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Организация
Объединенных Наций по
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منظمة الأمم المتحدة
للتربية والعلم والثقافة

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Educación
2030



EXPERIENCES IN CUBAN EDUCATION

Learning and Teaching in the
Education 2030 Agenda

Santiago - Chile

9 to 11 August, 2016



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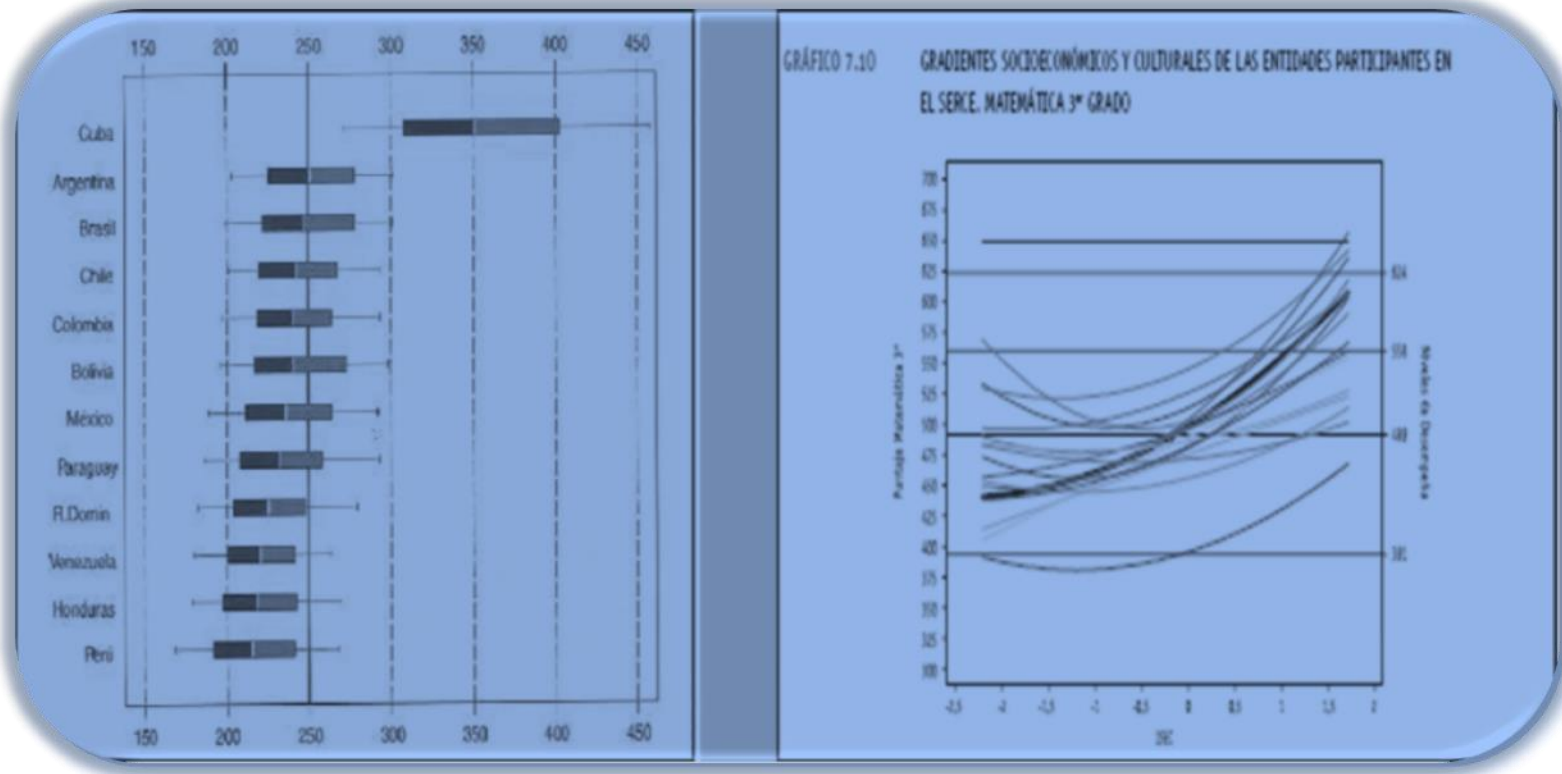
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Introduction

- ❑ Cuban education has shown, in LLECE studies, high levels of educational quality and equity.





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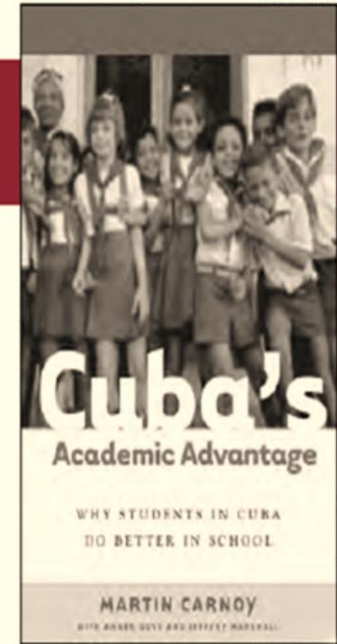
- This has also been shown through external criteria, like the comparative study conducted by Stanford University.
 - Carnoy, M. et al. (2007). *“Cuba’s Academic Advantage. Why Students in Cuba do better in School”*. Stanford: Stanford University Press.

Martin Carnoy

Explores Success of Cuban Schools

In March, Martin Carnoy published *Cuba’s Academic Advantage* (Stanford University Press, 2007), with co-authors Amber K. Gove (MA '97, PhD '05) and Jeffrey H. Marshall (PhD '04). The book explores the surprising success of the educational system in Cuba, where the average elementary school student outperforms her Latin American peers. The authors develop the case for Cuba’s support-

ive social context and centralized management of education, calling into question prevailing views about the effectiveness of educational markets, school and teacher autonomy, decentralized decision-making, and government responsibility for children’s social and economic welfare. To learn more, visit the Stanford University Press website at <http://www.sup.org>.





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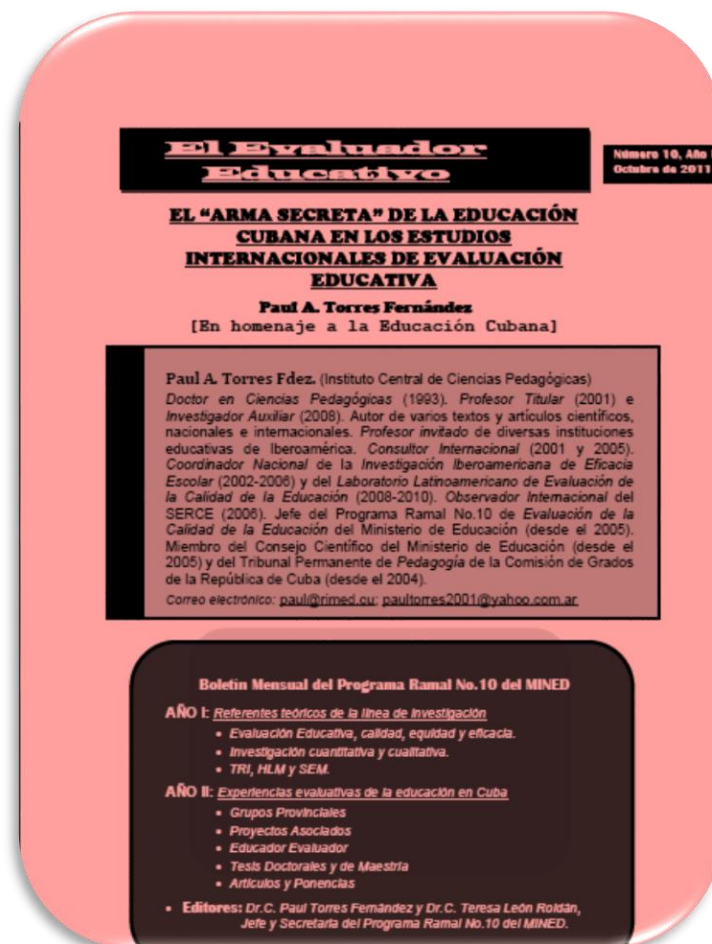
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Introduction

- How can such convincing results be explained?...
 - It is certain that there are many factors to take into account, as is explained in the Bulletin “El Evaluador Educativo” No.10/Year II (<http://www.cubaeduca.cu/index.php?option=comcontent&view=article&id=1632:esenciales-en-la-educacion&catid=2:uncategorised>)
 - However, there can be no doubt that teacher training is essential.
 - This includes what I and a group of other specialists have dubbed “*Cuba’s secret weapon*”.





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Cuban Education Assessment

- How have we used educational assessment in the training of Cuban teachers?...
 1. One early initiative was determining the **frequent errors in students' learning.**
 2. Another was to conduct actions to strengthen **Methodological Work.**
 3. Another important element was warnings over the harmful impact of certain **learning-associated factors.**





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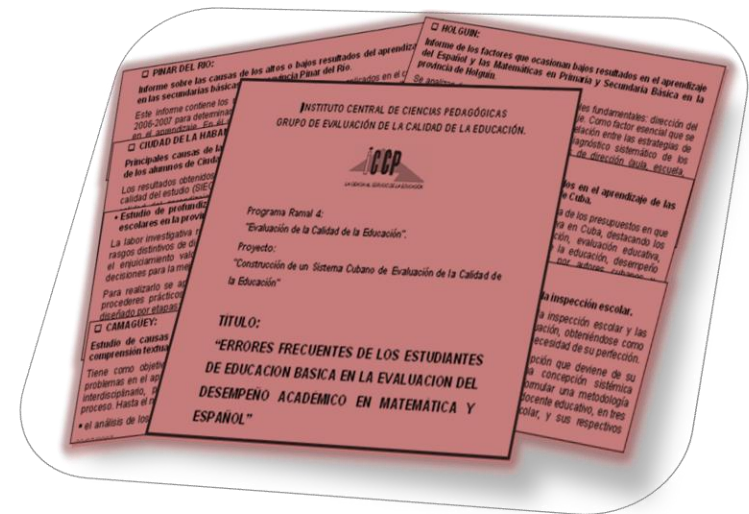
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Cuban Education Assessment

- On determining the **frequent errors** in students' learning
 - Research to determine the “**elements of knowledge**” in the school curriculum in which students are most often mistaken, when taking *objective tests*.
 - **Comparison of samples** of students in different regions of the country **and different cohorts**.
 - **Didactic analysis of the most probable cause** of each *cognitive error*.
 - **Preparation of collections of exercises** for students **and teaching materials** for teachers.





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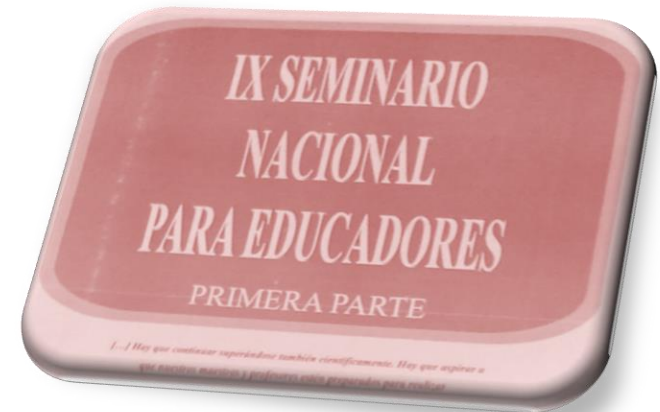
Cuban Education Assessment

□ On **Methodological Work**

- Participation in the **National Seminar for Educators**, attended by one of the available Educational Channels.

- Development of topics **tasked to the country's leading subject matters specialists.**

- Reproduction of a **periolibro for all school institutions and methodological teams** at the country's Provincial and Municipal Departments.



- Development of broadcasts for the television programme **“Para ti, Maestro”**
 - Didactic discussion of **cognitive errors with epistemological origins.**
- Preparation of **Master's Degree and Doctoral Theses.**



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Cuban Education Assessment

□ On Methodological Work

- Close link between **Educational Assessment** and specific and **General Didactics**, in Cuba.
 - **Example** of that is socialisation work and interchange on social networks (**Facebook, Twitter, Blogger**, etc.)





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Cuban Education Assessment

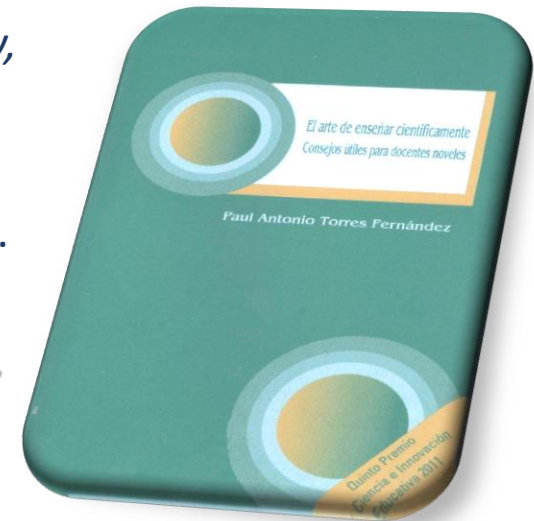
□ On **Methodological Work**

- Solidity of the theory of **General Didactics** in Cuba.

- More than an *art*, or a *teaching technology*, it is seen as a **science**.
- Consideration of **categories**, and **didactic principles**, as well as **teaching procedures**.

- Example of the text “***El arte de enseñar científicamente. Consejos útiles para docentes noveles***”.

- Developing **from the more visible aspects to items more internal to the teacher-education process**: “*Recognition*”, “*The Class*”, “*Didactic functions*”, “*Independent cognitive activity*” and the “*Planning of teaching*”.
- **Systemisation of contemporary Cuban teaching works**, through the *psychological and pedagogical basis* of each topic.





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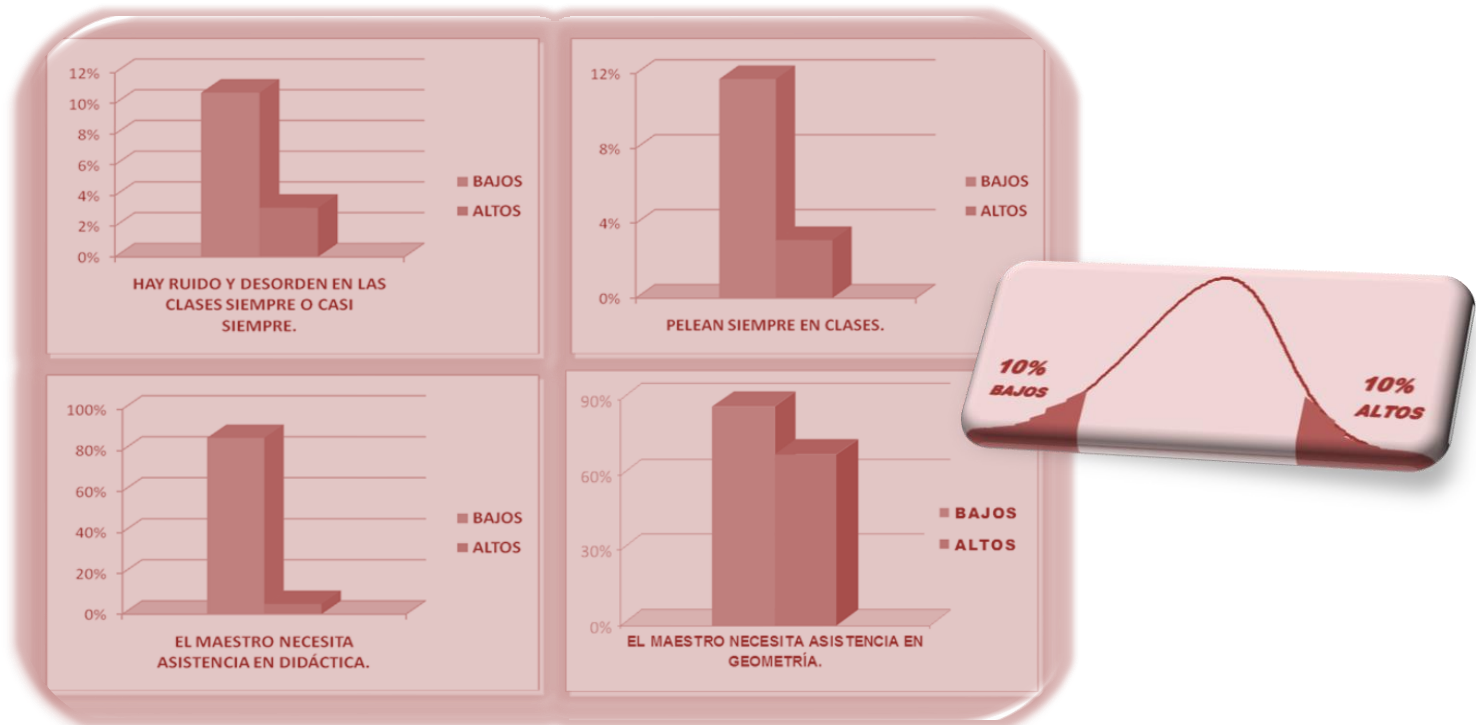
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Cuban Education Assessment

- On warnings over the harmful impact of certain *learning-associated factors*.
 - Through aspects of **school organization** and **teacher training**, with *in-depth studies*.





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Cuban Education Assessment

- **More areas have been explored in the country than the three aspects discussed**, regarding the usage of Educational Assessment to improve teaching and learning..
 - Also to be highlighted as an example are **the research activities** performed over the past 10 years **with the Institute of Neuroscience**.
 - Not only to determine *problems in learning (dyscalculia, dysgraphia and dyslexia)*, but also more recent work on *basic cognitive abilities*.

Developmental Psychology

© 2011 American Psychological Association
0012-1649/11/\$12.00 DOI: 10.1037/a0025356

Basic Numerical Capacities and Prevalence of Developmental Dyscalculia: The Havana Survey

Vivian Reigosa-Crespo and Mitchell Valdés-Sosa
Cuban Centre for Neuroscience

Brian Butterworth
Institute of Cognitive Neuroscience, University College London

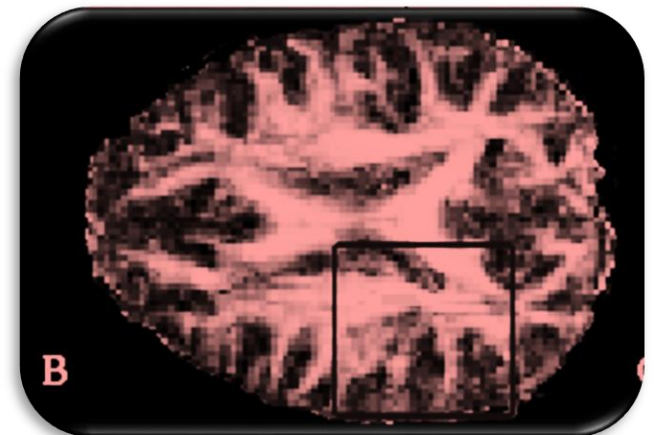
Nancy Estévez, Marisol Rodríguez, and Elsa Santos
Cuban Centre for Neuroscience

Paul Torres
Central Institute of Pedagogical Sciences

Ramón Suárez
National Institute of Hygiene and Epidemiology

Agustín Lage
Cuban Centre for Neuroscience

The association of enumeration and number comparison capacities with arithmetical competence was examined in a large sample of children from 2nd to 9th grades. It was found that efficiency on numerical capacities predicted separately more than 25% of the variance in the individual differences on a timed





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Cuban Education Assessment

- Possibility to find out more about these experiences and continue with interchange through **Symposium 6 “Education quality assessment for inclusive and equitable education, in the framework of the Education 2030 Agenda”**, at the International Congress **PEDAGOGÍA 2017**.
 - Invitation to the Congress available at: <http://www.pedagogiacuba.com>





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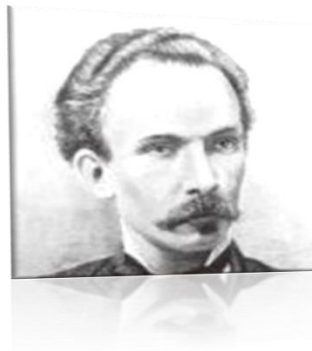
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Conclusions

- ❑ The Cuban Education System has used **Educational Assessment as a useful scientific tool** to improve teaching and learning.
 - In the field of determining the ***frequent errors in students' learning***
 - In strengthening ***Methodological Work*** .
 - Through warnings over the harmful impact of certain ***learning-associated factors***.



"El premio de los certámenes no ha de ser para la mejor oda, sino para el mejor estudio de los factores reales del país (...) Resolver el problema después de conocer sus elementos, es más fácil que resolver el problema sin conocerlos."

Many thanks...



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