversation is entirely abstract and without a base for comparison.

How to Teach Them

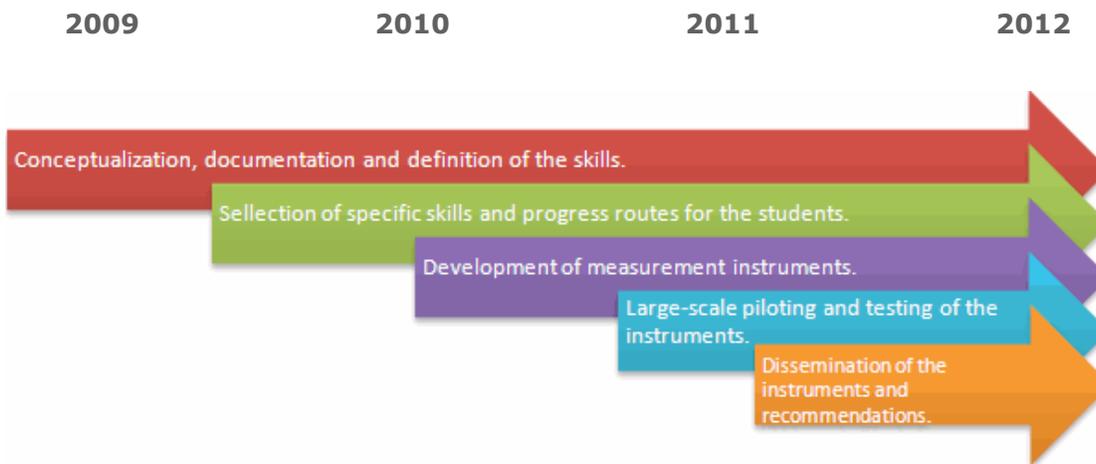
Detecting, describing, and systematizing the educational practices that strengthen the development of 21st century skills is the logical continuation of this effort. We do not propose that this be a new curricular subject, but skills that can be deployed transversely in each subject and educational experience, from early education to higher education, both inside and outside of school.

The use of technologies in education offers opportunities to improve the management of learning and to strengthen educational practices associated with the development of these skills. In particular, technologies aid the development of student-centered methodologies and permit learning outside of school and the school day.

The implementation of these practices requires substantial changes in teacher training. It would require teachers to play a significantly different role than they have played historically, driving the process of knowledge construction more than vertically distributing content.

Phases of Work and Products

The project proposed a work in five phases, to be developed over the course of four years:



At the end of the final phase, the results of this work will include:

- Conceptual Proposals and theories
- Progress Maps
- Prototypes
- Case studies
- Platform for measurement and technical requirements
- Policy framework

Moreover, the project is working in coordination with the OECD so that the conclusions and lessons of the project can be considered for the application of the Programme for International Student Assessment (PISA) in 2012 and 2015.

ATC21S Initiative in Latin America

The work in Latin America and the Caribbean that is part of the ATC21S initiative was officially presented on April 6, 2011 at the IDB headquarters. With the help of Microsoft Latam and Intel Education Latin America, the IDB leads the effort so that our region can benefit early-on from the results of this work.

The government of Costa Rica has accepted the invitation to be a pioneer. With the help of the Omar Dengo Foundation and the CRUSA Foundation, they have constructed a research team that will translate and adapt the measurement instruments for Latin America, which will lead the development of the pilots and tests to validate the instruments and contribute to the analysis of the results.

To strengthen the regional focus of the initiative, a Regional Directory has been created for the ministries of education of Brazil, Colombia, Chile, and Mexico. These countries, together with Costa Rica, the IDB, and the sponsoring companies, will work to ensure that all of the region will be able to use the findings and the instruments developed.



More Information

Website of Latin American initiative:

<http://www.iadb.org/atc21s>

Website of global initiative:

<http://www.atc21s.org>

About the Author

Eugenio Severin, is a Senior Education Specialist at the Inter-American Development Bank. He is in charge of projects that use technology in education. He holds a degree in Literature, a Masters in Business Administration, and a Diploma in Public Policy in Education.

Partners

