



UNIVERSIDAD
DE SALAMANCA

CAMPUS DE EXCELENCIA INTERNACIONAL



Knowledge construction through e-learning platforms

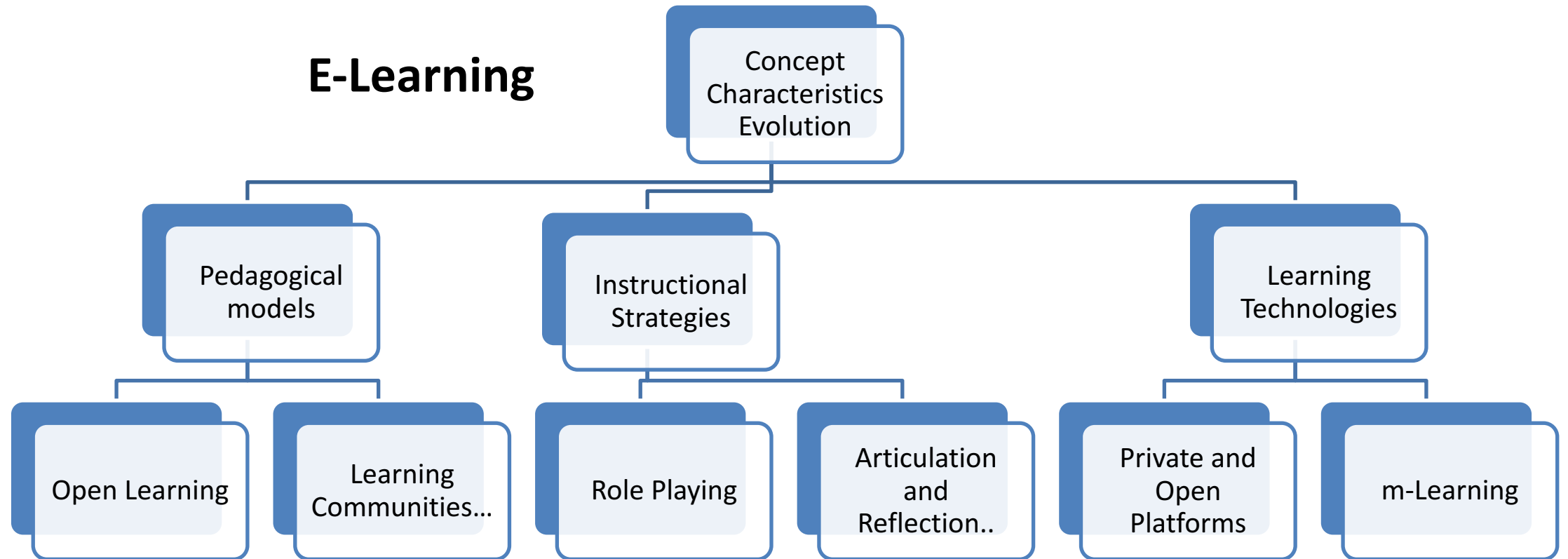
Dra. Erla M. Morales Morgado
GRIAL Research Group
Faculty of Education
University of Salamanca
erla@usal.es

Dña. Silmara Yelitza Marchena
Faculty of Education
University of Salamanca
smarchena@usal.es

Berlin, Germany. January 6th, 2017

Introduction

E-Learning



e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

E-Learning

Can be defined as an open and distributed learning environment that utilizes pedagogical tools, enabled by Internet and Web-based technologies, to facilitate learning and knowledge building through meaningful action and interaction (Dabbagh, 2005)

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Theory-based desing framework for E-learning

Dabagg, N. (2005)

Pedagogical Models or Constructs
e.g. open/flexible learning, distributed learning, knowledge building communities

1

2

Instructional Strategies

e.g. collaboration, articulation, reflection, role-playing, exploration, problem solving

E-Learning

3

Learning Technologies

e.g. asynchronous & synchronous communication tools, hipermedia & multimedia tools, Web authoring tools, course management systems

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Pedagogical models

- Are the mechanism by which **we link theory to practice**.
- Lead to the specification of **instructional strategies**.
- Pedagogical models and strategies aim to:
allocate control of the **sequence of instruction** to learners (Coleman, Perry, & Schwen, 1997),
- Task the learner with creating, elaborating, or otherwise **constructing representations of individual meaning** (Hannafin, 1992).



e-Learning

Definition

Pedagogical Models

Instructional Strategies

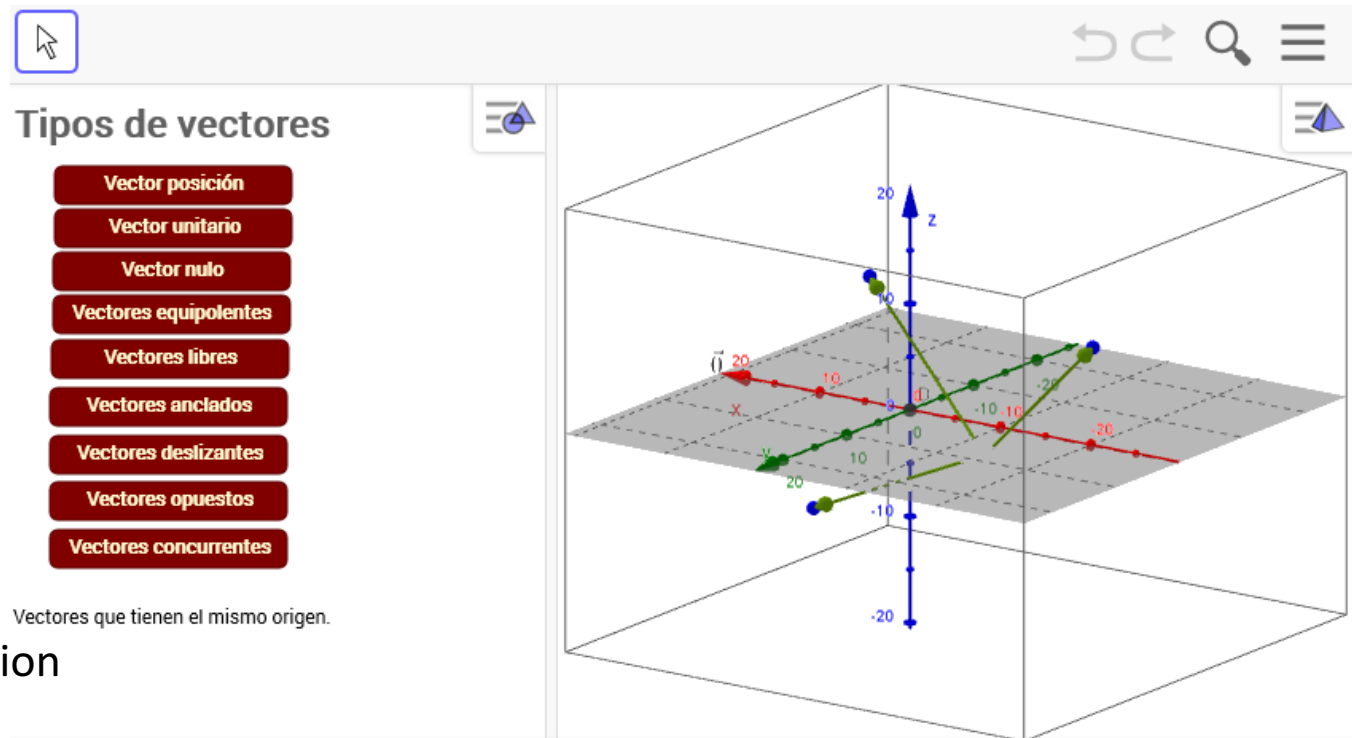
Learning Technologies

Promoting Authentic Learning Activities

Using graphics to present elements of a case or problem to make it more realistic.

Thesis:

Learning Objects and Geometric Representation for teaching "Definition and applications of geometric vector." (Orozco, 2017)



e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Promoting Authentic Learning Activities

Developing a direct manipulation interface using web authoring tools to allow learners to immerse themselves in, and manipulate, certain aspects of the case environment.



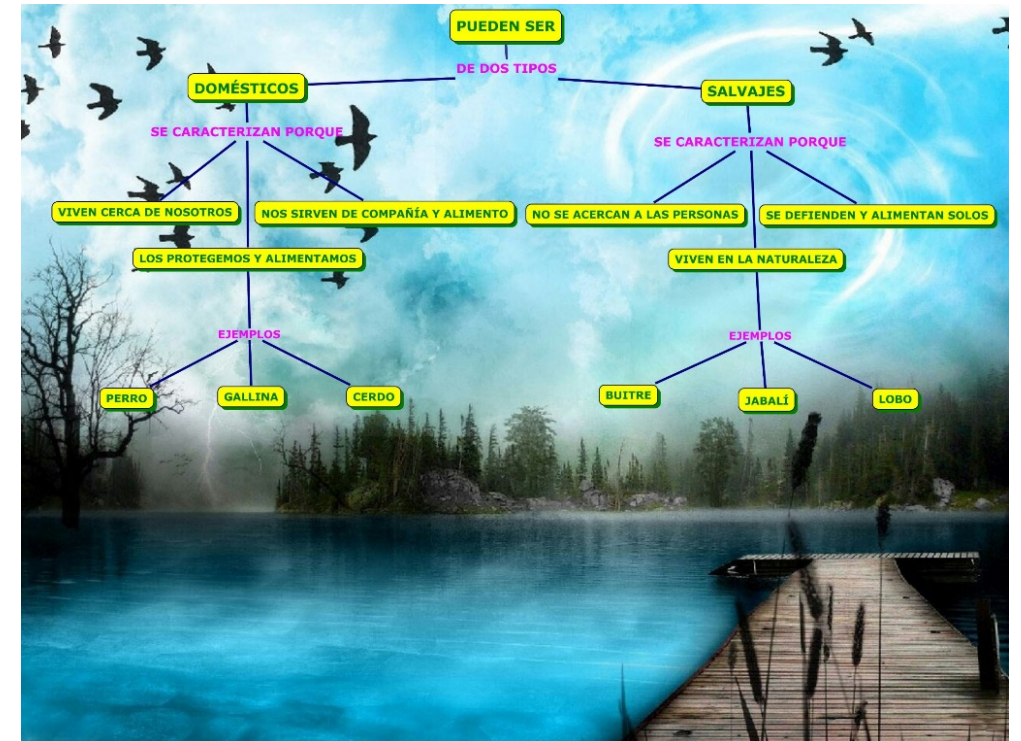
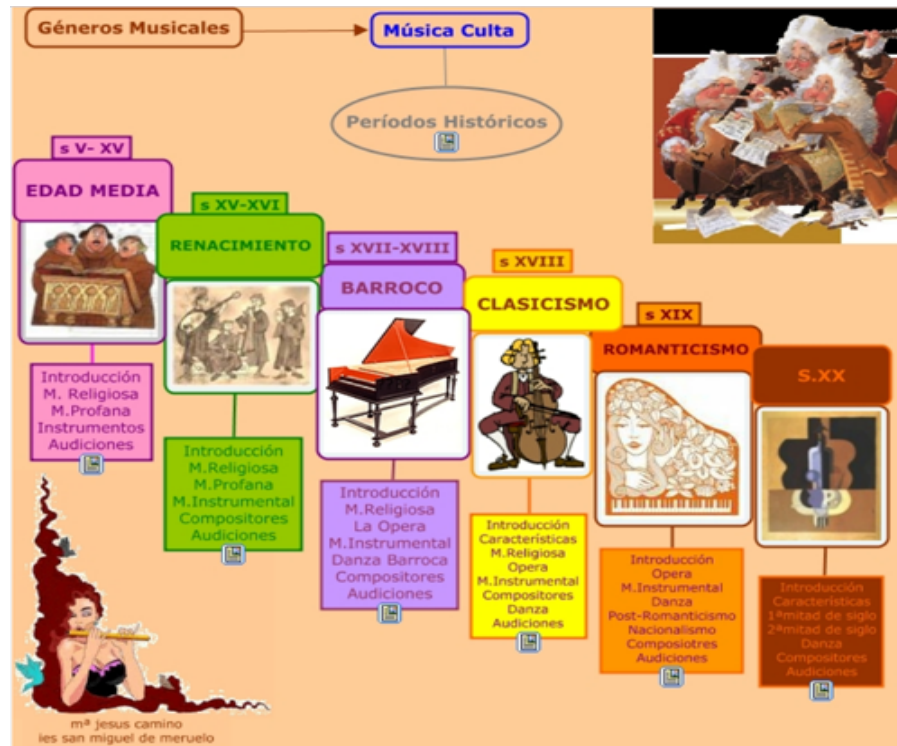
<http://www.mindmeister.com/es>



<http://freemind.sourceforge.net/>



<http://cmap.ihmc.us/>



e-Learning

Definition

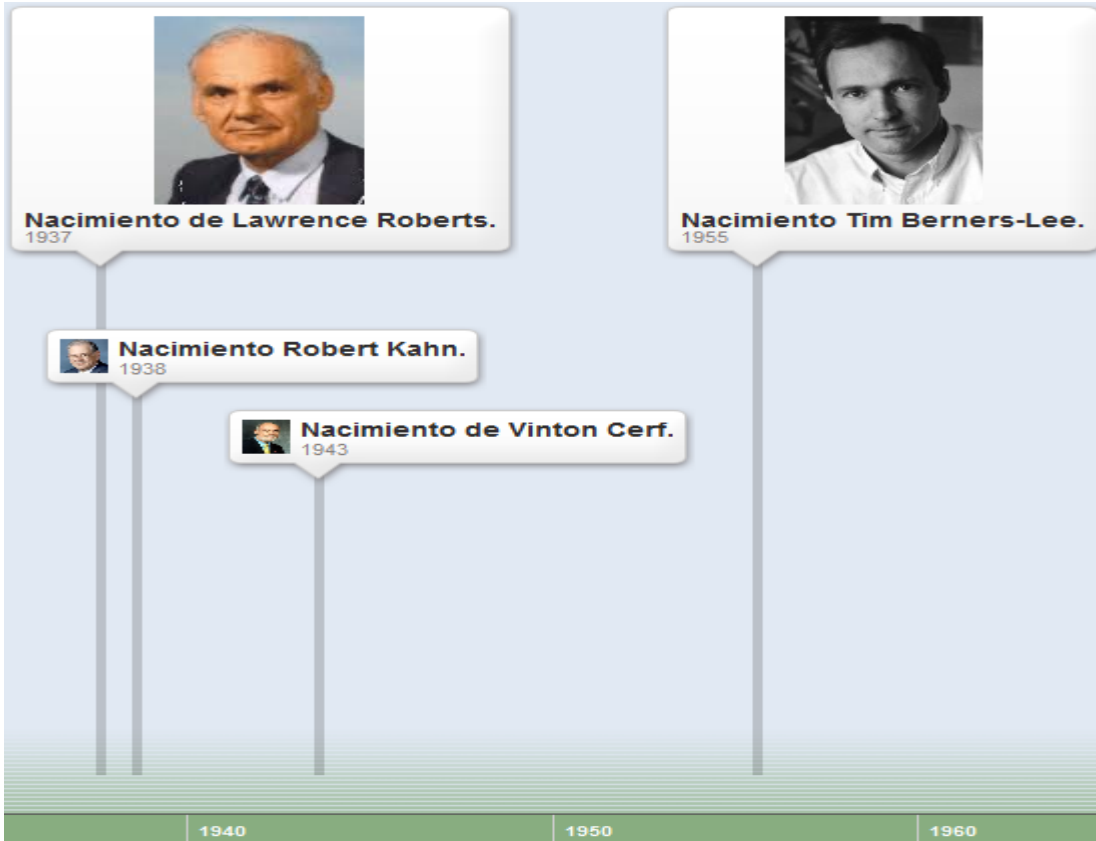
Pedagogical Models

Instructional Strategies

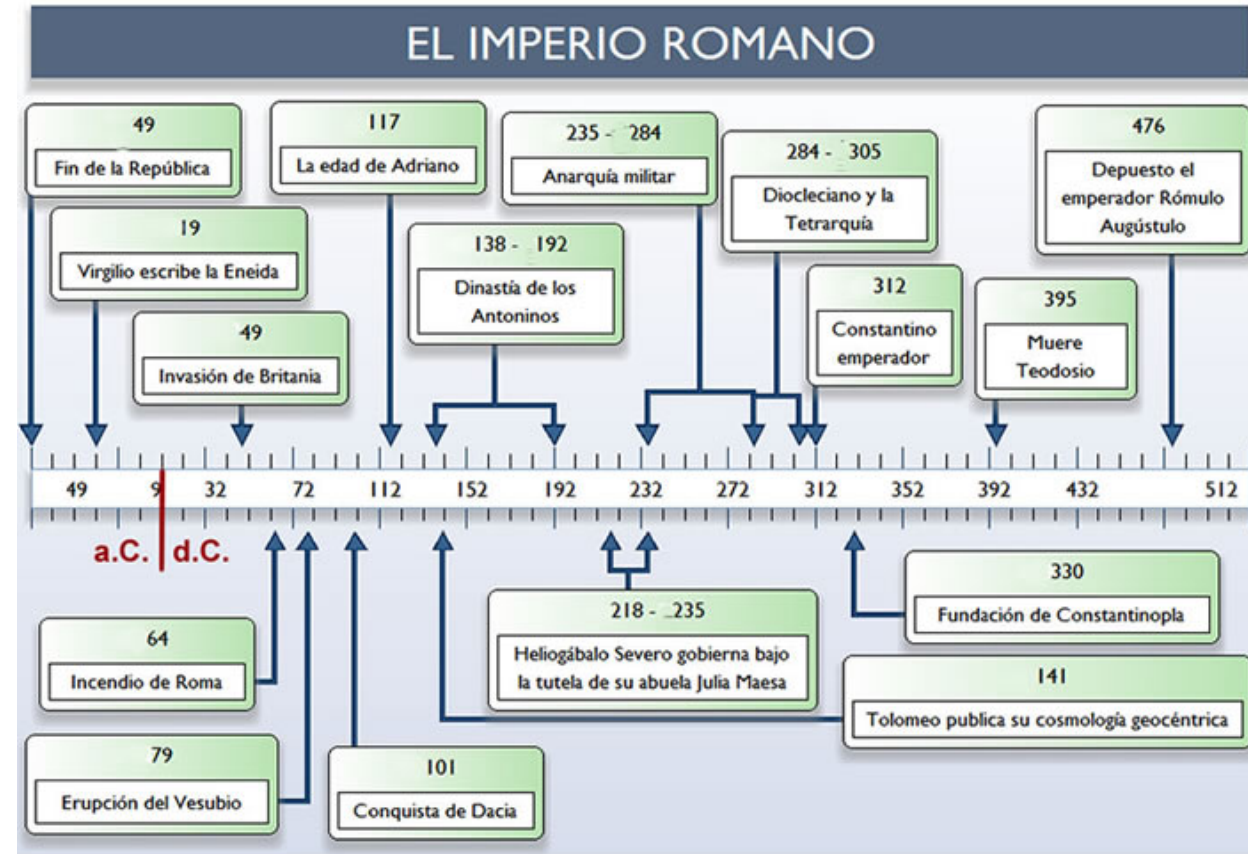
Learning Technologies

Promoting Authentic Learning Activities

 **timeline** beta <http://www.xtimeline.com/index.aspx>



<http://www.dipity.com/>



e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Supporting Role-Playing

- Allows learners assume practitioner and professional roles such as scientists, physicians, historians, salesperson, and other
- Allows learners to practice their knowledge and skills in a simulated real world situation and immediately observe the results of their actions,
- Promotes reflection and meaningful learning.



<https://www.secondlife.com>

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Supporting Role-Playing

The screenshot shows the CLASSCRAFT game interface. On the left is a player list with names like Alyssa Crookes, Danielle Deschamps, and Tasmin Howells. The main area displays the profile for Tasmin Howells, a Hunter, with Level 2 and 135 gold. Her stats are HP 31, AP 40, and XP 1525. The background shows a character in a forest setting.

Healers
HP 50
AP 35
Have higher HP so they can help others, but low AP

Mages
HP 30
AP 50
Have the most AP, but the least HP

The 'Learn Powers' menu shows a grid of abilities: PROTECT 1, FIRST AID, HUNTING, PROTECT 2, AMBUSH, COUNTER ATTACK, PROTECT 3, FRONTAL ASSAULT, and SECRET WEAPON. The SECRET WEAPON power is highlighted with a tooltip that reads: 'Secret Weapon: During a test, the warrior and his team can use a cheat sheet approved by the Gamemaster. -25. Requires: Ambush, Counter Attack. COSTS 3'.

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Promoting Articulation and Reflection

Articulation involves “having students think about their actions and give reasons for their decisions and strategies, thus making their tacit knowledge more explicit or overt” (Wilson & Cole, 1996, p. 606).

Examples: Using a **Edublog** for:

- Providing students with a web posting area and appropriate tools to publish their work (e.g., draft papers or problem solutions).
- Designing an activity that engages students in keeping an online journal in which they reflect on their understanding of the reading material for the course.



WORDPRESS.COM

e-Learning

Definition

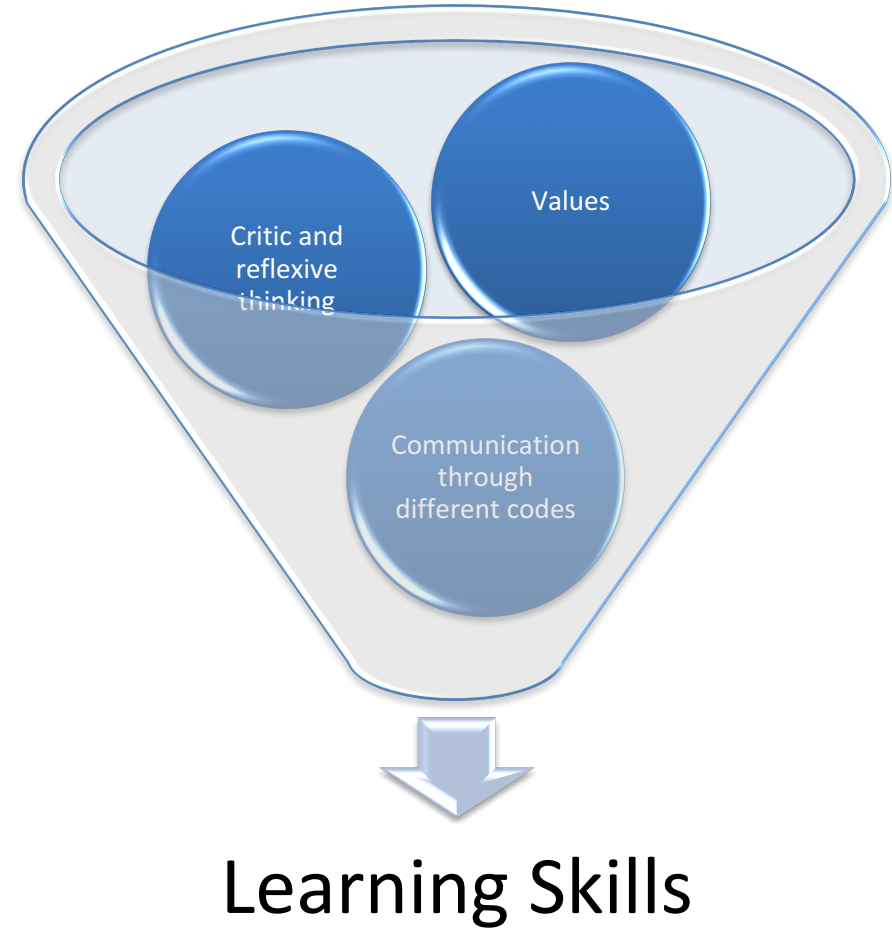
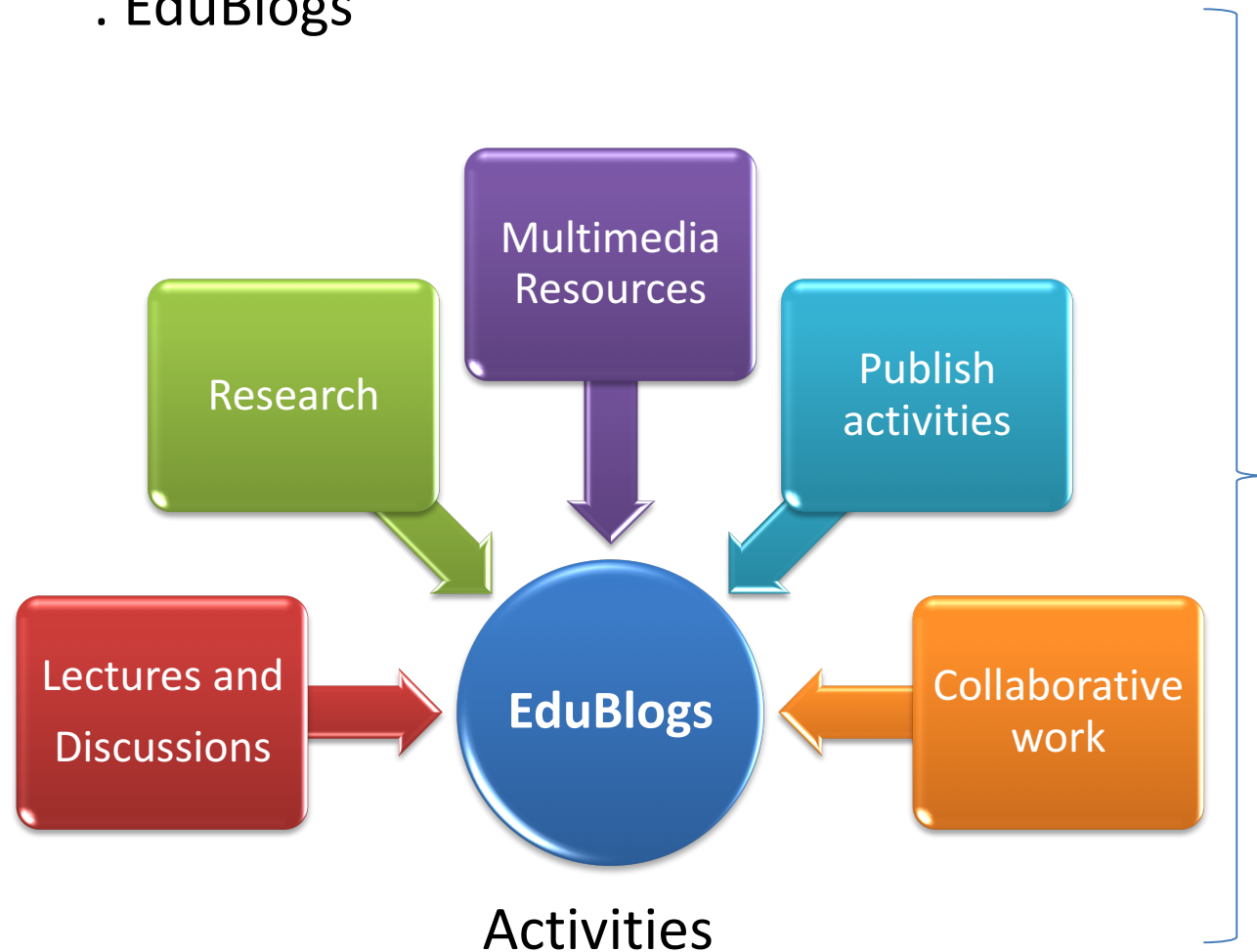
Pedagogical Models

Instructional Strategies

Learning Technologies

Promoting Articulation and Reflection

. EduBlogs



e-Learning

Definition

Pedagogical Models

Instructional Strategies

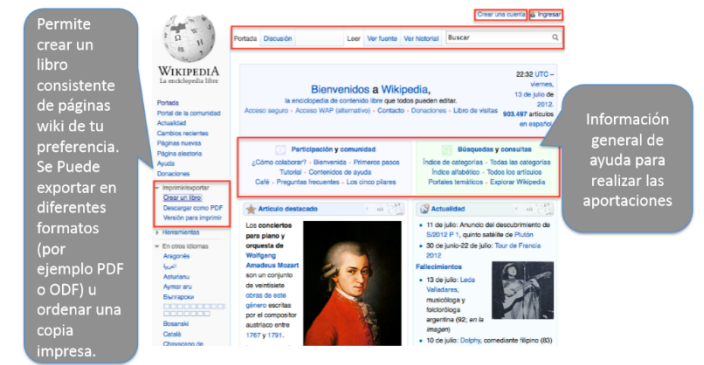
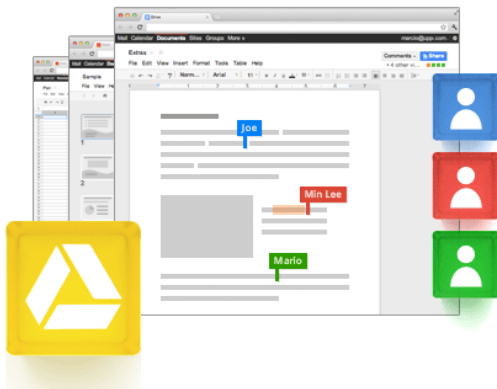
Learning Technologies

Promoting Collaboration and Social Negotiation

A collaborative strategy can be defined as an instructional strategy that encourages interaction between and among two or more learners to maximize their own and each other's learning.

Examples in E-Learning contexts using learning technologies include:

- Designing activities that allow group members to share documents related to a group project.
- Using a Wiki, where users are able to create and reorganize the contents.
- Add links, digital documents, etc.



e-Learning

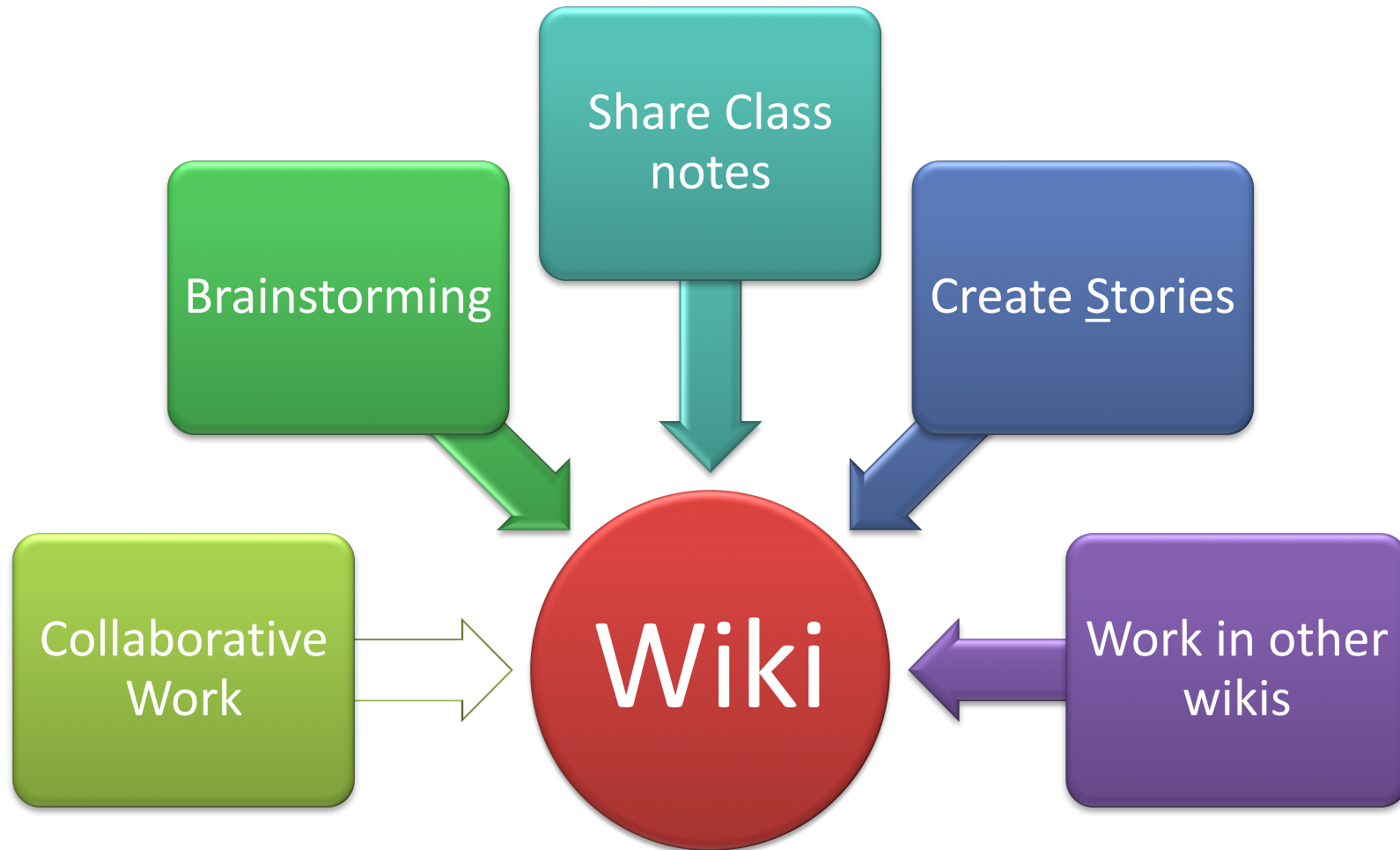
Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Promoting Collaboration and Social Negotiation



e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Promoting Collaboration and Social Negotiation

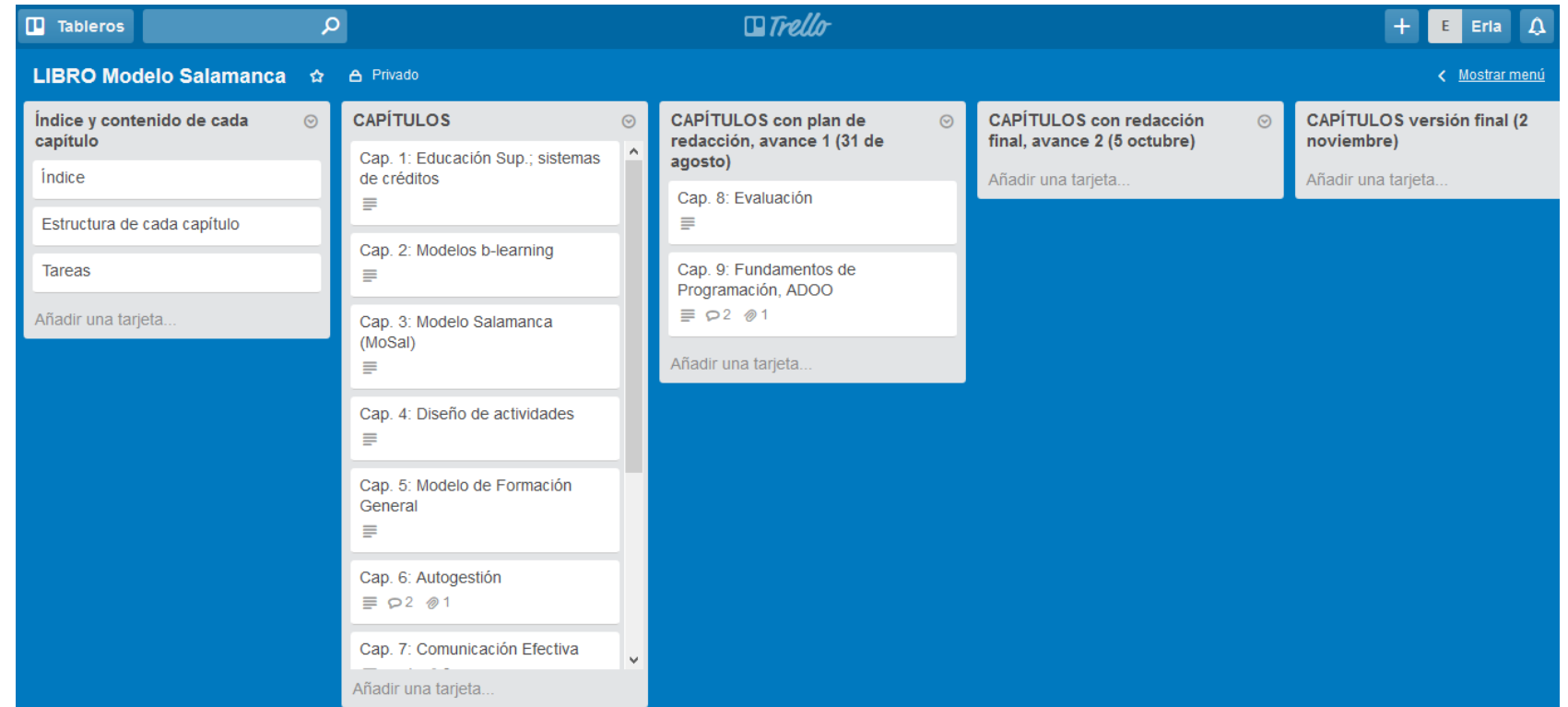


It is a list of tasks completed with cards, used with a team or alone.

Example:

- Create a collaborative project through Trello

<https://trello.com/>



e-Learning

Definition

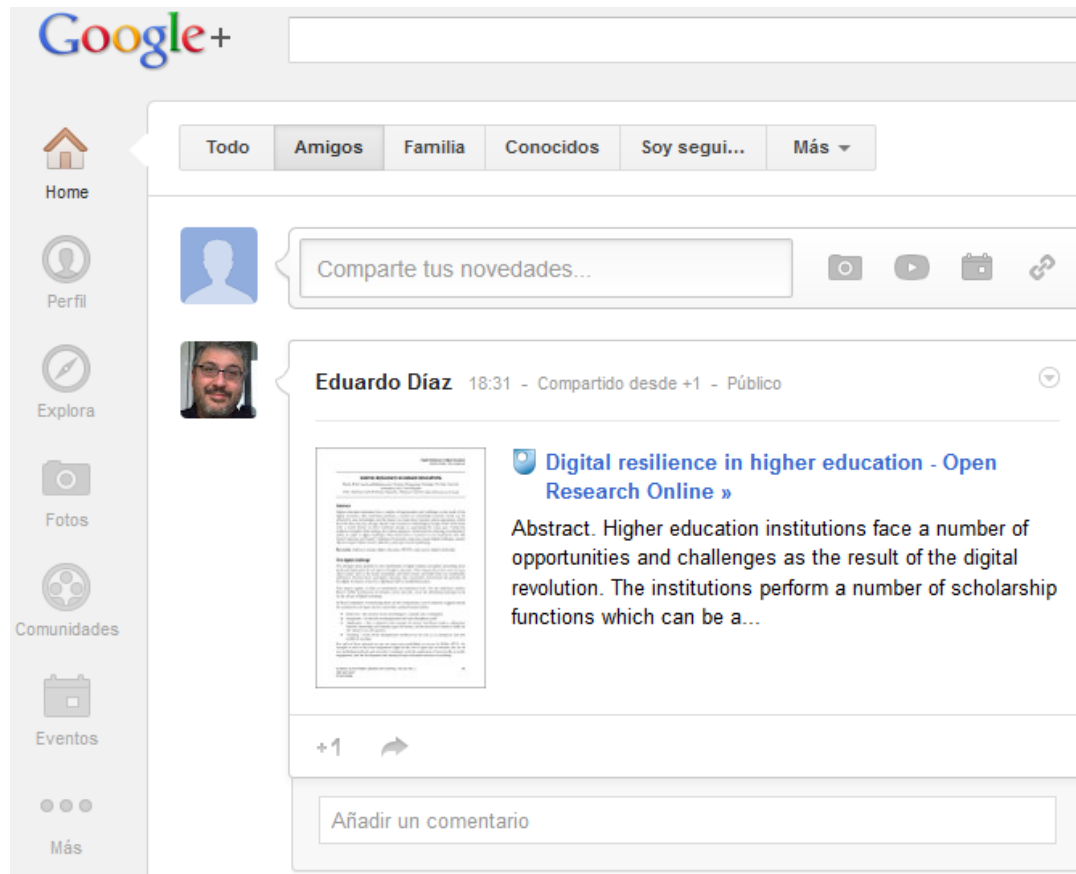
Pedagogical Models

Instructional Strategies

Learning Technologies

Promoting Collaboration and Social Negotiation

Engaging students in synchronous communication activities using virtual chat and videoconferencing.



Hangouts



e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Promoting Collaboration and Social Negotiation

Setting online group discussion areas focused around a topic or specific activity, goal, or project, such as a case study, using asynchronous discussion forums, to promote collaboration and social negotiation

Using Google Plus Circle for discussing a specific topic.

The screenshot shows a Google Plus interface. At the top, the search bar contains the text "Didáctica de la Educación Infantil". Below the search bar, there are navigation tabs: "Todo", "Amigos", "Familia", "Conocidos", "DEI" (highlighted with a red box), and "Más". The main content area shows a post by "Maria sanchez prieto" dated "19/12/2012 - Público". The post text is "bonito video realizado por un niño de tan solo 12 años" and includes a YouTube link: "http://www.youtube.com/watch?v=ku2xtrHYim8&feature=share". To the right of the post, there is a "Students" label with a red arrow pointing to a grid of 37 profile pictures, which is also highlighted with a red box. Below the grid are buttons for "Configuración" and "Añadir". At the bottom of the page, there is a prompt: "RELLENA LOS DATOS DE TU PERFIL".

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Supporting multiple perspectives

Is an instructional strategy that emphasizes the construction of flexible knowledge. By exposing students to multiple points of view of understanding or judging things or events, learners rearrange information to construct new knowledge, acquiring flexible and meaningful knowledge structures

(Duffy & Cunningham, 1996, p. 178).

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Supporting multiple perspectives

Example:

- Designing activities that allow group members to share documents related to a group project.

Learning Skills



The banner features a lightbulb icon on the left containing gears, a graduation cap, and a checklist. The text 'WebQuest' is centered with a mouse cursor icon. Below it, the title 'Modalidades y tendencias educativas en e-learning' is displayed in blue. To the right is the logo of the University of Salamanca, with the text 'UNIVERSIDAD DE SALAMANCA' and 'Universidad de Salamanca Máster TIC en Educación'. At the bottom, a blue navigation bar contains the following menu items: 'Introducción', 'Tareas', 'Proceso', 'Recursos', 'Evaluación', 'Guía didáctica', and 'Créditos'.

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Supporting multiple perspectives

EarthQuests

- Based on GIS Applications like GoogleEarth
- Allow students to go different places
- Customize the information about the places, etc.

Activity: Around the world in 80 minutes

<http://www.xtec.cat/~jvivanco/80minuts/80minutos.htm>



GeoQuest

- Geointeractive activities
- Select a case of study together with geographic components
- Examples: History exploration, etc.



<http://www.slideshare.net/corcosuk/geoquest-actividades-educativas-geointeractivas-presentation>

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Supporting multiple perspectives

USAL Project

Informational competency development through the interactive learning objects, desing, creation and implementation

Objetives:

Design, creation and evaluation of learning objects, based on learning styles in order to develop skills related with the efficient use of the information(**Searching, selection, storing and information register**)

e-Learning

Definition


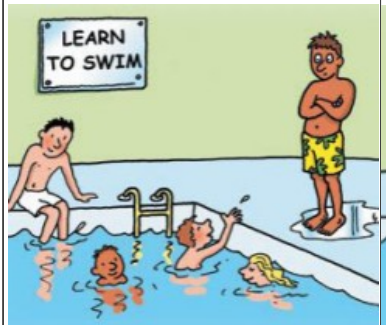
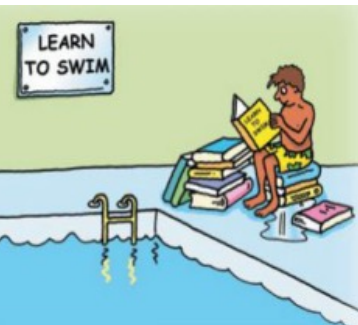

Pedagogical Models

Instructional Strategies

Learning Technologies

Supporting multiple perspectives

Learning styles (Honey & Mumford, 1986).

<i>Activo</i>	<i>Reflexivo</i>	<i>Teórico</i>	<i>Pragmático</i>
			
Características principales			
Animador Improvisador Descubridor Arriesgado Espontáneo	Conciencioso Receptivo Analítico Exhaustivo Observador	Metódico Lógico Objetivo Crítico Estructurado	Experimentador Práctico Directo Eficaz Realista

Cuestionario Honey-Alonso de Estilos de Aprendizaje

Instrucciones:

- Este cuestionario ha sido diseñado para identificar su Estilo preferido de Aprendizaje. No es un test de inteligencia , ni de personalidad
- No hay límite de tiempo para contestar al Cuestionario. No le ocupará más de 15 minutos.
- No hay respuestas correctas o erróneas. Será útil en la medida que sea sincero/a en sus respuestas.
- Si está más de acuerdo que en desacuerdo con el ítem seleccione 'Mas (+)'. Si, por el contrario, está más en desacuerdo que de acuerdo, seleccione 'Menos (-)'.
• Por favor conteste a todos los ítems.
- El Cuestionario es anónimo.

Muchas gracias.

Más(+)	Menos(-)	ítem
<input type="radio"/> +	<input type="radio"/> -	1. Tengo fama de decir lo que pienso claramente y sin rodeos.
<input type="radio"/> +	<input type="radio"/> -	2. Estoy seguro lo que es bueno y lo que es malo, lo que está bien y lo que está mal.
<input type="radio"/> +	<input type="radio"/> -	3. Muchas veces actúo sin mirar las consecuencias.

e-Learning

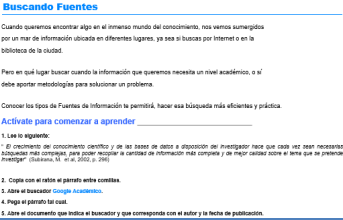


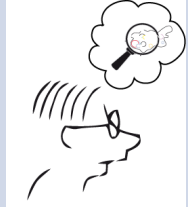

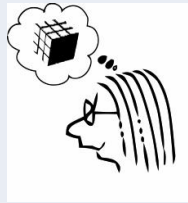
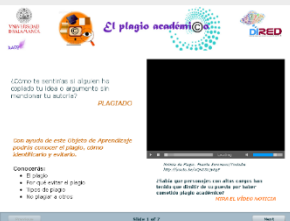
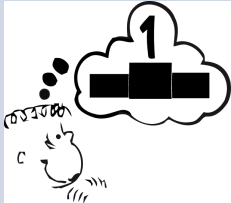
Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Learning Objects designed for Learning Styles (Campos-Ortuño & Morales-Morgado, 2013).

<h3>1. Information Sources</h3>		<h3>Theoric</h3> 
<h3>2. The internet browsers</h3>		<h3>Reflexive</h3> 
<h3>3. Optimization of Google browser</h3>		<h3>Pragmatic</h3> 
<h3>4. Academic Plagiarism</h3>		<h3>Active</h3> 



e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Learning Objects content designed for Learning Styles (Campos-Ortuño & Morales-Morgado, 2013).

Active	Reflexive	Theoric	Pragmatic
1) Attention	1) Attention	1) Preparatory activity;	1) Attention
2) Preparatory activity;	2) Theory	2) Attention	2) Preparatory activity;
3) Theory	3) Preparatory activity;	3) Theory	3) Theory
4) Principal activity;	4) Theory	4) Principal activity;	4) Principal activity;
5) evaluation/ Autoevaluation/ reflection.	5) Principal activity;	5) evaluation/ Autoevaluation/ reflection.	5) evaluation/ Autoevaluation/ reflection.
	6) evaluation/ Autoevaluation/ reflection.		

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Example of LO based in learning styles (Campos-Ortuño & Morales-Morgado, 2013).

- Orange colour
- Video showing a real situation

1. Attention
2. Preparatory activity
3. Theory
4. Principal activity
5. Evaluation/
Autoevaluation/
reflection.

UNIVERSIDAD DE SALAMANCA

RACO

El plagio académico

DIREC

¿Cómo te sentirías si alguien ha copiado tu idea o argumento sin mencionar tu autoría?

PLAGIADO

Con ayuda de este Objeto de Aprendizaje podrás conocer el plagio, cómo identificarlo y evitarlo.

Conocerás:

- El plagio
- Por qué evitar el plagio
- Tipos de plagio
- No plagiar a otros

Noticia de Plagio. Fuente Euronews/Youtube
<http://youtu.be/xQnSSVjv8gE>

¿Sabía que personajes con altos cargos han tenido que dimitir de su puesto por haber cometido plagio académico?

MIRA EL VÍDEO NOTICIA

Previous Slide 1 of 7 Next

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Example of LO based in learning styles: adaptation to Chilean context

Morales-Morgado, E. M., Ortuño, R. A. C., & Bonilla, A. A. P. (2016).

Plagiarism in latinpamerican context

¿Sabía que personajes con altos cargos han tenido que dimitir de su puesto por haber cometido plagio académico?



Tienes más ejemplos en estos videos

Noticia de Plagio. Fuente: azisomolared/YouTube
<https://www.youtube.com/watch?v=sYkqFSUSzIM>



Noticia de Plagio. Fuente: 24 horas/YouTube
<https://www.youtube.com/watch?v=8vFigaBmpJQ>

¿Por qué se debe evitar el plagio?

El plagio es una infracción de integridad académica, que tiene que ver con la honestidad intelectual.

No es ético, puede conllevar graves consecuencias legales, ya que atentan los derechos morales y patrimoniales del autor original, y esto se considera un delito.

Los derechos de autor o **Copyright** es un conjunto de leyes que regulan los derechos morales y patrimoniales de la producción intelectual; entre ellas **tenemos:**

Ley Chilena 17.336 sobre propiedad intelectual. Publicada en el diario oficial el 2 de Octubre de 1970.

Ley de Propiedad Intelectual de España, regulada por real Decreto Legislativo 1/1996, de 12 de abril (modificada por la Ley 5/1998 de 12 de abril)

 **copyright**

Fuente: <http://goo.gl/H5NdyG>



Fuente: <http://goo.gl/pMQ40I>

¿Qué suele plagiarse en el mundo?

[Clic para conocer](#)

Chilean Law of Intellectual property

<http://academica2.usach.cl/>

e-Learning

Definition

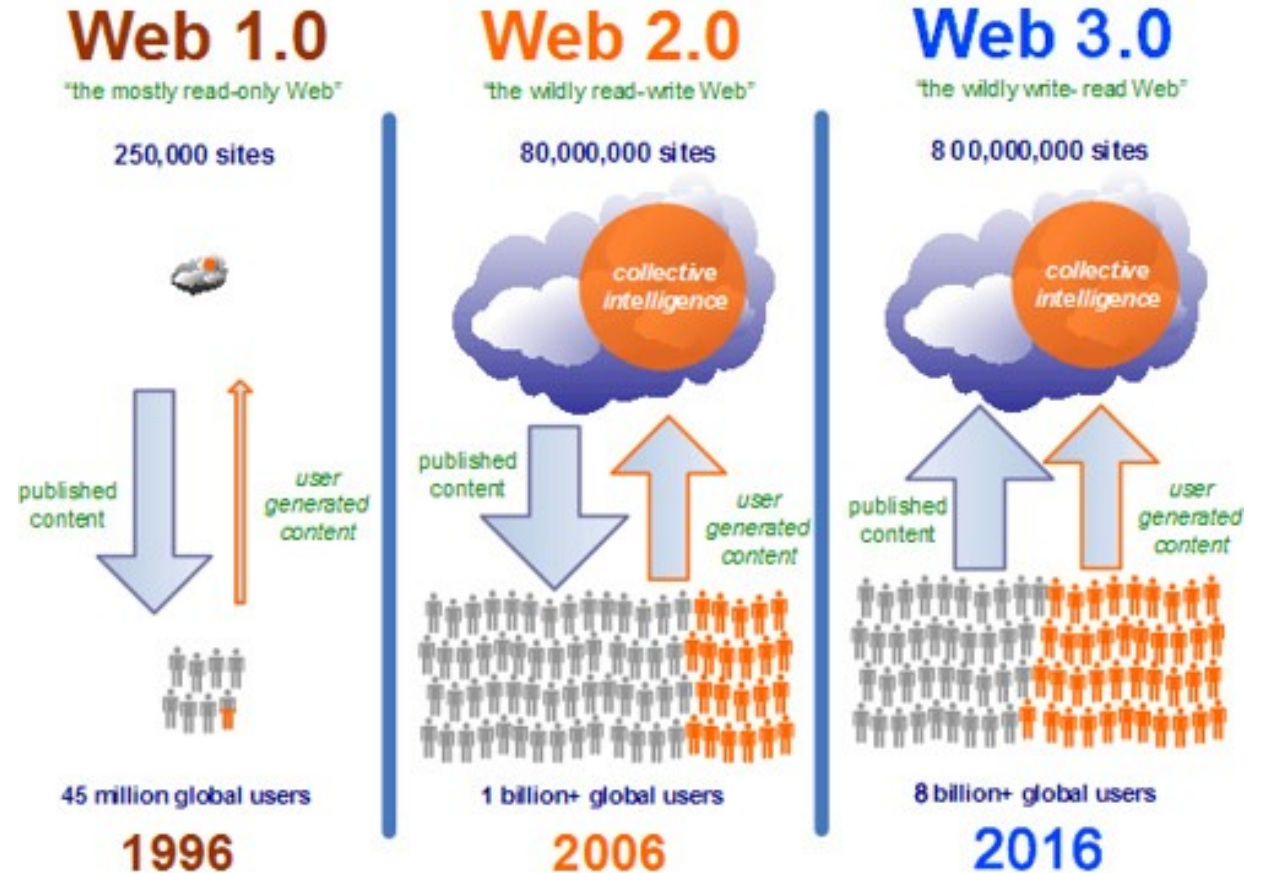
Pedagogical Models

Instructional Strategies

Learning Technologies

The Web 2.0 is not a technological revolution, it is a social revolution. "Here's my take on it: Web 2.0 is an attitude not a technology.

Downes (2005).



e-Learning

Definition

Pedagogical Models

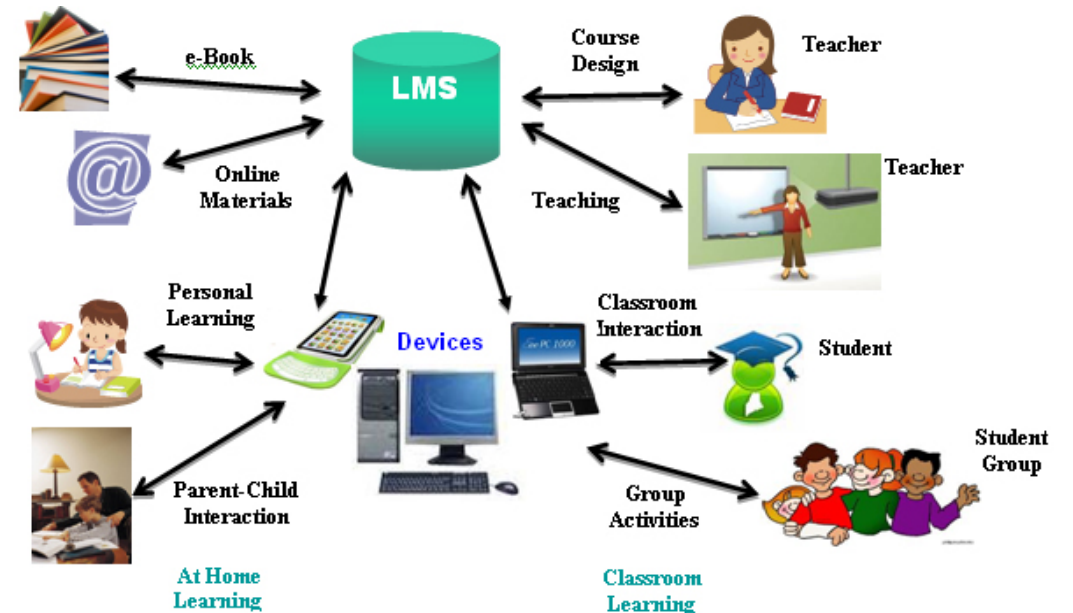
Instructional Strategies

Learning Technologies

LMS (Learning Management Systems)

The dominant learning technology employed today is a type of system that organizes and delivers online courses—the learning management system (LMS).

Downes (2005)



e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Private e-Learning platforms

It provides the teacher with a virtual private space, in which messages, files and links can be shared, a classroom calendar, as well as proposing tasks and activities as well as managing them.

•

EDU 2.0 | Plataforma de E-learning sencilla y potente Blog Iniciar sesión

¡El plan gratuito es increíble e incluye almacenamiento ilimitado!
Suscribirse

Tour guiado sobre las principales funcionalidades de este sitio web.

Compruebe qué fácil resulta crear una clase.

Gestión integrada de currícula y...

Enseñanza de nivel no universitario
Fácil de usar por administradores, profesores, estudiantes

Universidad
EL LMS perfecto para administradores, profesores, estudiantes

Empresa
Una versión de EDU 2.0 está también disponible para empresas.

Servicios
Todo lo que necesita en un único sistema de fácil uso.

Planes
Ofrecemos un estupendo plan gratuito y planes premium para usuarios

<https://www.neolms.com/>



<https://www.edmodo.com>

redAlumnos

<http://www.redalumnos.com/>

e-Learning

Definition

Pedagogical Models

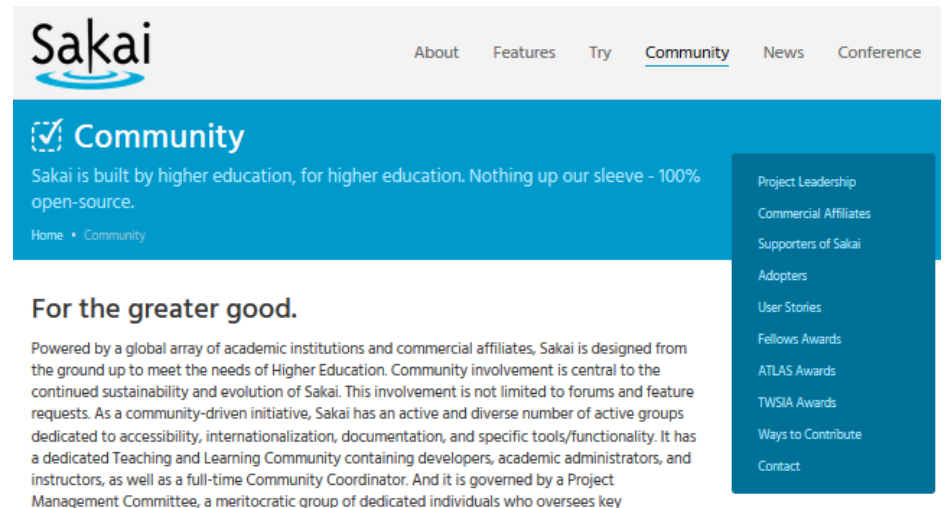
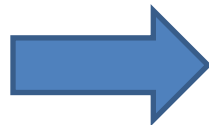
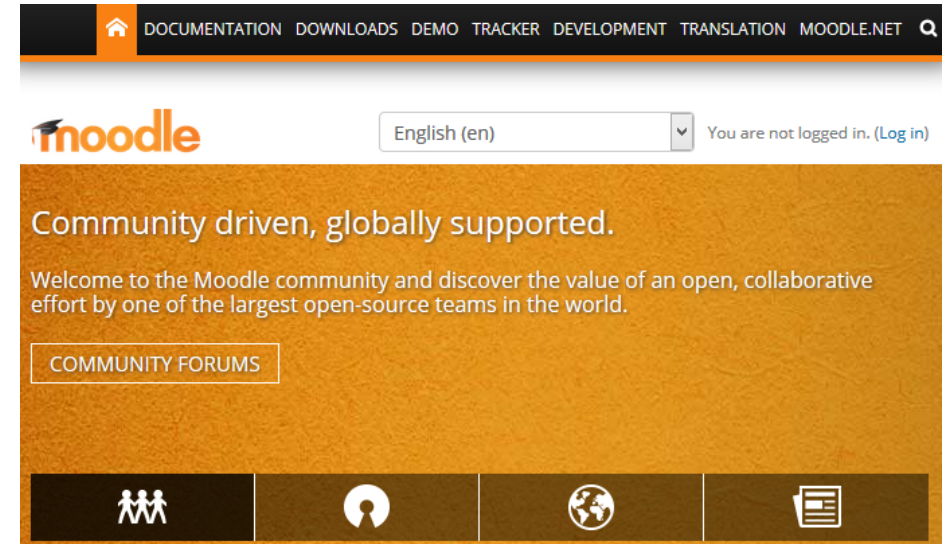
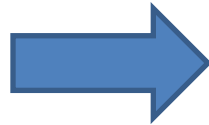
Instructional Strategies

Learning Technologies

Open Source e-Learning platforms



Modular Object-Oriented Dynamic Learning Environment



e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

e-Learning platforms

The “traditional” eLearning platforms, despite their large penetration and consolidation, need to evolve and open themselves to support this rich fan of possibilities demanded by the users, ceasing to be the centre technological attention to become another component into a complex digital ecosystem oriented to the learning and knowledge management, both at institutional and personal levels.

(Gacía-Peñalvo & Seoane, 2015)

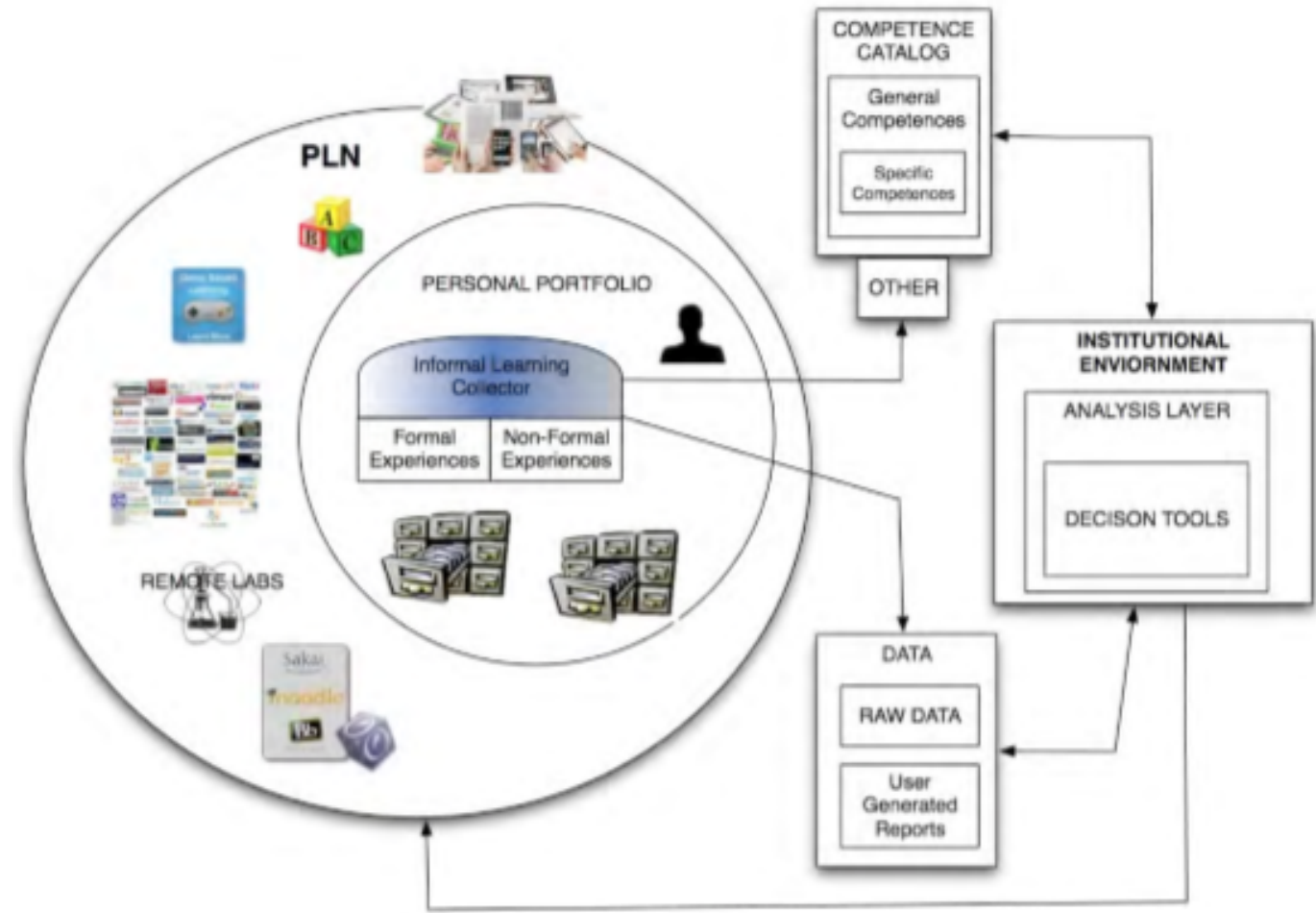


Imagen. An example of a personal learning network that includes informal skills (García-Peñalvo et al., 2014)

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Gadgets into Moodle

InfanTIC

Debates Miembros Promociones Empleos Búsqueda Más...

El Alzheimer explicado en cuentos y cómics de superhéroes
Cuentos y cómics infantiles del superhéroe Prodigy-man que ayudarán a los niños y preadolescentes a comprender qué es el Alzheimer y cómo comportarse con los abuelos o personas mayores que padecen esta enfermedad.

Seguir a Oscar

PRODIGY-MAN: COMICS -- CUENTOS INFANTILES DEL SUPERHÉROE PRODIGY-MAN... prodigy-man-files.blogspot.com.es

2 - LAS GATITAS Y EL GATO MIEDOSO VA AL MÉDICO *****PRODIGY-MAN: COMICS ONLINE***** *Clickar en...
hace 1 mes

Recomendar Comentar Seguir Marcar Más

Compartir

PRODIGY-MAN: COMICS -- CUENTOS INFANTILES DEL SUPERHÉROE...
prodigy-man-files.blogspot.com.es

« 1 de 3 »

Editar

Publicar en actualizaciones

Interesante iniciativa que apuesta por un tema que afecta a muchas familias, totalmente recomendable.

Recuento: 103

visible a: todos

Sharing information from LinkedIn to Twitter

Sígueme en Twitter

Erla Morales Morgado
erlamorales

erlamorales Interesante iniciativa que apuesta por un tema que afecta a muchas familias, totalmente recomendable.
lnkd.in/bQKrS2
55 seconds ago · reply · retweet · favorite

erlamorales Matriz de Habilidades TIC para el Aprendizaje (HTPA)
enlaces.cl/index.php?t=44...
3 days ago · reply · retweet · favorite

erlamorales Para Todos La 2 - Debate: Aprender a aprender, Para todos La 2 - RTVE.es A la Carta rtve.es/v/1747223/ via @rtve
3 days ago · reply · retweet · favorite

erlamorales Toma nota! Curso "Enseña y aprende con videojuegos"
videojuegosyaprendizaje.weebly.com
3 days ago · reply · retweet · favorite

Twitter gadget into Moodle

e-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

Gadgets into Moodle

- Agrégame a tus círculos en Google +



Llárame por Skype



Add RSS

Really Simple Syndication



Videoconferencia

Click to video call me



ooVoo Video Chat

e-learning Conocimiento en Red

Añadir/Editar canales

Generative Justice Vol 13, No 2 (2016) Revista @Teknokultura

"Learning from Simulated and Unsupervised Images through Adversarial Training" . @apple inc. Research ...

Jóvenes, transformación digital y formas de inclusión en América Latina. Convocatoria abierta @fundacionceibal @JovenesDigital

Giving Psychology Away via Open Pedagogy. Slideshare from Rajiv Jhangiani @thatpsychprof

"El cuerpo en la escuela", Pablo Scharagrodsky

Sitio fuente...

m-Learning

Definition

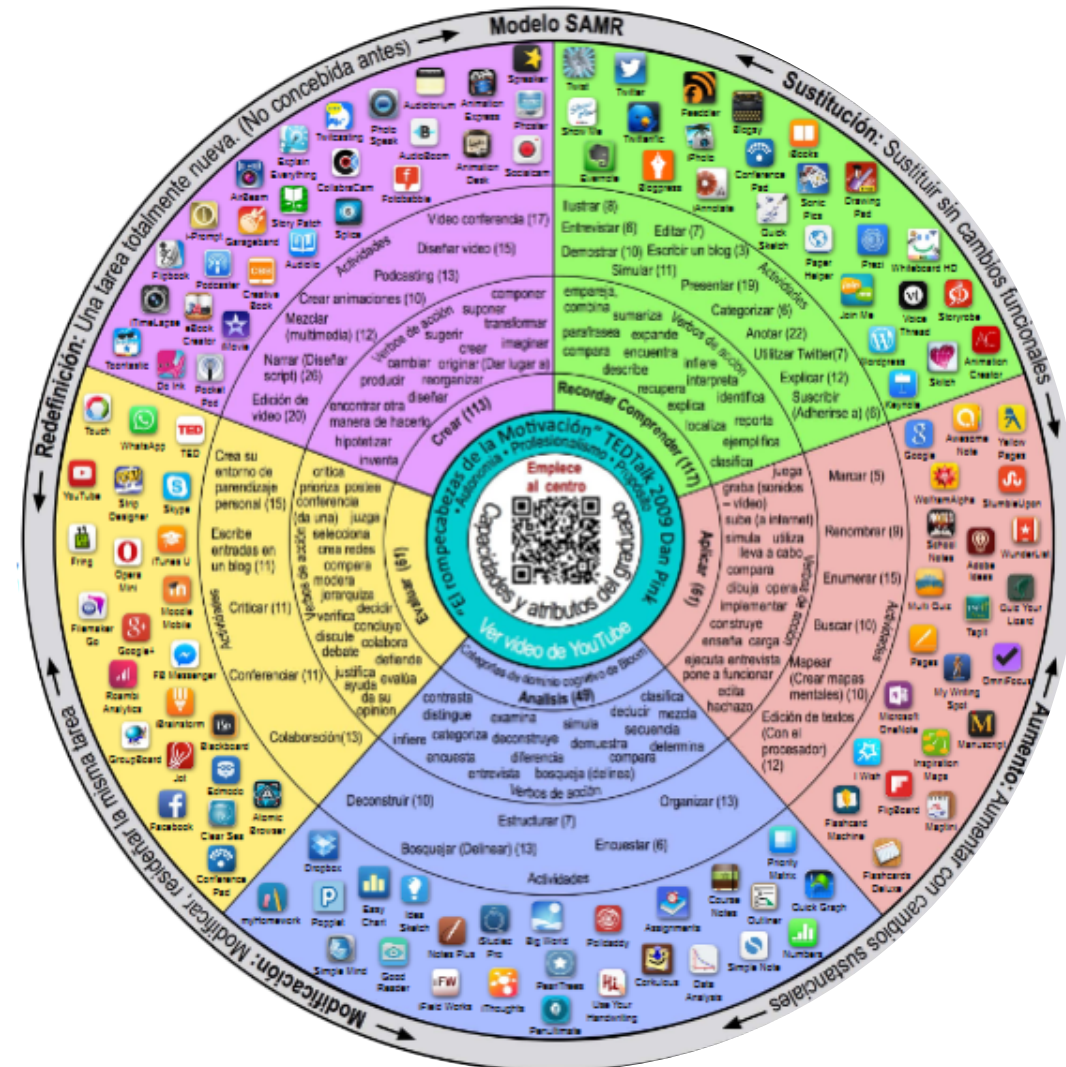
Pedagogical Models

Instructional Strategies

Learning Technologies

m-Learning

M-learning is a new learning approach to support personal learning demands that may happen anywhere and/or at any time; or in response to the process of coming to know, by which learners in cooperation with their peers and teachers, construct transiently stable interpretations of their world (Sharples, Taylor and Vavoula, 2005). Cited by Casany et al., 2012)



m-Learning

Definition

Pedagogical Models

Instructional Strategies

Learning Technologies

m-Learning

Moodbile: A Framework to Integrate m-Learning Applications with the LMS
Casany et al. (2012)

Integrate mobile devices and educational applications with the LMS through webservice; introducing the Moodbile project that provides an extension of Moodle 2.0 webservice for mobile integration and two mobile clients ready to use on real courses.

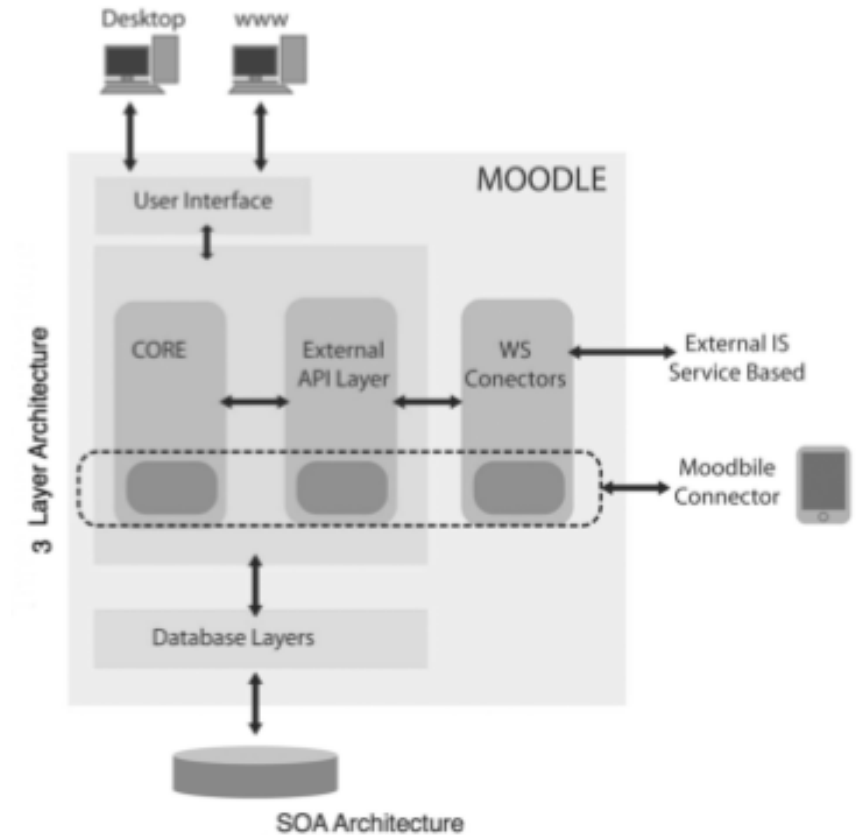


Figure 2: Moodbile Connector Architecture

Phd programme Education in the Knowledge Society

PhD Programme coordinator:

Dr. Francisco José García Peñalvo
fgarcia@usal.es
@frangp

UNIVERSIDAD DE SALAMANCA
CAMPUS DE EXCELENCIA INTERNACIONAL

PROGRAMA DE DOCTORADO FORMACIÓN EN LA SOCIEDAD DEL CONOCIMIENTO

PRESENTACIÓN DEL PROGRAMA DE DOCTORADO

iuce

INSTITUTO DE INVESTIGACIÓN EN EDUCACIÓN Y SOCIEDAD DEL CONOCIMIENTO

Education in the Knowledge Society PhD Programme

3

(<http://knowledgesociety.usal.es>)

(García-Peñalvo, 2013a ;2013b; 2014a; 2015)

Research groups





<http://grial.usal.es>



<http://grial.usal.es>



<http://gite213.usal.es/>



Unidad de Investigación Consolidada UIC 081 - GRIAL



<http://visualmed.usal.es/>



<http://gro.usal.es/>



<http://electra.usal.es/>

International Conference Technological Ecosystems for Enhancing Multiculturality (TEEM'16)

<http://2016.teemconference.eu/>

- **TEEM 2013** – Salamanca, Spain, November 14 - 15, 2013
<http://dl.acm.org/citation.cfm?id=2536536>
- **TEEM 2014** – Salamanca, Spain, October 01 - 03, 2014
<http://dl.acm.org/citation.cfm?id=2669711>
- **TEEM 2015** – Porto, Portugal, October 07-09, 2015
<http://dl.acm.org/citation.cfm?id=2808580>
- **TEEM 2016** - Salamanca, Spain, November 2-4, 2016
<http://dl.acm.org/citation.cfm?id=3012430>
- **TEEM 2017** – Cádiz, Spain, October 18-20, 2017

<http://teemconference.eu>

International Conference Technological Ecosystems for Enhancing Multiculturality (TEEM'16)

TOPICS

Education Assessment and Orientation	Human- Computer Interaction	eLearning	Computers in Education	Communication Media and Education
Medicine and Education	Robotics in Education	Engineering and Education	Information Society and Education	

TRACKS

The Conference itself looks for the innovation. The TEEM Steering Committee do not want this event be another classic conference in which people present their works and returns home without interacting with the peers. This way, TEEM is divided in thematic and highly cohesive tracks. Each track shares the scientific and formal aspects for paper submissions, peer reviews and publication, but the track chairs will organize the proper dynamics to achieve the most important goal: to create a researching community.

PROCEEDINGS

Conference proceedings will be published in the ACM Digital Library as a volume in its International Conference Proceedings Series with ISBN and indexing in SCOPUS.

References

- Abdullateef, B. N., Elias, N. F., Mohamed, H., Zaidan, A. A., & Zaidan, B. B. (2016). An evaluation and selection problems of OSS-LMS packages. 5, 248. doi:10.1186/s 40064-016-1828-y.
<https://springerplus.springeropen.com/articles/10.1186/s40064-016-1828-y>
- Alier Forment, M., Casany Guerrero, M. J., Conde González, M. Á., García-Peñalvo, F. J., & Severance, C. (2010). Interoperability for LMS: the missing piece to become the common place for e-learning innovation. *International Journal of Knowledge and Learning (IJKL)*, 6(2/3), 130-141. doi:10.1504/IJKL.2010.034749
- Alier, M., Galanis, N., Mayol, E., Piguillem, J., Casany, M. J., García-Peñalvo, F. J., & Conde, M. Á. (2012). Del PLE al LMS+Portfolio: Integración de elementos de aprendizaje informal en Moodle + Mahara Moodle Moot Madrid 2012. *Globalización y Socialización (Madrid, España, 19-21 de septiembre de 2012)* (pp. 24-29). Madrid, España: Universidad Europea de Madrid. <http://repositorio.grial.eu/bitstream/grial/618/1/MoodleMoot2012.pdf>
- Alves, G. R., & Felgueiras, M. C. (Eds.). (2015). *Proceedings of the Third International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'15) (Porto, Portugal, October 7-9, 2015)*. New York, USA: ACM.
- Campos Ortuño, R. A., & Morales Morgado, E. M. (2013). Influencia de Objetos de Aprendizaje basados en multiestilos. In *Actas del III Congreso Ibérico de Innovación en Educación con las TIC*. Salamanca, España. Retrieved from <https://diarium.usal.es/ietic2013/>
- Campos Ortuño, R. A., Morales Morgado, E. M., & Orozco Rodríguez, C. M. (2016). Desenho de Objetos de Aprendizagem adaptados para quatro estilos de aprendizagem: um estudo de caso. *Revista Educação Pública (UFMT) Brasil*, 25(59/2), 548–572.
- Campos Ortuño, R.A., Morales-Morgado, E.M. & Orozco Rodríguez, C.M. (2016, maio/ago). Diseño de Objetos de Aprendizaje adaptados para cuatro estilos de aprender: un estudio de caso. *Educação Pública*, 25, 548–572.

References

- Casany, M. J., Alier, M., Mayol, E., Piguillem, J., Galanis, N., García-Peñalvo, F. J., & Conde, M. Á. (2012). Moodbile: A Framework to Integrate m-Learning Applications with the LMS. *Journal of Research and Practice in Information Technology (JRPIT)*, 44(2), 129-149.
- Conde González, M. Á., Pozo de Dios, A. d., & García Peñalvo, F. J. (2011). e-Learning Services in Moodle 2.0. CEPIS Upgrade, XII(2), 43-50. http://repositorio.grial.eu/bitstream/123456789/75/1/II_2011_CONDE1.pdf
- Dabbagh, N. (2005). Pedagogical models for E-Learning: A theory-based design framework. *International Journal of Technology in Teaching and Learning*, 1(1), 25-44.
- Downes, S. (2005). E-learning 2.0. *eLearn Magazine* (October).
- García-Peñalvo, F. J. (2005). Estado actual de los sistemas E-Learning. *Education in the Knowledge Society*, 6(2). https://www.researchgate.net/publication/28096675_Estado_actual_de_los_sistemas_e-learning
- García-Peñalvo, F. J. (Ed.) (2008). *Advances in E-Learning: Experiences and Methodologies*. Hershey, PA, USA: Information Science Reference (formerly Idea Group Reference).
- García-Peñalvo, F. J. (2013a). Aportaciones de la Ingeniería en una Perspectiva Multicultural de la Sociedad del Conocimiento. *VAEP-RITA*, 1(4), 201-202.
- García-Peñalvo, F. J. (2013b). Education in knowledge society: A new PhD programme approach. In F. J. García-Peñalvo (Ed.), *Proceedings of the First International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'13) (Salamanca, Spain, November 14-15, 2013)* (pp. 575-577). New York, NY, USA: ACM.
- García-Peñalvo, F. J. (Ed.) (2013c). *Proceedings of the First International Conference on Technological Ecosystems for Enhancing Multiculturality, TEEM 2013*. New York, USA: ACM.
- García-Peñalvo, F. J. (2014a). Formación en la sociedad del conocimiento, un programa de doctorado con una perspectiva interdisciplinar. *Education in the Knowledge Society*, 15(1), 4-9.
- García-Peñalvo, F. J. (Ed.) (2014b). *Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality, TEEM 2014*. New York, USA: ACM.

References

- García-Peñalvo, F. J. (2015). Engineering contributions to a Knowledge Society multicultural perspective. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, 10(1), 17-18. doi:10.1109/RITA.2015.2391371
- García-Peñalvo, F. J. (Ed.) (2016). *Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality, TEEM 2016*. New York, USA: ACM.
- García-Peñalvo, F. J., Johnson, M., Ribeiro Alves, G., Minovic, M., & Conde-González, M. Á. (2014). Informal learning recognition through a cloud ecosystem. *Future Generation Computer Systems*, 32, 282-294.
[doi:http://dx.doi.org/10.1016/j.future.2013.08.004](http://dx.doi.org/10.1016/j.future.2013.08.004)
- García-Peñalvo, F. J., & Seoane-Pardo, A. M. (2015). Una revisión actualizada del concepto de eLearning. Décimo Aniversario. *Education in the Knowledge Society*, 16(1), 119-144. doi:<http://dx.doi.org/10.14201/eks2015161119144>
- Greenberg, L. (2002). LMS and LCMS: What's the difference? Learning circuits—ASTD's online magazine all about e-learning, 31(2). <https://www.efrontlearning.com/blog/2013/05/lms-and-lcms-whats-the-difference.html>
- Morales Morgado, E. M., García Peñalvo, F. J., Campos Ortuño, R. A., & Astroza Hidalgo, C. (2013). Desarrollo de competencias a través de objetos de aprendizaje. (Spanish). *RED. Revista de Educación a Distancia*, (36), 1–19.
- Morales Morgado, E. M., Pérez Bonilla, A. A., & Campos Ortuño, R. A. (2016). Desarrollo de la competencia informacional a través del diseño, creación e implementación de objetos de aprendizajes interactivos. In *Actas del I Congreso de Innovación, Tecnología y Aprendizaje - INTEA*. Santiago de Chile. Retrieved from <http://www.intea.udesantiagoovirtual.cl/posters/morales.pdf>
- Morales-Morgado, E. M., & Campos Ortuño, R. A. (2014). Dimensiones para el diseño y catalogación de Objetos de Aprendizaje en base a competencias informacionales. *Revista Teoría de La Educación: Educación Y Cultura En La Sociedad de La Información (TESI)*, 15(2), 4–31

References

- Morales-Morgado, E. M., Ortuño, R. A. C., & Bonilla, A. A. P. (2016). Multimedia resources to develop information competence: A methodological design for the comparative study of undergraduate and post-graduate students in two public universities in Chile and Spain. In *Computers in Education (SIIE), 2016 International Symposium on* (pp. 1–6). IEEE Xplore. <https://doi.org/10.1109/SIIE.2016.7751854>
- Orozco Rodríguez, C. M. (2017). Learning Objects Creation based on Johnson-Laird Mental Models. *Revista Serie-Estudios*.
- Orozco Rodríguez, C. M., Morales Morgado, E. M., & Moita, F. (2014). Objeto de aprendizaje con eXelearning y Geogebra para la definición del concepto de vector real. In *Actas del Congreso Nacional de Educação (CONEDU)*. Campina Grande, Paraíba, Brasil: Realize. Retrieved from http://www.editorarealize.com.br/revistas/conedu/trabalhos/Modalidade_1datahora_12_08_2014_14_36_44_idinscrito_32813_f2322a22f31c2cef0844d1c4b494262b.pdf
- Orozco Rodríguez, C. M., Morales Morgado, E. M., & Moita, F. G. da S. C. (2014). The eXeLearning and GeoGebra integration for teaching geometrics definitions and vectors representations through learning objects. In *Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality – TEEM'14* (pp. 639–645). Salamanca, Spain: ACM Press. <https://doi.org/10.1145/2669711.2669967>
- Orozco Rodríguez, C. M., Morales-Morgado, E. M., & Moita, F. G. da S. C. (2015). Learning Objects and Geometric Representation for Teaching “Definition and Applications of Geometric Vector.” *Journal of Cases on Information Technology*, 17(1), 13–30. <https://doi.org/10.4018/JCIT.2015010102>
- Scopeo. (2013). SCOPEO INFORME No2: MOOC: Estado de la situación actual, posibilidades, retos y futuro. Salamanca. <http://scopeo.usal.es/informes/scopeo-informe-no-2-mooc-estado-de-la-situacion-actual-posibilidades-retos-y-futuro/>



Dra. Erla Mariela Morales Morgado
Dpto. Didáctica, Organización y Métodos de Investigación
Universidad de Salamanca

Correo USAL: erla@usal.es

Correo Gmail: erlamorales@gmail.com

Twitter: [erlamorales](https://twitter.com/erlamorales)

Blog personal: <http://diarium.usal.es/erla/>

Blog grupo Grial: <http://grial.usal.es/grial/erlamorales>

Blog DIRED: <http://diarium.usal.es/linglingyang>