Lean MOOC production

Ignacio Despujol
Universitat Politècnica de València

valencia

UNIVERSITAT POLITÈCNICA DE VALÈNCIA

UPV

- Public academic institution since 1971
  - 3 campuses
  - 13 colleges
  - 45 research centers
  - 35 bachelor degrees
  - 58 master degrees
  - 30 PhD Programs
  - 35.000 students
  - 2,500 teachers
  - 1,500 staff

UNIVERSITAT POLITÈCNICA DE VALÈNCIA

January 2013

UPV [X] Formación Online

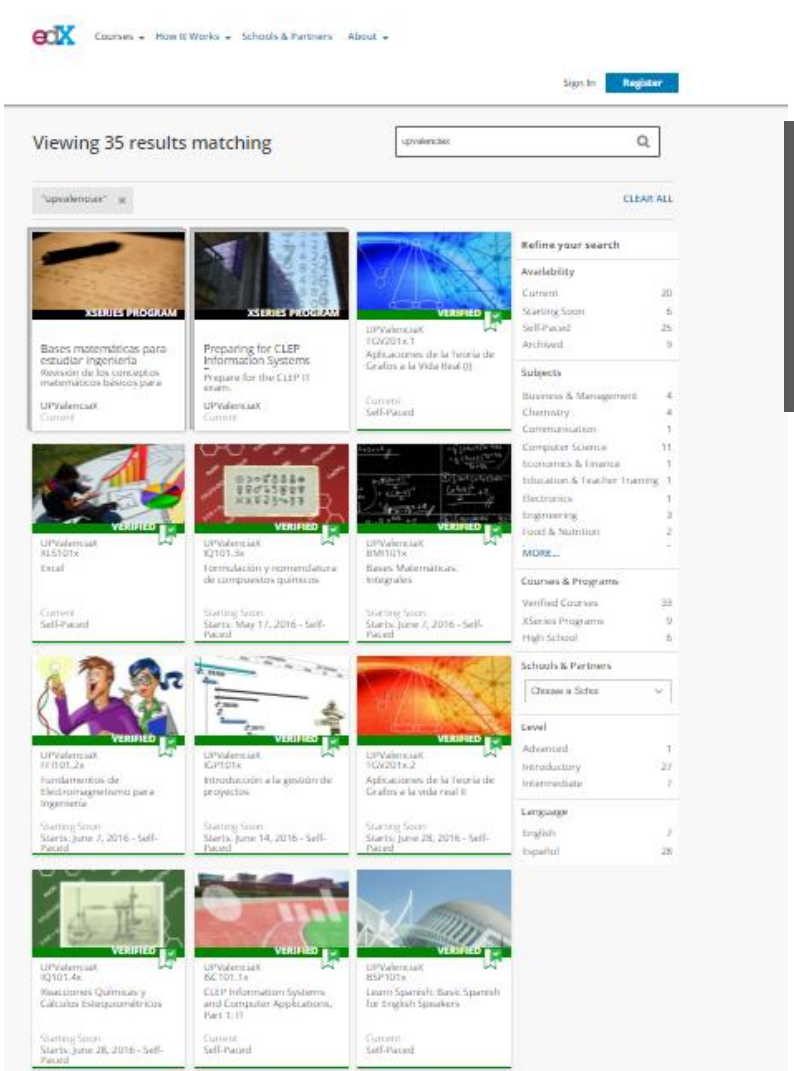
Buscar en Internet
7 semanas
16 de enero de 2013

Valoración de Futbolistas
3 semanas
16 de enero de 2013

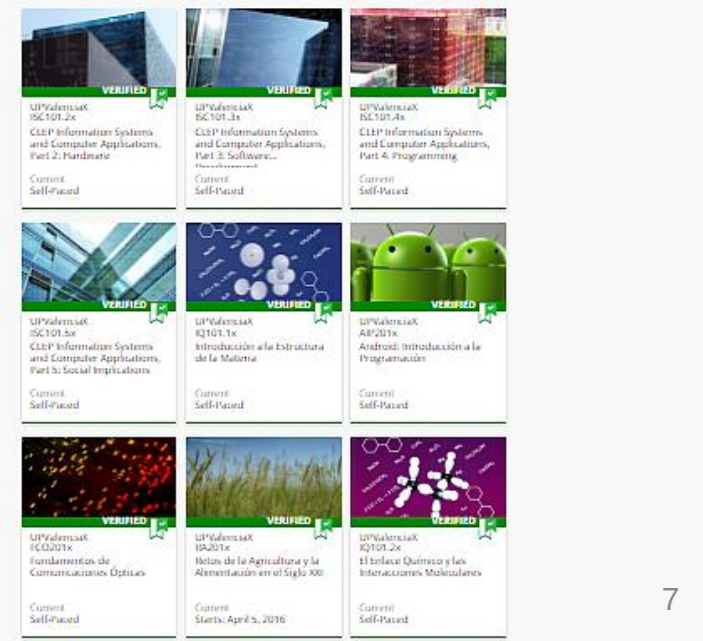
UNIVERSITAT POLITÈCNICA DE VALÈNCIA

UPV [X] Formación Online

- 3 technologies (Google, MiriadaX, OpenedX)
- 3 platforms (upvx.es, edx.org, miriadax.es)



- 42 courses, 145 editions
- 485.000 enrollments
- 10,5% completion rate



UNIVERSITAT POLITÈCNICA DE VALÈNCIA

UPV [X] Formación Online

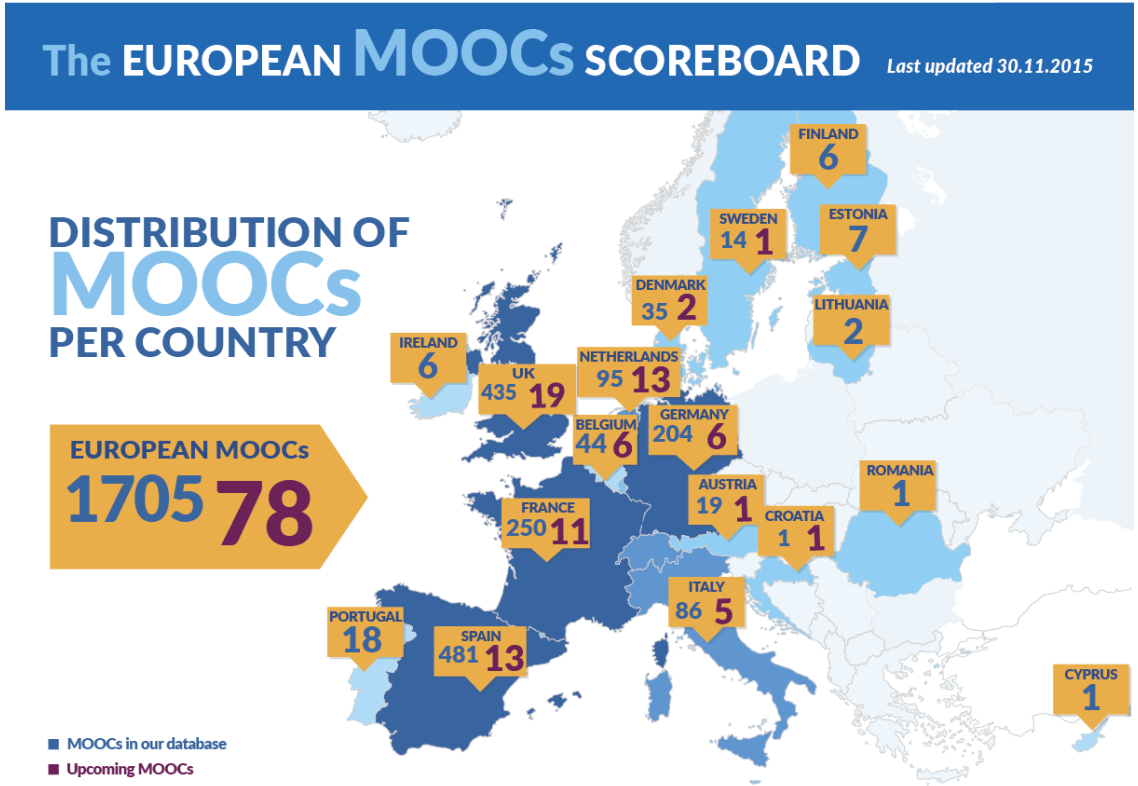
Back to schools and partners

The Universitat Politècnica de Valencia (UPV) is a public educational institution that offers modern, flexible degrees designed to meet the demands of society, as well as official postgraduate programmes that are subject to demanding educational quality control systems.

It is the only Spanish technological University ranked among the best in the world, according to the Shanghai Academic Ranking of World Universities (ARWU). It is also ranked among the 100 best universities in the world that are less than 50 years old (Times Higher Education Index).

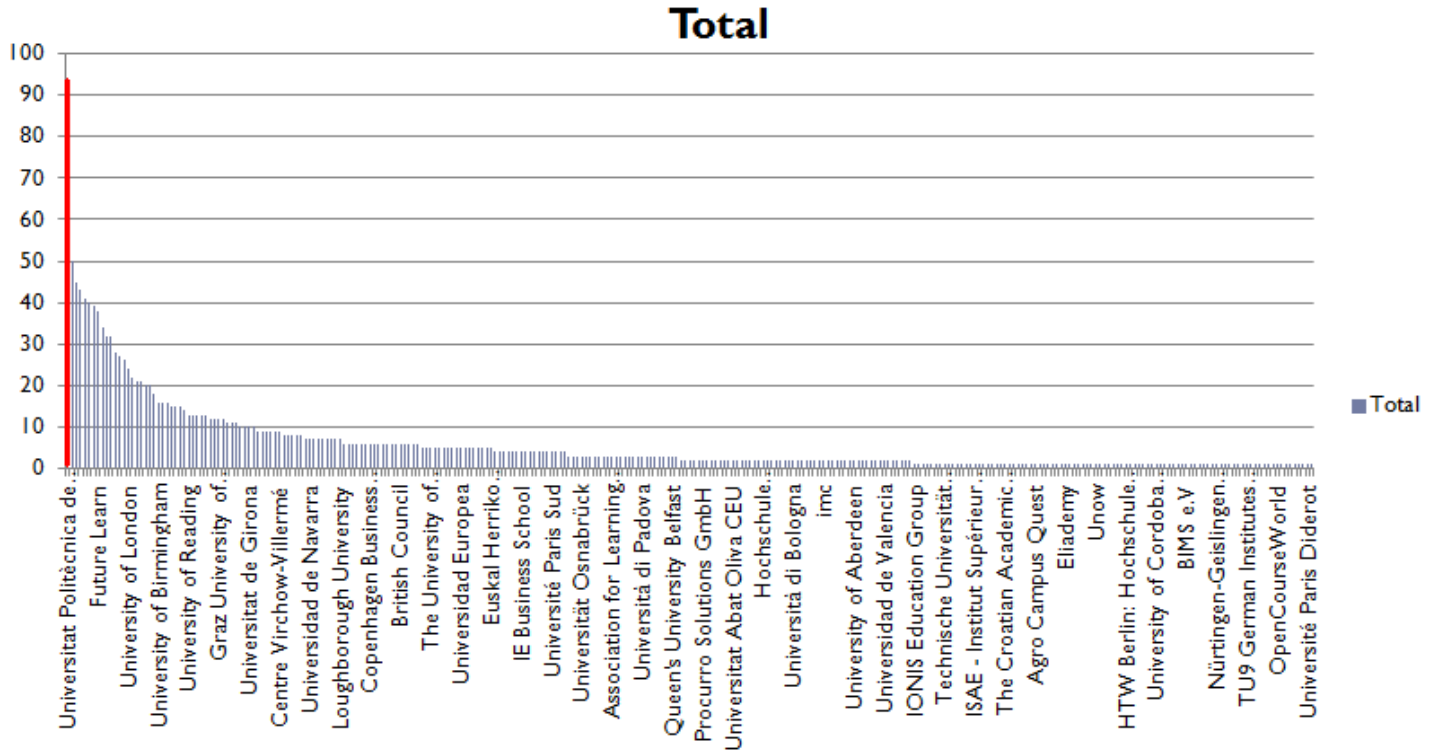
Currently, its academic community comprises more than 36,000 students, almost 2,500 teachers and researchers, and 1,500 administration and services professionals. It is composed by three campuses, located in València, Alcoi and Gandia.

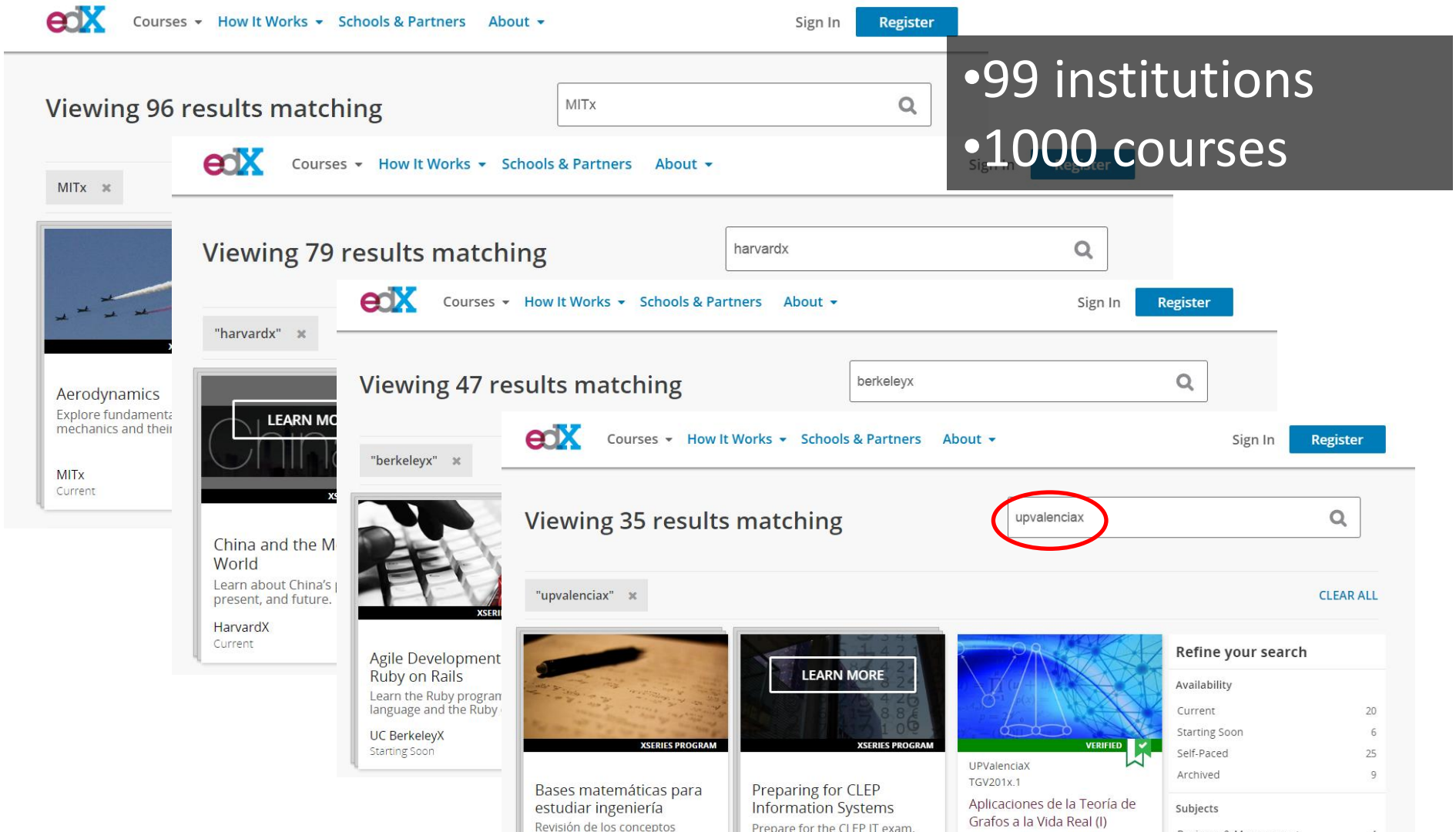
Europe November 2015



http://openeducationeuropa.eu/es/european_scoreboard_moocs

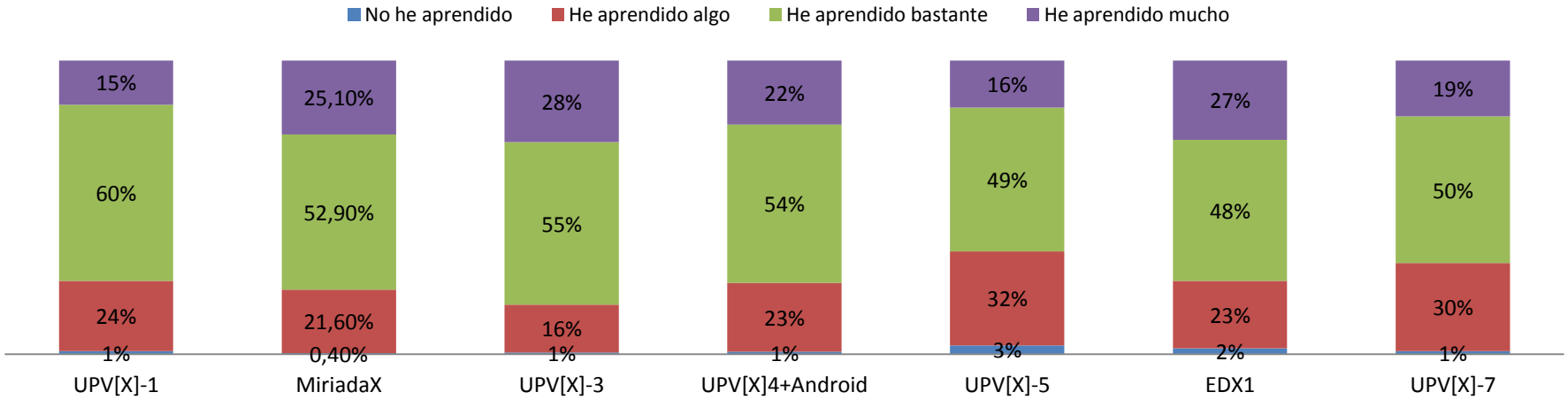
Europe (course editions Nov 2015)





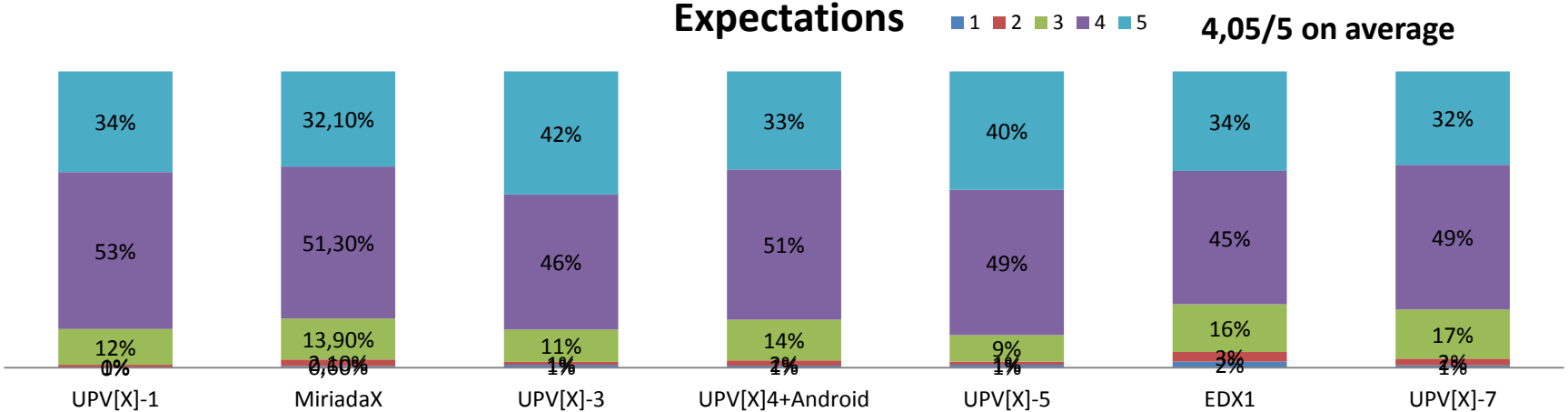
- 99 institutions
- 1000 courses

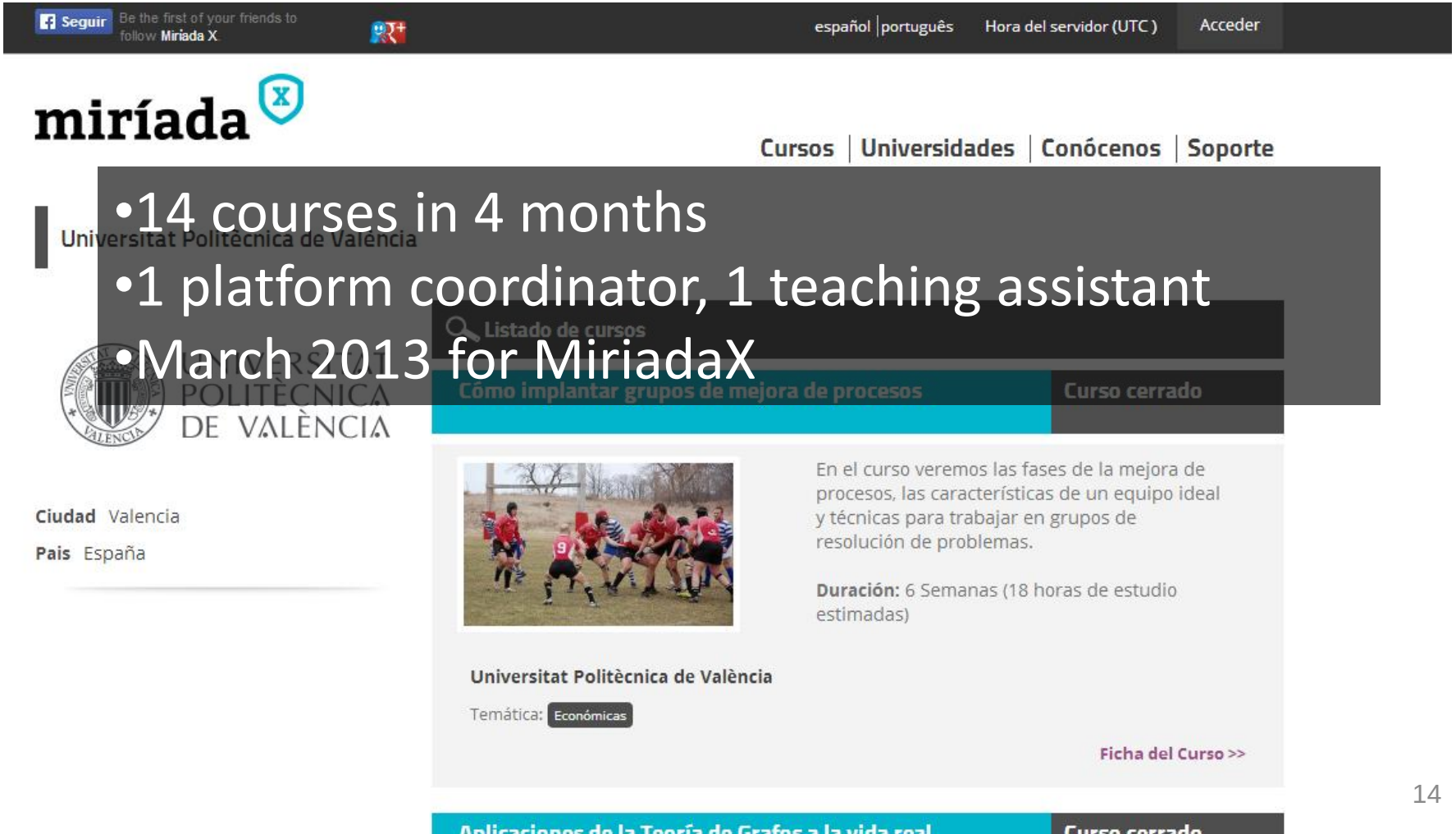
Learning



Expectations

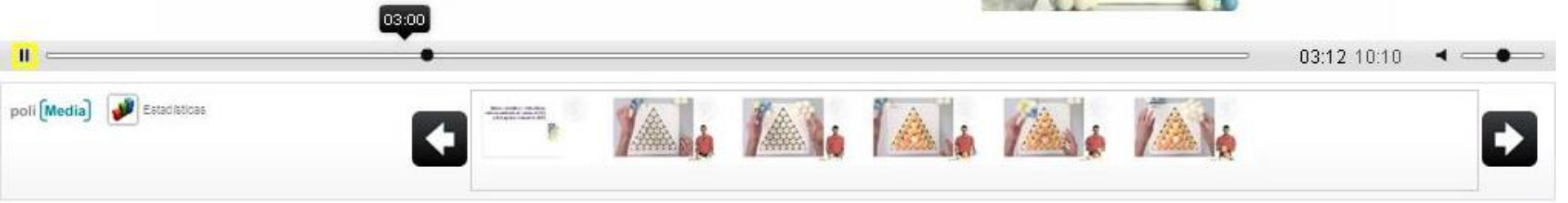
4,05/5 on average




Seguir
Be the first of your friends to follow Miriada X
español | português
Hora del servidor (UTC)
Acceder
miríada
Cursos | Universidades | Conócenos | Soporte
•14 courses in 4 months
•1 platform coordinator, 1 teaching assistant
•March 2013 for MiriadaX
Universitat Politècnica de València
POLITÈCNICA DE VALÈNCIA
Ciudad Valencia
Pais España
Listado de cursos
Cómo implantar grupos de mejora de procesos
Curso cerrado
En el curso veremos las fases de la mejora de procesos, las características de un equipo ideal y técnicas para trabajar en grupos de resolución de problemas.
Duración: 6 Semanas (18 horas de estudio estimadas)
Universitat Politècnica de València
Temática: Económicas
Ficha del Curso >>

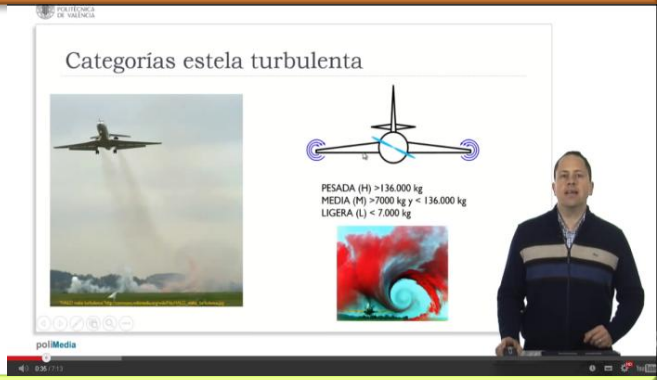
How did we do it?

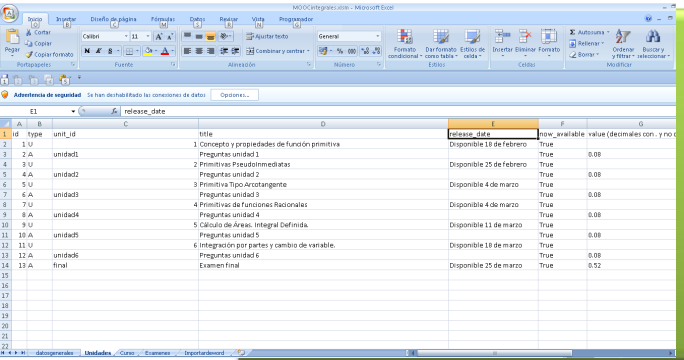
- Making things simple for teachers
- Simplifying, Standardizing, Automating



Faculty used to technology

Easy video production tool





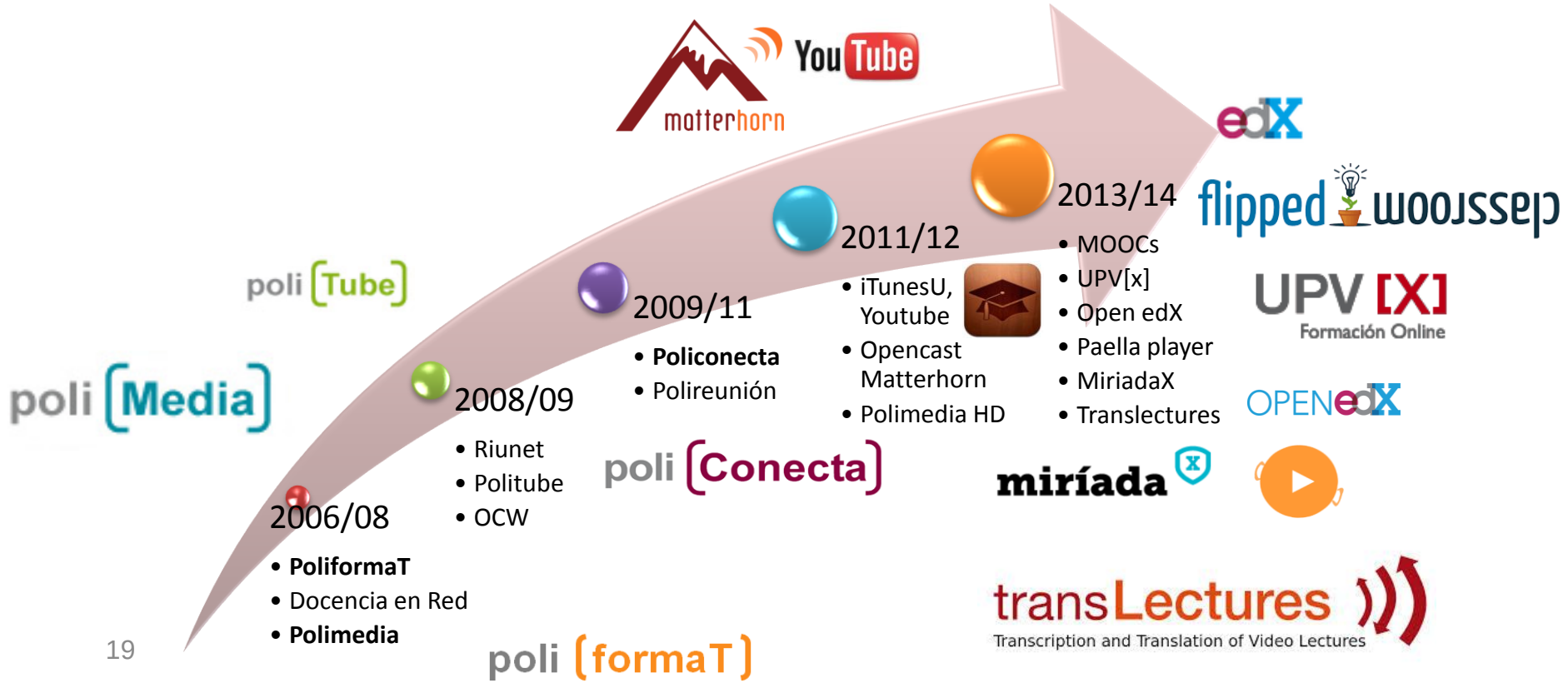
Automation and training

Open call for courses

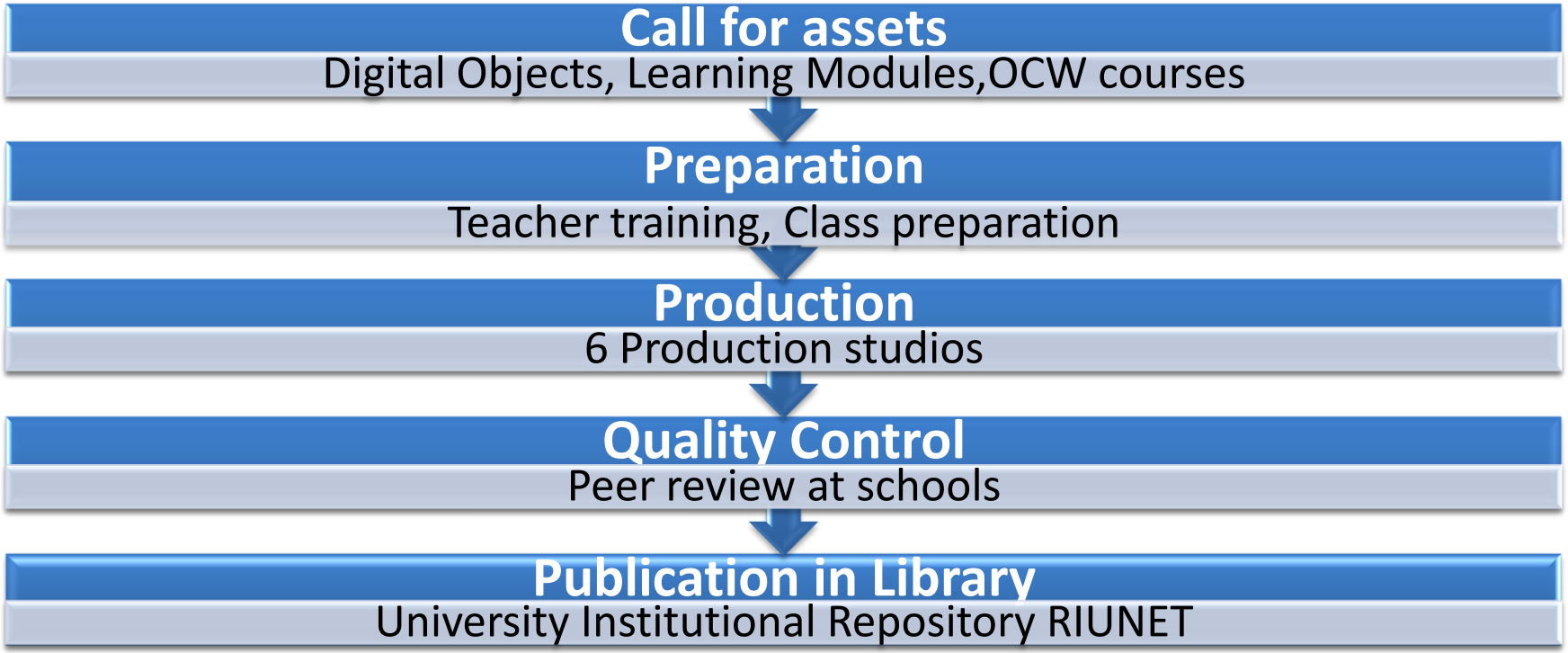
Common support team

Personalized support

Educational technology evolution in UPV



DOCENCIA EN RED plan

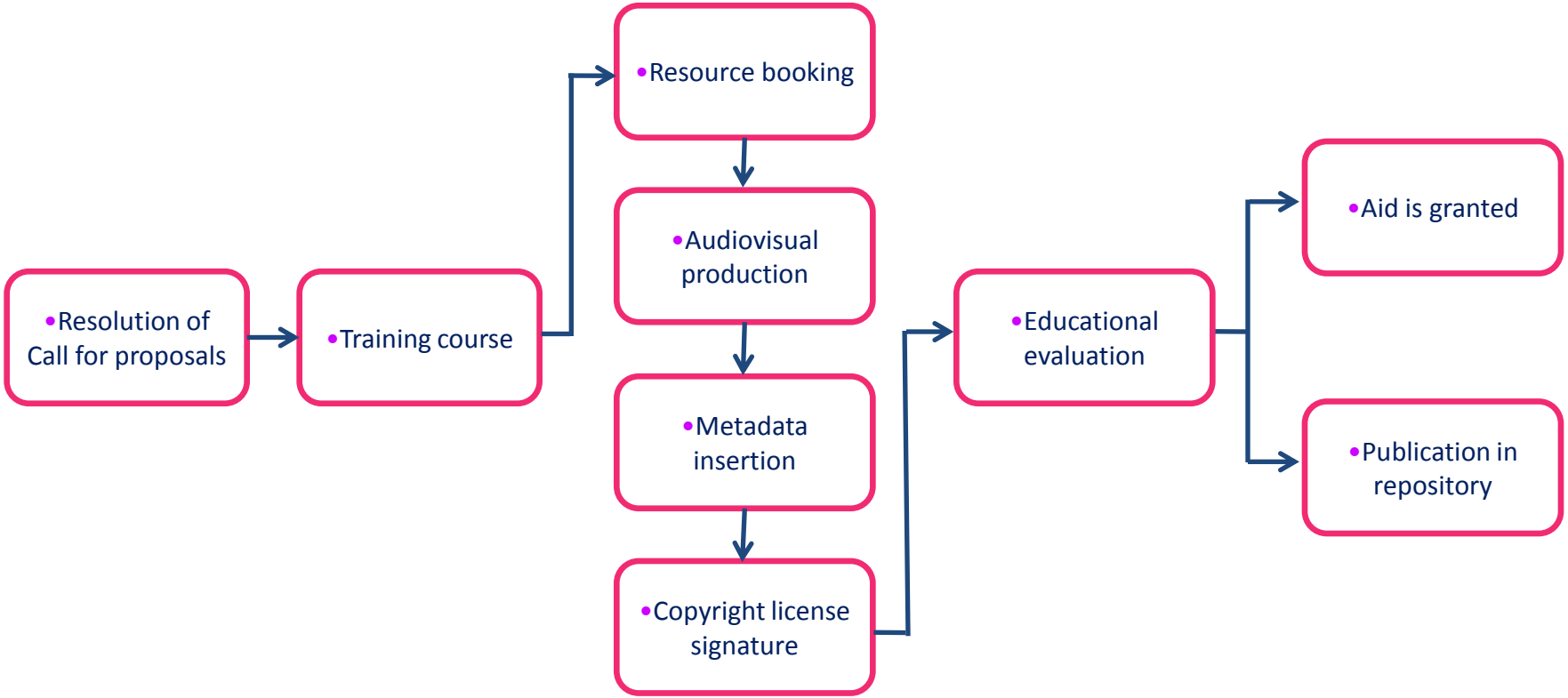


Type of materials

- Learning Objects and their transcriptions
  - Polimedia recordings
  - Screencast recordings
  - Educational videos
  - Numerical simulations with interactive calculation (Virtual Laboratories)
  - Educational articles

- Learning Modules
- OCW courses
- MOOC
- Recording of Lectures (Opencast Matterhorn)

Docencia en Red process diagram



Educational production incentives (2015)

Economic incentives (maximum €400 per teacher)

- From €20 to €30 per object (depending on type and publication rights)
- €70 per learning module
- €150 for the recording of the lectures of a course with Matterhorn
- €250 per one OCW course or MOOC

Exceptional quality mentions

- Diploma and additional economic incentive for distinguished materials

Additional incentive for the use of materials

- Additional economic incentive for most used materials

Curricular recognition

- Content production gives Academic Activity Index points

Assets produced

	2007	2008	2009	2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2007 - 2015
	Finished	**Finished**	**Finished**	**Finished**	**Finished**	**Finished**	**Finished**	**Finished**	**Finished**	**Total**
Period	October to February	May to November	May to November	May to November	January to June	January to June	January to June	January to June	January to June	
Endowment	**150,000**	**150,000**	**75,000**	**63,750**	**55,000**	**63,750**	**10,000**	**10,000**	**20,000**	
Incentives granted	48,550	77,650	59,850	45,070	44,890	46,130	10,000	10,000	10,000	342,140
Learning Objects										
Polimedia	547	455	436	323	319	304	363	526	327	**3600**
Vídeo	44	35	90	37	39	33	33	80	32	**423**
Virtual Labs	188	261	202	112	132	106	100	98	36	**1269**
Educational articles			35	32	86	76	91	188	69	**577**
Screencast				66	48	37	66	82	106	**405**
Other	92									
Total objects	**871**	**751**	**728**	**596**	**624**	**556**	**661**	**974**	**570**	**6331**
Learning Modules		**51**	**42**	**34**	**25**	**21**	**23**	44	24	**264**
OCW complete courses		**30**	**34**	**26**	**9**	**10**	**10**	21	5	**145**
Opencast courses					**7**	**11**	**12**	13	**15**	**58**
MOOC								35	**8**	**43**
Translectures -transcription							**29**	83	**43**	**155**

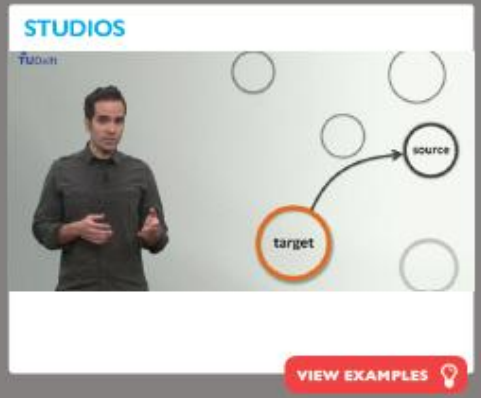
- More than 600 teachers

Video formats

I.

RECORDING LOCATIONS

Where to go.



http://multimedia-academy.tudelft.nl/

2.
PRESENTATION METHODS

How to behave.

FACING THE AUDIENCE

VIEW EXAMPLES

FACING BOARDS

VIEW EXAMPLES

INTERVIEWS

VIEW EXAMPLES

CONVERSATIONS

VIEW EXAMPLES

DISCUSSIONS

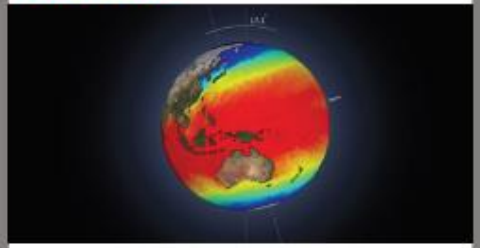
VIEW EXAMPLES

http://multimedia-academy.tudelft.nl/

3. SUPPORTIVE CONTENT

What to show.

ANIMATIONS



VIEW EXAMPLES

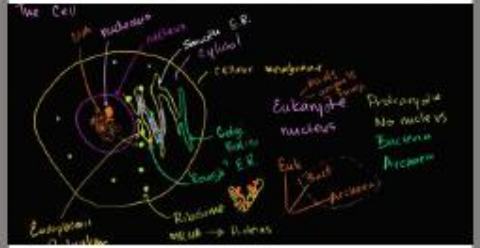
OBJECTS

VIEW EXAMPLES

BOARDS

VIEW EXAMPLES

KHAN ACADEMY STYLE CAPTURINGS



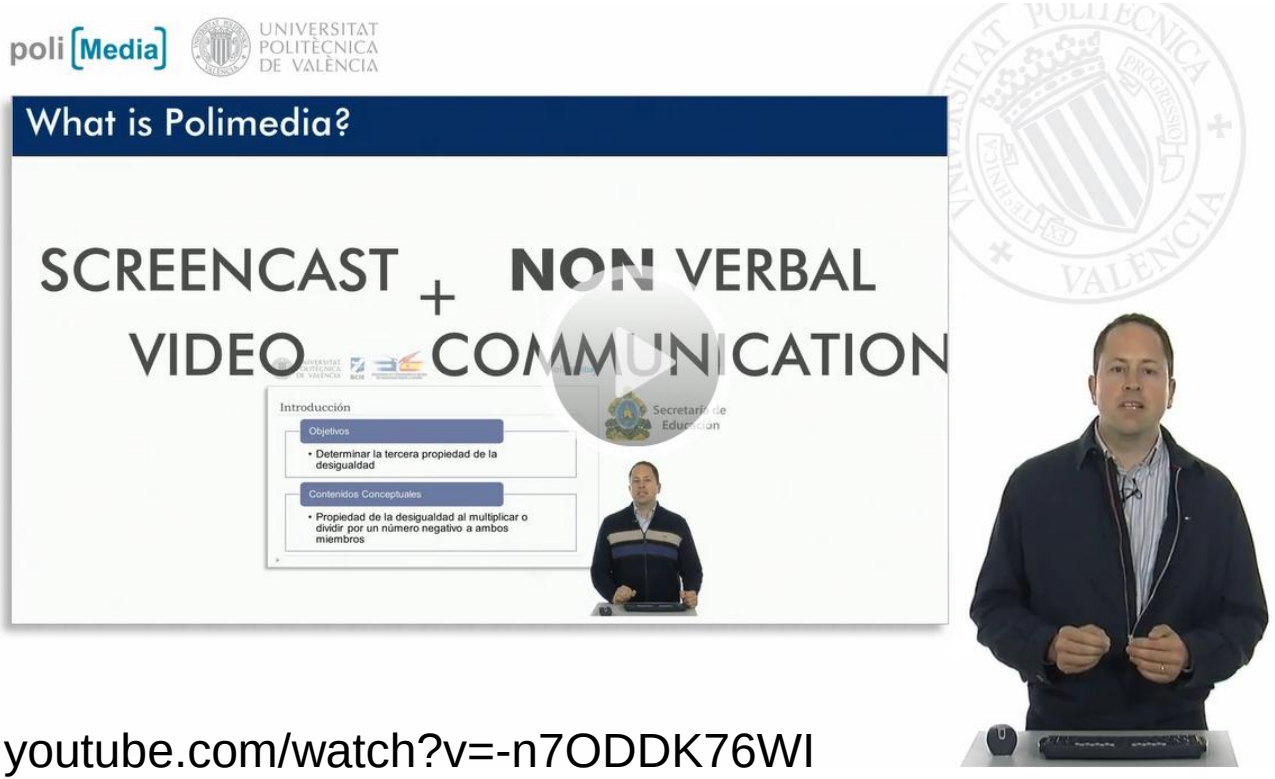
VIEW EXAMPLES

SCREEN CAPTURINGS

VIEW EXAMPLES

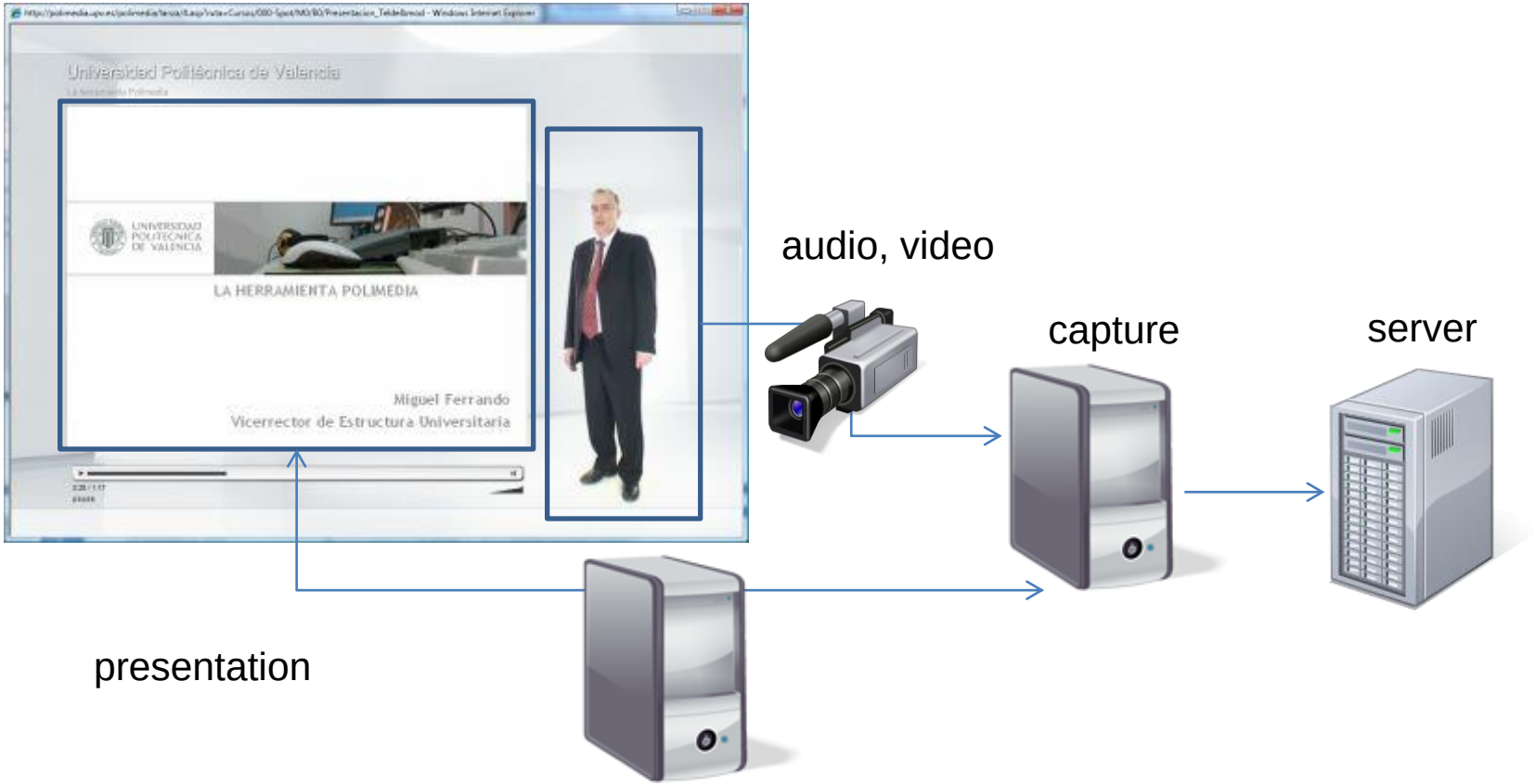
http://multimedia-academy.tudelft.nl/

poli[Media]



https://www.youtube.com/watch?v=-n7ODDK76WI

poli[Media]


Universidad Politécnica de Valencia
LA HERRAMIENTA POLIMEDIA
Miguel Ferrando
Vicerrector de Estructura Universitaria
audio, video
capture
server
presentation

poli[Media]

- Luma key

- No adjustments
- No editing

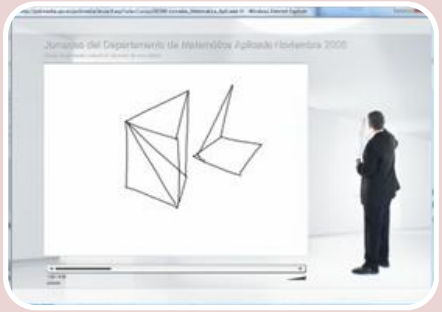
poli[Media]

- One non skilled operator

poli[Media] Presentation formats

Screen

- Presentations
- Web browsers
- Graphics
- Videos
- Software demos



Whiteboard

- Whiteboard capture
- Graphics pad integration

Video

- Zenith Camera
- Real world objects
- Experiments

poli[Media]

- Technical Characteristics
  - PRODUCTION
    - Separate capture of video, audio and computer sources
    - Synchronization of multimedia streams
    - Storing of high quality files for every source (1280x720 4 Mbps)
  - DISTRIBUTION
    - Internet format: MPEG4
    - High Resolution: 1280x720 2 Mbps coding rate
  - PUBLICATION
    - Streaming or files
    - Digital library storage (media.upv.es)
    - Easily integrated with Sakai, Moodle, WebCT
    - Exporting to Youtube

poli[Media]

“A customer can have a car painted any color he wants as long as it’s black”

poli[Media]

- **Numbers**

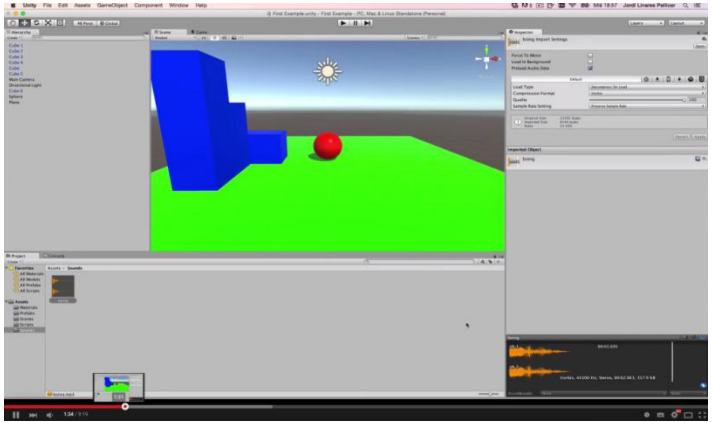
1.717 teachers

2.713 hours

12.385 objects

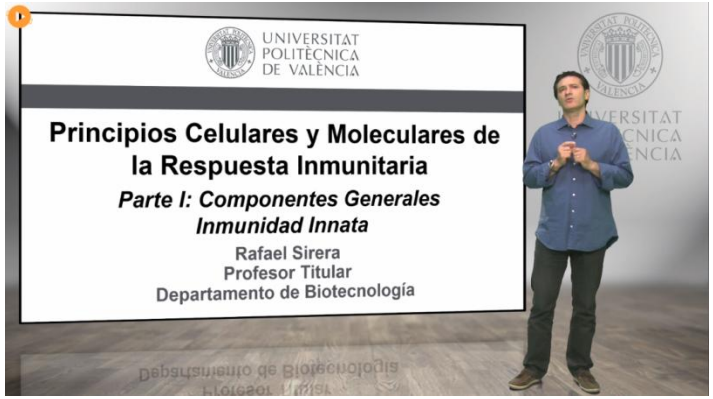
Some institutions using poli[Media]

Video format

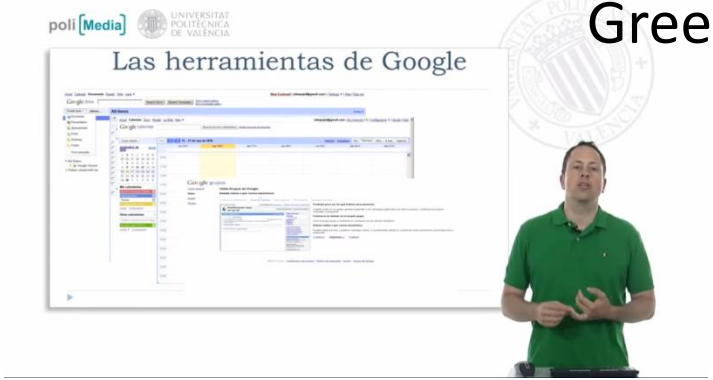


Screencast

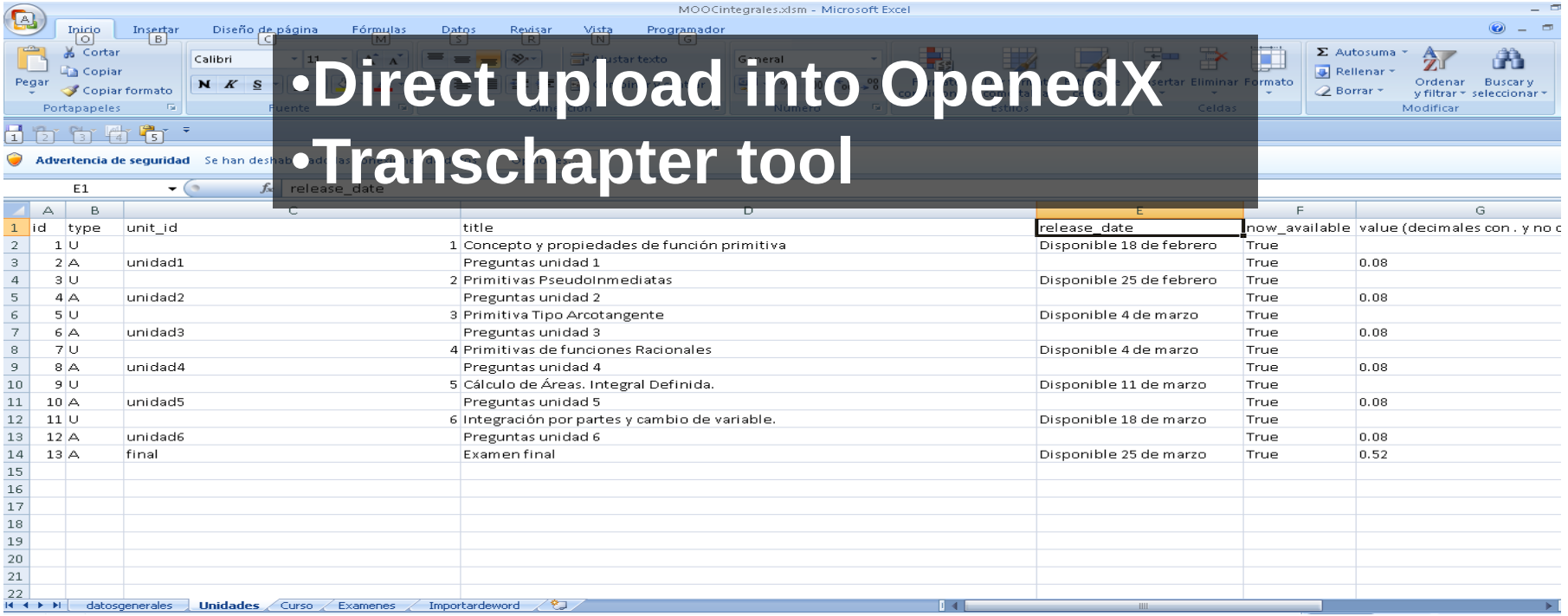
Polimedia



Green Screen Studio



Spreadsheet Template



- Direct upload into OpenedX
- Transchapter tool

	A	B	C	D	E	F	G
1	id	type	unit_id	title	release_date	now_available	value (decimales con . y no c
2	1	U	1	Concepto y propiedades de función primitiva	Disponible 18 de febrero	True	
3	2	A	unidad1	Preguntas unidad 1		True	0.08
4	3	U	2	Primitivas PseudoInmediatas	Disponible 25 de febrero	True	
5	4	A	unidad2	Preguntas unidad 2		True	0.08
6	5	U	3	Primitiva Tipo Arcotangente	Disponible 4 de marzo	True	
7	6	A	unidad3	Preguntas unidad 3		True	0.08
8	7	U	4	Primitivas de funciones Racionales	Disponible 4 de marzo	True	
9	8	A	unidad4	Preguntas unidad 4		True	0.08
10	9	U	5	Cálculo de Áreas. Integral Definida.	Disponible 11 de marzo	True	
11	10	A	unidad5	Preguntas unidad 5		True	0.08
12	11	U	6	Integración por partes y cambio de variable.	Disponible 18 de marzo	True	
13	12	A	unidad6	Preguntas unidad 6		True	0.08
14	13	A	final	Examen final	Disponible 25 de marzo	True	0.52
15							
16							
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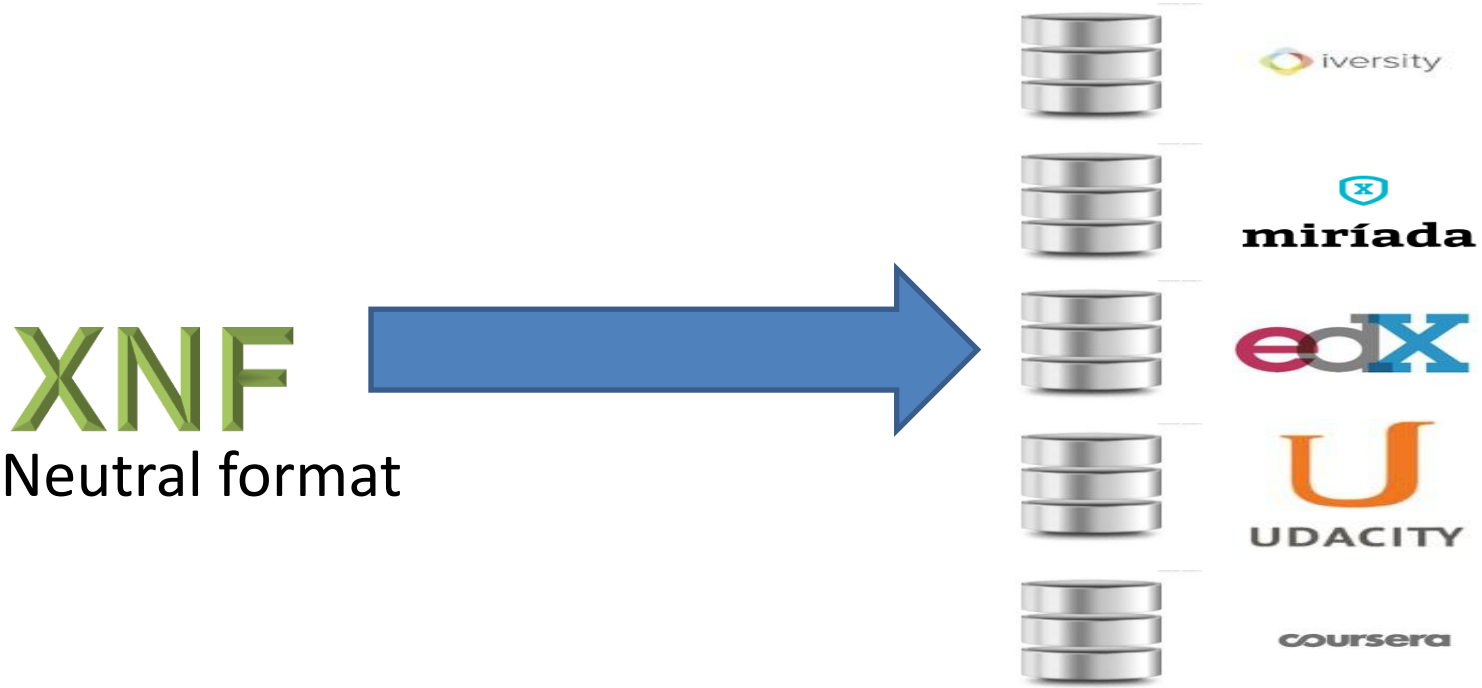
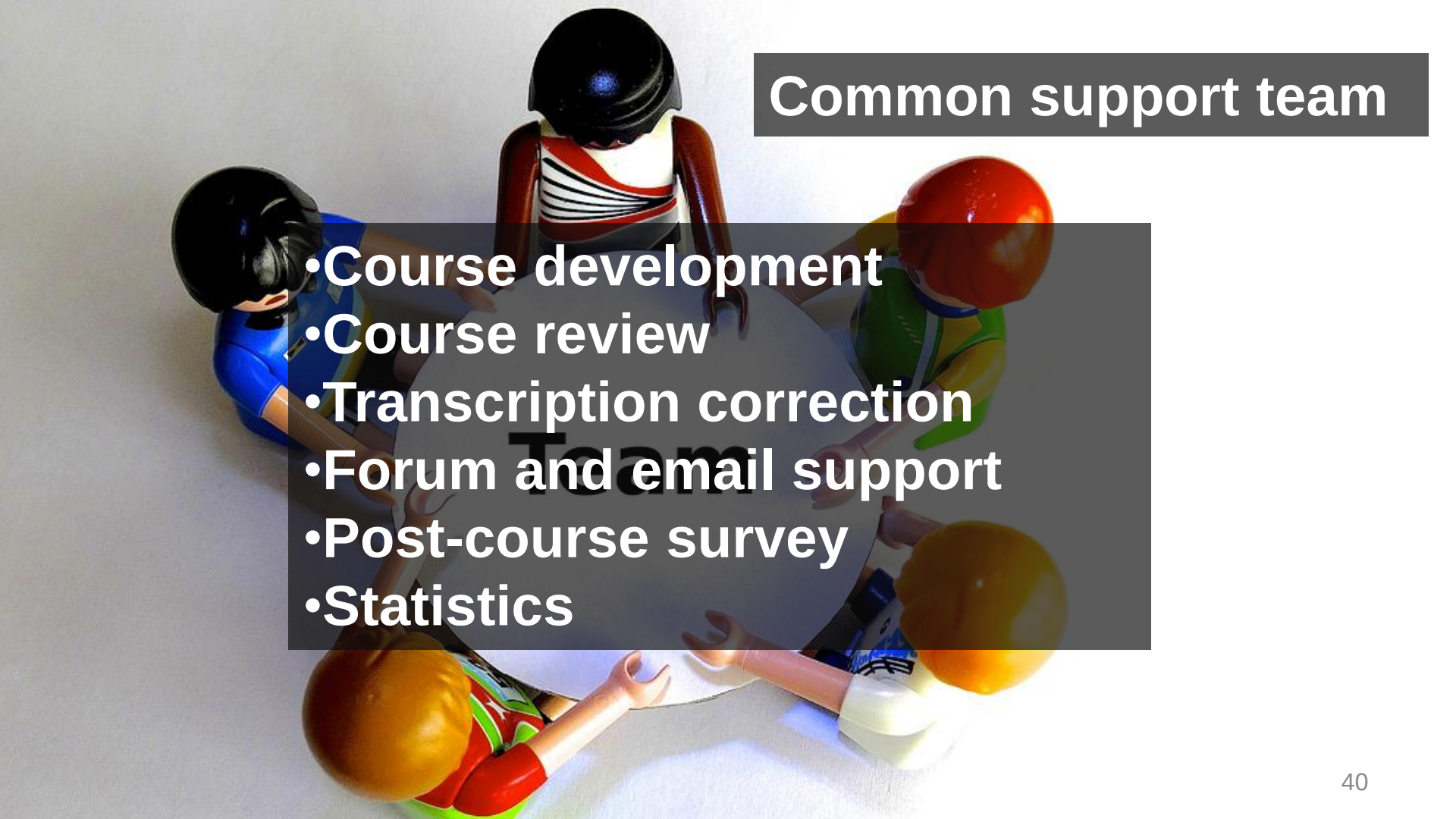
22							

Content automation tools



Common support team



- Course development
- Course review
- Transcription correction
- Forum and email support
- Post-course survey
- Statistics

transLectures

Transcription and Translation of Video Lectures

hola en este tema vamos a hablar de las características de los aviones	Hello on this topic we are going to talk about the characteristics of aircrafts
que nos afectan a la hora de diseñar un aeropuerto, bien	That affect us at the time of designing an airport
empezaremos	We will start
aquí vamos a ver	here we are going to see
un poco una clasificación de aviones de las muchas que hay	A little bit of a classification of aircraft from the many that there are
comentaremos varias	We will discuss several of them
luego las nuevas tendencias en aviación comercial y corporativa	Then the new trends in corporate and commercial aviation
ei actuaciones en tierra pesos importantes y dimensiones que vamos a tener que tener en cuenta	ground manouvres, important weights and dimensions that we are going to take into account

1 minute of video->3 minutes of transcription

https://ttp.mllp.upv.es/

- Open call for MOOC
- MOOCs announced when finished

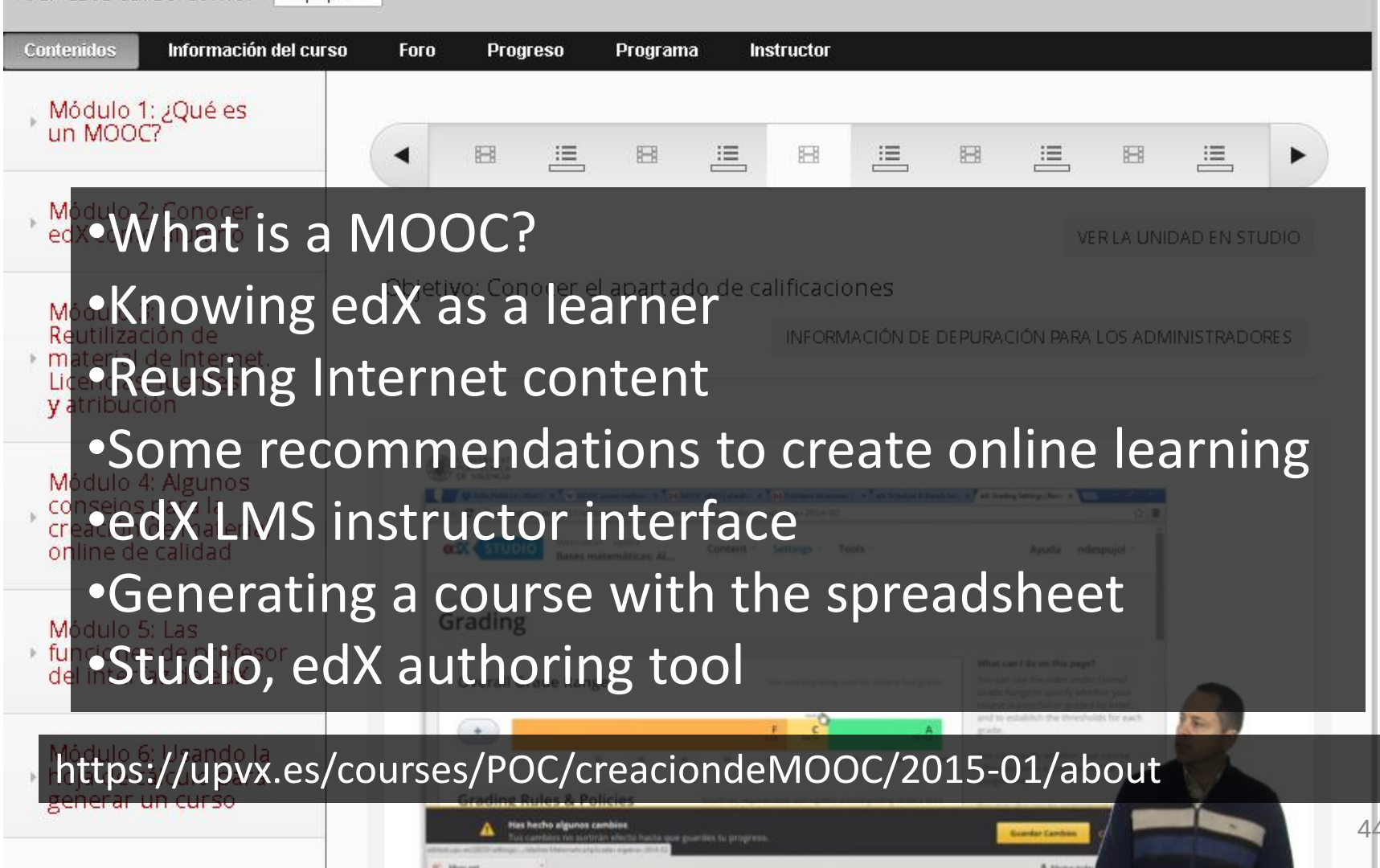
Video

Texto

Preguntas de refuerzo

Documentation&training

http://www.upv.es/contenidos/DOCENRED/infoweb/docenred/info/U0711219.pdf



- What is a MOOC?
- Knowing edX as a learner
- Reusing Internet content
- Some recommendations to create online learning
- edX LMS instructor interface
- Generating a course with the spreadsheet
- Studio, edX authoring tool

https://upvx.es/courses/POC/creaciondeMOOC/2015-01/about

Personalized support

Foto: Linda Castañeda CC-BY

Thank you very much

ndespujol@cc.upv.es