



MODES DE LA CONNAISSANCE | FORMAS DE CONOCIMIENTO
WAYS OF KNOWING

IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC • 10–13 JULY



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC • 10–13 JULY

Transforming teaching and learning: a successful 1:1 experience in an IB school

THE ENGLISH SCHOOL – BOGOTÁ, COLOMBIA



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Natalia Castillo M.

- Language arts Spanish teacher and Head of Department. MYP Language A, DP Language A: Literature.
- E-learning Coach
- www.englishschool.edu.co
- Twitter: @NataliaCM0319



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Warm up exercise:

Choose one of the following exercises (1, 2 or 3) and if you have internet access post your answer in the padlet located in this address: <http://es.padlet.com/ncastillo/wi49bugbyv2t>. You will have 4 minutes for this exercise.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Warm up exercise:

Choose one of the following exercises (1, 2 or 3) and if you have internet access post your answer in the padlet located in this address: <http://es.padlet.com/ncastillo/wi49bugbyv2t>. You will have 4 minutes for this exercise.

1

***Answer the following question:
What are the main challenges you find teaching your students with technology today?***



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Warm up exercise:

Choose one of the following exercises (1, 2 or 3) and if you have internet access post your answer in the padlet located in this address: <http://es.padlet.com/ncastillo/wi49bugbyv2t>. You will have 4 minutes for this exercise.

1

***Answer the following question:
What are the main challenges you find teaching your students with technology today?***

2

A teacher that's is new to your school asks you about the impact of technology in your classes. Describe 2 concrete examples you would show him/her.



Warm up exercise:

Choose one of the following exercises (1, 2 or 3) and if you have internet access post your answer in the padlet located in this address: <http://es.padlet.com/ncastillo/wi49bugbyv2t>. You will have 4 minutes for this exercise.

1

***Answer the following question:
What are the main challenges you find teaching your students with technology today?***

2

A teacher that's is new to your school asks you about the impact of technology in your classes. Describe 2 concrete examples you would show him/her.

3

Find three images or invent a slogan that best describes the impact of technology in your students.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Comment on one of the answers or ideas you find interesting with the person sitting next to you. If you have internet access write a post next to the original answer. You will have 4 minutes for this exercise.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Reflection 1:

What are the main challenges we face introducing technology to our classrooms?



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Reflection 1:

What are the main challenges we face introducing technology to our classrooms?

Information overload



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Reflection 1:

What are the main challenges we face introducing technology to our classrooms?

Information overload

**Multiple distractions
(games, social media, etc)**



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Reflection 1:

What are the main challenges we face introducing technology to our classrooms?

Information overload

**Multiple distractions
(games, social media, etc)**

Multiple devices



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Reflection 1:

What are the main challenges we face introducing technology to our classrooms?

Information overload

**Multiple distractions
(games, social media, etc)**

Multiple devices

Disengaged students



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Reflection 1:

What are the main challenges we face introducing technology to our classrooms?

Information overload

**Multiple distractions
(games, social media, etc)**

Multiple devices

Disengaged students

Individual work- not looking up!



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Why should we implement technology in education?



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Reflection 2:



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Reflection 2:

What skills did you develop during the exercise?



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC • 10-13 JULY

Reflection 2:

What skills did you develop during the exercise?

How did you interact with others?



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC • 10-13 JULY

Reflection 2:

What skills did you develop during the exercise?

How did you interact with others?

How did you use your own strengths in order to respond to what was asked?



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

“History will judge us on how well we prepared an entire generation to face the challenges of a life where a real world and a digital world converge” - Jason Ohler

<http://www.jasonohler.com/index.cfm>



“History will judge us on how well we prepared an entire generation to face the challenges of a life where a real world and a digital world converge” - Jason Ohler

<http://www.jasonohler.com/index.cfm>

- **Critical thinking-** analysing the existing data, evaluating sources and responses, develop arguments and strong points of view with the information in hand and develop problem solving skills.



“History will judge us on how well we prepared an entire generation to face the challenges of a life where a real world and a digital world converge” - Jason Ohler

<http://www.jasonohler.com/index.cfm>

- **Critical thinking-** analysing the existing data, evaluating sources and responses, develop arguments and strong points of view with the information in hand and develop problem solving skills.
- **Creativity-** creating considering the information at hand searching for solutions or responses to an increasingly complex world.



“History will judge us on how well we prepared an entire generation to face the challenges of a life where a real world and a digital world converge” - Jason Ohler

<http://www.jasonohler.com/index.cfm>

- **Critical thinking-** analysing the existing data, evaluating sources and responses, develop arguments and strong points of view with the information in hand and develop problem solving skills.
- **Creativity-** creating considering the information at hand searching for solutions or responses to an increasingly complex world.
- **Collaboration-** generating genuine connections with those around us in order to respond to a problem or situation and enrich our own points of view.



“History will judge us on how well we prepared an entire generation to face the challenges of a life where a real world and a digital world converge” - Jason Ohler

<http://www.jasonohler.com/index.cfm>

- **Critical thinking-** analysing the existing data, evaluating sources and responses, develop arguments and strong points of view with the information in hand and develop problem solving skills.
- **Creativity-** creating considering the information at hand searching for solutions or responses to an increasingly complex world.
- **Collaboration-** generating genuine connections with those around us in order to respond to a problem or situation and enrich our own points of view.
- **Digital citizenship-** connecting and interacting digitally respecting ourselves and those around us.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

“History will judge us on how well we prepared an entire generation to face the challenges of a life where a real world and a digital world converge” - Jason Ohler

<http://www.jasonohler.com/index.cfm>



“History will judge us on how well we prepared an entire generation to face the challenges of a life where a real world and a digital world converge” - Jason Ohler

<http://www.jasonohler.com/index.cfm>

Top 5 Needs of Employers





What are the pedagogical possibilities when you introduce technology?



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

- Creating spaces for individual and collaborative work.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

- Creating spaces for individual and collaborative work.
- Enhancing communication skills.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

- Creating spaces for individual and collaborative work.
- Enhancing communication skills.
- Considering differentiated instruction.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

- Creating spaces for individual and collaborative work.
- Enhancing communication skills.
- Considering differentiated instruction.
 - Analytical, pragmatic and creative thinking (Sternberg's triarchic approach)



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

- Creating spaces for individual and collaborative work.
- Enhancing communication skills.
- Considering differentiated instruction.
 - Analytical, pragmatic and creative thinking (Sternberg's triarchic approach)
 - Multiple intelligences (Gardner's approach)



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

- Creating spaces for individual and collaborative work.
- Enhancing communication skills.
- Considering differentiated instruction.
 - Analytical, pragmatic and creative thinking (Sternberg's triarchic approach)
 - Multiple intelligences (Gardner's approach)
- Generating reflection and inquiry from essential questions.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

- Creating spaces for individual and collaborative work.
- Enhancing communication skills.
- Considering differentiated instruction.
 - Analytical, pragmatic and creative thinking (Sternberg's triarchic approach)
 - Multiple intelligences (Gardner's approach)
- Generating reflection and inquiry from essential questions.
- Developing projects and challenges with students.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Who are we and how have we integrated technology?



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



Fundación Educativa
de Inglaterra



Colegio
de Inglaterra
The English School

MISSION

The English School strives for academic excellence, delivering high quality learning in a happy environment, creating confident leaders who act with integrity. Students have a social conscience, demonstrate care for the environment and are capable of transforming their surroundings in a positive way.

VISION

By 2016 our pioneering, innovative and multilingual graduates will be among the happiest IB students within Latin America, striving for excellence.

KEY OBJECTIVES

1. For our graduates to be multilingual and among the best IB students in Latin America
2. To strengthen the international reputation and prestige of the school.
3. To implement cutting edge teaching and learning strategies supported by emerging technologies.





PYP



MYP



DP



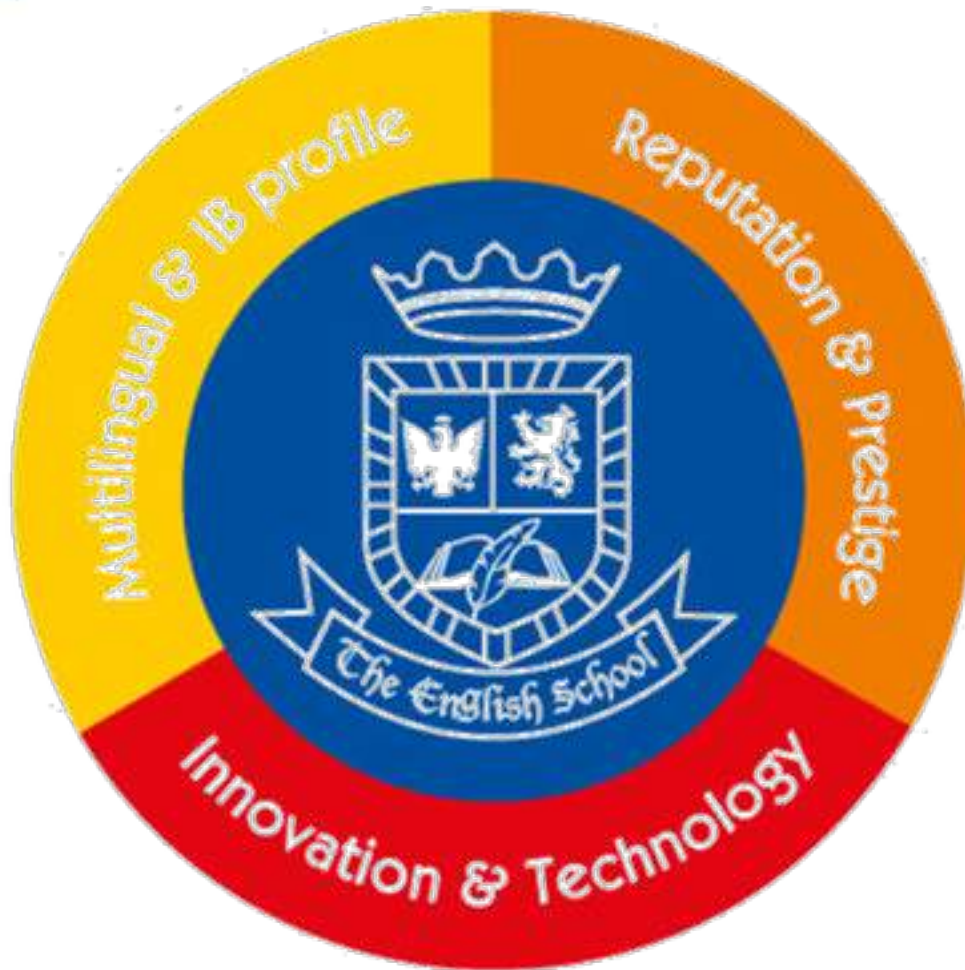
IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



Strategic planning team



Mission and vision



Strategic objectives



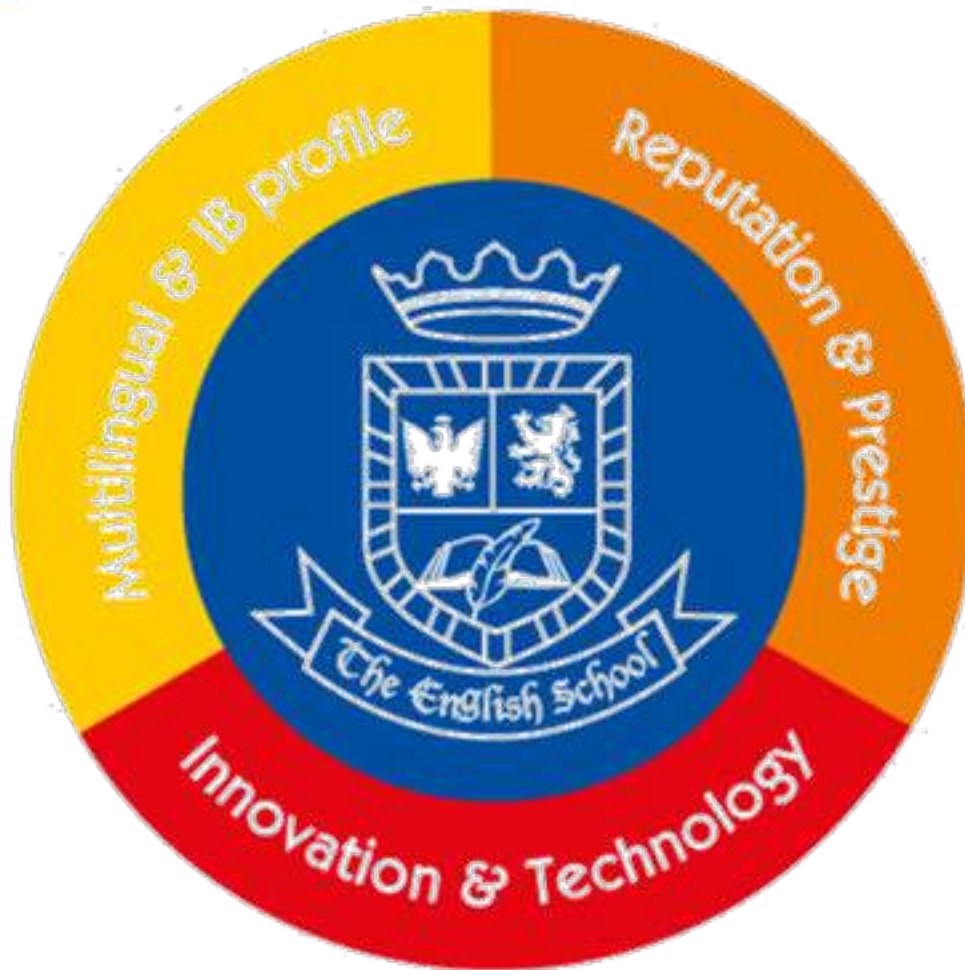
IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



Strategic planning team



Mission and vision



Strategic objectives



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

11
@TES

¡Aprendizaje, donde sea, cuando sea!



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



11
@TES

¡Aprendizaje, donde sea, cuando sea!



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



11
@TES

¡Aprendizaje, donde sea, cuando sea!



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



1:1
@TES

¡Aprendizaje, donde sea, cuando sea!





2013-2014: Introducing the 1:1 program



Grade 9 - 100%



Grade 10 - 94%



Grade 11 - 81%



E-learning plan vision:

“Teachers will **change educational practice** within the classroom and technology will enhance practice. In four years teachers and students will all have their own **global collaborative learning spaces**. Learners will be **self directed & independent**. Teachers will be facilitators, guiding students in cyber classroom activities. Students will take **ownership of their own learning** by helping fellow classmates and teachers reinforce **technological skills**, through **sharing practice** and **collaboration**. The school will be **less dependent on paper**, services and resources will be web accessible. Repetitive processes will be automated and communication tools will be centralized and streamlined.”



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Four Year Plan

Y1: 2011-2012
Access

Y2: 2012-2013
Integration

Y3: 2013-2014
Consolidation

Y4: 2014-2015
Extension



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Four Year Plan

Y1: 2011-2012
Access

Y2: 2012-2013
Integration

Y3: 2013-2014
Consolidation

Y4: 2014-2015
Extension



APR 2012 - MARCH 2013

PHASE 1 - PLANNING

1. Prepare team
2. Consider current research (other 1:1 deployments – Headmistress visits 5 schools in UK, 4 Mexico, 1 Costa Rica)
3. Develop a vision for learning and teaching w/ 1:1 engaging stakeholders
4. Develop Communication Strategies
5. Audit current use of ICT
6. Conduct infrastructure readiness assessment
7. Work on budgetary options & prepare budget
8. Confirm project scope and timeline

SEP 2012 - JUL 2013

PHASE 2 - PREPARATION

9. Professional Development, to support 1:1, improve learning and change pedagogy
10. Content for learning (software, tools and online resources)
11. Learning spaces
12. Ensure infrastructure & support are suitable
13. Provide guidance for stake-holders (Support documentation)
14. Invite suppliers
15. Pilot Project
16. Management Policies

MAY 2013 - SEP 2013

PHASE 3- IMPLEMENTATION

17. Provide On site service structures (Space, tech support)
18. Conduct parent and community sessions
19. Order and prepare devices and on-going maintenance
20. Provide PD for teachers
21. Deploy devices

OCT 2013 - JUN 2014

PHASE 4- EVALUATION

22. Evaluate successes and areas of improvement
23. Incorporate students, teachers and parents reflections
24. Share with community
25. Plan 1:1 Program extension

Action Plan



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Action Plan



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Leadership

Action Plan



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Leadership

Infrastructure

Action Plan



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Leadership

Infrastructure

Community

Action Plan



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Leadership

Infrastructure

Community

Teaching and learning

Action Plan



Leadership: SELT

- Inspiring and leading the process.
- Promoting digital-age learning culture and providing an environment for innovation (becoming the first Smart elite school and the first Apple school in Colombia).
- Monitoring progress.





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



Infrastructure

- Technical considerations (networks, servers, storage), planning the launch, creating and renovating learning spaces, providing technical support.



Año 1, 2011-2012

Infraestructura Tecnológica Jun/12



ADMINISTRATIVE USE	49
ACADEMIC USE	257



SMART BOARD 680	32
SMART BOARD 680 UF75	2
SMART BOARD 880 UF75	1



DELL VOSTRO	
ACADEMIC USE	111



MACBOOK PRO 13.3"	
ACADEMIC USE Video	4
TEACHER USE (Soon)	25



DELL PROJECTORS	
ACADEMIC USE	46

+ 34



BANDWIDTH (COLUMBUS)	20M
ARUBA ACCESS POINTS	63





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Community

TEACHERS

STUDENTS

TECHNOLOGY
COMITEE

PARENTS





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Community

- Communicating and socialising the e-learning plan to all members of the community in each step of the process.

TEACHERS

STUDENTS

TECHNOLOGY
COMITEE

PARENTS





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Community

- Communicating and socialising the e-learning plan to all members of the community in each step of the process.
- Studying and considering the needs and challenges of each section and department and giving the required support in terms of pedagogical vision and technical support.

TEACHERS

STUDENTS

TECHNOLOGY
COMITEE

PARENTS





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Community

- Communicating and socialising the e-learning plan to all members of the community in each step of the process.
- Studying and considering the needs and challenges of each section and department and giving the required support in terms of pedagogical vision and technical support.
- Participating in technological events in the local community to discuss and address the most up to date issues in the field of technology in education. (TEB conferences, TES News talks)

TEACHERS

STUDENTS

TECHNOLOGY
COMITEE

PARENTS





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Community

- Communicating and socialising the e-learning plan to all members of the community in each step of the process.
- Studying and considering the needs and challenges of each section and department and giving the required support in terms of pedagogical vision and technical support.
- Participating in technological events in the local community to discuss and address the most up to date issues in the field of technology in education. (TEB conferences, TES News talks)
- Introducing the “Buen trato digital” campaign in alignment with the schools pastoral team.

TEACHERS

STUDENTS

TECHNOLOGY
COMITEE

PARENTS





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Community

- Communicating and socialising the e-learning plan to all members of the community in each step of the process.
- Studying and considering the needs and challenges of each section and department and giving the required support in terms of pedagogical vision and technical support.
- Participating in technological events in the local community to discuss and address the most up to date issues in the field of technology in education. (TEB conferences, TES News talks)
- Introducing the “Buen trato digital” campaign in alignment with the schools pastoral team.

TEACHERS

STUDENTS

TECHNOLOGY
COMITEE

PARENTS



Tecnología Educativa Colegios de Bogotá



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Community

- Communicating and socialising the e-learning plan to all members of the community in each step of the process.
- Studying and considering the needs and challenges of each section and department and giving the required support in terms of pedagogical vision and technical support.
- Participating in technological events in the local community to discuss and address the most up to date issues in the field of technology in education. (TEB conferences, TES News talks)
- Introducing the “Buen trato digital” campaign in alignment with the schools pastoral team.

TEACHERS

STUDENTS

TECHNOLOGY
COMITEE

PARENTS



Tecnología Educativa Colegios de Bogotá

BUEN  TRATO

TES
The English School



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Teaching and learning





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Teaching and learning



- Content and pedagogy





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Teaching and learning



- Content and pedagogy





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Teaching and learning



- Content and pedagogy
- Professional development





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Teaching and learning



- Content and pedagogy
- Professional development





Teaching and learning



- Content and pedagogy

- Professional development



- By the consolidation year (2013-2014) the leadership team ensured the necessary **Teaching Resources** for every subject including digital textbooks, apps and website subscriptions.



Teaching and learning



- Content and pedagogy

- Professional development



- By the consolidation year (2013-2014) the leadership team ensured the necessary **Teaching Resources** for every subject including digital textbooks, apps and website subscriptions.
- It also provided a significant amount of **Professional Development**, specially for the teachers involved in the 1:1 initiative with 9th grade.



Teaching and learning



- Content and pedagogy

- Professional development



- By the consolidation year (2013-2014) the leadership team ensured the necessary **Teaching Resources** for every subject including digital textbooks, apps and website subscriptions.
- It also provided a significant amount of **Professional Development**, specially for the teachers involved in the 1:1 initiative with 9th grade.
- Finally, it has determined a specific **Pedagogical Approach** to support the teaching and learning process and give specific guidelines in order to transform the teaching and learning process and not just rely on software or equipment.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Teaching resources



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Teaching resources



SMART
Technologies Inc.



Phi dias
académico

ManageBac



Iste
2012 JUNE 24-27
san diego convention center

turnitin

Follett
DESTINY

moodle

EBSCO
HOST

NOVASOFT
Información Efectiva



Year 1



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Teaching resources



ManageBac



SMART Technologies Inc.



Phi dias académico

ManageBac



Year 2



Year 1





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Teaching resources



ManageBac



Year 3



ManageBac



Year 2



Year 1



ManageBac



COURSE / SESSION	PARTICIPANTS	HOURS EA
Introduction to OsX, iLife, by iShop Apple trainer	All Preschool & Primary	3 - Jan/13
Coaching teachers for addressing 1:1 concerns by TCEA (Online)	All Grades 9-11 teachers	2 - Jan/13
SMART Board training	All teachers	2 - Jan/13
Introduction to iBooks Author	7 Bach teachers 4 students	12 - Feb & March/13
TEB Innovation Time	7 teachers	6 - March
ISTE Conference in USA	2 teachers	32 -Jun/13
Introduction to OsX, iOS, iLife by Apple Distinguished Educator from México	33 1:1 Teachers G9	40 - Aug/13
Introduction to OsX, iOS, iLife by Apple Coach	All DP Teachers	4 - Aug/13
Introduction to ManageBac	All teachers	3 - Aug/13
iLife, Keynote & Apps	All preschool	3 - Inset Oct
iLife, Keynote & Apps	All Primary	3 - Inset Oct
SMART training	All Primary & Preschool	2 - Inset Oct
SMART Certification Program	5 teachers	16 - Oct/13
Apple coaching in Individual basis	60 teachers	240 Total
Digital Saturday	45 parents	2 - Oct/13
Digital Saturday	15 parents	2 - Nov/13
Apple Certified Technician	1 Technician	40 - Nov/13



Professional development

COURSE / SESSION	PARTICIPANTS	HOURS EA
Introduction to OsX, iLife, by iShop Apple trainer	All Preschool & Primary	3 - Jan/13
Coaching teachers for addressing 1:1 concerns by TCEA (Online)	All Grades 9-11 teachers	2 - Jan/13
SMART Board training	All teachers	2 - Jan/13
Introduction to iBooks Author	7 Bach teachers 4 students	12 - Feb & March/13
TEB Innovation Time	7 teachers	6 - March
ISTE Conference in USA	2 teachers	32 -Jun/13
Introduction to OsX, iOS, iLife by Apple Distinguished Educator from México	33 1:1 Teachers G9	40 - Aug/13
Introduction to OsX, iOS, iLife by Apple Coach	All DP Teachers	4 - Aug/13
Introduction to ManageBac	All teachers	3 - Aug/13
iLife, Keynote & Apps	All preschool	3 - Inset Oct
iLife, Keynote & Apps	All Primary	3 - Inset Oct
SMART training	All Primary & Preschool	2 - Inset Oct
SMART Certification Program	5 teachers	16 - Oct/13
Apple coaching in Individual basis	60 teachers	240 Total
Digital Saturday	45 parents	2 - Oct/13
Digital Saturday	15 parents	2 - Nov/13
Apple Certified Technician	1 Technician	40 - Nov/13



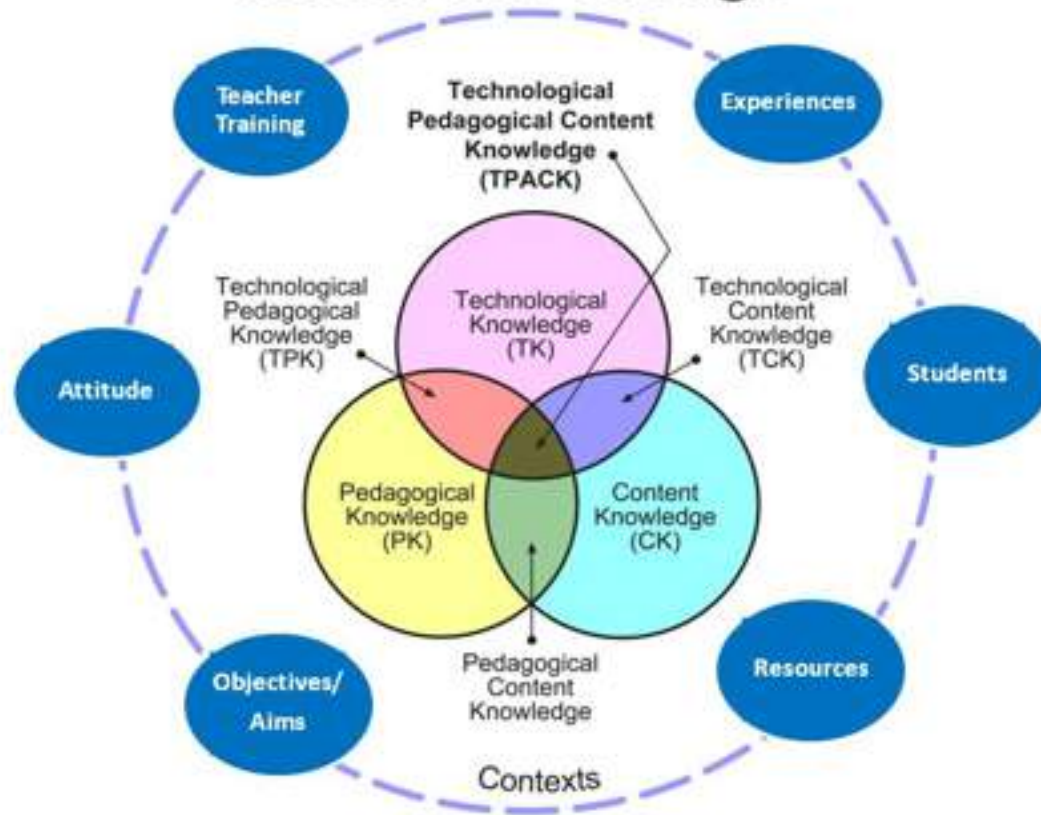
Pedagogical approach: three key models

- **ISTE standards:** the ISTE Standards are the standards for learning, teaching and leading in the digital age and are widely recognised and adopted worldwide. The family of ISTE Standards work together to transform education. <http://www.iste.org/STANDARDS>
- **T-PACK:** Technological Pedagogical Content Knowledge (TPACK) is a framework that identifies the knowledge teachers need to teach effectively with technology. The TPACK framework extends Shulman's idea of Pedagogical Content Knowledge. <http://www.tpck.org>
- **SAMR model:** "SAMR, a model designed to help educators integrate technology into teaching and learning , was developed by Dr. Ruben Puentedura. The model aims to enable teachers to design, develop, and integrate digital learning experiences that utilise technology to transform learning experiences to lead to high levels of achievement for students." <http://www.hippasus.com/rrpweblog/> and <http://www.schrockguide.net/samr.html>





Context Influence on TPACK Knowledge





Transformation

Redefinition

Tech allows for the creation of new tasks, previously inconceivable

Modification

Tech allows for significant task redesign

Augmentation

Tech acts as a direct tool substitute, with functional improvement

Substitution

Tech acts as a direct tool substitute, with no functional change

Enhancement

Enhancement

functional change

Tech acts as a direct tool substitute, with no

Substitution



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



How can these models change the way we plan and conceive our lessons and assessment?



How can these models change the way we plan and conceive our lessons and assessment?

**The English School - 1:1 Pilot program
9th grade Language Arts 2013-2014
(MYP year 5)**



How can these models change the way we plan and conceive our lessons and assessment?

The English School - 1:1 Pilot program
9th grade Language Arts 2013-2014
(MYP year 5)

- 1:1 Program 7th -11th grade all
subjects 2014-2015 (MYP years 3-5,
DP)



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



Classroom management

Approaches to learning

Developing unit plans with challenge based learning strategies



Classroom management

 **The English School**

 **Ciudadanía digital: guía para el uso responsable de tecnología**

-  Sigue las instrucciones del profesor en cuanto a cómo y cuándo usar los dispositivos electrónicos. No olvides que hay momentos adecuados para su uso y hay momentos en que éste no es necesario.
-  En clase usa los dispositivos electrónicos, redes y software sólo con propósitos educativos referendos a la asignatura en cuestión.
-  Demuestra respeto por el celular y por los demás al usar tecnología, incluyendo las redes sociales. Evita toda forma de acoso o maltrato a través de estos medios.
-  Mantén privada tu información personal y la de otros.
-  Da crédito a otros por su trabajo e ideas; referencia tus fuentes bien sean éstas textos, imágenes, archivos de audio o video encontrados en aplicaciones o páginas web.
-  Reporta el uso inapropiado de tecnología inmediatamente.

1:1 TES *Aprendeja, donde sea cuando sea!*

© 2014 The English School



Classroom management

- Developing school specific digital citizenship guidelines aligned to the school's "Buen trato" project.

The English School

Ciudadanía digital: guía para el uso responsable de tecnología

- Sigue las instrucciones del profesor en cuanto a cómo y cuándo usar los dispositivos electrónicos. No olvides que hay momentos adecuados para su uso y hay momentos en que éste no es necesario.
- En clase usa los dispositivos electrónicos, redes y software sólo con propósitos educativos referidos a la asignatura en cuestión.
- Demuestra respeto por el celular y por los demás al usar tecnología, incluyendo las redes sociales. Evita toda forma de acoso o maltrato a través de estos medios.
- Mantén privada tu información personal y la de otros.
- Da crédito a otros por su trabajo e ideas; referencia tus fuentes bien sean éstas textos, imágenes, archivos de audio o video encontrados en aplicaciones o páginas web.
- Reporta el uso inapropiado de tecnología inmediatamente.

1:1 TES Aprende, donde sea cuando sea!
#11111111





Classroom management

The English School

Ciudadanía digital: guía para el uso responsable de tecnología

- 1. Sigue las instrucciones del profesor en cuanto a cómo y cuándo usar los dispositivos electrónicos. No olvides que hay momentos adecuados para su uso y hay momentos en que éste no es necesario.
- 2. En clase usa los dispositivos electrónicos, redes y software sólo con propósitos educativos referidos a la asignatura en cuestión.
- 3. Demuestra respeto por el réseau y por los demás al usar tecnología, incluyendo las redes sociales. Evita toda forma de acoso o maltrato a través de estos medios.
- 4. Mantén privada tu información personal y la de otros.
- 5. Da crédito a otros por su trabajo e ideas; referencia tus fuentes bien sean éstas textos, imágenes, archivos de audio o video encontrados en aplicaciones o páginas web.
- 6. Reporta el uso inapropiado de tecnología inmediatamente.

1:1 TES Aprende, donde sea cuando sea!

- Developing school specific digital citizenship guidelines aligned to the school's "Buen trato" project.



- Developing with the students classroom's digital expectations. Generating a set of clear and direct instructions for the proper use of devices.



Classroom management

The English School

Ciudadanía digital: guía para el uso responsable de tecnología

- 1. Sigue las instrucciones del profesor en cuanto a cómo y cuándo usar los dispositivos electrónicos. No olvides que hay momentos adecuados para su uso y hay momentos en que éste no es necesario.
- 2. En clase usa los dispositivos electrónicos, redes y software sólo con propósitos educativos referidos a la asignatura en cuestión.
- 3. Demuestra respeto por el réseau y por los demás al usar tecnología, incluyendo las redes sociales. Evita toda forma de acoso o maltrato a través de estos medios.
- 4. Mantén privada tu información personal y la de otros.
- 5. Da crédito a otros por su trabajo e ideas; referencia tus fuentes bien sean éstas textos, imágenes, archivos de audio o video encontrados en aplicaciones o páginas web.
- 6. Reporta el uso inapropiado de tecnología inmediatamente.

1:1 TES Aprendeja, donde sea cuando sea!

- Developing school specific digital citizenship guidelines aligned to the school's "Buen trato" project.



- Developing with the students classroom's digital expectations. Generating a set of clear and direct instructions for the proper use of devices.

IB profile exercise!



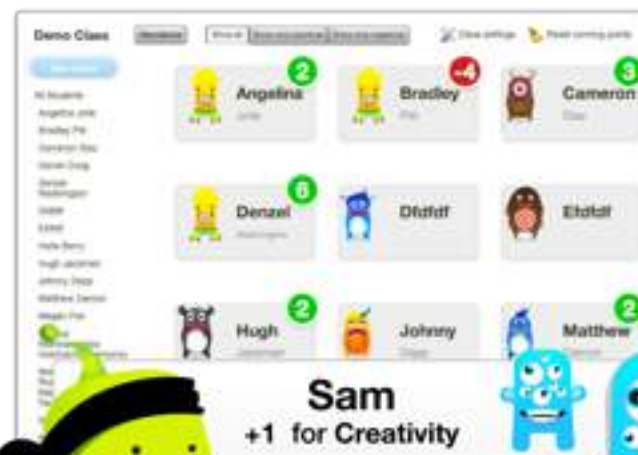


Consider the ten attributes of the IB profile and think of one way we can develop each one in our class both in real and virtual environments.





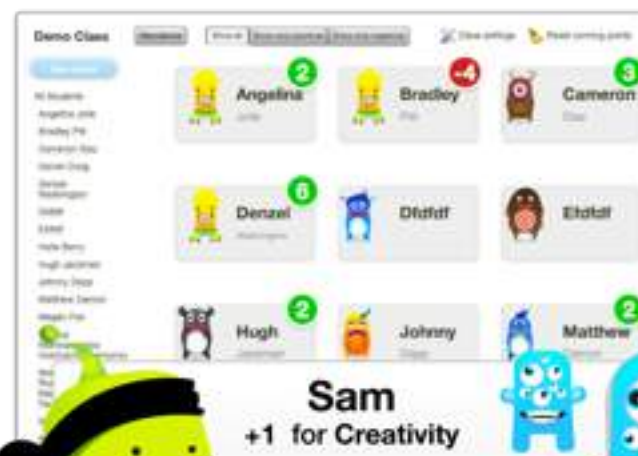
Class behaviour tools





Class behaviour tools

- classdojo.com: behaviour points allow positive reinforcement and helps students focus on the assigned task. It generates reports for students, parents and teachers, it has a timer and a random name picker to make sure everyone in the classroom participates and is engaged.



Sam
+1 for Creativity

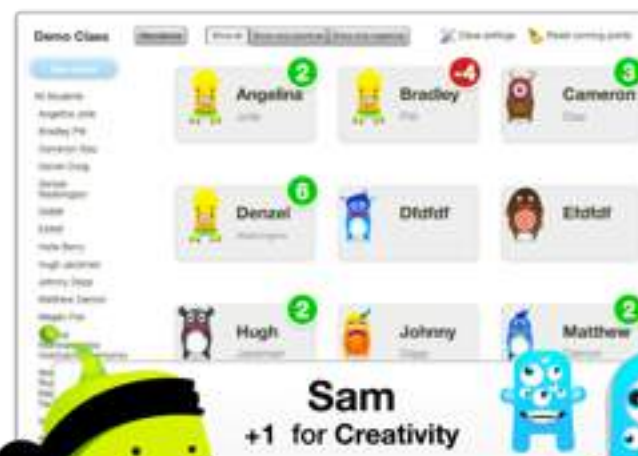


CLASS
DOJO



Class behaviour tools

- classdojo.com: behaviour points allow positive reinforcement and helps students focus on the assigned task. It generates reports for students, parents and teachers, it has a timer and a random name picker to make sure everyone in the classroom participates and is engaged.
- classtools.net: it has a random name picker, timers with music that can be used for starters or plenaries, revision games, timelines, etc.



Sam
+1 for Creativity





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Approaches to learning



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Approaches to learning

Collaboration



Approaches to learning

Organisation

Collaboration



Approaches to learning

Organisation

Collaboration

Reflection



Approaches to learning

Organisation

- Note taking
- Tagging
- Calendars
- To-do-lists or sticky notes

Collaboration

Reflection



Approaches to learning

Organisation

- Note taking
- Tagging
- Calendars
- To-do-lists or sticky notes

Collaboration

- Group cork boards
- Group notebooks
- Project to-do-lists
- Shared documents and folders

Reflection



Approaches to learning

Organisation

- Note taking
- Tagging
- Calendars
- To-do-lists or sticky notes

Collaboration

- Group cork boards
- Group notebooks
- Project to-do-lists
- Shared documents and folders

Reflection

- Creating and sending self and co evaluation
- Evaluating projects with



Approaches to learning

Organisation

- Note taking
- Tagging
- Calendars
- To-do-lists or sticky notes

Collaboration

- Group cork boards
- Group notebooks
- Project to-do-lists
- Shared documents and folders



Reflection

- Creating and sending self and co evaluation
- Evaluating projects with



Approaches to learning

Organisation

- Note taking
- Tagging
- Calendars
- To-do-lists or sticky notes



Collaboration

- Group cork boards
- Group notebooks
- Project to-do-lists
- Shared documents and folders

Reflection

- Creating and sending self and co evaluation
- Evaluating projects with



Approaches to learning

Organisation

- Note taking
- Tagging
- Calendars
- To-do-lists or sticky notes



Collaboration

- Group cork boards
- Group notebooks
- Project to-do-lists
- Shared documents and folders

Reflection

- Creating and sending self and co evaluation
- Evaluating projects with



Approaches to learning

Organisation

- Note taking
- Tagging
- Calendars
- To-do-lists or sticky notes



Collaboration

- Group cork boards
- Group notebooks
- Project to-do-lists
- Shared documents and folders



Reflection

- Creating and sending self and co evaluation
- Evaluating projects with



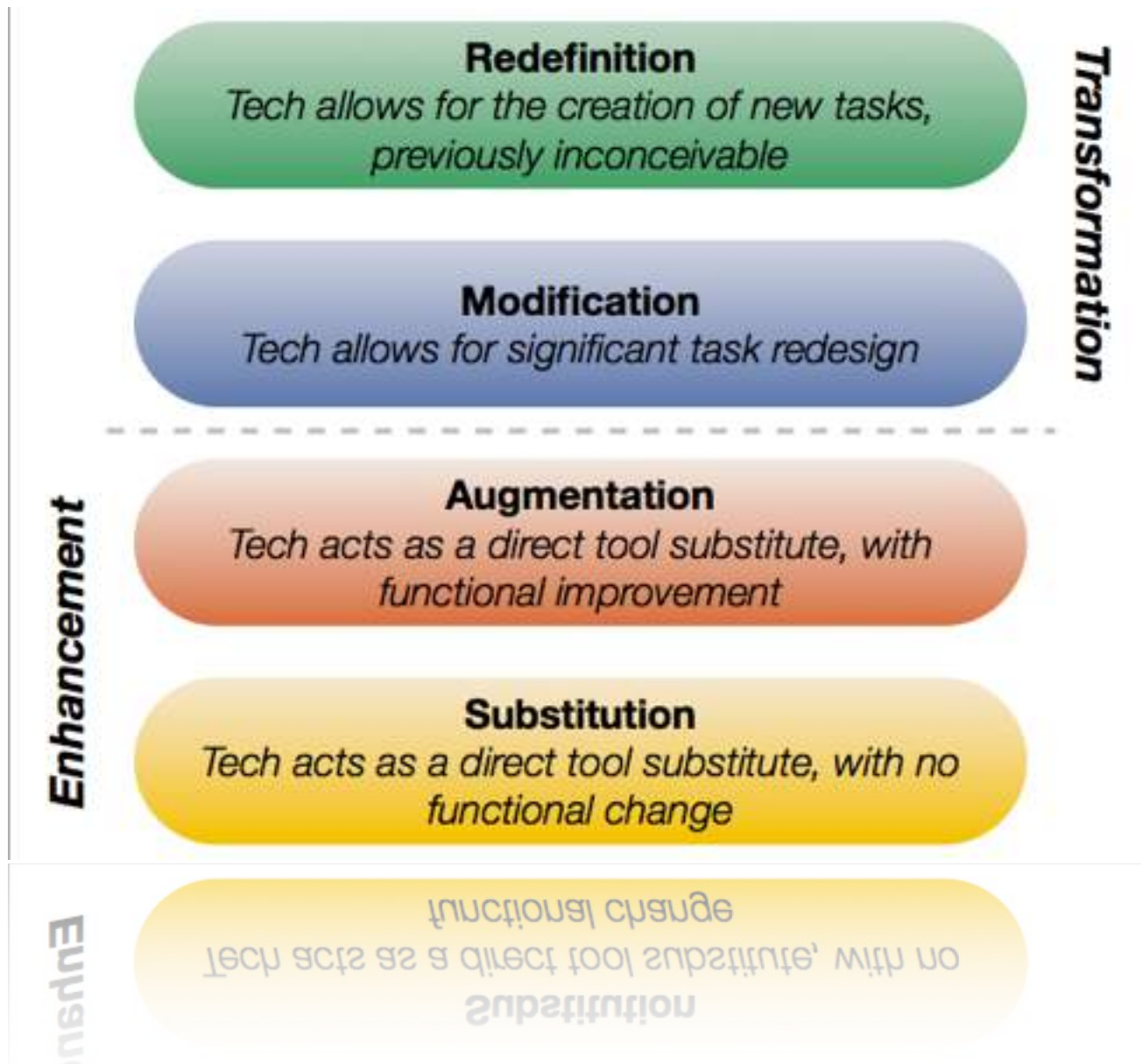
Developing unit plans with challenge based learning strategies through the SAMR model



- Acknowledge differentiation, collaborative work, challenge-based learning and inquiry-based learning as a pedagogical framework to explore teaching and learning strategies involving technology.



SAMR model





**What do we want our students
to be able to do?**



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



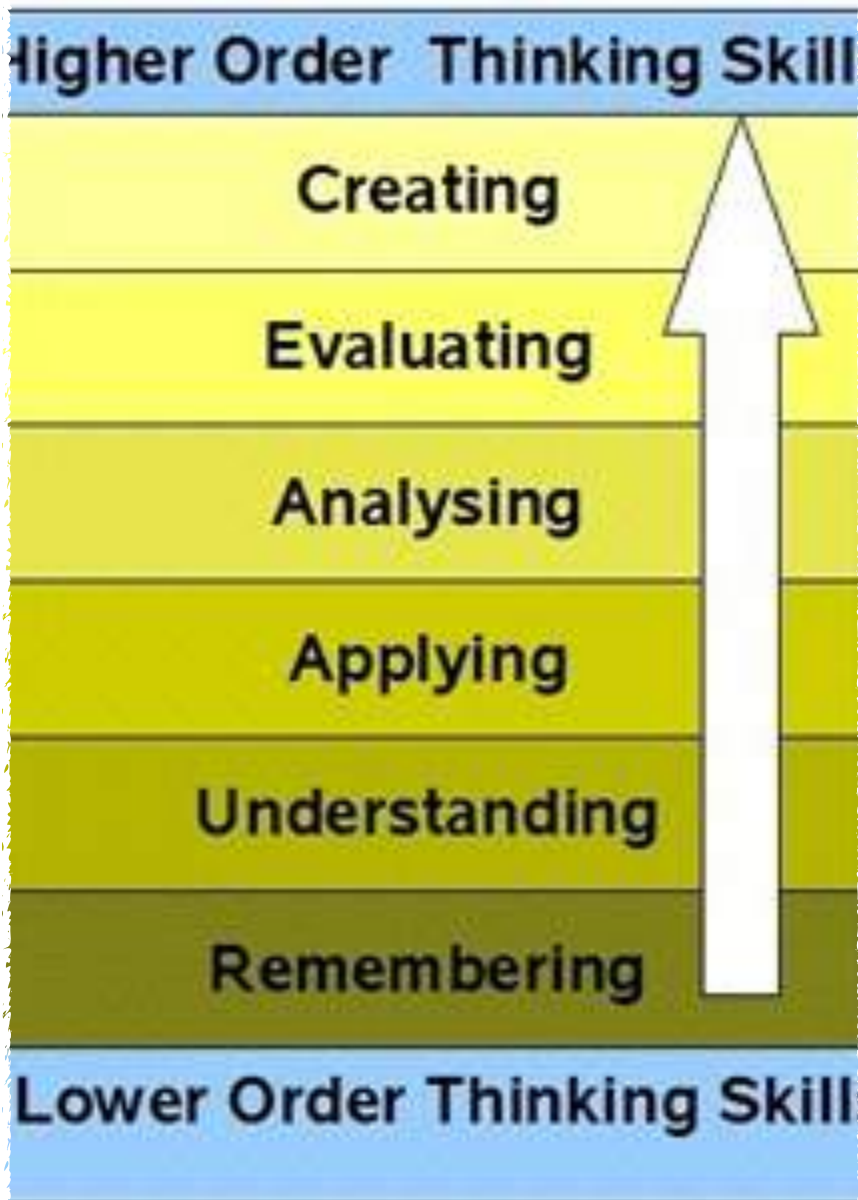
IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Developing Higher order thinking skills- Bloom's taxonomy



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Developing Higher order thinking skills- Bloom's taxonomy





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



How to successfully integrate these pedagogical approaches?



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



Is it possible to integrate collaboration, inquiry based learning, creativity and redefinition in each task?



Is it possible to integrate collaboration, inquiry based learning, creativity and redefinition in each task?

How do you develop coherent formative and summative assessment that relies on technology in the redefinition level?



Challenge based learning strategies

- “Challenge based learning is a collaborative learning experience in which teachers and students work together to learn about compelling issues, propose solutions to real problems, and take action. The approach asks students to reflect in their learning and the impact of their actions and publish their solutions to a WORLDWIDE AUDIENCE.” (Apple, p.3)



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

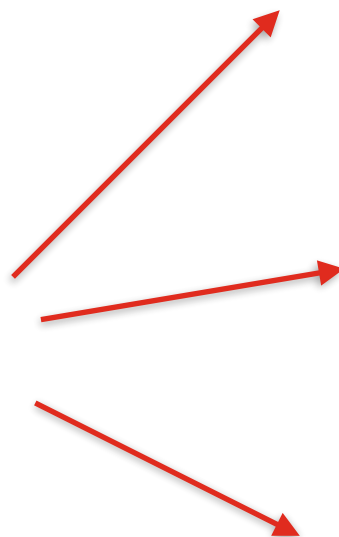


- Collaborative skills
- Real life situations or problems/Concepts in context
- Interdisciplinary connections
- Focus on inquiry and creation
- Impact on the community
- Differentiated tasks



- Collaborative skills
- Real life situations or problems/Concepts in context
- Interdisciplinary connections
- Focus on inquiry and creation
- Impact on the community
- Differentiated tasks

Teaching and learning
strategies

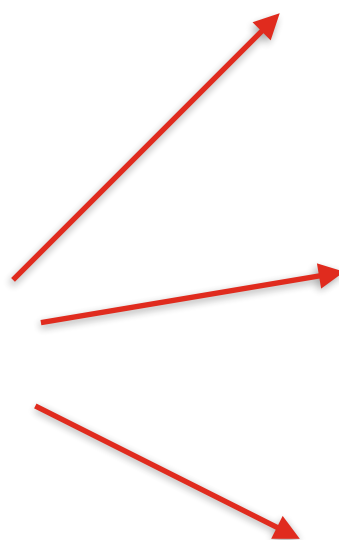




- Collaborative skills
- Real life situations or problems/Concepts in context
- Interdisciplinary connections
- Focus on inquiry and creation
- Impact on the community
- Differentiated tasks

Teaching and learning
strategies

Service and Action



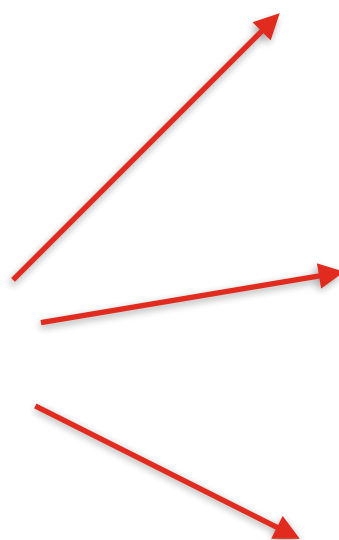


- Collaborative skills
- Real life situations or problems/Concepts in context
- Interdisciplinary connections
- Focus on inquiry and creation
- Impact on the community
- Differentiated tasks

Teaching and learning strategies

Service and Action

Inquiry and research





- Collaborative skills
- Real life situations or problems/Concepts in context
- Interdisciplinary connections
- Focus on inquiry and creation
- Impact on the community
- Differentiated tasks

Teaching and learning strategies

Service and Action

Inquiry and research





- Collaborative skills
- Real life situations or problems/Concepts in context
- Interdisciplinary connections
- Focus on inquiry and creation
- Impact on the community
- Differentiated tasks

Teaching and learning strategies

Service and Action

Inquiry and research



IB PROGRAMS



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

How to do it?



How to do it?

Steps!



How to do it?

Steps!

**Specific example from
MYP language arts**



STEPS!

- Start with a big idea: what is it that I want my students to learn?- **CHOOSE THE KEY CONCEPTS**
- Present an essential question: write a question or ask your students to write a question that serves as I guide to connect a real world problem to the selected concepts- **QUESTION(S)**
- Design the challenge: design a challenge that makes students integrate the subjects key **CONTENTS**, **CONCEPTS** and **SKILLS** through the creation of a **PRODUCT** designed on the Redefinition level.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



Determine the preliminary steps to prepare students for the challenge: what do they need to know? what will they need to be able to do before the challenge in terms of contents and technological skills? How will I prepare them to inquire and work collaboratively?



Determine the preliminary steps to prepare students for the challenge: what do they need to know? what will they need to be able to do before the challenge in terms of contents and technological skills? How will I prepare them to inquire and work collaboratively?

Remembering, Understanding, Applying and Analysing skills. **FORMATIVE ASSESSMENT:** Substitution, augmentation, modification.



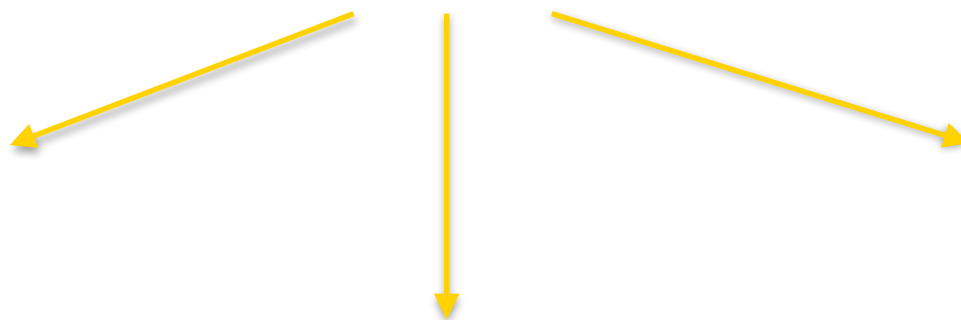
Determine the preliminary steps to prepare students for the challenge: what do they need to know? what will they need to be able to do before the challenge in terms of contents and technological skills? How will I prepare them to inquire and work collaboratively?

Remembering, Understanding, Applying and Analysing skills. **FORMATIVE ASSESSMENT:** Substitution, augmentation, modification.

- Organise your unit considering the **challenge completion** your final product.

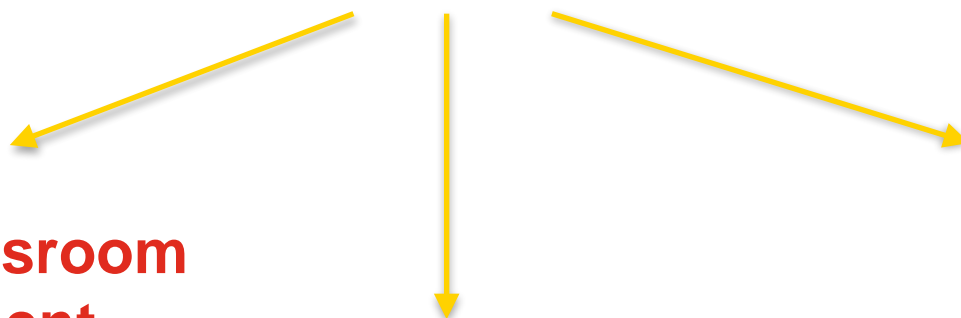


New approach to apps and technology!





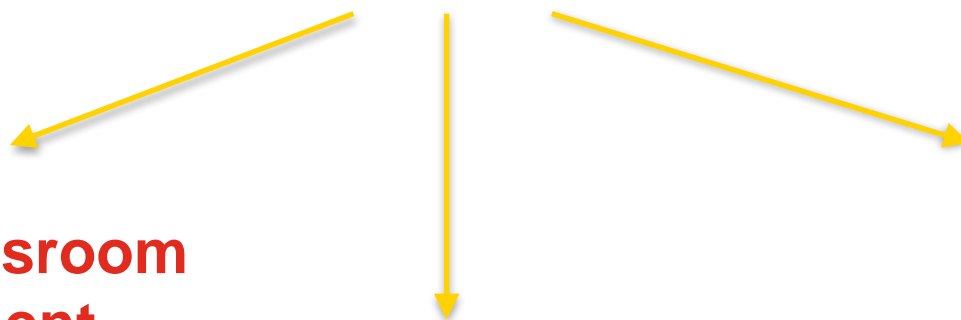
New approach to apps and technology!



**Tools for classroom
management**



New approach to apps and technology!



**Tools for classroom
management**

**Tools for
formative
assessment**

**Tools for
summative
assessment**



New approach to apps and technology!

Tools for classroom management

Tools for formative assessment

Tools for final products and other summative assessments

Bloom's Taxonomy for iPads

Creating	 Audioboo	 iMovie	 ComicBook!	 ReelDirector	 SonicPics	 Animoto	 Puppet Pals	 Toontastic	 Doink
Evaluating	 HootSuite	 Skype	 Mobile RSS	 Science 360	 Zite	 FlipBoard	 Instapaper	 Goodreads	 Wunderlist
Analyzing	 iThoughts HD	 Lino	 Popplet	 Today's Documents	 Diigo	 Explain Everything	 3D Cell Simulation	 GoSky Watch	 GoDocs
Applying	 ShowMe	 Poetry Creator	 Keynote	 Visualize	 Posterous	 ZigZag Board	 Presentation Link	 Xperica	 GearHD
Understanding	 ScreenChomp	 Motion Math	 123 Charts	 Idea Sketch	 Corkulous	 Blogsy	 Good Reader	 Touch Draw	 Pages
Remembering	 iBook	 Notesshelf	 Stack the Countries	 Evernote Peek	 NxtApp 4Kids	 Ansel & Clair's Adventure	 Word Seek HD	 eClicker	 Globe



🌐 **Apps and websites for formative assessment (preliminary steps)**

- * Understanding: specific subject related apps. Language development, math skills, etc. (Khan Academy, Duolingo, LouvreHD, TED.)
- * Reading and note taking: iBooks, GoodReader, Acrobatreader, Evernote, Notability, etc.
- * Class behaviour: Classdojo, Stopwatch.
- * Analysis: iThoughtsHD, OmniGraffle, Idea Sketch, Mindnode, Popplet, PicCollage.
- * Collaboration: Wikispaces, Lino, Padlet, Dropbox, Wunderlist, Snapguide, Edmodo, etc.
- * Photography: iphoto, photobooth, photogene, colorthief, pencil camera, snap different, superburst.
- * Developing creative thinking: Brainsparker
- * Application: Keynote, Numbers, Pages, ShowMe, HaikuDeck, Moodboard, ComicBook, Stripdesign, Tellagami, etc.

⑤ **Apps and websites for summative assessment-final product:**

- * Images and posters: keynote, Moodboard, Diptic, PicCollage, AnimationHD, MyBrushes Pro, Skitch.
- * Podcasts: Audioboo
- * Video creation: iMovie, Movie FX cam, 8mm, ReelDirector, Garageband.
- * Book creation: iBooks, Bookpress
- * Publishing and social media: Tumblr, Facebook, Instagram, Twitter, Skype



Which ones do I need for each project?



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Personal SAMR integration experience



Personal SAMR integration experience

Language Arts MYP: grade 9
Natalia Castillo- John Triana



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Unit title:



Unit title:

**Community and service: social
injustice in literature**



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Unit objective: Big idea!



Unit objective: Big idea!

- ⑥ The students will understand how literature can address relevant situations of any **community**, respond to them in a **critical** fashion and generate a **response** or impact in the reader.



Unit objective: Big idea!

- ① The students will understand how literature can address relevant situations of any **community**, respond to them in a **critical** fashion and generate a **response** or impact in the reader.

New chapter: Statement of inquiry. The authors **communicate** political, social and ethical issues through **characters** that present different **points of view** in order to generate an **effect** in the reader.



Essential question



Essential question

- 6 If I had the voice of a narrator, what problems or situations of my society will I portray in my story so that other could see them and reflect on them?



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Challenge!



Challenge!

- Students will create their own stories through **Illustrated/Graphic Novels** to express their personal points of view about their **society** while understanding the most important **narrative devices**, how they work and what effect they can create on the reader.



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY



Preliminary steps: developing content understanding and skills development



SUBSTITUTION: Remembering and Understanding



Phase 1

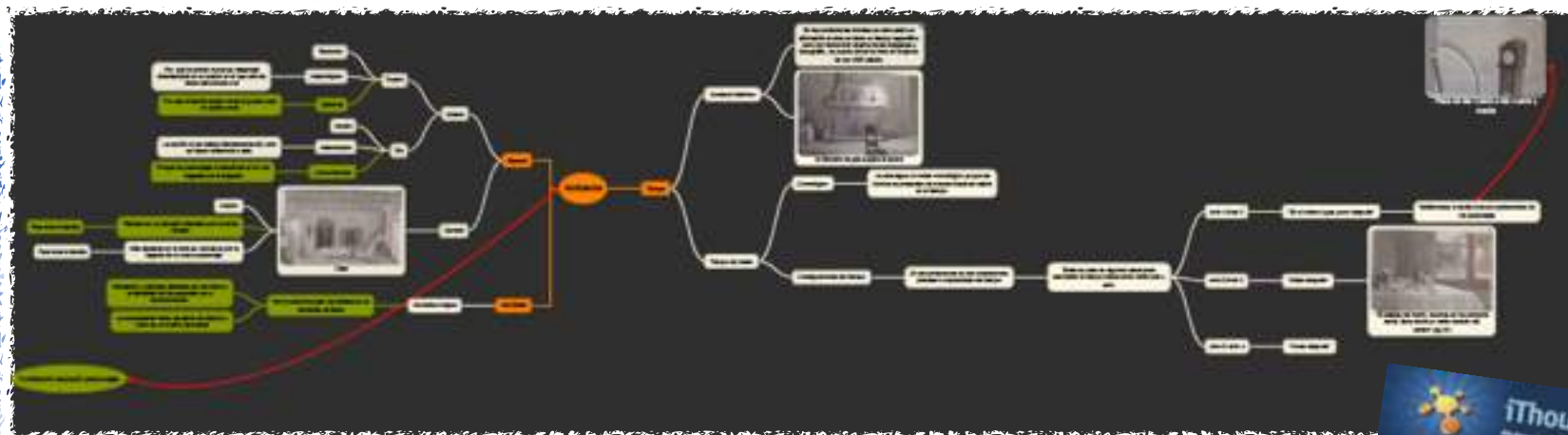
Individual work!

- Reading and annotating the selected stories in digital books (iBooks).
- Taking notes of the main idea, topics and literary devices discovered in the stories in an Evernote or other note taking app. Special emphasis in devices related to exploring social injustice.



AUGMENTATION: Analysing

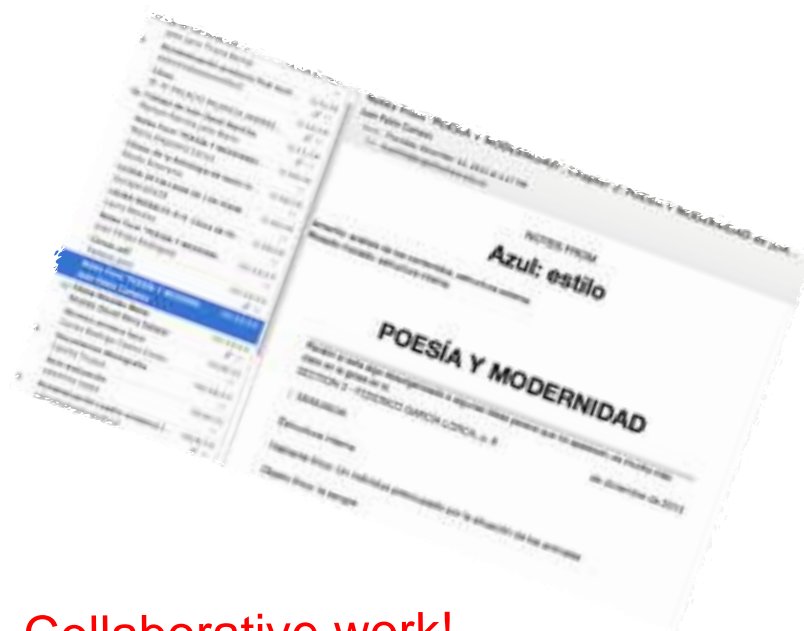
- Sending the notes from the iBook with the general analysis of the stories to the teacher to get feedback.
- Creating a mind map of one the stories that summarises the analysis both of content and the devices of each story using images to support main ideas.



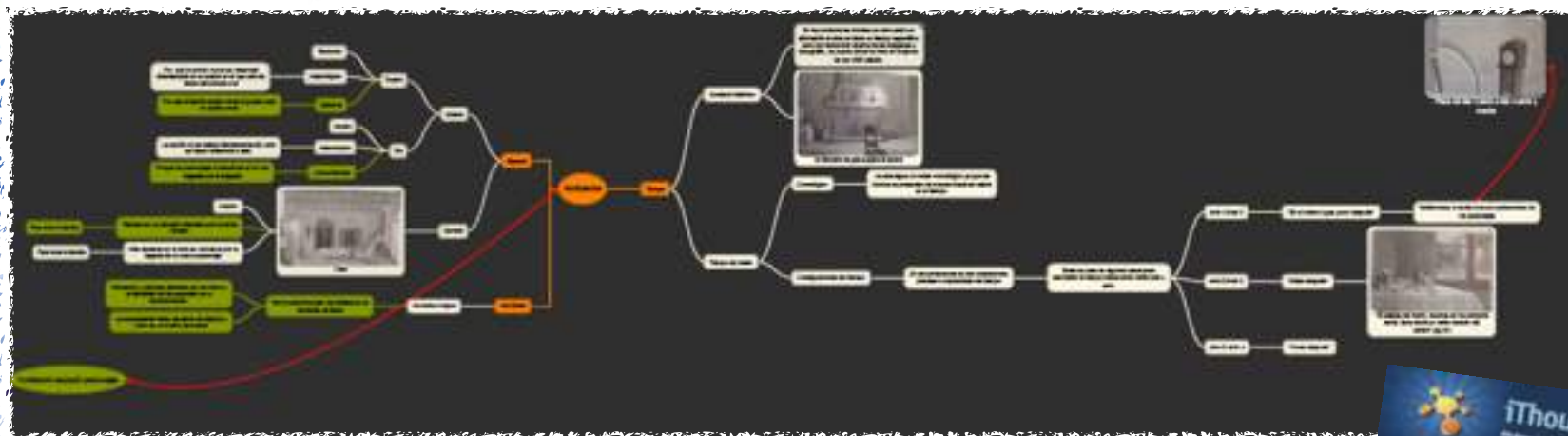


AUGMENTATION: Analysing

- Sending the notes from the iBook with the general analysis of the stories to the teacher to get feedback.
- Creating a mind map of one the stories that summarises the analysis both of content and the devices of each story using images to support main ideas.



Collaborative work!





AUGMENTATION: Analysing and applying

- Participating in a class cork board through the unit to develop further concept appropriation through inquiry questions related to narrative and it's possibilities of expression.
- Creating comics that represent the physical, psychological and ideological characterisation of a chosen character. (formative assessment)



Collaborative work!



Collaborative work!

MODIFICATION: Analysing, evaluating and creating

Creating posters based on the authors perspective on society and how it relates to the story that was read and analysed in class. Presenting the choices of image, text and edition that where made to convey an important message about society. (Summative assessment)



Phase 4



iPhoto

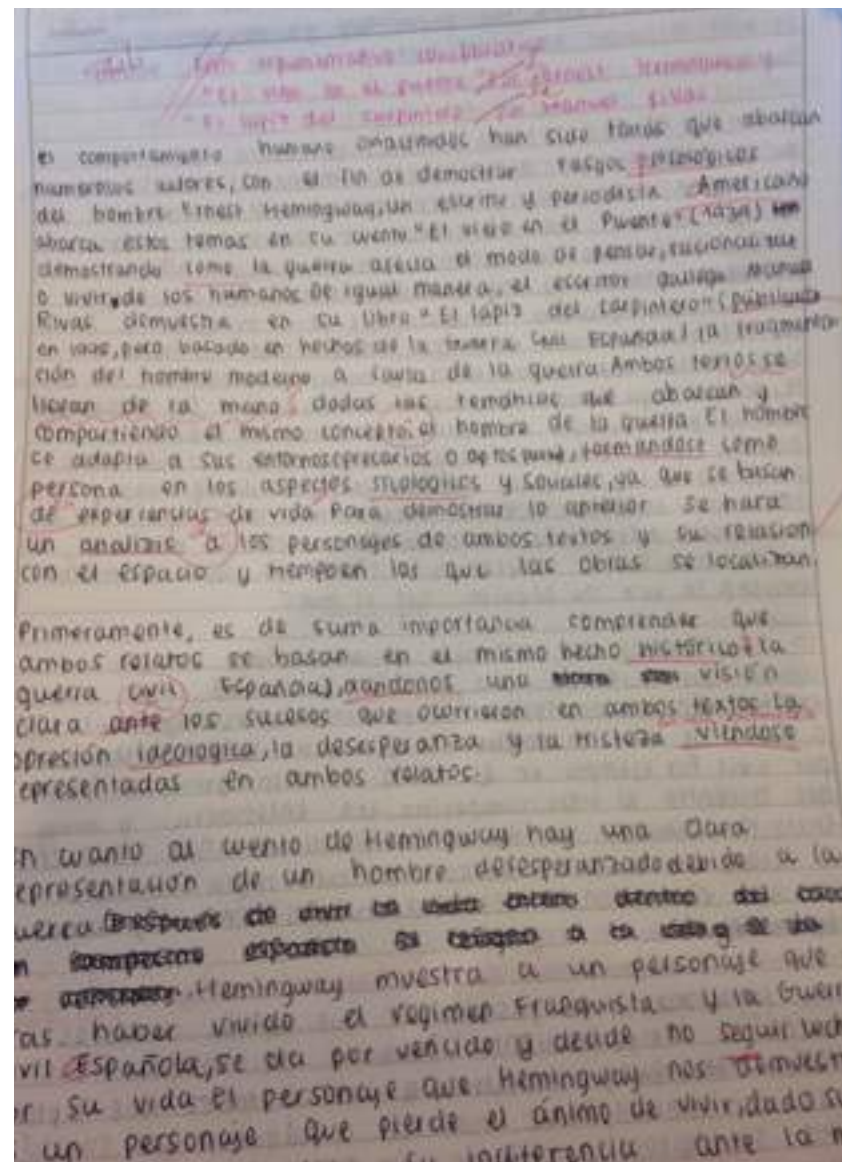




No technology task: analysing and evaluating

- Writing a formal Commentary about one of the short stories. Students had to analyse all the literary devices and give a personal interpretation of the text and the message the author was trying to convey. (Summative assessment)

Individual work!





Final project: Redefinition

Taking it one step further!

Phase 5



MODIFICATION: Analysing, evaluating and creating

Collaborative work!

- Creating and adaptation of one of the stories as a chapter of a **Graphic or illustrated novel** that portrays one or more topics related to social injustice in the students context.





IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

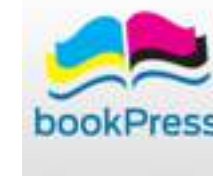


- STEPS:

1. Choosing the topic related to social injustice that they consider more related to their own Colombian, bogotan, context.
2. Create a project timeline and assign the group member responsibilities.
3. Researching in different media (websites, blogs, newspaper websites, etc) about the situation.
4. Evaluating the sources, choosing the best ones based on their content and share their inquiry in the Dropbox folder of the class so all the groups can benefit from the research.
5. Writing a storyboard of their original story to develop this topic and situation in relevant and meaningful way.
6. Taking and editing pictures in order to integrate the graphic component to the novel.
7. Creating a Graphic story based on images taken in Comic Book or related apps that vividly recreate their story.



Dropbox





Collaborative work!

REDEFINITION: Evaluating and Sharing

- Publishing the book in Ibooks, Bookpress or other related apps.
- Each class creates a Facebook fan page where they post the link to the novels and invite friends and family to read their novels and give their opinions about the social issues presented on them.
- Each group writes comments about the topics that were presented by the other groups and evaluates their work according to the specific rubric.
- Each group uploads a video reflection on their work.

[https://www.facebook.com/
MYPTES](https://www.facebook.com/MYPTES)



IB CONFERENCE OF THE AMERICAS 2014
WASHINGTON, DC - 10-13 JULY

Impact on students learning



82%

Reinforce Technological Skills



To what extent has the iPad helped you to
(Not at all, A little, A lot, Completely)



79%

Increase independent learning



To what extent has the iPad helped you to
(Not at all, A little, A lot, Completely)



77%

Enhance Learning Experience



To what extent has the iPad helped you to
(Not at all, A little, A lot, Completely)



72%

Take ownership of own Learning



@TES

To what extend has the iPad helped you to
(Not at all, A little, A lot, Completely)



73%

Collaborate more with peers



@TES

To what extent has the iPad helped you to
(Not at all, A little, A lot, Completely)



100%

Use less paper



Has the iPad helped your son/daughter
(Not at all, A little, A lot, Completely)



92%

Access to more tools to solve
problems



@TES

Has the iPad helped your son/daughter
(Not at all, A little, A lot, Completely)



83%

Work more collaboratively with
classmates



Has the iPad helped your son/daughter
(Not at all, A little, A lot, Completely)



75%

Improve the learning
experience



Has the iPad helped your son/daughter
(Not at all, A little, A lot, Completely)



“I never teach my pupils; I only attempt to provide the conditions in which they can learn.”

- Albert Einstein