

# SIGMA

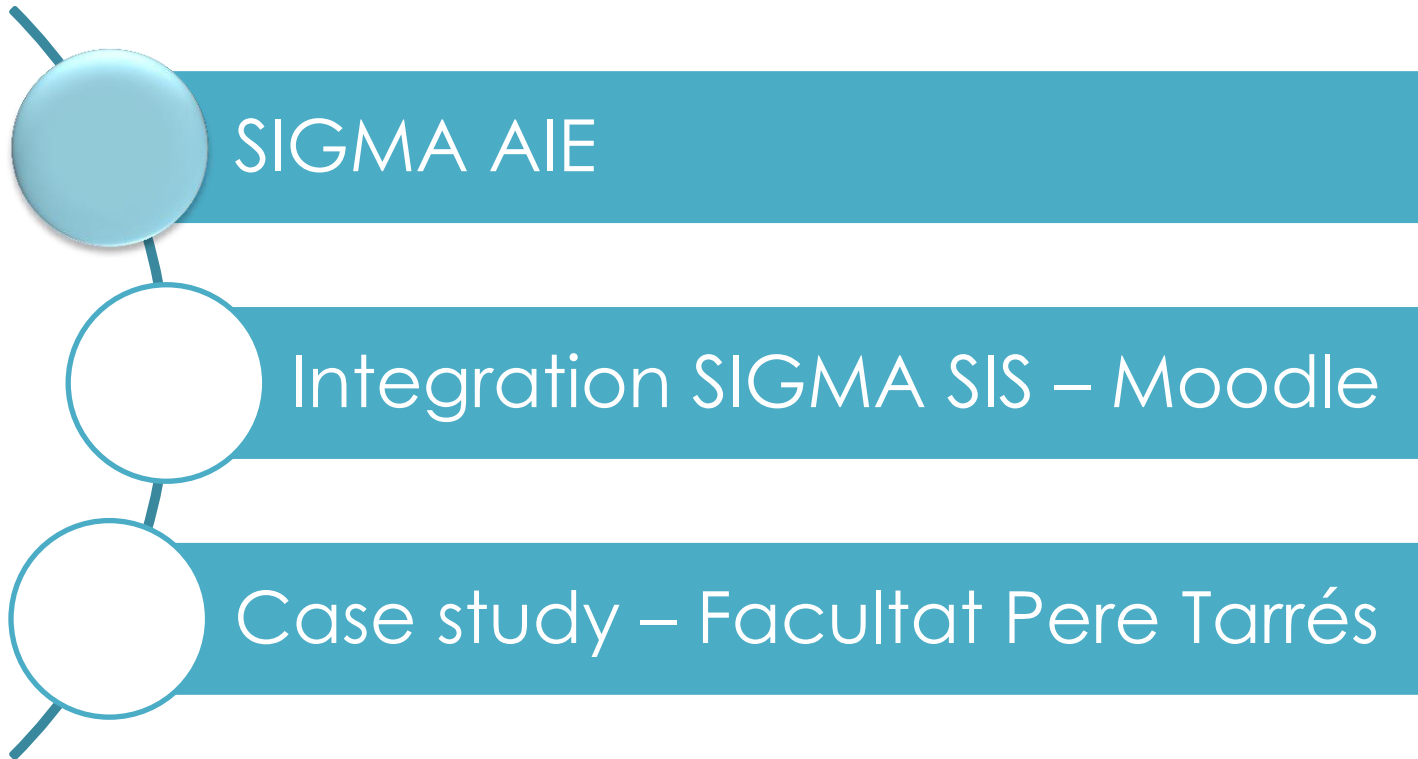
technological innovation for universities

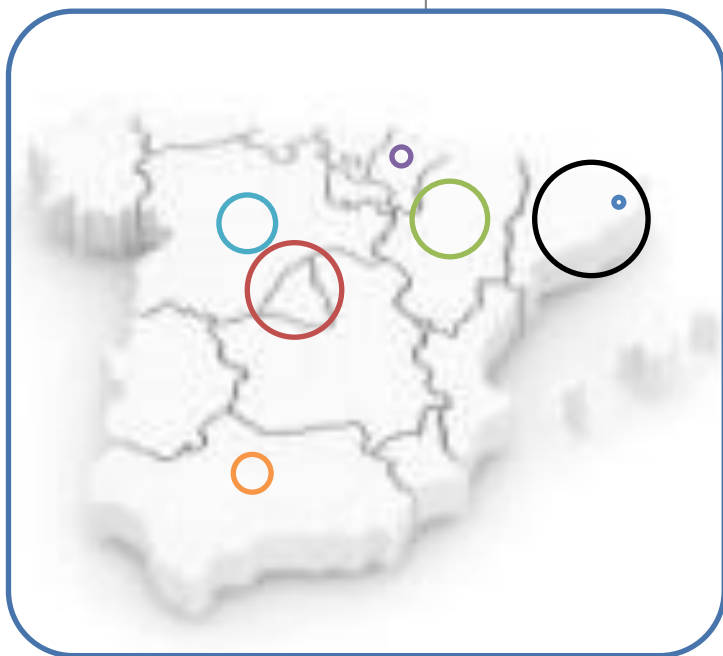
## Integrating a Student Information System with Moodle in a SaaS model

Joel Molins & Joan Busquiel



EUNIS e-Learning Task Force Workshop





SIGMA AIE is the **only non-profit consortia** for the Higher Education sector in Spain

Created in 1996, **brings together 8 Spanish public universities** to offer technological solutions for their needs of managing the **academic, teaching and research processes**

SIGMA focuses its efforts on developing and maintaining "**best of breed**" solutions

- **SIGMA SIS Student Information System**
- **SIGMA CRIS Research Information System**

Experience

20 + years **serving** the University  
Management

Technology

**Pioneers** in Web Applications for Higher  
Education

Innovation

Open, mobile and service-oriented  
**solutions**

Quality

Our **icon** - The Enrollment process more  
**complete, reliable and secure**

International

Leaders in **European organizations**,  
**consortia** and **partners** networks

Social  
responsibility

**Gartner** recognizes the **SIGMA Learning  
Center** in promoting the education sector

### Owners



### Customers



**ELISAVA** Escola Superior de Disseny i Enginyeria de Barcelona



Centre adscrit a la **UAB**



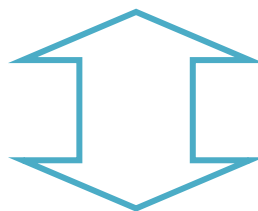
SIGMA represents  
**20% of the students**  
in the Spanish public  
university system



European University  
Information Systems



Rome Student Systems and  
Standards Group



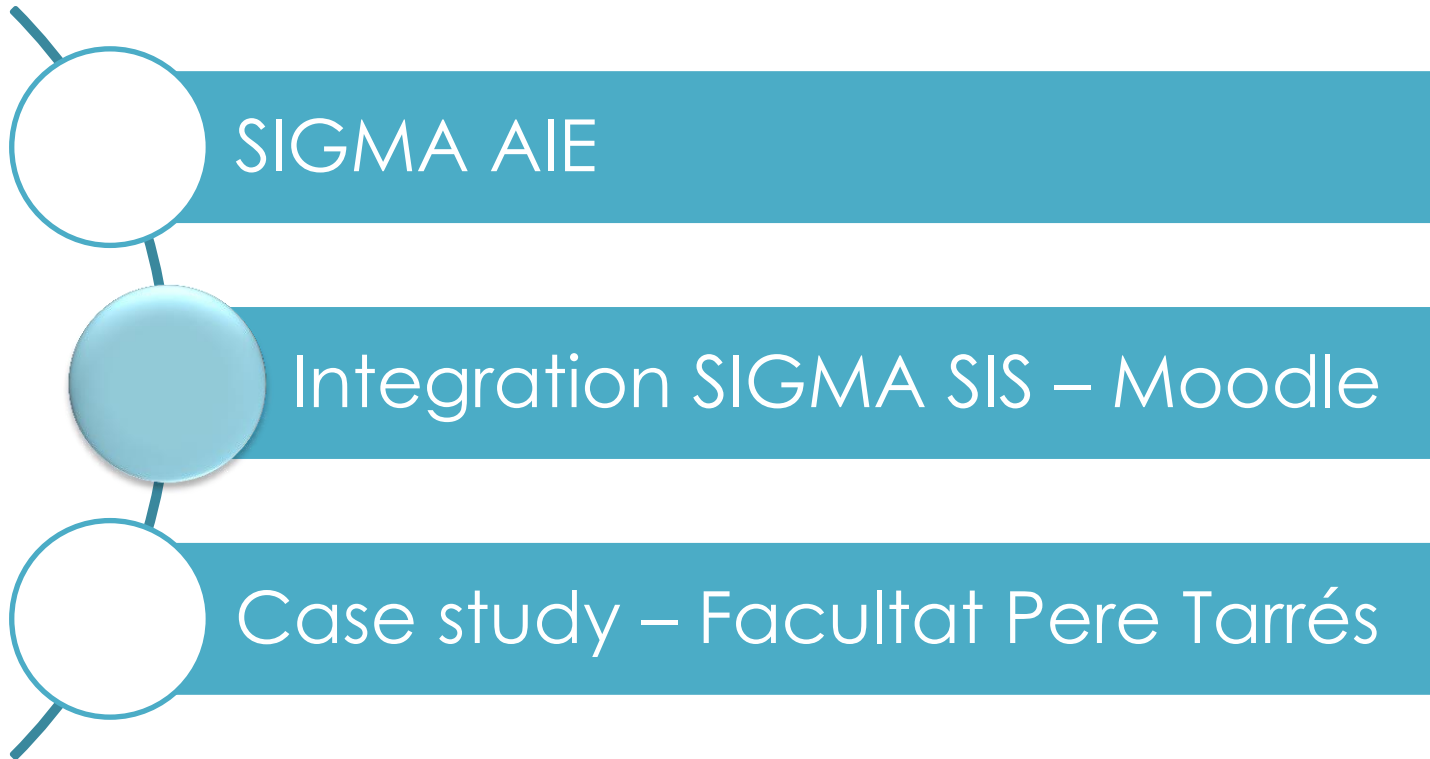
European Association  
**E A of E C**  
Erasmus Coordinators



**IESN**  
INTERNATIONAL EXCHANGE  
ERASMUS STUDENT NETWORK

**egracons**  
EUROPEAN GRADE CONVERSION SYSTEM





Two levels of integration:

- **Level I: Data Integration**

- Creating a data interface that allows external systems to obtain a minimalist version of the SIGMA SIS data model.
- Creating a synchronization process between the interface and learning platforms.
- Creating a set of Web services that enable learning platforms the return of information, such as grades.

- **Level II: Functional Integration**

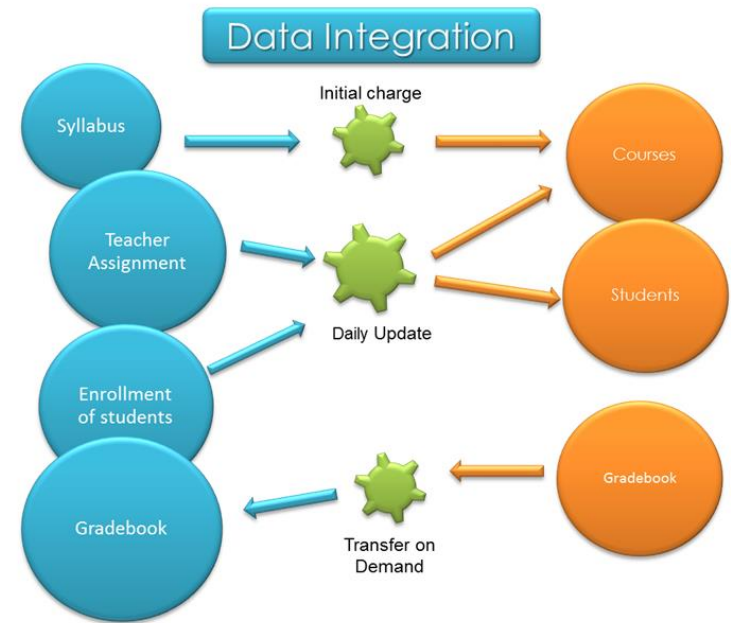
- Giving access to SIGMA functionalities, directly from the learning platform.
- Creating a delegated identification system for total transparency of this integration.
- For frequently used modules, creating plugins on the learning platform, that allows these modules to log in at SIGMA information. For example, a lite version of the SIGMA gradebook.

### ***From SIGMA to Moodle***

- Initial charge of the entire syllabus definitions in SIGMA, thus creating the necessary courses in e-learning platform.
- Daily load distributions of teachers in their groups, as well as the creation of new groups of enrolment.
- Enrolment and unenrolment of students to courses.

### ***From Moodle to SIGMA***

- Teachers currently put their grades in Moodle to keep the student informed of their grades in a convenient and fast way.
- One of the latest developments in SIGMA is creating a tool that allows the teacher to pass the students' grades directly to SIGMA, with just one click.



## MetaGroup

- Tool that allows the teacher to group two or more of their groups in a single Moodle course. Because classroom teaching and online teaching does not always require the same groups of students.


### GESTIÓN DE METAGRUPOS

#### Grupos en Moodle

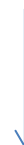
Asignatura: 41391 - Trabajo Fin de Máster
<input type="checkbox"/> Grupo 1
<input type="checkbox"/> Grupo 2 - <b>Agrupado en "MetaCuso de Test"</b>
<input type="checkbox"/> Grupo 5
<input type="checkbox"/> Grupo 6 - <b>Agrupado en "MetaCuso de Test"</b>
<input type="checkbox"/> Grupo 7
Asignatura: 40362 - Comparación transcultural
<input type="checkbox"/> Grupo 1
Asignatura: 40326 - Antropología del ritual y organización de la procreación
<input type="checkbox"/> Grupo 1 - <b>No eres el profesor responsable de este grupo</b>
Asignatura: 28699 - Prácticas de Campo en Antropología Social y Cultural I
<input type="checkbox"/> Grupo 3
Asignatura: 40368 - Proyecto de máster, trabajo de investigación
<input type="checkbox"/> Grupo 2

Nuevo MetaGrupo

#### MetaGrupos en Moodle

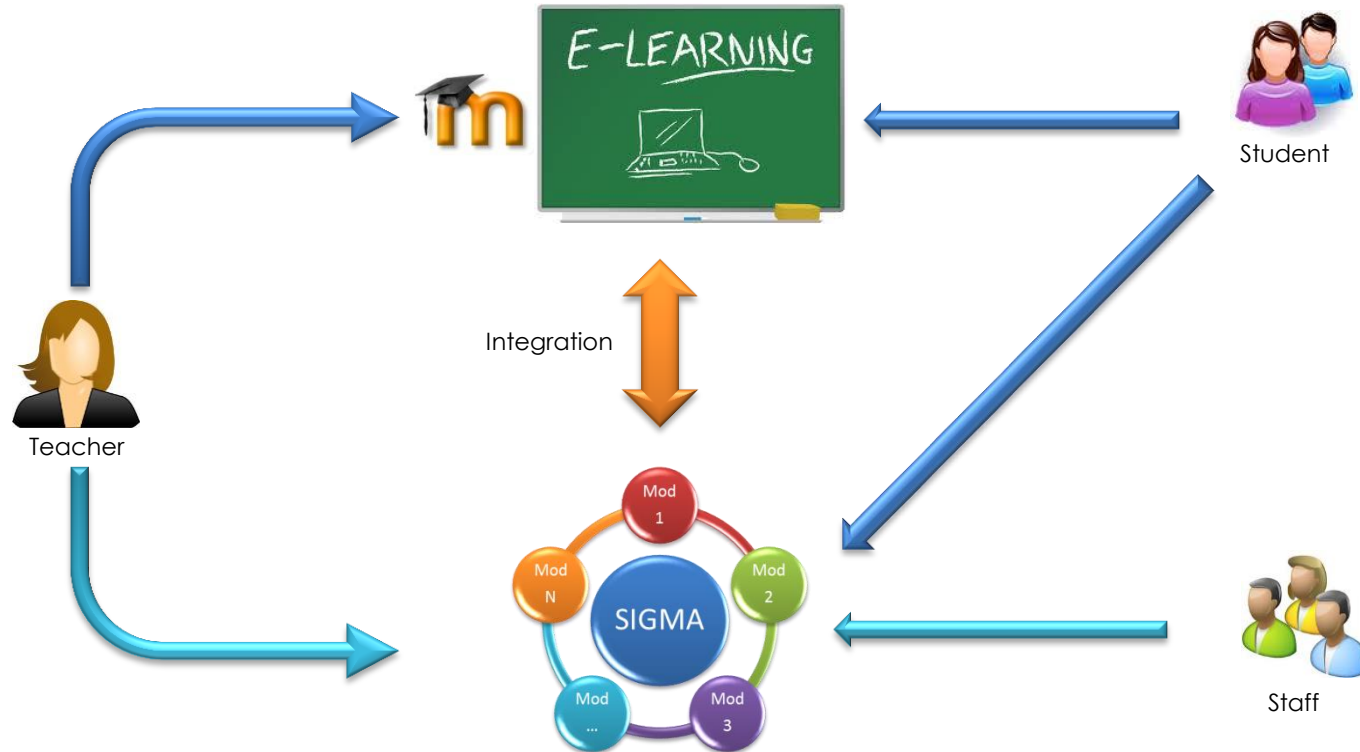
	Id	Nombre MetaGrupo	Integrantes
	META_2008_1	MetaCuso de Test	Asignatura: 41391 - Trabajo Fin de Máster - <b>Grupo 2</b> Asignatura: 41391 - Trabajo Fin de Máster - <b>Grupo 3</b>

#### MetaGrupo Moodle



#### Moodle



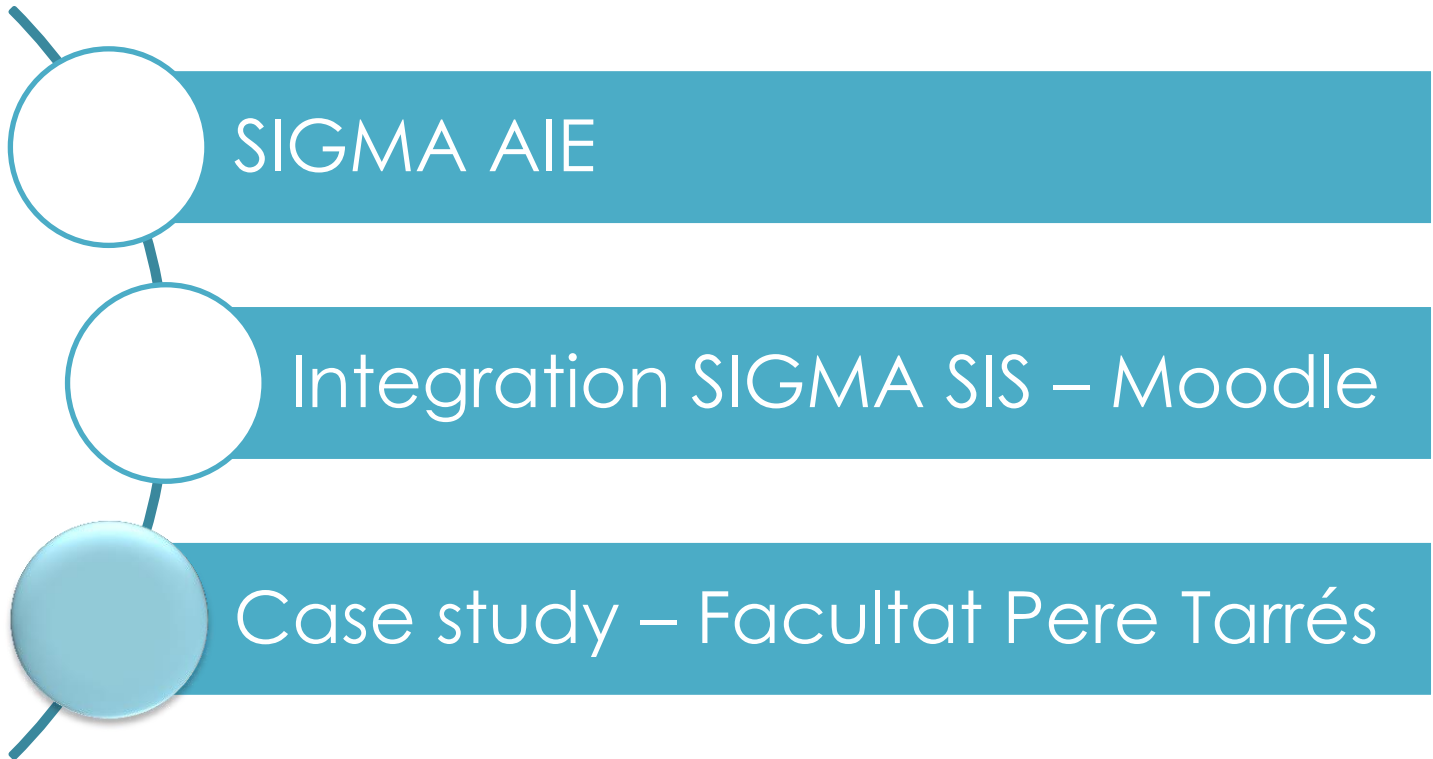


## **Student Information System functionalities**

- Check the class lists
- Check student records
- Enter final grades in SIGMA SIS
  - Transfer and calculation of grades
  - Management of alphabetic grades
  - Check grades template
- Manage records
  - Transfer of records to SIGMA SIS
  - Dates of exams reviews
  - Closing records
  - List of records

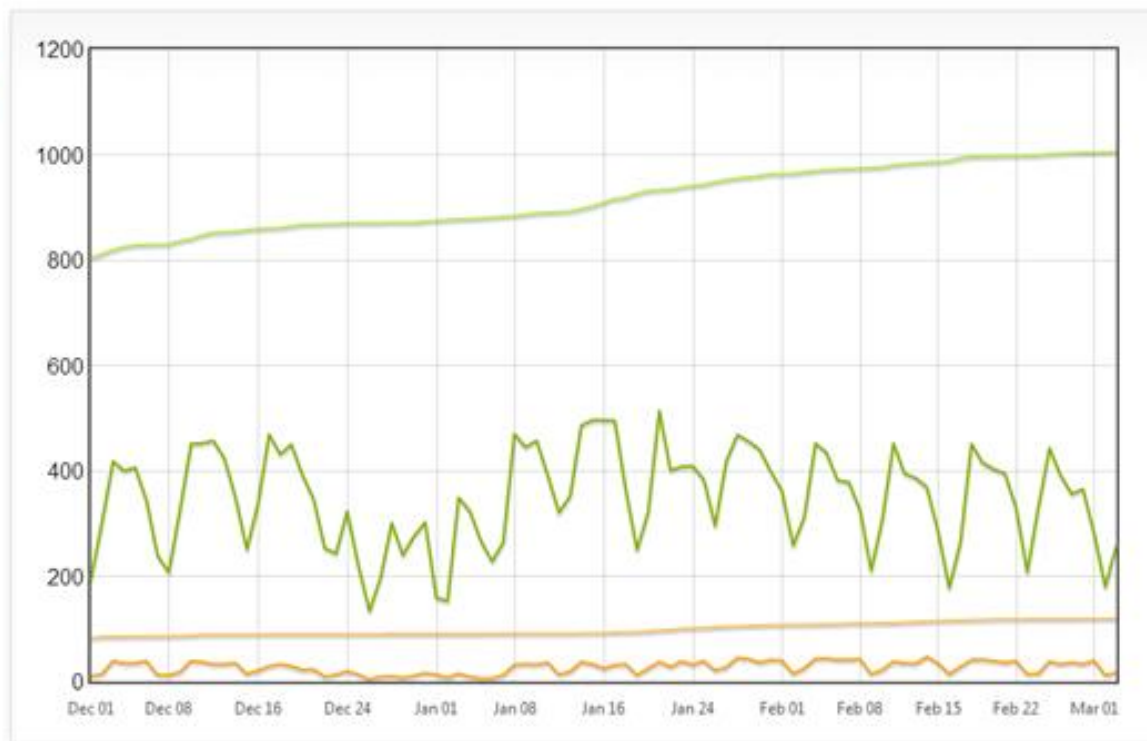
## **More functionalities**

- Surveys
  - Fill satisfaction surveys
  - Check teacher report
  - Check subject report
- Pizarra Web
  - Sending and receiving messages from the app Pizarra



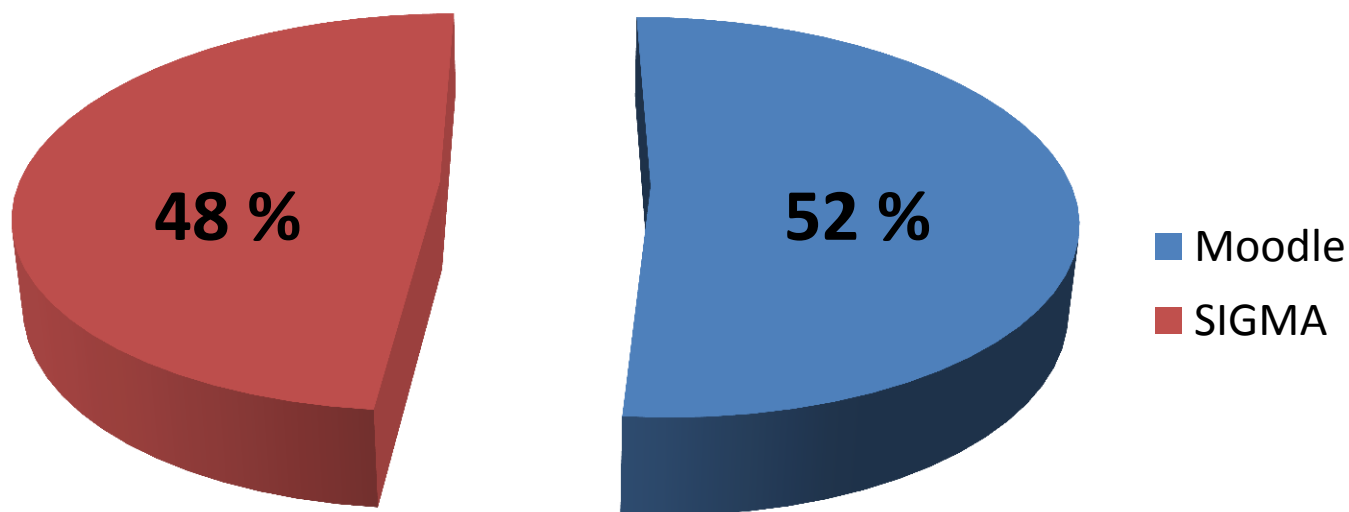
Since July 2013, the Moodle platform was opened to teachers and from September 2013, also for students. Since that day, the system has worked continuously without system failure.

During February 2014, a total of 1.122 users entered the Moodle platform from a potential of 1.493. Furthermore, an average of 426 users enter daily, some more than once, providing an average of 935 identifications every day.



Since the beginning of the academic year, teachers of Facultat Pere Tarrés have made 52% of queries to SIGMA SIS by functional integration. In the new schools that we are implementing, this value is 100%, because we no longer give the option for teachers to access SIGMA other than Moodle.

### Access of teachers to SIGMA SIS in Facultat Pere Tarrés



## Functional and data integrations



Universidad de Valladolid



Escola Universitària  
del Maresme

Escola Superior  
de Ciències de la Salut

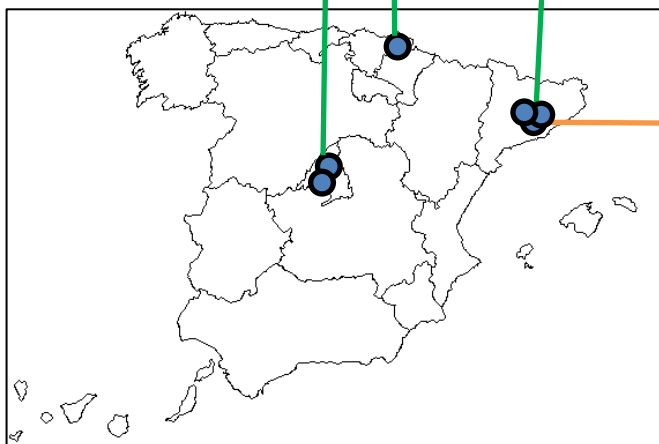


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## SaaS model



FACULTAT  
D'EDUCACIÓ  
SOCIAL I  
TREBALL  
SOCIAL



**Navegación**

- Página Principal
  - » Área personal
  - » Páginas del sitio
  - » Mi perfil
  - » Curso actual
    - » 2012\_0\_100\_10190\_1\_1
      - » Participantes
      - » Informes
      - » General
        - » 1 de enero - 7 de enero
        - » 8 de enero - 14 de enero
        - » 15 de enero - 21 de enero
  - » Más cursos

**Ajustes**

- » Administración del curso
  - » Activar edición
  - » Editar ajustes
    - » Usuarios
    - » Filtros
    - » Calificaciones
      - » Copia de seguridad
      - » Restaurar
      - » Importar
      - » Reiniciar
      - » Banco de preguntas
  - » Cambiar rol a...
  - » Ajustes de mi perfil

<b>Profesor/a</b>	
<b>Centro</b>	100 - Facultad de Educación Social y Trabajo Social Pere Tarrés
<b>Asignatura</b>	10190 Sistemas de bienestar
<b>Grupo</b>	1
<b>Tipo docencia</b>	Teoría
<b>Año académico</b>	2012/13-0

**Calificar finales**



Si no ve las calificaciones finales acceda al detalle a través de



**Convocatoria**

Primera convocatoria ordinaria - Junio

Calificaciones					Profesor/a		Actas	
	DNI	NIA	Apellidos	Nombre	Calificación final	Primera convocatoria ordinaria - Junio	Primera convocatoria ordinaria - Junio	Segunda convocatoria ordinaria - Julio
		1751	GOMEZ		6	Aprobado	-	-
		3917	BADIA		7,6	Notable	-	-
		2696	BLANCO		6,5	Aprobado	-	-
		1672	PLA		5,7	Aprobado	-	-
		1243	RUIZ		8,3	Notable	-	-
		2212	TERESAS		7,7	Notable	-	-
		1465			4,6	Suspensas	-	-
		1274			4,3	Suspensas	-	-

Unidad se ha identificado como Carme Fernandez Gsa (Salir)

Moodle Docs para esta página



technological innovation  
for universities

SIGMA AIE



[www.sigmaaie.org](http://www.sigmaaie.org)