

# transLectures & poliMedia

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UNIVERSITAT  
POLITÈCNICA  
DE VALÈNCIA

# poliMedia

- Universitat Politècnica de València's learning objects repository
- 11.461 recordings
- Developed under the Networked Teaching Project at UPV



The screenshot shows the poliMedia website interface. At the top, the URL is <https://media.upv.es>. The header includes the Universitat Politècnica de València logo and the text "UNIVERSITAT POLITÈCNICA DE VALÈNCIA". To the right, there are links for "Iniciar sesión como: Usuario de Polimedia" and "Cuenta UPV", and the "poliMedia" logo. Below the header, there is a search section titled "Busca en nuestro catálogo" with a search input field and a "Buscar" button. Below the search field, it says "11461 vídeos disponibles". Underneath, there is a section titled "Explora nuestros contenidos" with two content cards. The first card is titled "Ejemplos de grabaciones Polimedia" and lists "Autor: Administrador Polimedia" and "Fecha de creación: 25/5/2012". The second card is titled "La herramienta Polimedia" and lists "Autor: Miguel Ferrando Bataller" and "Fecha de creación: 8/4/2004". At the bottom right, there is a small portrait of a man and the text "VALENCIA DE VALENCIA".

# The Networked Teaching Project

- A Project for supporting e-learning content creation
- Starting in 2007
- Coordinating IT , Educational and Library services with Teachers

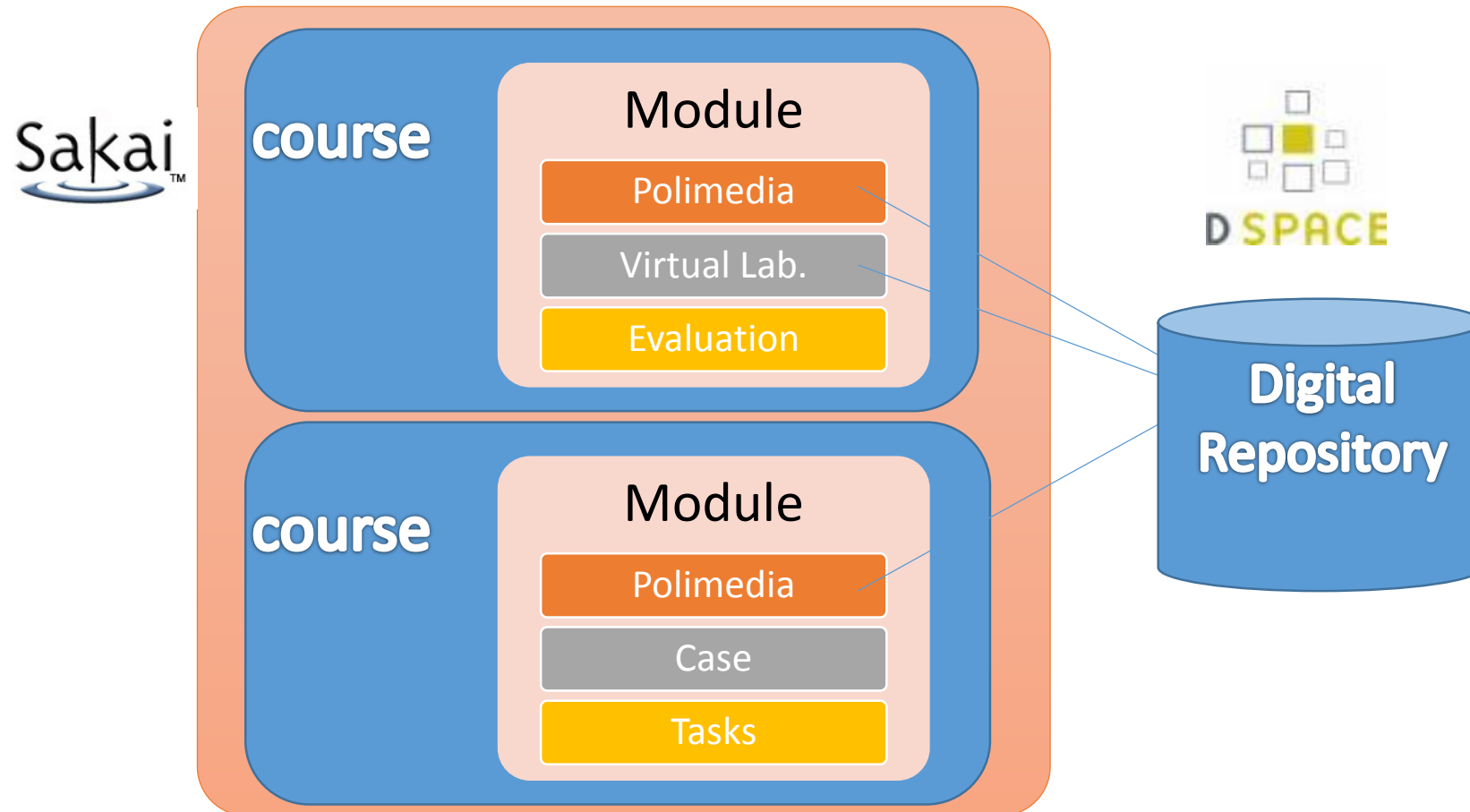


# Our 2013 Menu

- Learning Objects
  - Polimedia recordings
  - Screencast recordings
  - Educational videos
  - Numerical simulations with interactive calculation (VL)
  - Educational articles
- Learning Modules
- OCW courses
- Lecture Recording (Opencast Matterhorn)
- Transcribed/Translated recordings



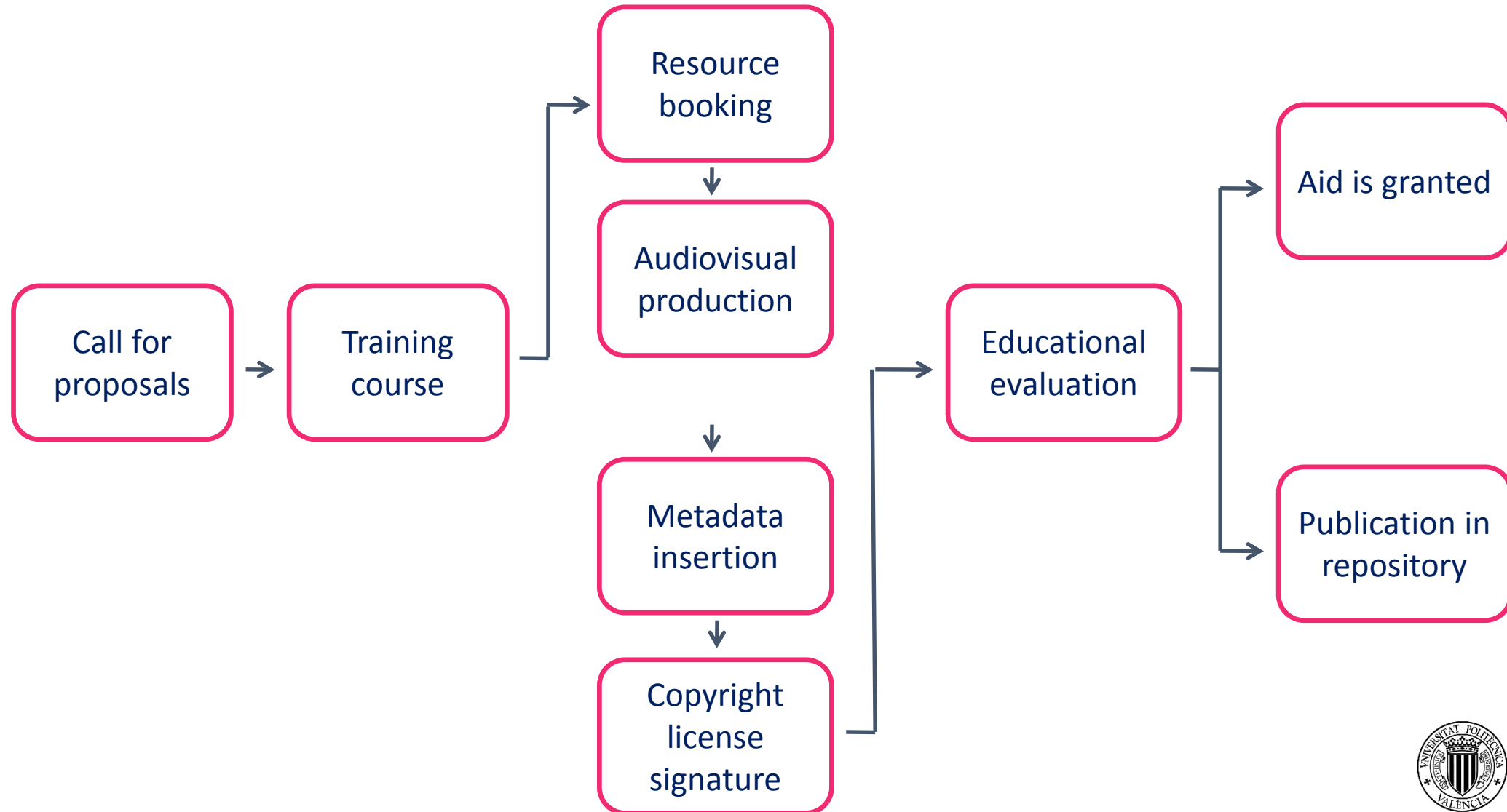
# Practical Implementation



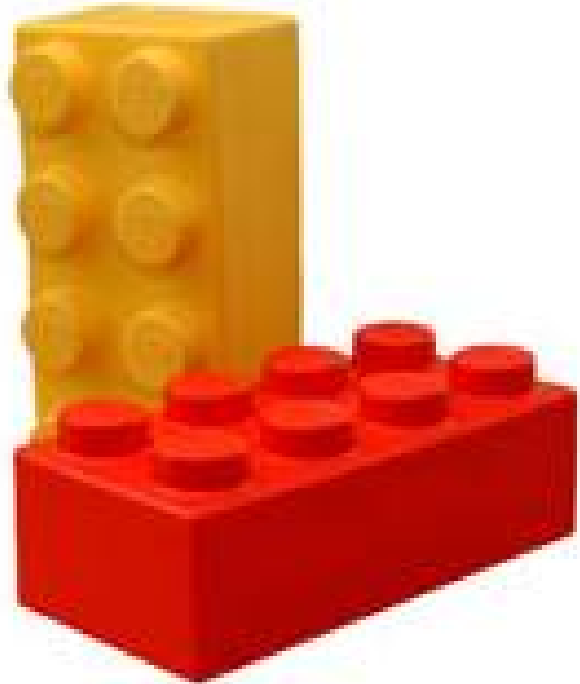
# Assets produced

	2007	2008	2009	2010	2010 - 2011	2011 - 2012	2012 - 2013	TOTAL
<b>Polimedia</b>	1626	979	1124	1144	1353	1846	2102	10174
<b>Standard video recordings</b>	144	135	100	37	39	33	33	521
<b>Virtual Labs</b>	188	261	202	138	132	106	108	1135
<b>Screencasts</b>				66	48	37	66	217
<b>Learning Modules</b>		51	42	34	25	21	23	196
<b>OCW sites</b>		30	34	26	9	10	10	119
<b>Lecture Recording hours</b>					144	512	2486	3142
<b>Transcripted Recordings</b>							10174	10174

# Networked Teaching process



What is poli [Media] ?



- Learning objects production
- 10-minute recordings
- Specialized studio
- Short menu of options



## La herramienta Polimedia

Materia: Docencia  
Fecha: 22/02/2007  
Dirección: Ferrando Bataller, Miguel  
Universidad: UPV  
Duración total: 1 m, 18 s



## Estudios de Grado

Materia: Formación  
Fecha: 08/02/2010  
Dirección:  
Universidad:  
Duración total: 4 h, 1 m, 13 s



## Teoría básica de grafos y análisis de 4 conocidos problemas

Materia: Teoría de grafos  
Fecha: 19/06/2008  
Dirección: Jordan Lluch, Cristina  
Universidad: UPV  
Duración total: 5 h, 40 m, 35 s



## Cultivos Leñosos

Materia: Fruticultura  
Fecha: 01/07/2010  
Dirección: Agustí Fonfría, Manuel



# poli[Media]:

## What is Polimedia?

SCREENCAST + NON VERBAL  
VIDEO COMMUNICATION

### Introducción

#### Objetivos

- Determinar la tercera propiedad de la desigualdad

#### Contenidos Conceptuales

- Propiedad de la desigualdad al multiplicar o dividir por un número negativo a ambos miembros



00:32 03:20

poli [Media]  Enlaces  Estadísticas

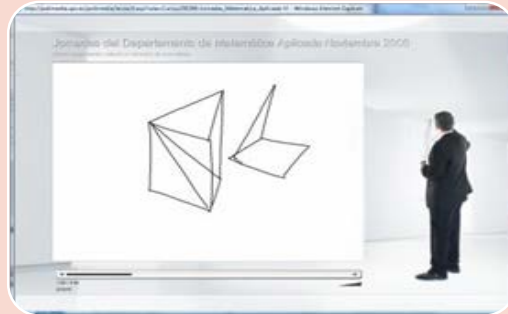


# Presentation formats



## Screen

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



## Whiteboard

- Whiteboard capture
- Graphics pad integration



## Video

- Zenith Camera
- Real world objects
- Experiments



# Producing content: Polimedia studio



2x -3x recording rate

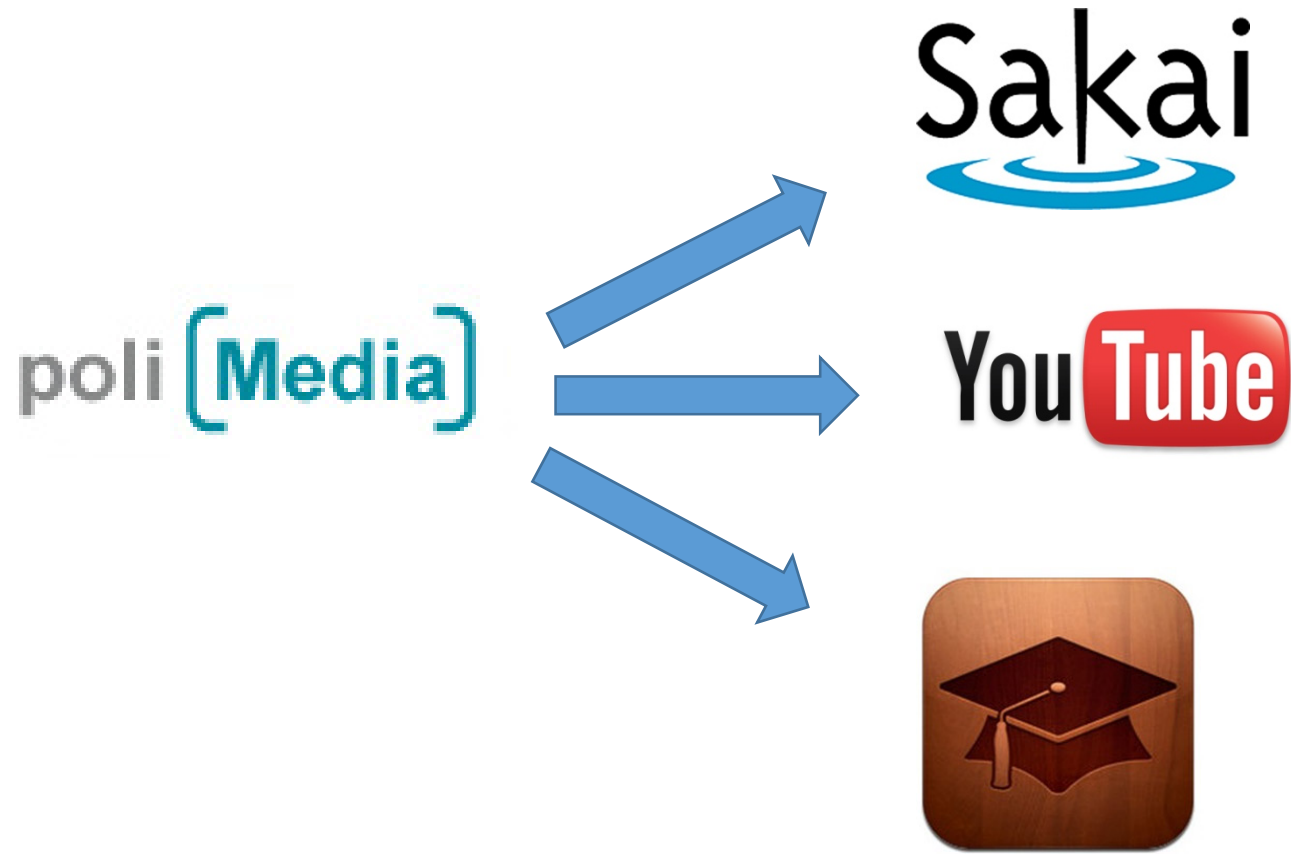


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# Polimedia Studio



# Distribution







# STATISTICS

## About 2.000.000 views a year

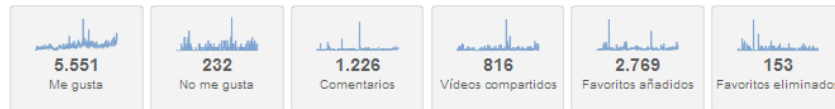
**UPV** valenciaupv CANAL Vídeos: 2.257 - Fecha de creación: 30/06/2009 - Reproducciones totales: 1.668.449

22/09/2011 – 24/10/2012

### Rendimiento



### Interacción

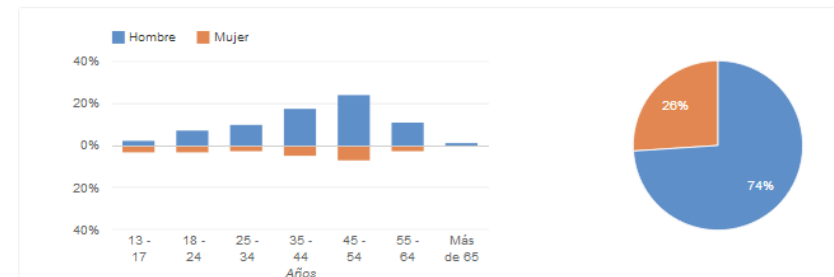


### Los 10 mejores vídeos Explorar todos los vídeos

Vídeo	Reproducciones ↓	Me gusta	Comentarios
1. Manejo de escalas en AutoCAD para impresión de ...	62.126	185	46
2. Multímetro digital. Medida de corrientes en alterna...	47.696	37	4
3. Vídeo práctico de Estacionamiento y Lectura.© UPV	36.908	90	27
4. Vídeo práctico Nivelación Geométrica.© UPV	23.186	33	15
5. Ciencias de los Materiales 1. Estructuras Cristalina...	16.207	69	16
6. Le Subjonctif (II).© UPV	11.269	45	7
7. Cromatografía: Cromatografía de gases.© UPV	10.707	62	12
8. Convertir líneas en polilíneas.© UPV	10.600	29	8
9. Diagramas de Aleaciones de Ingeniería. Diagrama ...	10.296	66	14
10. Ciencias de los Materiales 2. Estructuras Cristalina...	8.569	30	1

**UPV** valenciaupv CANAL Vídeos: 2.257 - Fecha de creación: 30/06/2009 - Reproducciones totales: 1.668.449

22/09/2011 – 24/10/2012



Ubicaciones de reproducción principales	Reproducciones	Entre 13 y 17 años	Entre 18 y 24 años	Entre 25 y 34 años	Entre 35 y 44 años	Entre 45 y 54 años	Entre 55 y 64 años	Más de 65 años	Sexo
1. España	384.089	2,7%	6,4%	10,3%	27,4%	38,9%	12,7%	1,7%	74% H, 26% M
2. México	294.617	8,7%	16,6%	15,0%	20,2%	26,4%	11,7%	1,4%	74% H, 26% M
3. Colombia	207.509	13,9%	15,2%	15,1%	18,3%	24,5%	11,3%	1,6%	74% H, 26% M
4. Perú	175.257	8,6%	13,9%	15,8%	18,4%	28,1%	13,8%	1,4%	74% H, 26% M
5. Argentina	127.207	5,2%	8,8%	13,5%	19,8%	31,2%	18,6%	2,9%	74% H, 26% M
6. Chile	106.882	5,8%	16,6%	17,4%	19,8%	28,0%	10,8%	1,5%	74% H, 26% M
7. Venezuela	57.023	3,5%	8,0%	10,7%	20,7%	33,8%	21,0%	2,2%	74% H, 26% M
8. Ecuador	47.587	11,5%	15,4%	15,1%	20,1%	26,8%	9,9%	1,1%	74% H, 26% M
9. Brasil	43.273	2,8%	6,9%	14,2%	23,2%	33,6%	16,9%	2,4%	74% H, 26% M
10. Estados Uni...	21.044	2,9%	2,8%	8,3%	24,6%	36,3%	23,6%	1,5%	74% H, 26% M



# Lecture recording with Matterhorn

- 52 lecture halls
- Opt-in policy ☹️
- ~2000 hours/semester
- Working on the player component (Paella Player)



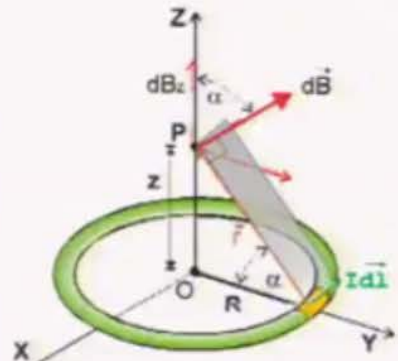



# Paella Player

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LECCIÓN 3: CAMPOS MAGNÉTICOS INDEPENDIENTES DEL TIEMPO

B) CAMPO MAGNÉTICO CREADO POR UNA ESPIRA CIRCULAR


$$d\vec{B} = \frac{\mu_0 I}{4\pi r^3} d\vec{l} \times \vec{r}$$
$$dB = \frac{\mu_0 I dl}{4\pi r^2}$$


00:00:00

30s

UNIVERSITAT POLITÈCNICA DE VALÈNCIA

# Integrating transLectures with Paella Player

The screenshot shows a web browser window with the URL <https://media.upv.es/player/?id=cd34a9f1-dfcb-0d4d-b84d-0ef6f8a43228&autoplay=true>. The video content displays a presentation slide from 'poli [Media]' at the 'UNIVERSITAT POLITÈCNICA DE VALÈNCIA'. The slide title is 'Overview of Future Internet Testing (FITTEST)'. The slide lists the following bullet points:

- What is Future Internet Testing?
- Who is working on it?
- What tool will be delivered?
- How does this tool work?
- What are the benefits?
- Who is the audience?
- How can you participate?

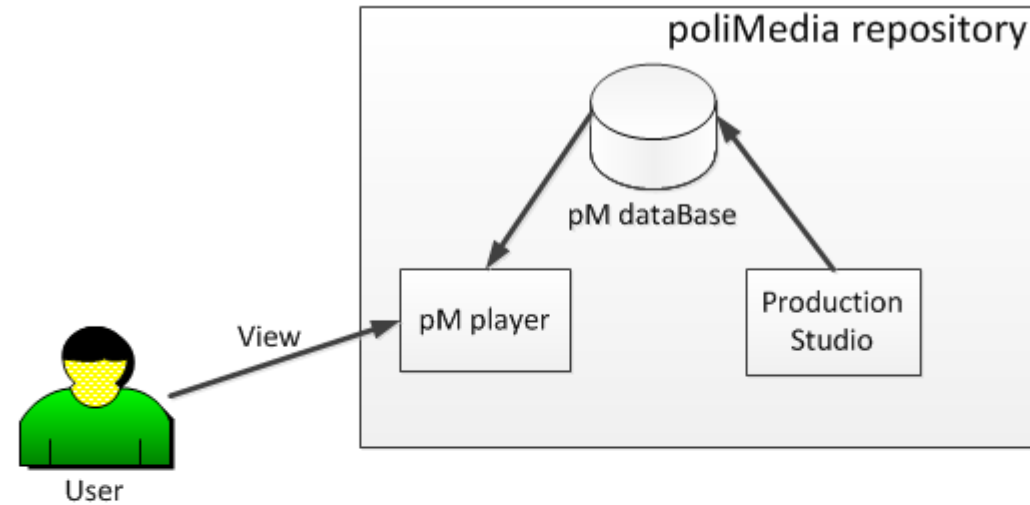
The slide also features a large play button icon, a FITTEST logo (a spider), and a watermark of the university's seal. A video player interface is overlaid on the bottom right, showing a language selection dropdown menu with 'Ninguno' selected and an 'Editar' button. The video player controls at the bottom left show a timestamp of 00:00:12 and a 30-second skip button.

# Integrating transLectures with poliMedia

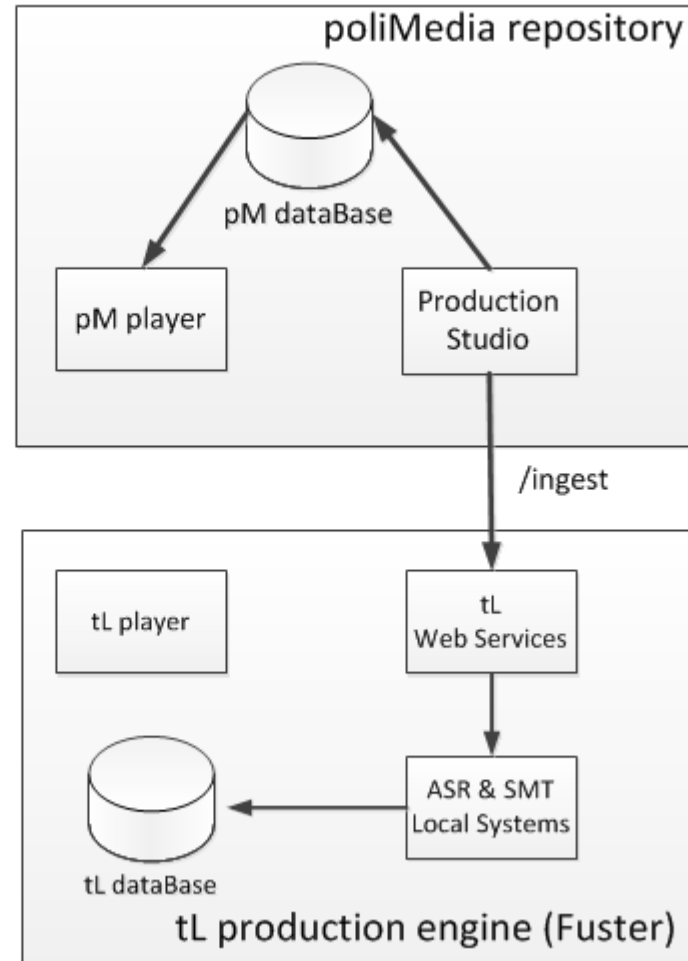
- Adding a new server (Fuster) to our infrastructure to manage Transcriptions & Translations
- Quite easy
- System independence



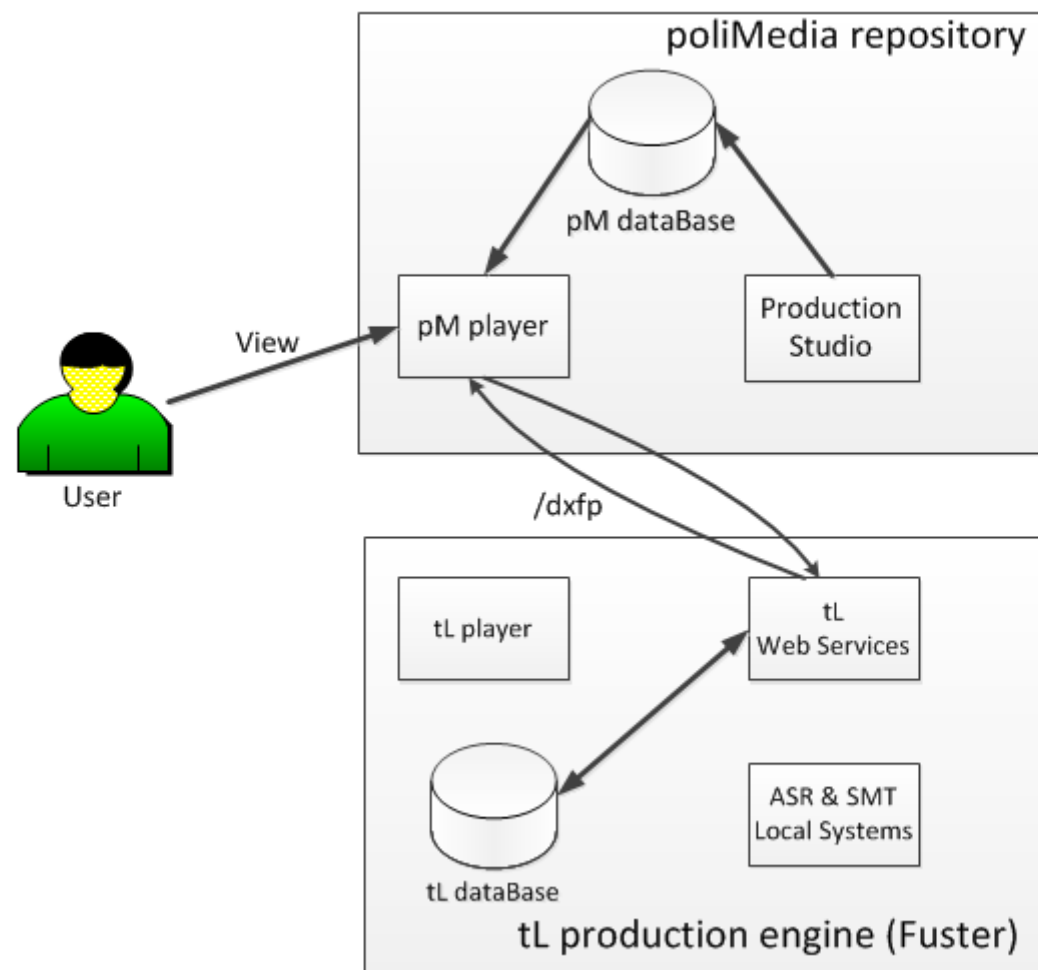
# poliMedia before transLectures



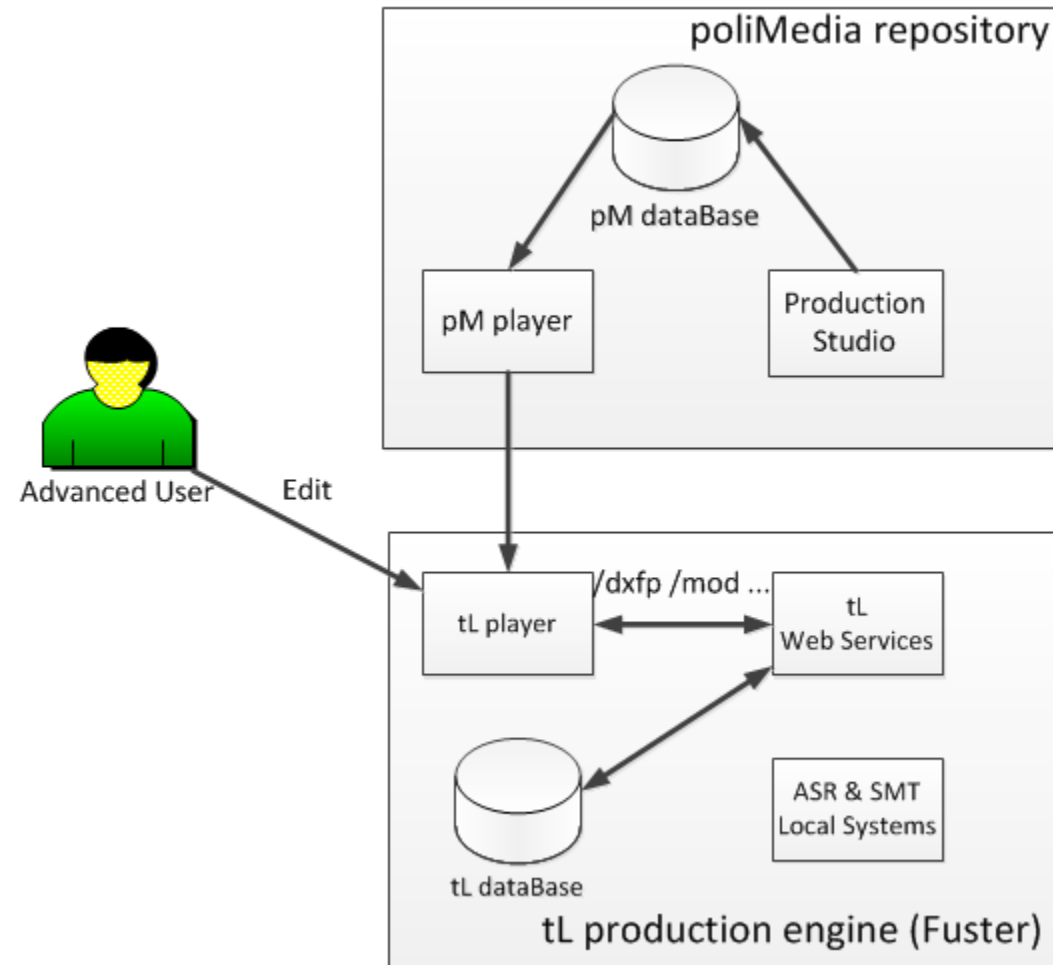
# Ingest service



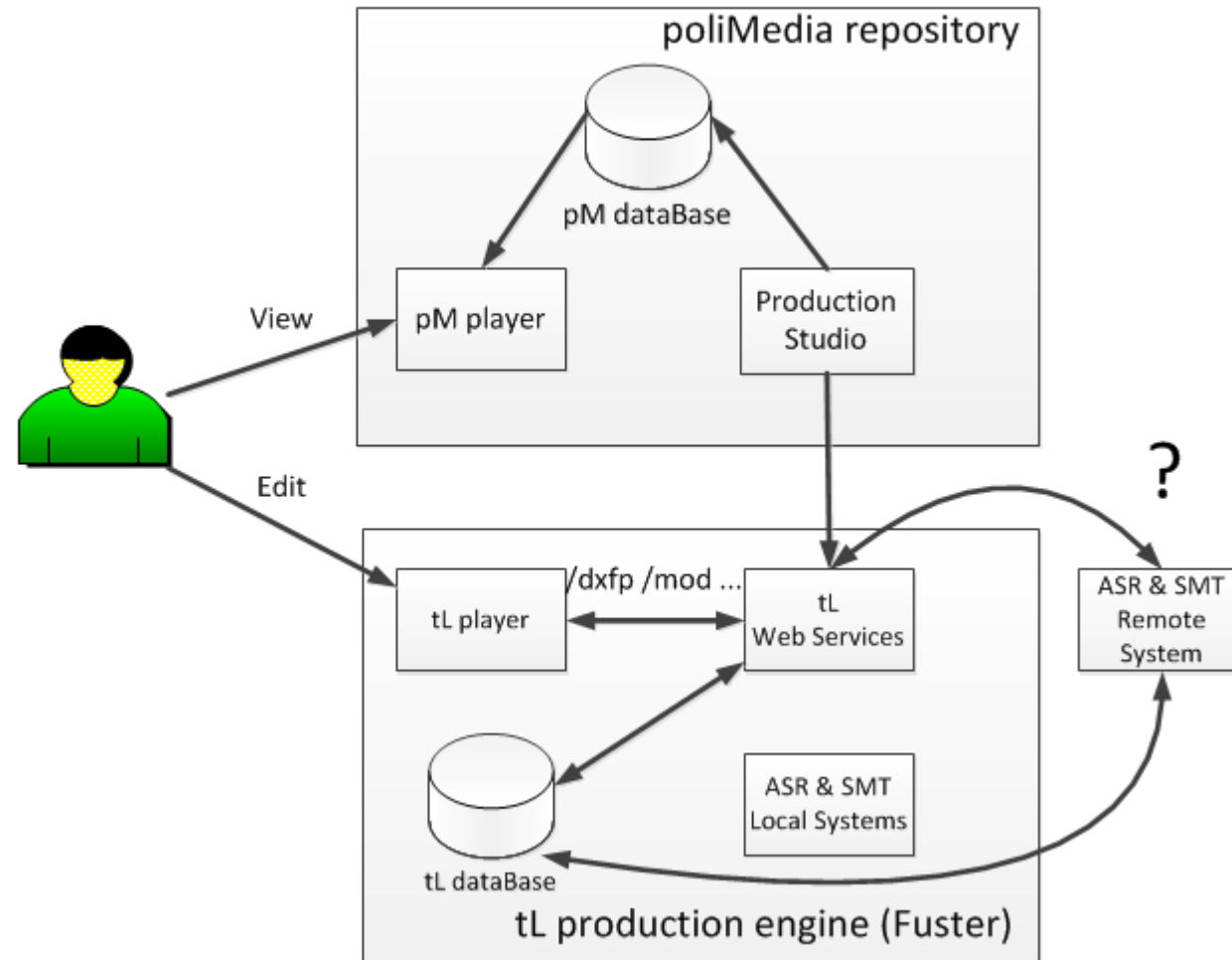
# Viewing a transcription/translation



# Editing



# External engine support





# transLectures Platform (TLP)

- **Web Service**

- HTTP API:

- */ingest* (POST)
    - */status* (GET)
    - */lecturedata* (GET)
    - */langs* (GET)
    - */dfxp* (GET)
    - */mod* (POST)

# tL player

- Available with the transLectures tools
- Open Source (Apache license)
- Helps authors to review & correct Transcriptions and Translations
- Developed in HTML5



The screenshot displays the transLectures web player interface. At the top, there is a navigation bar with the logo "transLectures" and the tagline "Transcription and Translation of Video Lectures". The navigation bar includes links for "MAIN", "HELP", and "LOGOUT". On the right side of the navigation bar, there are logos for "COOPERATOR", "CIP", and the European Union flag.

The main content area is divided into two sections. The left section is a video player showing a slide with the following text:

Clase Introductoria de Derecho  
Constitucional y Estructuras  
Políticas

---

Diplomatura en Gestión y Administración Pública  
1' Curso – Cuatrimestre A

The right section is a transcript of the video content, starting with a play button icon and the text: "Bueno, buenos días a todos, yo me llamo Jose Carlos de Bartolomé Genzano, soy profesor del área de derecho constitucional que está ubicada pues dentro de lo que es el departamento de urbanismo."

# tL player

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## What are objectives of Module 2?

- 1) Lead the participants via **interactive exercises** to
  - Reflect upon an updated **definition of innovation**
  - Distinguish types of **technological** and **non-technological innovation**
- 2) Facilitate the innovative thinking of participants based on the example of **Cybercafé**, based on ICT progress
- 3) Develop participants deeper understanding of *each innovation type* on the **"Wheel of Innovation"**.
- 4) Present the **Triangle System** and lead discussion of the participants' possible approach to use it for *their innovation*
  - **"Creativity, R&D and external environment"**.

innovative triangle

poliMedia

01:53 / 05:29



well we will lead the participants through interactive exercises there will be lots of videos and lots of interaction	bueno encabezaremos a los participantes en ejercicio activo será muchos videos mucha interacción
on these videos	en estos videos
to reflect upon what is an updated definition of innovation and we will discuss technological innovation	para reflexionar sobre lo que es ahora definición de innovación y vamos a hablar de la innovación tecnológica
as well as non-technological innovation	y la innovación tecnológica
we will facilitate this innovative thinking as I said before by using the cyber cafe /e e// exercise to	facilitará <b>este</b> pensamiento innovador, como dije antes usando el cibercafé o ejercicio a
make them think about innovation	hacerlos pensar sobre innovación
and we will develop our participants /e// deeper understanding of innovation based on the innovation wheel	y vamos a desarrollar participantes son mejor comprensión de la innovación basada en la innovación que se
which /will which// represents different types of innovation technological but also non-technological innovation like	¿ que representa distintos tipos de innovación tecnológica, sino también las innovaciones tecnológicas como
marketing strategy and so on	estrategia de comercialización y demás
and finally we will present the triangle system that is this triangle based on	y finalmente presentaremos el triángulo sistema basado en este triángulo
creativity research and development and your	la creatividad investigación y desarrollo y su

# Manual upload of lectures (Try Our Tools)

MAIN

UPLOAD VIDEO

LOGOUT

## UPLOAD FORM

Title (*):	<input type="text"/>
Keywords:	<input type="text"/>
Topic:	<input type="text"/>
Language (*):	Spanish ▾
Speaker name (*):	<input type="text"/>
Media ID (*):	<input type="text"/>
Video file (*):	<input type="button" value="Seleccionar archivo"/> No se ha seleccionado ningún archivo <small>(.mp4, .ogv, .avi, .wmv, .flv)</small>
Slides file:	<input type="button" value="Seleccionar archivo"/> No se ha seleccionado ningún archivo <small>(.mp4, .ogv, .avi, .wmv, .pdf, .ppt[x], .txt)</small>
E-mail:	<input type="text"/> <small>We will send you an e-mail when the video processing ends.</small>
	<input type="button" value="Upload"/>

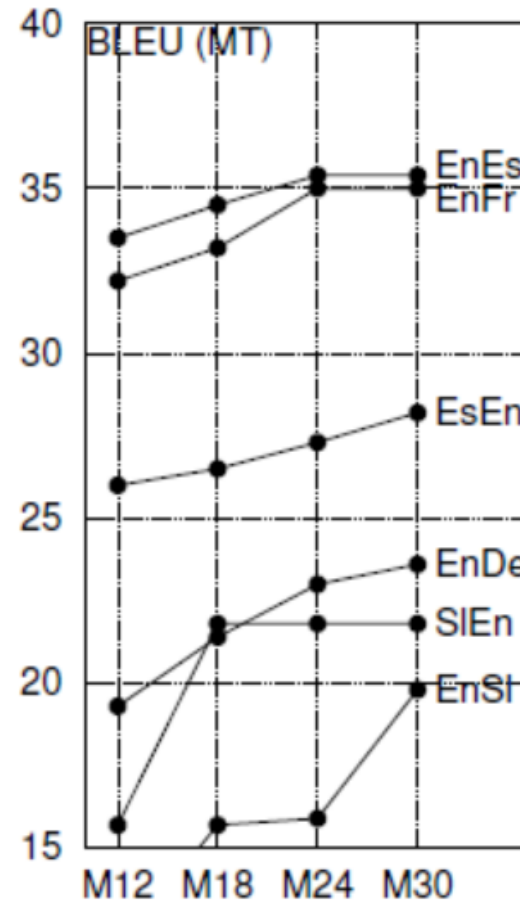
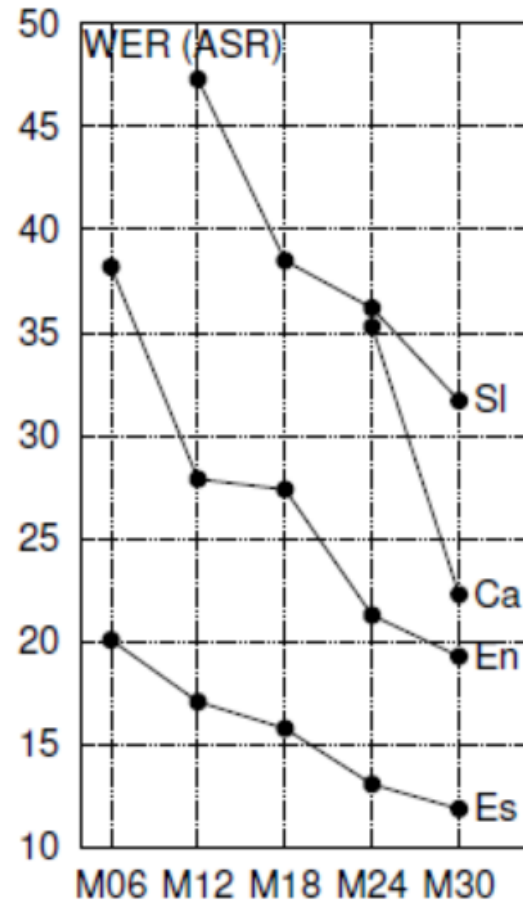


# transLectures + poliMedia evaluations at UPV

- Coordinated with the internal UPV action plan “Networked Teaching”.
- 52 lecturers supervise 5 of their own video transcriptions.
- User interaction statistics collected by the transLectures player in the evaluations.
- Satisfaction surveys collected from lecturers after completing each video.



# transLectures Scientific Results



# Evaluation Results at UPV

## Supervision of transcriptions:

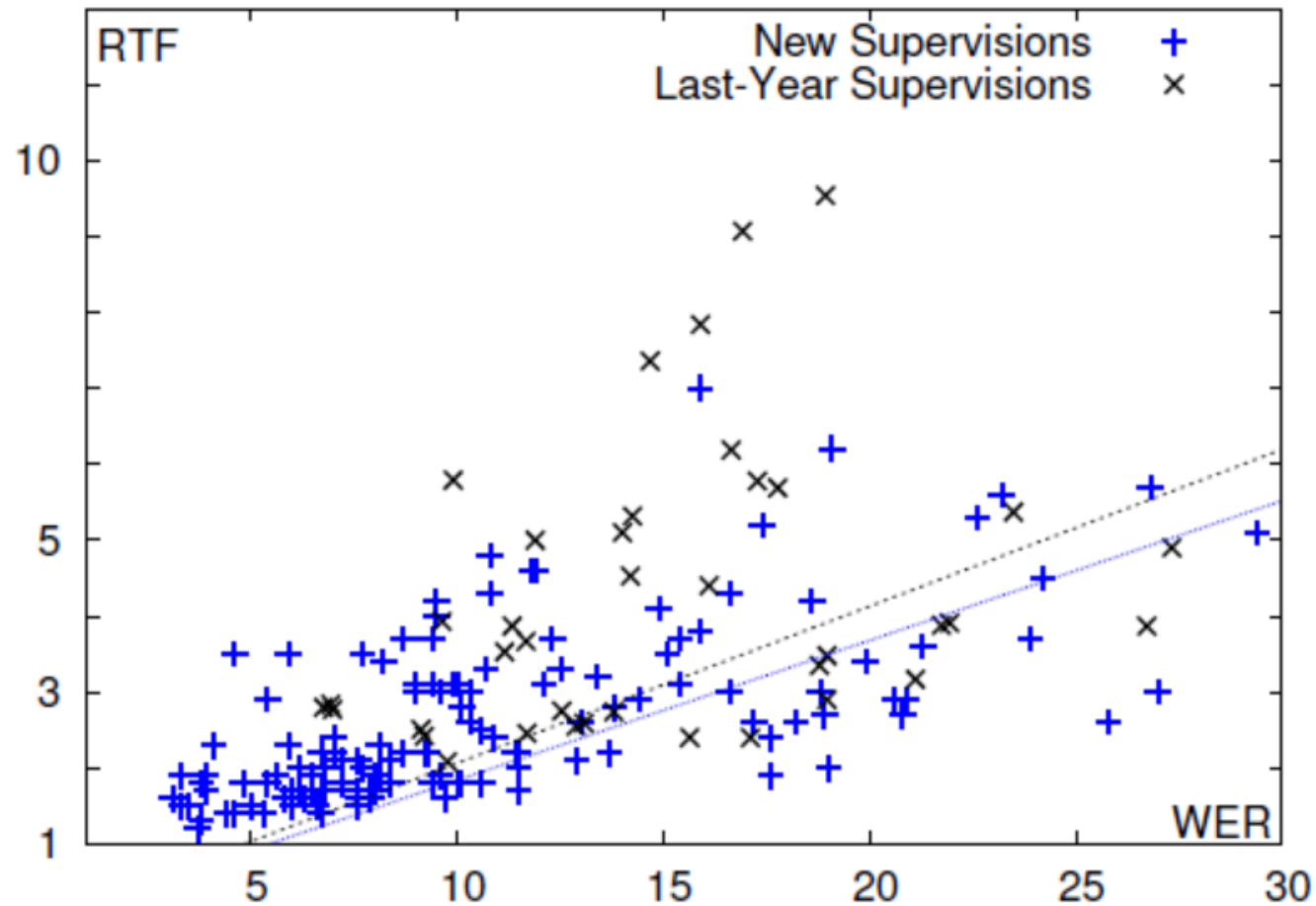
	WER	RTF	SS-score
Spanish	12.0	2.7	8.5
Catalan	40.2	5.6	8.6
English	36.0	6.2	-

## Supervision of Spanish to English translations:

	TER	BLEU	RTF	SS-score
Spanish → English	41.9	49.8	12.2	8.1



Better transcriptions, less corrections 😊





# Beyond transLectures

- Multilingual MOOC aggregator platform
- 12 universities and companies in 8 EU countries
- EMMA MOOCs will go live in September 2014
- MOOCs automatically transcribed and translated
- Languages transcribed
  - English, Spanish, French, Italian, Dutch, Portuguese and Estonian
- Language pairs translated
  - Spanish, French, Italian, Dutch, Portuguese and Estonian → English
  - English → Spanish and Italian
- EMMA open for providers wishing to make MOOCs available in multiple languages



# transLectures

Transcription and Translation of Video Lectures



[www.translectures.eu](http://www.translectures.eu)

## Thanks!

My mail (Carlos Turro)

[turro@cc.upv.es](mailto:turro@cc.upv.es)

Project coordinator:

Alfons Juan-Ciscar

[ajuan@dsic.upv.es](mailto:ajuan@dsic.upv.es)

EC FP7 ICT Programme – Project Number 287755

