



IB AFRICA, EUROPE & MIDDLE EAST  
REGIONAL CONFERENCE 2013

**THE HAGUE 24<sup>TH</sup> - 27<sup>TH</sup> OCTOBER**



# Teaching Science and History with iPads in the DP Flipped Classroom





**International  
Schools**  
Est. 1892

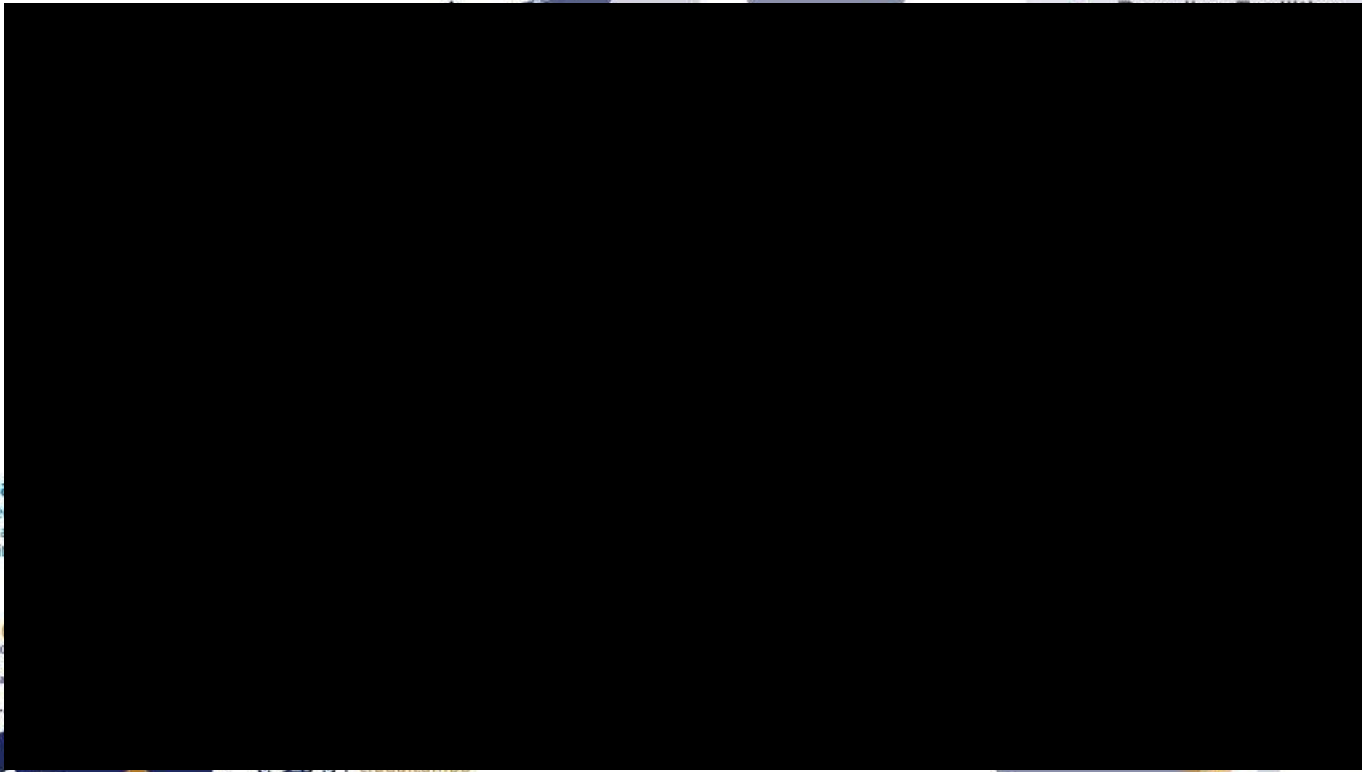
Spain • France • Ireland • Qatar



**Les Alpes**  
École Internationale  
Grades (9-10)  
Boarding School

**Information: +34 902 80 80 82**

- 9 Schools, 1 University
- International Programmes
- Study Abroad Programmes
- Summer Camps



**Universidad**  
Bachelor Degree  
Post Graduate  
Boarding Facility



**El Castillo**  
International School  
K-12 IB School  
Boarding and day



International School  
K-12 IB School  
Day students



**Santa Isabel**  
International School  
Kinder and Primary IB School  
Day students



**52 Nationalities**



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Schools  
Est. 1892

# International School SEK el Castillo Madrid, Spain



SEK-El Castillo





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# Convenient and powerful

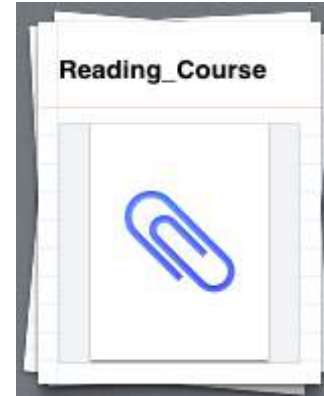
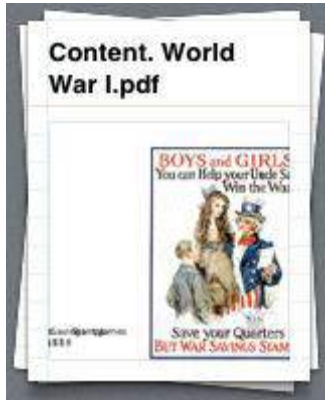


SEK-EI Castillo

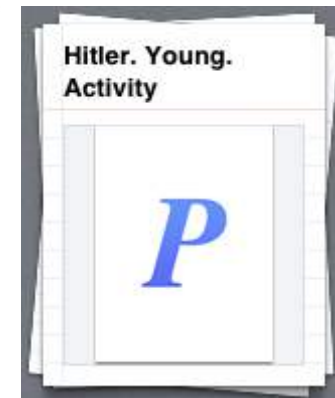




# A common platform The History IB Notebook

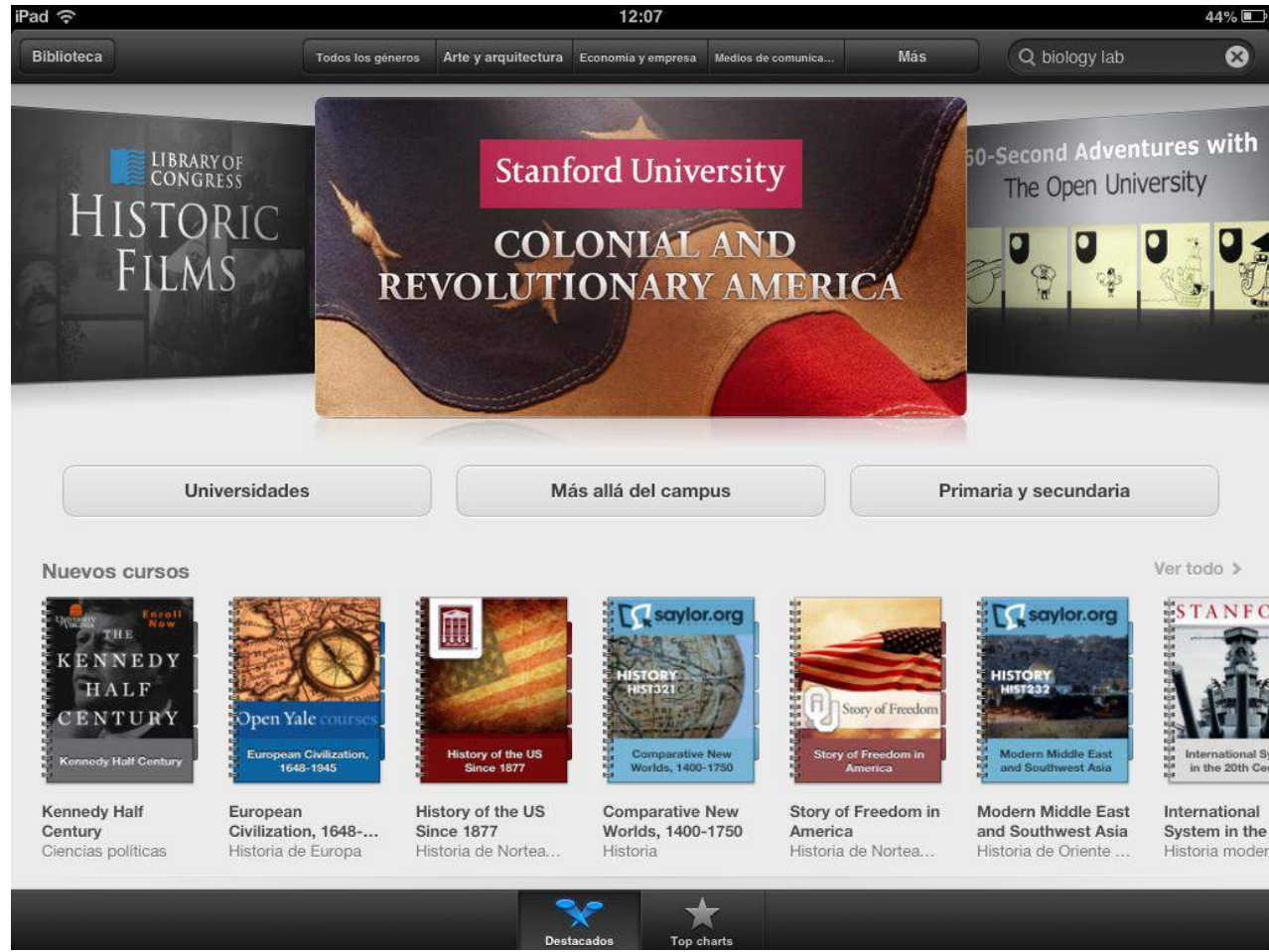


## History notebook





# This year in iTunes U





# SEK in iTunes U

iPad 15:22 33%

Library HISIB2: History IB- 2

All 17

- Unit 6. European diplomacy... 5
- Unit 8. Interwar years: confl... 6
- Unit 10. Second world war... 5

POSTS ASSIGNMENTS

Announcements

- What Paper 3 is about** 04/09/2013  
Take a look at the topics you will be studying this year  
 [document icon]

Unit 6. European diplomacy 1870-1923

- 1.1. Content. Balance of power** 09/07/2013  
<http://sparksnotes.com>  
 a summary of the balance of power [document icon]  
 A power point on the balance of power [document icon]
- 1.1. Arms race** 09/07/2013  
The reasons why the European powers began the arms race  
<http://teacherweb.com>  
 Arms race in Europe [document icon]
- 1.1. Alliances. European power interests** 09/07/2013  
Read this document about what each country was looking for from <http://sunnysuffolk.edu/>  
 What each European country wanted [document icon]  
 A summary of the alliances [document icon]  
 Triple Alliance. Map [document icon]

Info Posts Notes Materials







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# A class based on *historica*

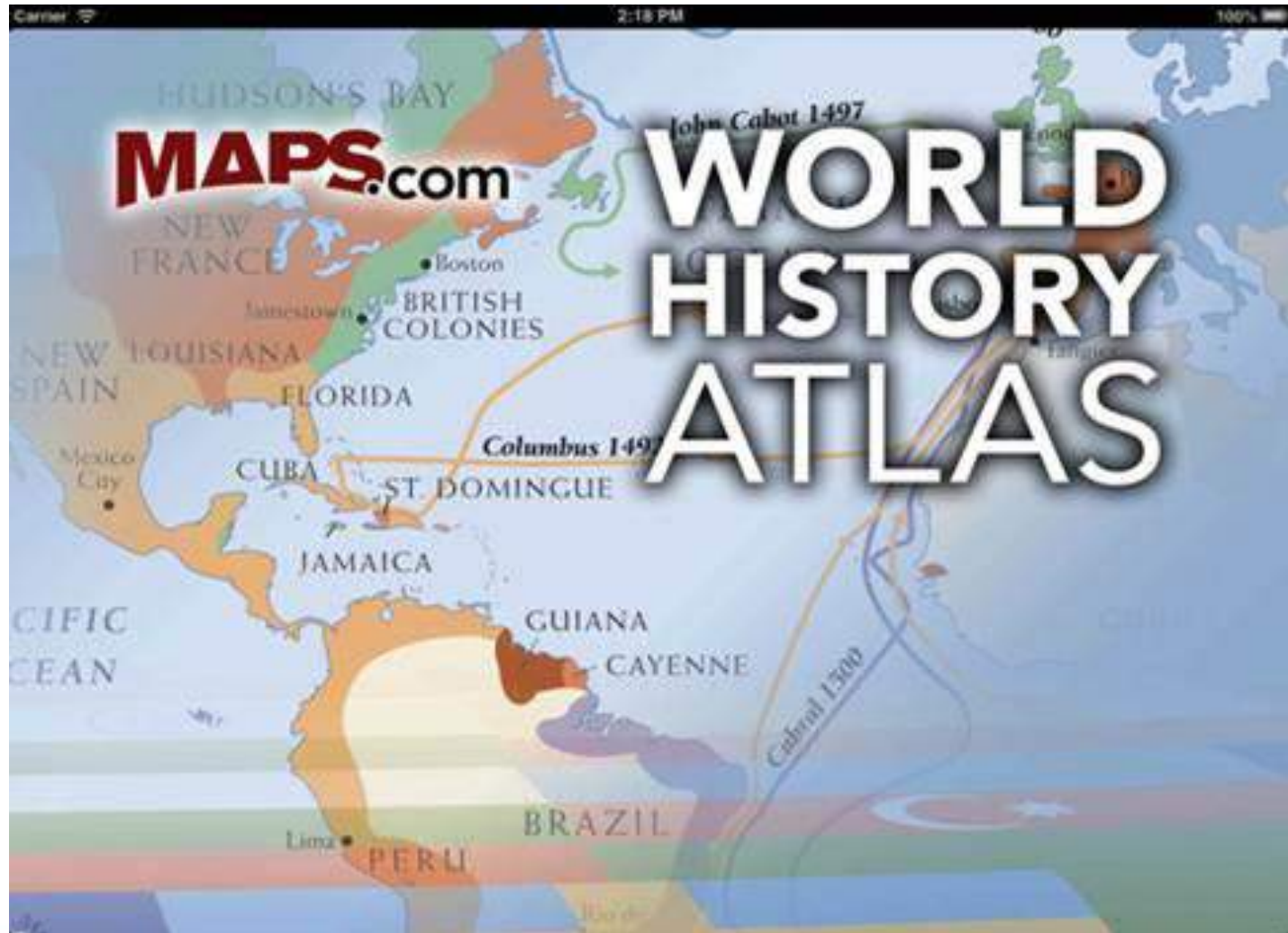
## HISTORY IB



Institución  
Educativa SEK  
Desde 1892



# Some interesting apps for History:



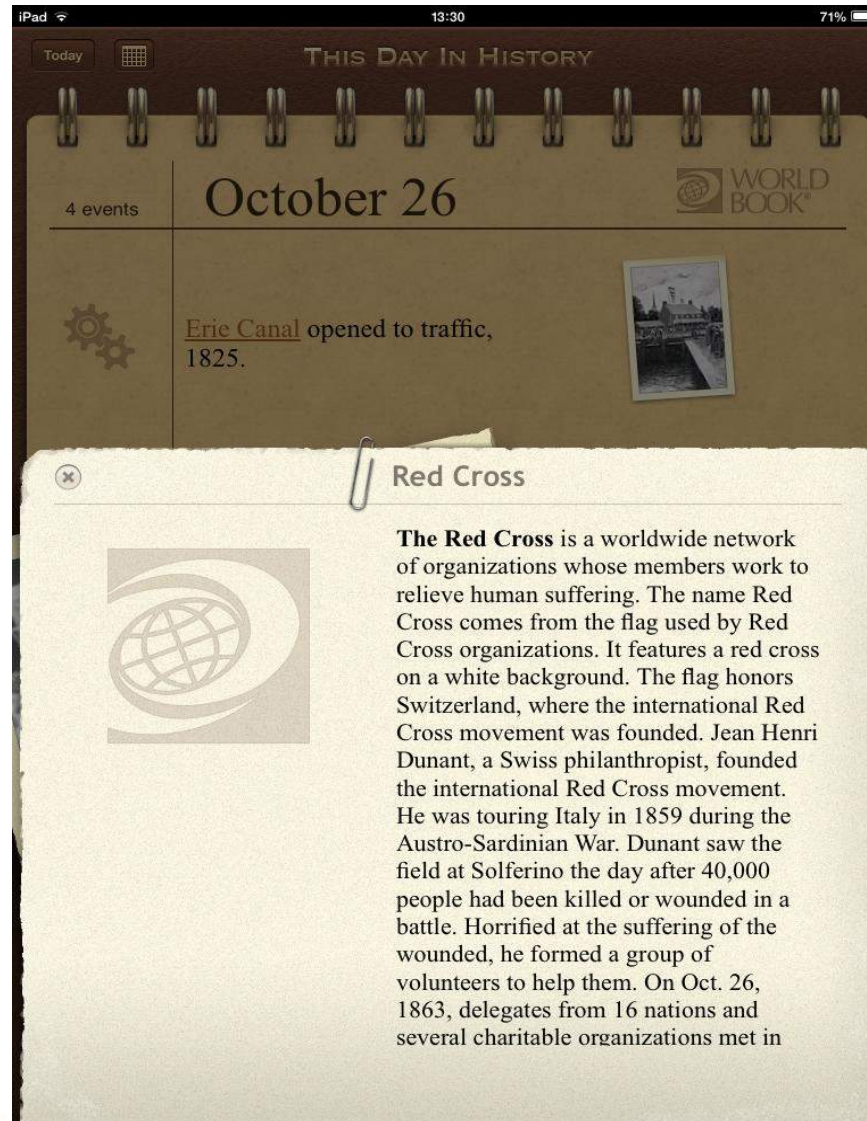


# Some interesting apps for History:





# Some interesting apps for History:



# Some interesting apps for History:



iPad 13:36 70%  
 Audiobooks Browse Library

Edward Gibbon Thomas Hardy Homer

**History**

Our History selection contains many fine works, from original texts like the **History of the Britons** by Nennius, written in the 9th Century, to the modern **A Short History of England** by the lovable G.K. Chesterton. The complete series of Gibbon's **Decline and Fall of the Roman Empire** set the standard for history writing. And **A History of France** by Charlotte Yonge is a good read for catching up. Top that off with Lockhart's **History of Napoleon** or Carlyle's **The French Revolution**. **The History of Florence and of the Affairs of Italy** is a fine, yet lesser-known, work by Machiavelli.

Check out the **History of the Donner Party** by McGlashan, or the **History of the Ottawa and Chippewa Indians** by Andrew J. Blackbird. **Uncle Tom's Cabin** by Harriet Beecher Stowe is a powerful account of slavery in the US, as is the many-volume **Slave Narratives** from the WPA. And just for fun, why not check out **The Chemical History of a Candle** by the esteemed English physicist Michael Faraday.

No more ads.  
 4,727 audiobooks.  
 Unlock for \$3.99.

- Ancient and Modern Physics** by Thomas E. Willson (★★★★★)
- The French Revolution** by Thomas Carlyle (★★★★★)
- George Washington** by Calista McCabe Courtenay (★★★★★)
- An Island Story** by H.E. Marshall (★★★★★)
- The American Empire** by Scott Nearing (★★★★★)
- The Abenaki Indians** by Frederic Kidder (★★★★★)
- Christopher Columbus and the New World...** by Filson Young (★★★★★)
- The Acadian Exiles** by Arthur G. Doughty (★★★★★)
- The American Judiciary** by Simeon E. Baldwin (★★★★★)



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# Some interesting apps for History:



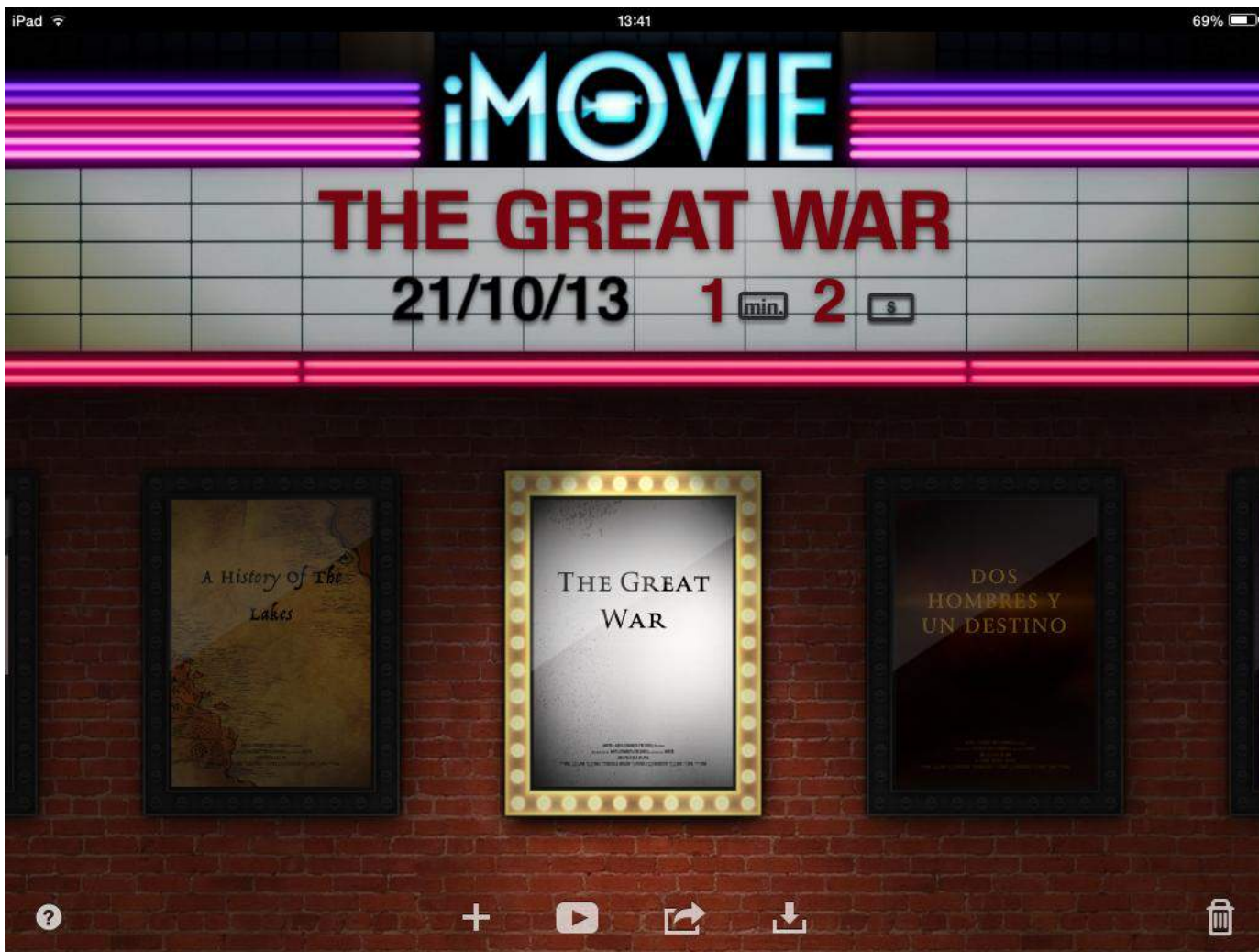


# Some interesting apps for History:





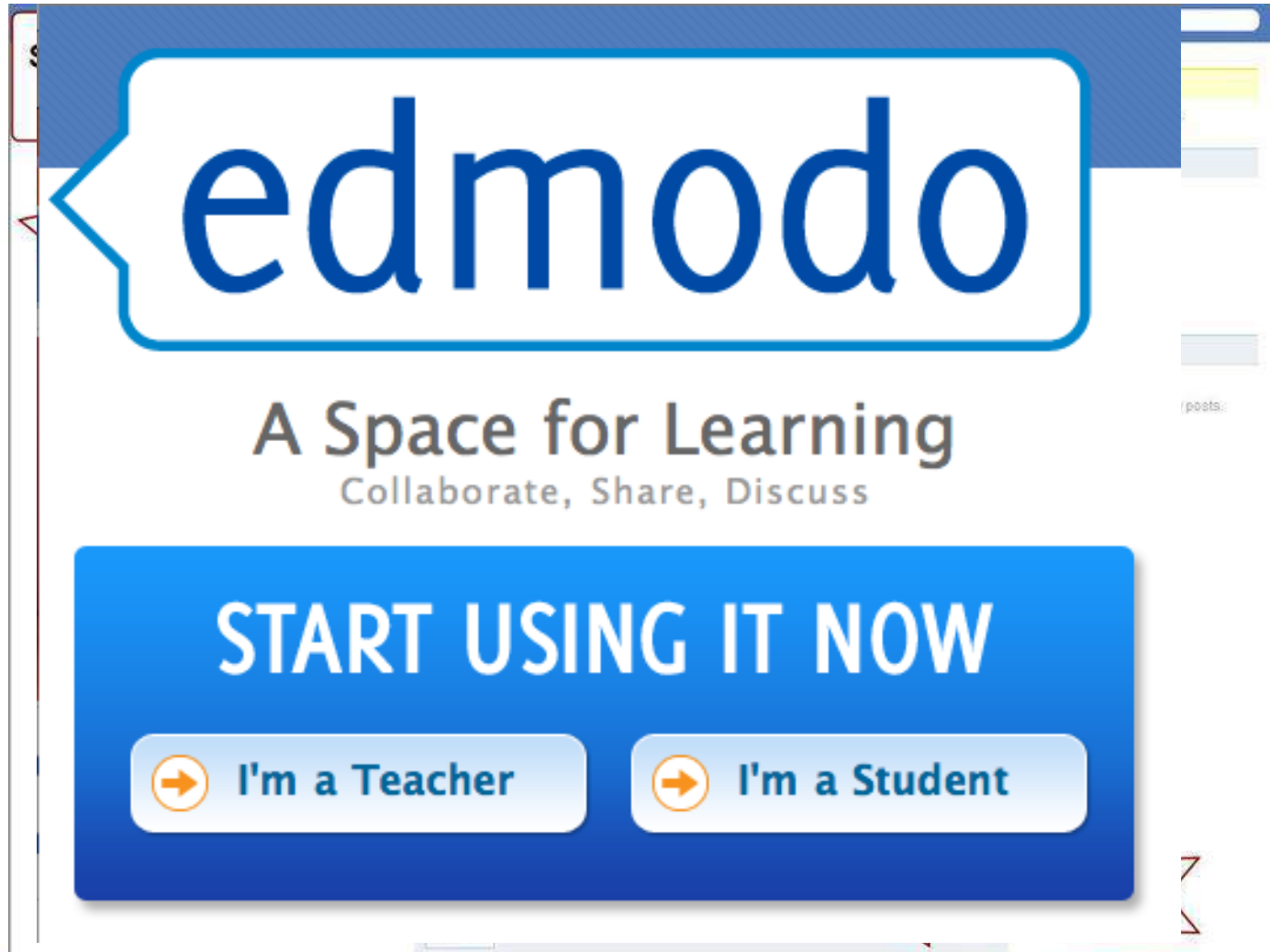
# Some interesting apps for History:







# Some interesting apps for History:

A screenshot of the Edmodo app interface. The word 'edmodo' is displayed in a large, blue, lowercase font inside a white speech bubble shape. Below it, the text 'A Space for Learning' is written in a dark grey font, followed by the tagline 'Collaborate, Share, Discuss' in a smaller, lighter grey font. A large blue button with white text says 'START USING IT NOW'. Below this button are two smaller white buttons with blue text and orange arrow icons: 'I'm a Teacher' and 'I'm a Student'. The interface is set against a dark blue background with a white sidebar on the right containing several colored rectangular buttons.

# A paper 3 History class

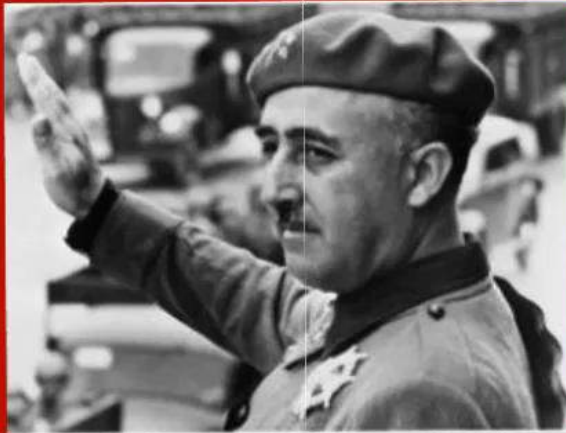
## 10. The Second World War and post-war Western Europe 1939-2000

Spain: Franco's regime and the transition to, and establishment of, democracy under Juan Carlos





# We watch and make a lot of videos



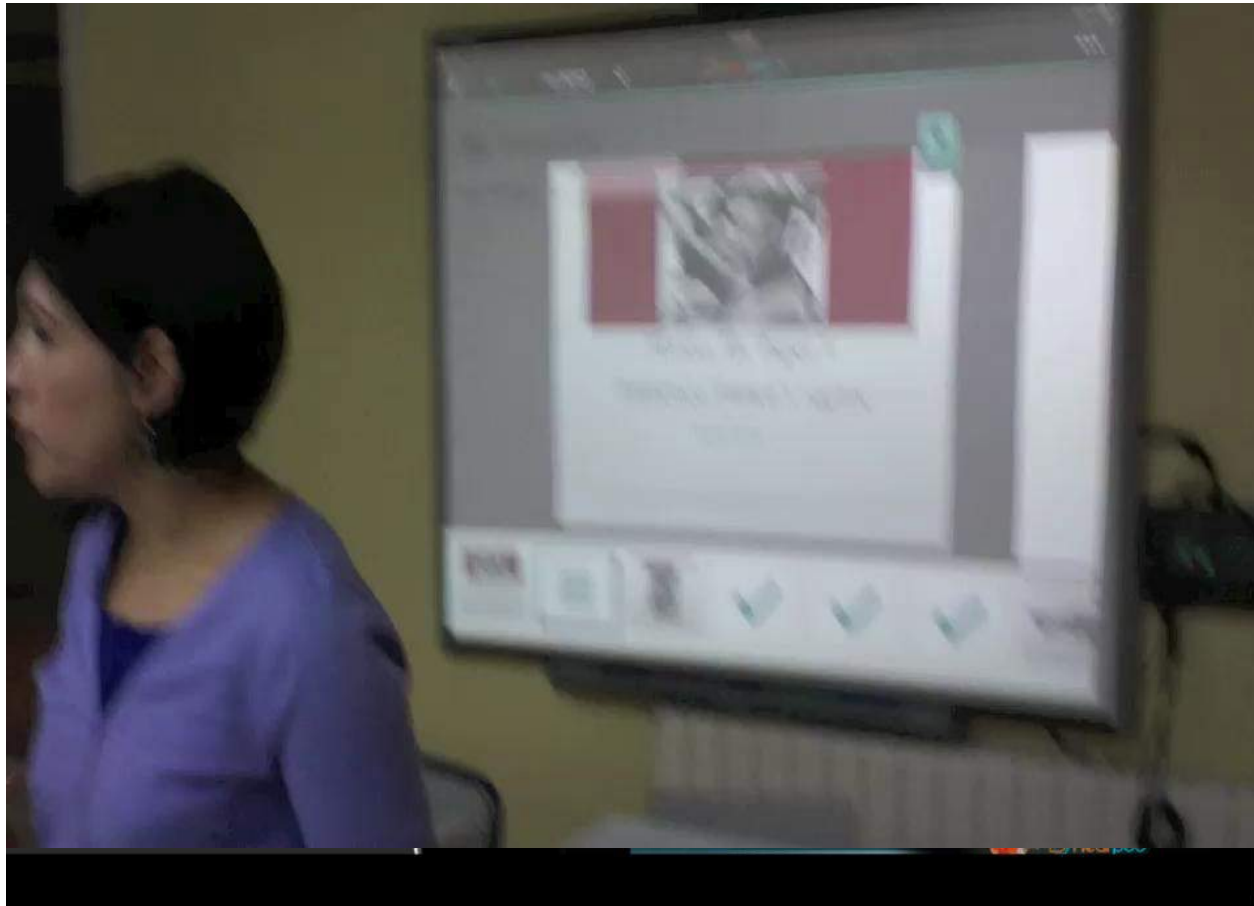
## History IB. Paper 3: Francisco Franco's regime 1939- 1975

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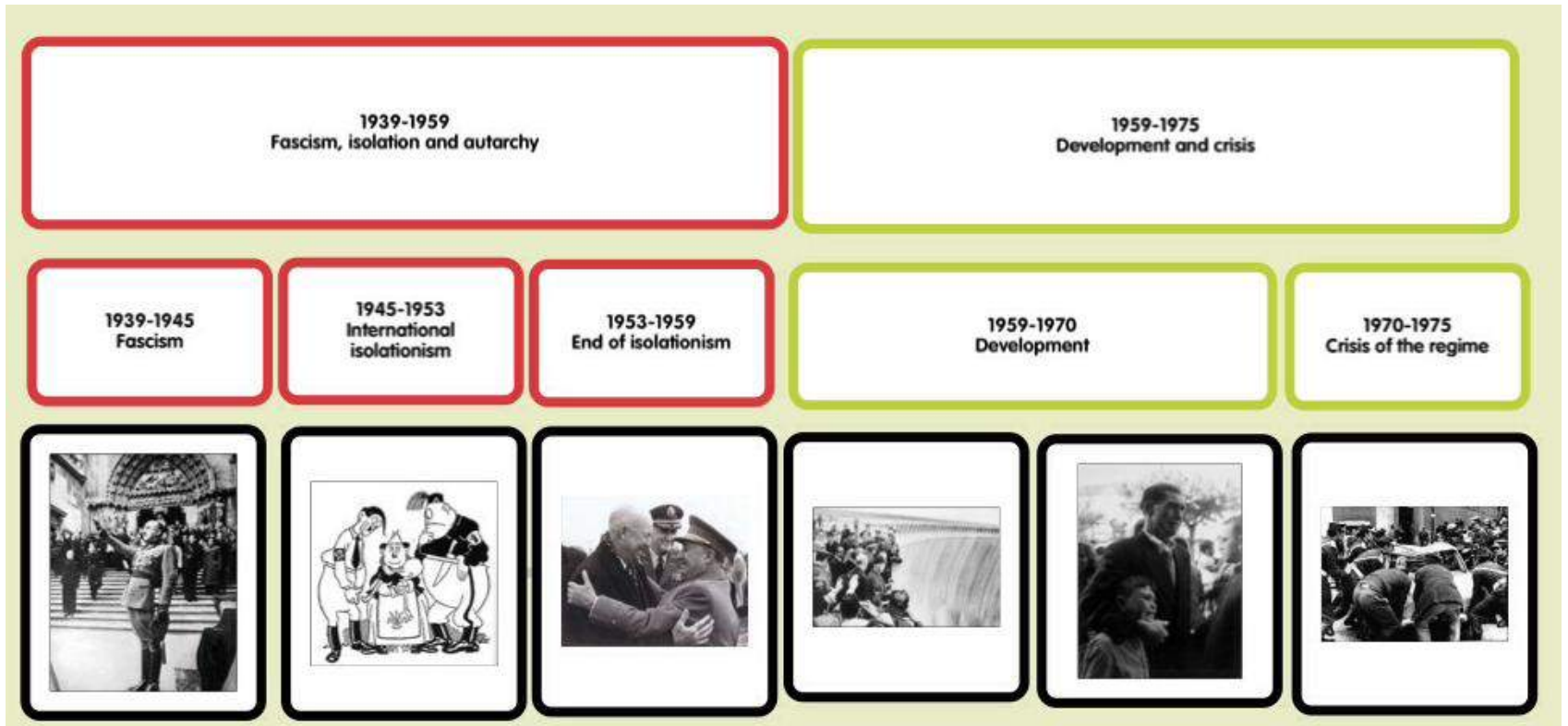


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# Reviewing with nearpod



# Timeline using popplet






# Working on the activities

## Activity 1: Evaluate Franco's regime




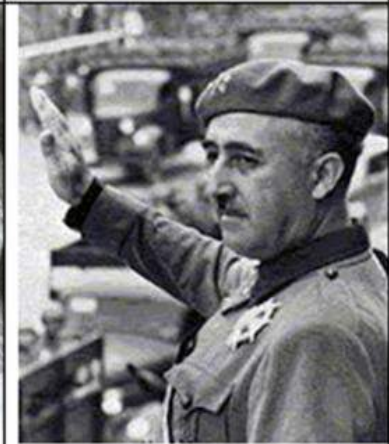

- Describe the ideology and the way Franco ruled Spain. Mention the role of the institutions
- Describe the way Franco got to power. Was there any opposition to him after the civil war
- How did Franco make sure he could control the country? Which measures did he take?
- What were Franco's policies related to education, economy and social issues?
- To what extent can we say the Franco's rule was a failure? Were there any successes?

1. Describe the importance of these three institutions in Franco's regime:

The Church	<u>Falange</u>	The Army
		

Describe the main events in the three stages of Franco's regime:



<p>World War II. Totalitarian regime. 1939-1945</p>	<p>Isolationism. 1945-1953</p>	<p>International acceptance 1953-1959</p>
		



## Activity 2: The ideology in Franco's regime

Describe the main pillars of Franco's ideology and explain how they were implemented:

Anticommunism

Totalitarianism

Anti-liberalism

Centralism

National Catholicism

Militarism

Traditionalism

Control of the society

Corporatism

Falange





Describe the historical context and explain how the law reflects the principles of fascism

## LEY DE PRINCIPIOS FUNDAMENTALES DEL MOVIMIENTO NACIONAL

“Yo, Francisco Franco Bahamonde, caudillo de España, consciente de mi responsabilidad ante Dios y ante la Historia, en presencia de las Cortes del Reino, promulgo como Principios del Movimiento Nacional, entendido como comunión de los españoles en los ideales que dieron vida a la cruzada, los siguientes:

- 1.- España es una unidad de destino en lo universal. El servicio a la unidad, grandeza y libertad de la Patria, es deber sagrado y tarea colectiva de todos los españoles.
- 2.- La Nación española considera como timbre de honor el acatamiento de la ley de Dios, según la doctrina de la Santa Iglesia Católica Apostólica Romana, única verdadera y fe inseparable de la conciencia nacional, que



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# SCIENCE AT SEK SCHOOLS

## Biology



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# Evernote itunes U Edmodo



## 2.1 Cell Theory



2.1.1. Outline the cell theory.



Robert Hooke was the first author to use the term "cell" after examining a thin slice of cork under a microscope in 1665. But he really did not know what really has discovered. He thought that the cells accords with small section of tubes with similar functions than the blood vessels.



Anton van Leeuwenhoek "Father of the Microbiology", he builds his own microscope, being the first to seeing living and single celled-fossils, which he referred as animalcules. The secret of his discover was in his lens, being an expert lens-maker, but he kept the information in secret and several aspects of his microscope were kept by his own.



### Beginnings of the Cell Theory



Theodor Schwann  
All animals are made of cells



Studied the cells division and concludes that all cells come from another cell.



Matthias Jakob Schleiden  
All plants are made of cells



### BIOLOGY DP STANDARD LEVEL

BIOLOGY SL, SCIENCE  
Raul Gonzalo, SEK EL CASTILLO

Creación: 3/07/13 Actualizada: 27/09/13  
En sesión: 9/09/13- 31/08/14

Biology standard level contents of IB Diplome programme subject.

BIOLOGY DP STANDARD LEVEL	
Entradas por fecha	12
Entradas por tema	12
Borradores	0
Temas	
1. Statistical analysis	1
2. The cell	5
3. Chemical of life	1
4. Genetics	0
5. Ecology and evolution	0
6. Human physiology	0
7. Option G Ecology and cons...	3
8. Option A Nutrition and health	1
9. Laboratory report	1

Hola, Sr. Gonzalo  
Profesor

---

Grupos
+

- BIOLOGY DP 2º BACH A and F
- SCW GROUP E
- SCW GROUP C
- SCW GROUP B
- BIOLOGY DP MIX GROUP (B, E)
- BIOLOGY DP GROUP C 2013



# APPS IN SCIENCE



Heartdecide

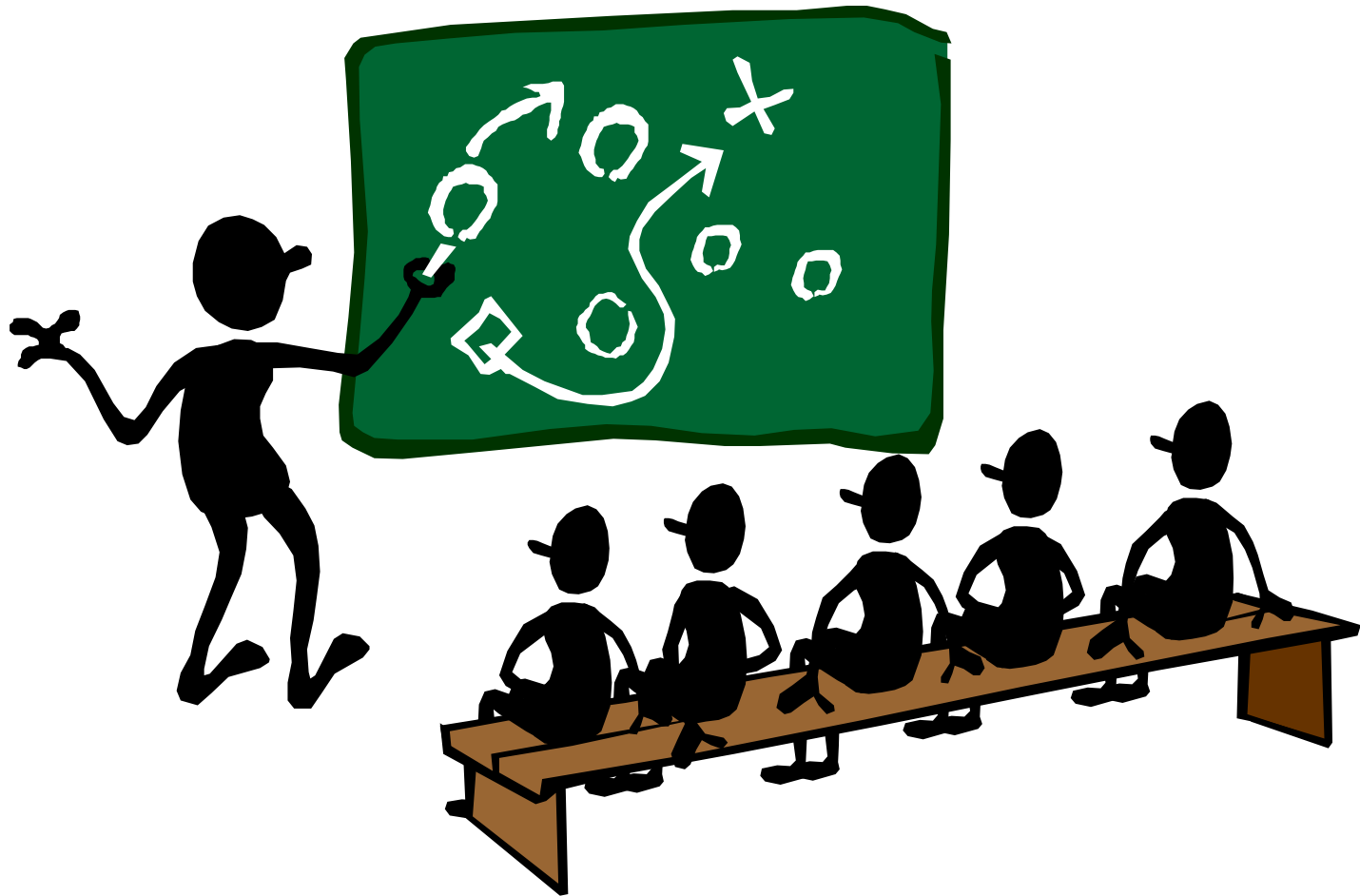


Evolutionary biology



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# Classroom Flipped classroom





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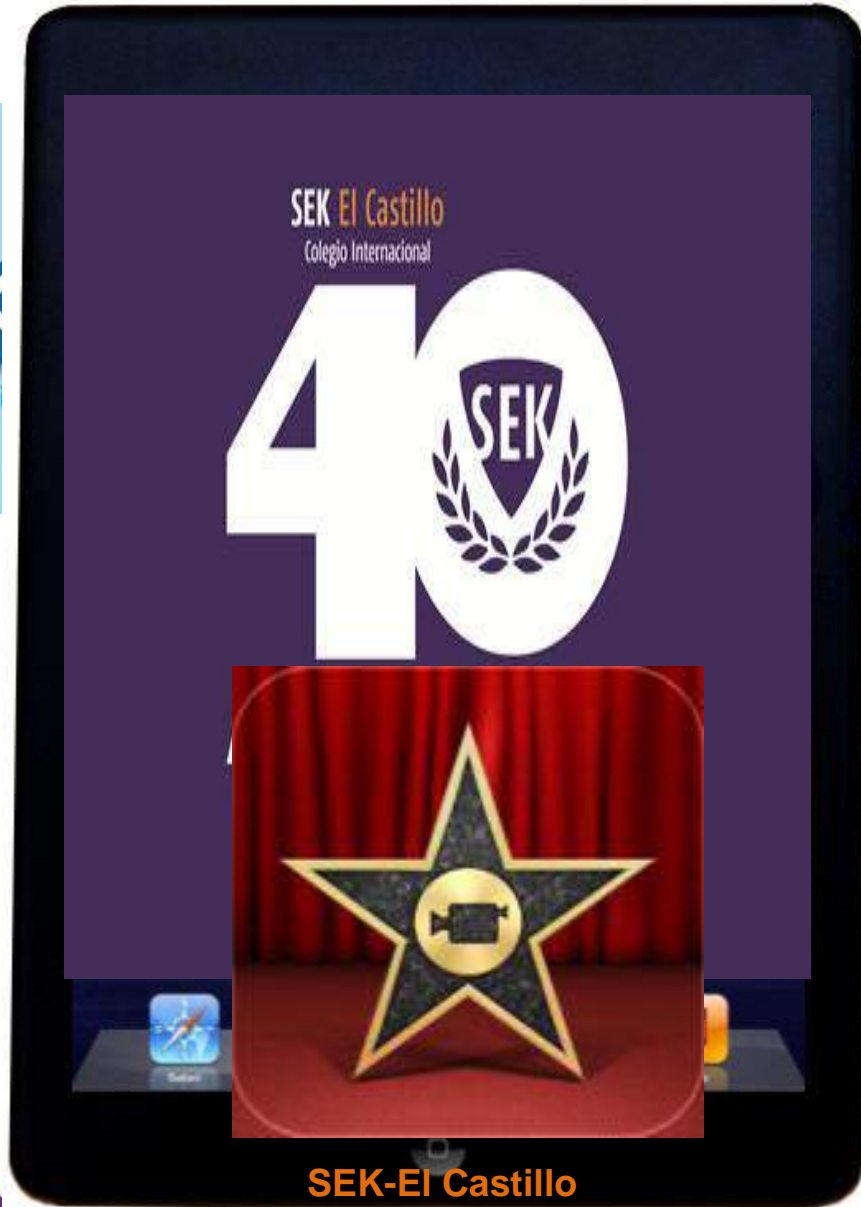
# Flipped classroom





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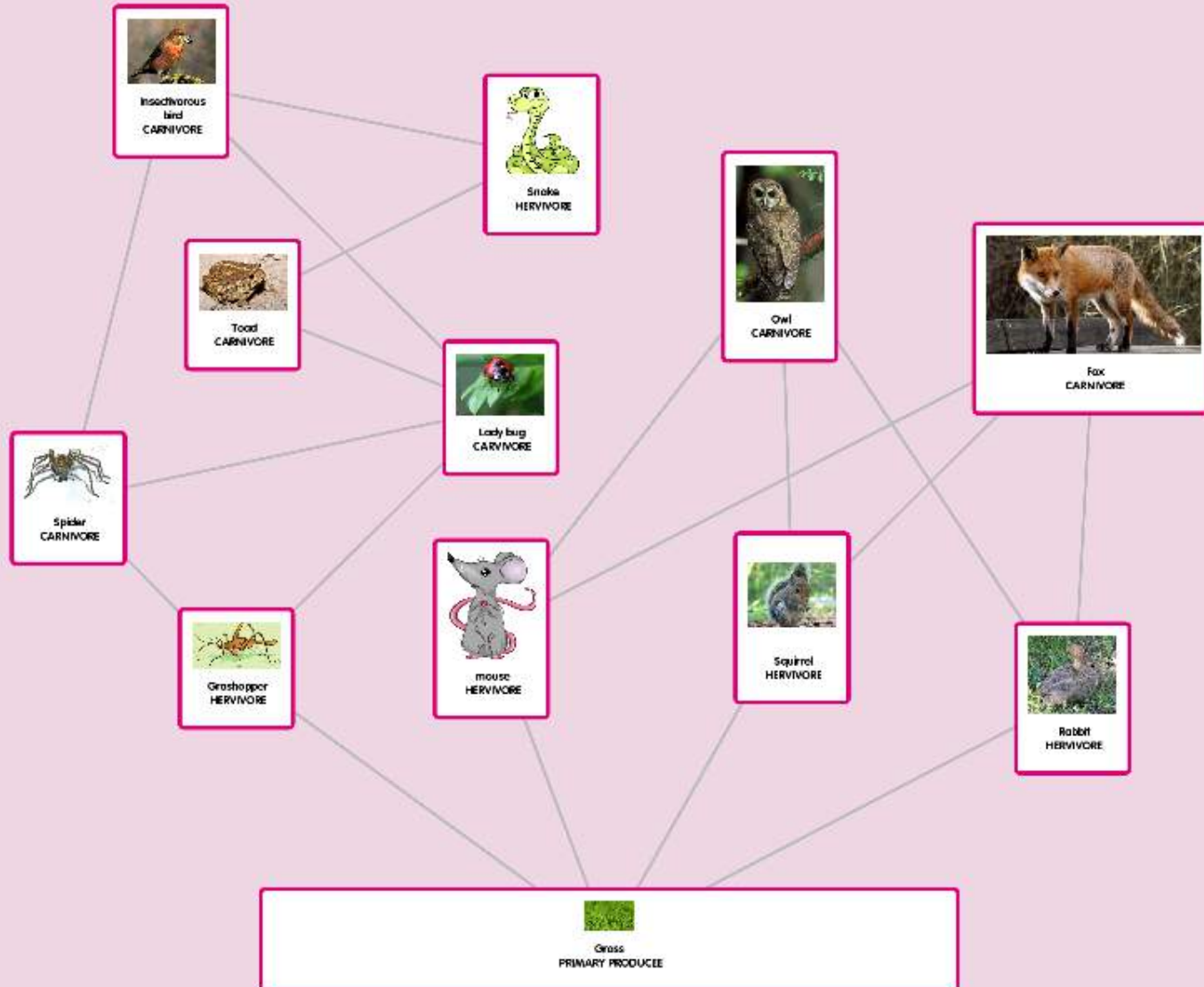
# New tools



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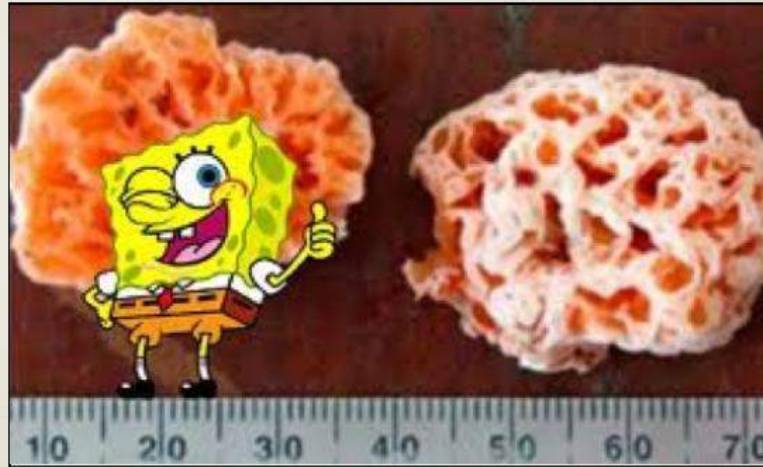




[view all](#)[clear all](#)[more popplets](#)[export](#)

## Asymmetrical

- No symmetry!!





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# Videos in class





# IB Learner pr

Thinkers  
Knowledgeable  
Communicators  
Risk-takers  
Reflective  
Principled  
Inquirers

Open-minded

Balanced  
Caring





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# Science beyond the classroom



SEK-EI Castillo



# Interactive dichotomous key gymkhana



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SEK-EI Castillo

Raul Gonzalo



# Quick response code

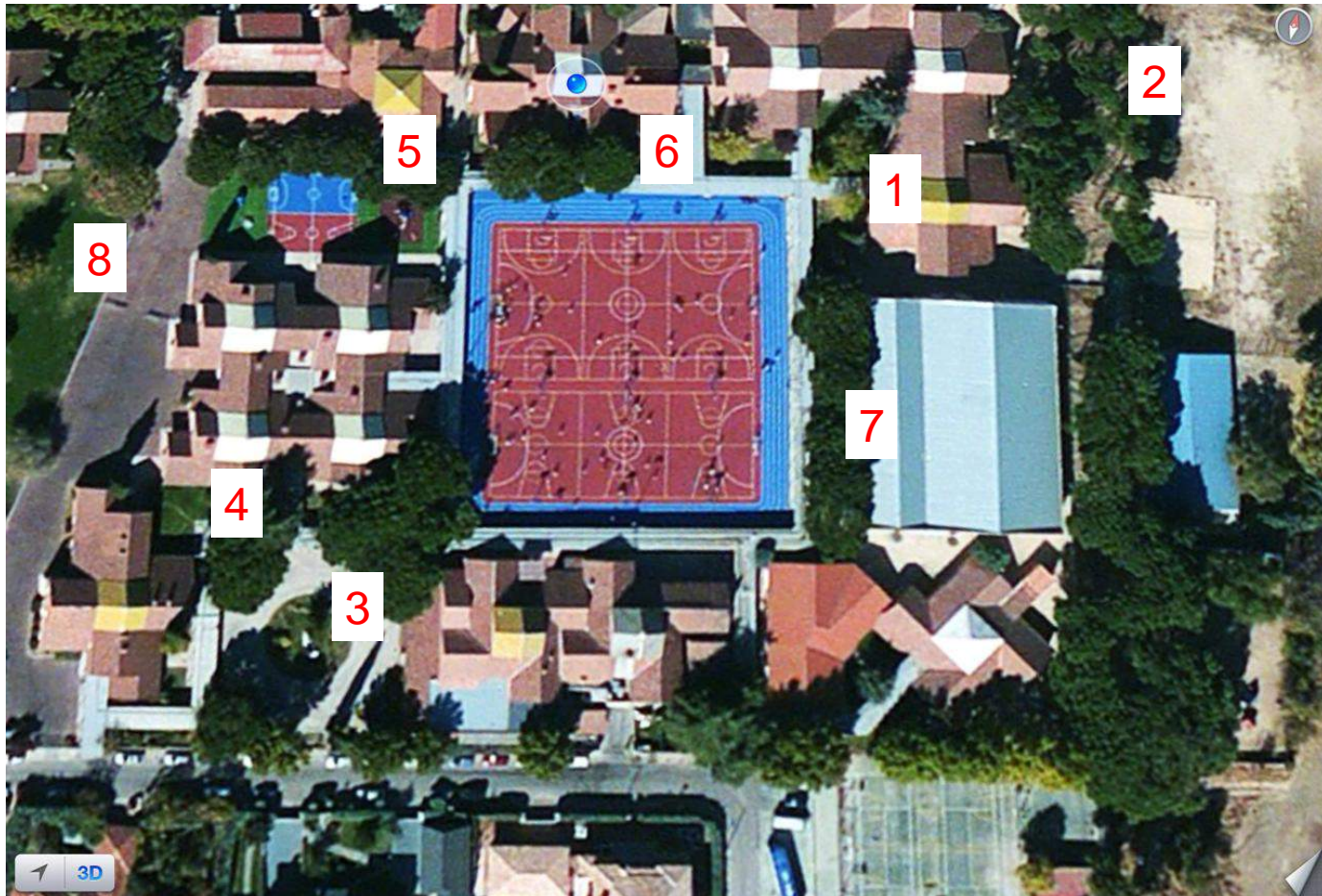


POWER POINT



KEY NOTE

# Interactive dichotomous key gymkhana







1. Leaves very small, like a scale..... *A. Cupressus arizona*



1. Leaves very easy to see, not like a scale.....2





2. Compound leaves.....3



2. Simple leaves.....5



3. Palmate leaves.....**B.** *Aesculus hippocastanum*



3. Pinnate leaves.....4



4. Leaf with smooth edge.....C. *Sophora japonica*



4. Leaf with dentate edge.....D. *Acer negundo*



5. Leaves very thin, with needle shape.....6



5. Leaves wider, does not have needle shape.....7



6. Leaves grouped in pairs.....**E.** *Pinus nigra*



6. Individual leaves .....**F.** *Picea abies*

7. Leaves with hand shape and edges with big teeth .....G. *Acer platanoides*



7. Leaves with ovate shape and highly dentate edges .....H. *Morus alba*





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Enter Unlock Code

G B C D E F A H







**Tell me and I forget,  
teach me and I may remember,  
involve me and I learn**

**Chinese proverb**



# IB and Technology: the Flipped Classroom and models 1 to 1

Ana Belén Frías– Raúl Gonzalo – **Jorge Moreno**

A presentation for the IBAEM Regional Conference in The Hague

October 24 – 27, 2013



# Preliminary

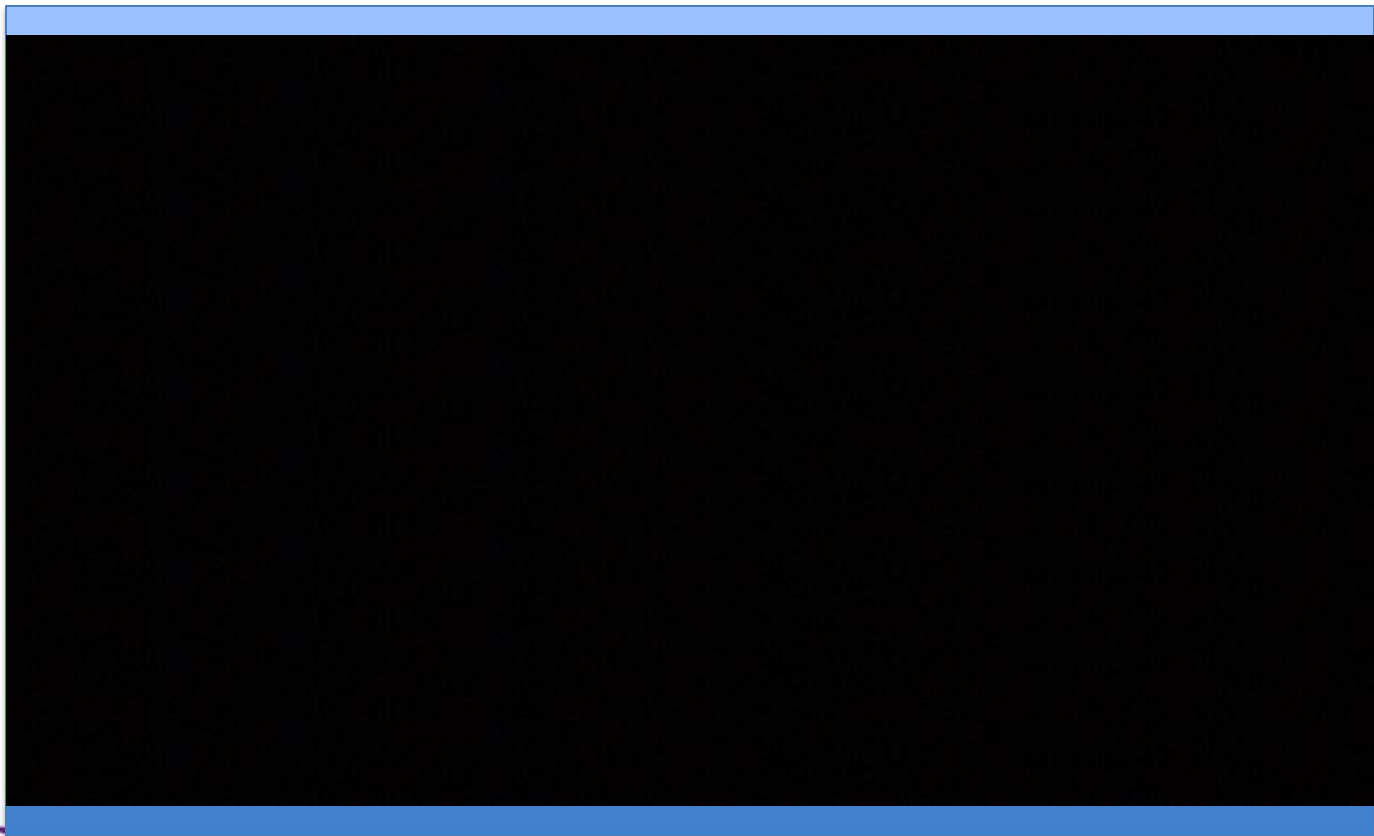
## Contents:

- SEK Educational Institution and current situation in education
- Why, how and what to innovate?
- Summary/final conclusion



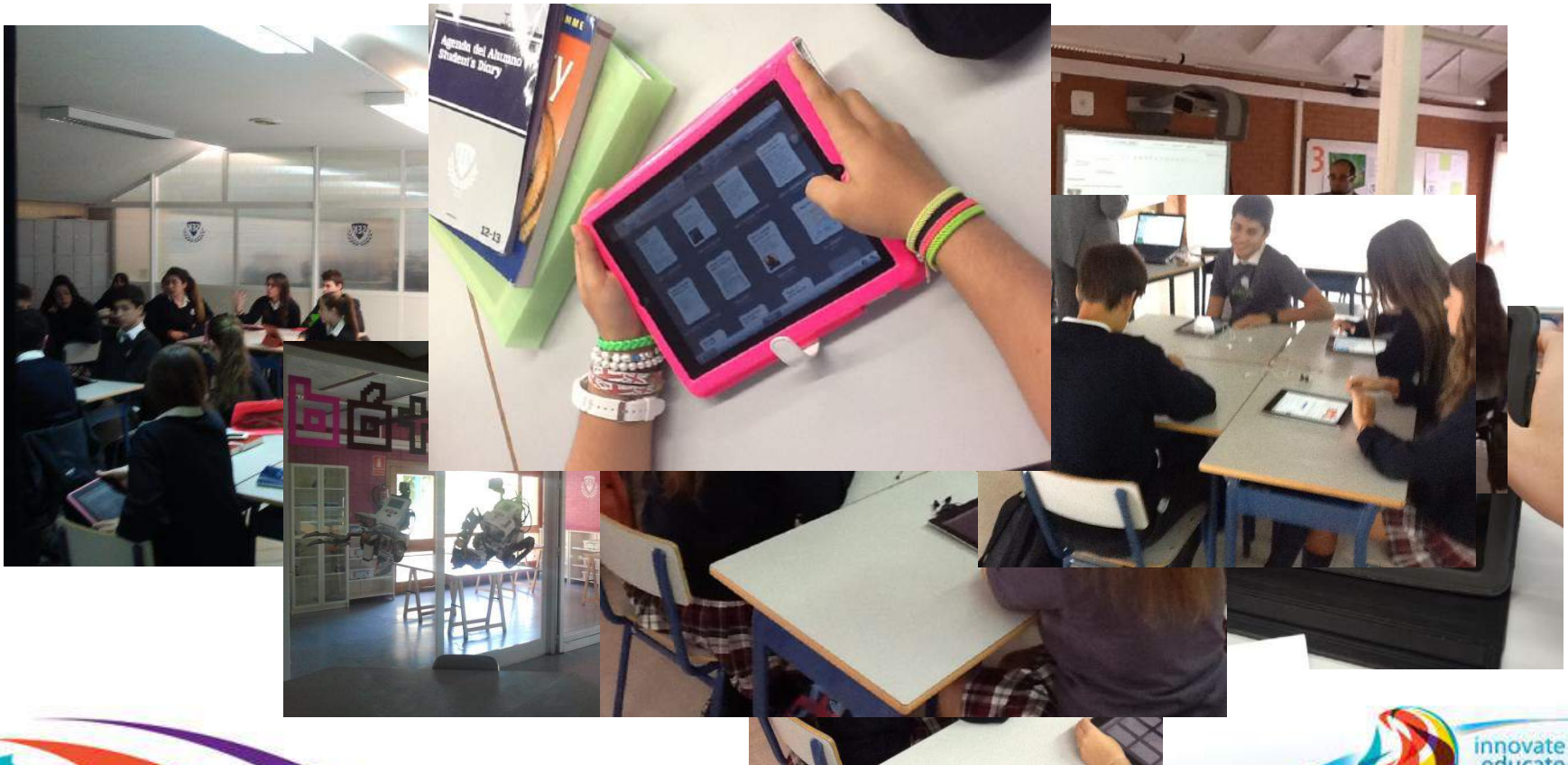
# SEK Educational Institution

## Current situation in education





# SEK Educational Institution and current situation in education



# Why innovate?



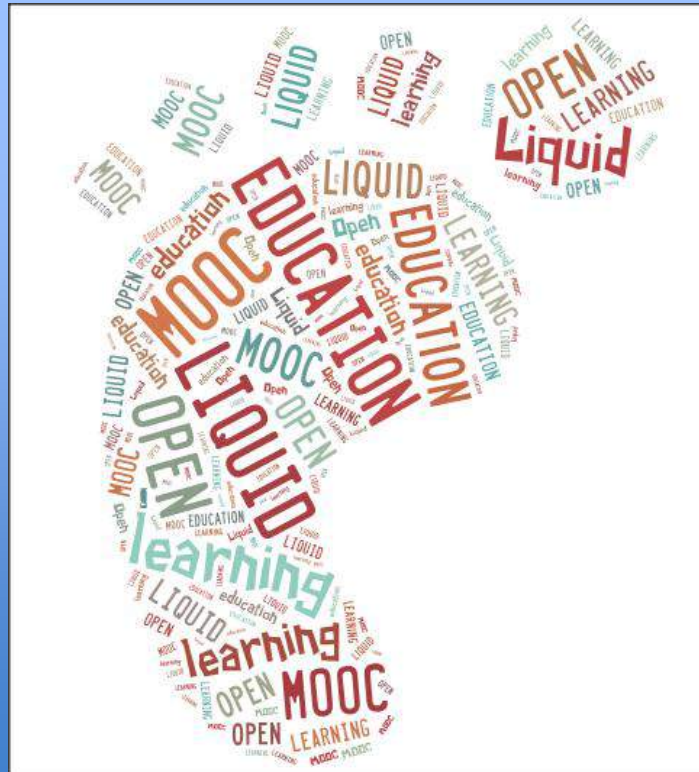


# Why innovate?

MOOC

LIQUID

P2P



KIPP

BLENDED

LEARNING



# How to innovate?

OPDS

One to one, based on Projects,  
Doing and not reading, Social  
impact





# How to innovate?





# What do we innovate?

Methodology

Tools

Evaluation



# Innovation means ... Methodology



# Innovation means ... Methodology

*“One must learn by doing the thing,  
for though you think you know it, you  
have no certainty until you try.”*

*Aristoteles*





# Innovation means ... Tools



Model 1 to 1  
SEK-EI Castillo



# Innovation means ... Evaluation

## School closer to University

Planificación de actividades				Plan de trabajo	
Secuenciación de actividades			Vinculación		
	Tipo(*1)	Modalidad (*2)	Tema	Objetivo	
1º Tr.	Reading: Predicting content and Reading for general understanding.	T.I.	P, NP	1	5
	Writing a Narrative	T.G., T.I.	P	1	1, 2, 4
	Reading for enjoyment	EX	P	1	6
	Speaking: Describing pictures	T.G.	P	1	1, 2, 3
	Reviewing present and past tenses	EX, T.I.	P, OL	1	1, 3
	Vocabulary: Travel and emergencies	T.G.	P, OL	1	1, 3
	Reading: Identifying main ideas and differentiating between fact and fiction	T.I.	P, N.P.	2	5
	Writing an informal letter/ email	T.G., T.I.	P	2	1, 2, 4

Estrategia didáctica
EXPOSITORY SESSIONS
PAIR WORK
GROUP WORK
CLASSROOM PRACTICE
INTERACTIVE SESSIONS





# Summary

Flipped Classroom & Learn by doing  
Own digital contents & model 1 to 1  
School evaluation & University  
evaluation



# Take away

“At any time,  
At any place,  
whatever device”





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**International school SEK-El Castillo**  
*Thank you for your attent*

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