

Agreements

Thank you to



- Committees of 15th European Association of Health Information and Libraries,
- Andalusian eHealth Library.
- Junta de Andalucía.

For allowing us to share with you our presentation.

Development of a sequence of virtual learning on a scientific information platform for medical libraries.

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Background



Madrid. XV Congress of Information and Documentation in Health Science.



A health librarians' work-team: ***T**eaching and learning with technology: how to transfer knowledge?*



- *Literacy competencies.*
- *Information management.*
- *Continuous learning.*
- *Proposal of a joint program on literacy competencies.*

Background



Alicante y Elche 10 - 13 marzo 2015



Introducing a dissertation: ***The Scientific literacy framework program in health libraries at hospitals***



- Contribution to access and use the scientific information through learning programs.
- Education skills which were made by the medical library.

Introduction

Educational goals of the medical library:

1. Offering **educational courses** to university, master and PhD students, medical residents and health professional.
2. Creating a **good environment** with the best online and face-to-face learning activities.
3. **Organizing and leading specific programs** with the associated University.



Introduction

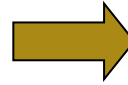
Why have we organized a virtual course on scientific information in health libraries?

- It is an **innovative project** at hospitals.
- It provides the best **learning flexibility**.
- It allows a **major participants number**.
- It gives **self-constructive educative itineraries** by students.

Objective



Organizing a **sequence of virtual learning** on scientific information using an educational platform in a framework of education plan at medical library, for grade and postgrade users, whose education starts at hospital.



Process or activity developed outside of classroom on the Internet.

The goals of the learning sequence

- 1. Identifying and using the **education methodology** principles at university.
- 2. **Facilitate access to health information** resources for students.
- 3. **Integrating Knowledge Information Technology** in the course.
- 4. Proposing **work strategies** to build students' own cognitive structure.

The skills to develop in the learning sequence

- Analyzing cases, situations and processes.
- Learning to synthesize topics.
- Using information resources.
- Using learning strategies.
- On-line discussion and forums.
- On-line cooperative works.
- Building knowledge.
- Critical evaluation about topics.

Model of sequence of learning

- The model includes basic information of the course (title, librarian-teachers, dates, etc.) and the goal.

<i>Model of sequence of learning</i>	
<i>Identify the sequence</i>	<i>Problem of context</i>
Title: Information Sources in Health Sciences Librarian-teachers: health librarians Students: health professionals, health students. Time: Dates: Edition number and year: Continuous education credits:	Understand the process of searching strategies to make clinical decisions, educate and investigate
<i>Title</i>	
Information Sources in Health Science	

Model of sequence of learning

- Objectives, student's competencies, syllabus of the course and finally the evaluation.

Competencies

Main competencies: manage bibliographic data bases and resources in health science.

Specific competency: help the students to acquire the main skills to manage the results of search, filter, select, evaluate, understand and use them adequately.

<i>To begin</i>	<i>In order to</i>	<i>How</i>
<ol style="list-style-type: none">1. Identify and use the best educational methods for the course.2. Facilitate the students the access to specialized information resources.3. Include the IT in the course4. Propose working strategies for helping students to build their own knowledge structure.	<ol style="list-style-type: none">1. Be efficacy making clinical decisions, educating and investigating.2. Be able to handle themselves with a virtual environment.3. Learn in a creative way4. Be critical in the selection of resources.5. Be able to work in a multidisciplinary team.	<ol style="list-style-type: none">1. Educational videos2. Conceptual maps3. Platforms based on videogames.4. Discussions⁴5. Reports

Model of sequence of learning

- The syllabus is divided in topics with their own objective, their schedule and activities.

PROGRAM

Opening activity

Based on the principal statement, the sequence of virtual learning is opened with an introduction activity to focus students in the general content of the course:

Topic 1: introduce the most important health science information resources and learn to use the MeSH and Emtree thesauri as the Boolean operators.

Developing activities

The student must investigate the content and the theory to solve a problem or a question through bibliographic searches in specialized data bases.

Topic 2: International data bases: PubMed and EMBASE. Objective: learn and manage the data bases PubMed and EMBASE.

Topic 3: Resources for Medicine Based Evidence: UpToDate, Cochrane Library Plus y Trip Database. Objective: learn how to use UpToDate, Cochrane Library Plus y Trip Database through practical cases.

Topic 4: Bibliometrical analysis of scientific production: Journal Citation Report (JCR) and Scimago & Journal Ranking (SJR). Objective: learn how to manage JCR and SJR.

Topic 5: Bibliographic manager. Objective: learn how to manage it.

Closing activities

We have selected a pair of activities that allow to settle the learnt knowledge and apply them resolving problems or practical situations in different contexts. Objectives: learn the contents of the course.

Adapting to a virtual course

- The student is on the focus of the educational process.



- Identifying the methodological principles of virtual learning.



- Using the most appropriate teaching methods for the subject.



- Integrating the knowledge information technologies



- Proposing work strategies to build student's cognitive structure.

Why Moodle?

We choose:



Moodle, the most important educational platform with 24.500 websites used in 175 countries..

- Well-Known, big community.
- Open resource.
- Collaborative tools.
- Flexible.
- Easy to use.

Working with an on-line course

The success of on-line courses is their planification, design and development before teaching.



Think about:

- Characteristics of the course.
- Students' features.
- Adaptation of contents.

Information Sources in Health Sciences in Moodle

Example. Information and introduction to the course

The screenshot shows a Moodle course interface. At the top, the course name 'seminario-invest-80884-22' is visible, along with an 'Activar edición' button. The left sidebar contains a navigation menu with options like 'Mi Campus', 'Área personal', 'Páginas del sitio', 'Mi perfil', and 'Curso actual', with the current course expanded to show 'seminario-invest-80884-22' and its sub-topics. The main content area features a header image of a stethoscope and the title 'Information Sources in Health Sciences'. Below this, there is a section for 'General Information about the course.' with links to 'User Guide', 'News', 'General Forum', and 'Resources for Health Sciences'. A 'Before beginning' section includes a link to 'Introducing teachers' and a 'Level Questionnaire' with a checkmark icon. The right sidebar contains three widgets: 'Últimas noticias' (Latest news) with a 'Añadir un nuevo tema...' button, 'Eventos próximos' (Upcoming events) featuring a 'Level Questionnaire (Cuestionario abierto)' event scheduled for Wednesday, June 15, 17:14, and 'Actividad reciente' (Recent activity) showing activity from Saturday, May 21, 2016, at 18:40.

li Campus ▶ seminario-invest-80884-22 Activar edición

Navegación

- Mi Campus
 - Área personal
 - Páginas del sitio
 - Mi perfil
- Curso actual
 - seminario-invest-80884-22
 - Participantes
 - Insignias
 - Information Sources in Health Sciences
 - Topic 1. Introduction to sources in Health Sciences
 - Topic 2. PubMed and Embase
 - Topic 3. EBM
 - Topic 4.

Information Sources in Health Sciences



General Information about the course.

- User Guide
- News
- General Forum
- Resources for Health Sciences

Before beginning

- Introducing teachers
- Level Questionnaire

Últimas noticias

Añadir un nuevo tema...
(Sin novedades aún)

Eventos próximos

-  **Level Questionnaire (Cuestionario abierto)**
miércoles, 15 junio, 17:14
Ir al calendario...
Nuevo evento...

Actividad reciente

Actividad desde sábado, 21 de mayo de 2016, 18:40
Informe completo de la actividad reciente...
Sin novedades desde el último acceso

Example. One topic in Moodle

Topic 1. Introduction to sources in Health Sciences

Introduce the most important health science information resources and learn to use the MeSH and EMTREE thesauri as the Boolean operators.



Introduction



Thesauri



Boolean operators



Forum Topic 1



Task 1: Analyzing descriptors

Help for Task 1. Sharing documents. Google Drive



Google Drive Tutorial

Supplementary Material



Readings about Thesauri

Information Sources in Health Sciences

Calendario

mayo 2016

Lun	Mar	Mié	Jue	Vie	Sáb	Dom
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Clave de eventos

- Ocultar eventos globales
- Ocultar eventos de curso
- Ocultar eventos de grupo
- Ocultar eventos del usuario

Readings about PubMed and Embase

Topic 3. EBM

Learn how to use UpToDate, Cochrane Library Plus y Trip Database through practical cases.

- Introduction to EBM
- Uptodate
- Cochrane Library Plus
- Trip Datababase
- Forum Topic 3
- Task 3. Using UptoDate for a clinical case

Supplementary Material

Readings about EBM

Topic 4. Bibliometrical analysis of scientific production

Journal Citation Report (JCR) and Scimago & Journal Ranking (SJR). Objective: learn how to manage JCR and SJR.

- Introduction to bibliometrical analysis
- Journal Citation Report
- Scimago Journal Ranking (SJR)
- Forum Topic 4
- Task 4. Questionnaire. JCR y SJR

Supplementary Material

Readings about bibliometrics and scientific production

Topic 5. Bibliographic manager

Learn how to use bibliographic manager.

- Introduction to bibliographical manager
- Bibliographical Manager
- Forum Topic 5
- Task 5. Bibliographic manager

analysis

Agregado Libro
Journal Citation Report

Agregado Libro
Bibliographical Manager

Agregado Libro
Scimago Journal Ranking (SJR)

Agregado Libro
Boolean operators

Agregado Archivo
User Guide

Agregado Cuestionario
Level Questionnaire

Agregado Tarea
Task 1: Analyzing descriptors

Agregado Foro
Forum Topic 1

Agregado Foro
Forum Topic 2

Agregado Carpeta
Readings about PubMed and Embase

Agregado Carpeta
Resources for Health Sciences

Agregado Carpeta
Readings about Thesauri

Agregado Tarea
Task 2: Searching in the databases

Agregado Foro
Forum Topic 3

Agregado Tarea

Example. Activity

- ▶ Topic 2. PubMed and Embase
- ▶ Topic 3. EBM
- ▶ Topic 4. Bibliometrical analysis of scientific pro...
- ▶ Topic 5. Bibliographic manager
- ▶ Final Project
- ▶ Mi Correo
- ▶ Mis cursos

Administración

- ▼ Administración del curso
 - ✎ Activar edición
 - ⚙ Editar ajustes
 - ▶ Usuarios
 - 🔍 Filtros
 - 📄 Informes
 - 📊 Calificaciones
 - 📈 Resultados
 - 🏆 Insignias
 - 🛡 Copia de seguridad
 - 🔧 Restaurar
 - 📁 Importar
 - 🔄 Reiniciar
 - ▶ Banco de preguntas
- ▶ Cambiar rol a...
- ▶ Ajustes de mi perfil

Mis cursos

- 📖 Biblioteca Formación de usuarios FOO
- 📖 Information Sources in Health Sciences

✓ Level Questionnaire

Topic 1. Introduction to sources in Health Sciences

Introduce the most important health science information resources and learn to use the MeSH and EMTREE thesauri as the Boolean operators.

- 📄 Introduction
- 📖 Thesauri →
- 📖 Boolean operators
- 🗨 Forum Topic 1
- 📁 Task 1: Analyzing descriptors

Help for Task 1. Sharing documents. Google

- 📄 Google Drive Tutorial
- Supplementary Material**
- 📁 Readings about Thesauri

Topic 2. PubMed and Embase

International data bases: PubMed and EMBASE

- 📄 Introduction
- 📖 PubMed
- 📖 Embase
- 🗨 Forum Topic 2
- 📁 Task 2: Searching in the databases

Help for Task 2. Creating a video

- 📄 Hangouts Tutorial
- Supplementary Material**
- 📁 Readings about PubMed and Embase

Actualizaciones de cursos:

Agregado Foro General Forum

Actualizado: Foro News

Agregado Página
Introduction

Agregado Libro
Trip Datatbase

Agregado Página
Introduction to bibliographical manager

Agregado Página
Introduction to bibliometrical analysis

Agregado Libro

Conclusions:

1. Differences about value given the virtual and face-to-face activities, being appreciated these last. We are in favour of working with both activities simultaneously (online and face-to-face education) because none of them are exclusive.
2. On-line learning fosters social education but the most important one is the practical education which allows the student to acquire skills related to the search selection filter, evaluation and results management.
3. The librarian-teacher must incorporate efficacy methods to transform the students learning in a participative and practical experience.
4. Introduce educative resources with an active role for students and integrate Internet and social networks.



Thank you so much

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