Five years of teaching experience at the Medical Library of the Autonomous University of Madrid

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ABSTRACT

Introduction

Since the 90s the UAM's Medical Library has been participating in the teaching of The Degree of Medicine through collaborations in different Departmental Areas.

In 2009 the new studies of The Medicine Degree were planned to suit the European Higher Education Area. The Library gets approval in the curriculum of the optative subject "Managing information resources in medicine" (GRIM), taught by the library staff, with 3 ECTS for students in 1st grade. The first lecture of our subject was given in the academic year 2010-2011.

At this time, the teaching of the Library has been extended to nursing degree classes, official masters and PhD courses.

Objective

Our goal is to make an evaluative analysis of teaching, developed in the last 5 academic years.

Methodology

To study our teaching experience through the number of students enrolled and their evaluation. Regarding to the evaluation, from the beginning we have had Academic Student Guides that have been modified throughout our five years of experience.

Results and conclusions

Overall the number of students enrolled in GRIM has remained stable with an upward peak in 2011-2012, which forced us to establish a "numerus clausus" of 60 students. From here, the number of students has fluctuate between 41 in 2013-2014 and 59 in 2014-2015 and.

Moreover, the evaluation system, followed a continuous assessment, which was completed with a final exam or with academic work. The pass rate varies from 94% to 100%.

Similar scores are also obtained for the subjects offered in collaboration with other departments such as Biostatistics and ICT (First Degree Nursing), Communication and scientific documentation, data processing and analysis (Master's Degree in Pharmacological Research) Systematic reviews literature and meta-analysis (Master in Quantitative and Research Methods in Epidemiology), context, basis and delimitation of the research problem (Master of Research and Nursing Care in Vulnerable Populations) and Doctorate Course on Evidence-Based Medicine.

In conclusion the pass rates of our subject show the acquisition of information skills, where students will be able to:

1. Identify the information needs, their nature and level.
2. Access and use the information resources effectively and efficiently.
3. Evaluate the relevance and quality of the information.
4. Communicate information. They will have knowledge of scientific writing and citation of documents in the biomedical area.
5. Use the information legally and ethically.
6. Work collaboratively in teams with shared responsibility
7. Use the information obtained to develop new knowledge.

Key words: Library, Universities, Problem-Based Learning, Test Taking Skills, Health Information Management, Teaching/methods

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Introduction

The UAM's Medical Library is more than 25 years experienced in teaching, and we began with our contribution in the ancient subject "Theory and History of the Medicine" included in the disappeared Bachelor of Science Degree in Medicine. At the beginning our task was to explain all the registered students in the first course of Medicine (200 more and less) the working system and resources that the library offered and how to use the Medline database. Years after, explanations about citation styles were added.

However, since 2009 the new Degree of Medicine Studies were planned in order to be adapted to the European Higher Education Area (EHEA), the library reached its higher development in teaching tasks, being approved to offer an optative subject into the new studies plan "Management of the information resources in medicine" (GRIM), taught by the library staff, with 3 ECTS for the first grade students, the first lecture was given through the 2010-2011 course.

Since then, the Library teaching activity has been increased in subjects taught in collaboration with other departments, such as Biostatistics and ICT (First Degree Nursing), Communication and scientific documentation, data processing and analysis (Master's Degree in Pharmacological Research) Systematic reviews literature and meta-analysis (Master in Quantitative and Research Methods in Epidemiology), context, basis and delimitation of the research problem (Master of Research and Nursing Care in Vulnerable Populations) and Doctorate Course on Evidence-Based Medicine.

Objective

After this five years period of teaching GRIM, we are trying to evaluate the results of the subject and its evolution in time, in order to verify if the informational skills needed during the students' formation and their professional career is carried out.

Methodology

The teaching experience is analyzed through the number of registered students and their evaluation.

From the beginning we have relied on Academic Student Guides which have been modified throughout our five years of experience to adapt to students' needs.

During the first two academic courses, the Academic Student Guides had 6 units: Introduction to Scientific Documentation – Introduction to the Library and its services - Methodology and presentation of the scientific work – Scientific documentation and data bases – Management of bibliography references – Quality criteria about the resources in medicine.

For the 2012-2013 academic course, the Academic Student Guides was a modified: Methodology and presentation of scientific work – Introduction to Scientific Documentation – Introduction to the Library and its services – Scientific documentation and data bases – Bibliographic styles and management of bibliography references.

Finally, for the 2014-2015 academic course, there was a lineal modification in the Academic Student Guides, being established as: Methodology and presentation of academic work. Ethic of investigation – The information resources and its evaluation – The data-bases in medicine – Bibliographic styles and management of bibliography references. (Figure 1)

Regarding our teaching methods, we divide our course in face-to-face classes and homework. The classes could be: theoretical, practical, seminars and workshops. And the homework is modified through time. (Figure 2)

At the beginning, the training activities included a group presentation (Ppt) of about 15-20 minutes length and an individual academic paper. The length of this paper should be around 1500 words and its topic was decided by the student in the area of the history of medicine, was the base for the group presentation. Since the 2014-2015 course, the topics are chosen by the teacher for both paper and presentation, ant the paper will also be made in group, its extension will be 3500 words and the length of the presentation is established in a minimum of 5 minutes per student.

Regarding to the number of enrolled students: there were 51 in the 2010-2011 course, 71 in the 2011-2012 course, this made us establish a "numerus clausus" of 60 students for the 2012-2013 course, which was covered for that year. In the 2013-2014 course the number of students was reduced to 41. In the 2014-2015 course the number of students rose again to 59 and finally in the 2015-2016 course there were 52 enrolled students. (Figure 3)

Also, there have been changes in the evaluation of the subject throughout the time. For the two first academic courses, in addition to make a presentation which was 15% of the final mark and the individual paper which was 20% of the final mark, a continuous evaluation was made consisting in bibliographies searches which were 15% of the final mark, final test which added a 35% to the final mark, and the remaining 15% was the class attendance. (Figure 4)

In the 2012-2013 course the test is removed from the evaluation so the continuous evaluation increased 35% of the total mark, the individual paper another 35% and both the presentation and the class assistance were 15% of the total mark. (Figure 5)

In the 2014-2015 course, the class assistance will add up to a 5% of the final mark, the group paper reaches a 35% of the final mark and the individual presentation a 25% of the final mark, the continuous evaluation is 35% of the final mark.(Figure 6)

Conclusions and Results

In general, the number of students enrolled in GRIM have remained stable with a small increased during the 2011-2012 course which, as we said before, forced us to establish a "numerus clausus" of 60 students. From this point on, the number of students has varied between 41 in 2013-2014 and 59 in 2014-2015

During the 2010-2011 academic course, two of 51 registered students didn't attend either the class or the exam, soy they were not evaluated. Regarding to the marks obtained 44, 5% got a C and 55.5% got a B.

During the 2011-2012 academic course, one of 71 students registered didn't attend either the class or the exam, soy they were not evaluated. Regarding to the marks 6% got D, 24% got C and 70% got B. It is important to say that two of the five students who didn't pass the first call passed it on the second call.

During the 2012-2013 academic course, 3 of 60 students failed (5%). Regarding to the qualifications, 46,5% got C and 48,5% got C. In the extra call a student didn't submit, another didn't pass and another got A.

During the 2013-2014 academic course, 4 of 41 registered students didn't attend either the class or the exam, soy they were not evaluated. The majority mark was B with 80%, 7,5% got C and 2% got A.

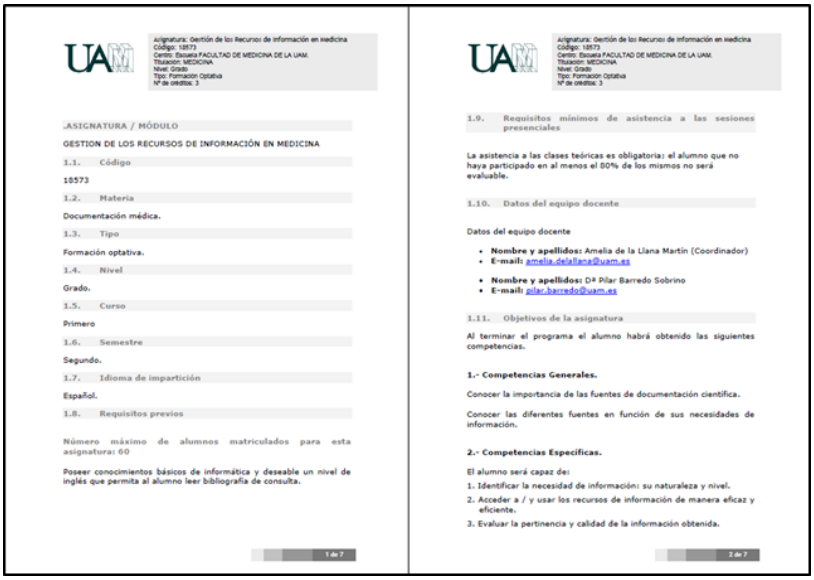
During the 2014-2015 academic course, 2 of 59 students didn't attend either the class or the exam, so they were not evaluated. The marks were a student with honors (2%), 70% got Band 28% got C. (Figure 7)

In conclusion the pass rates of our subject show the acquisition of information skills, where students will be able to (Figure 8):

1. Identify the information needs, their nature and level. Students will be able to distinguish primary, secondary and tertiary sources of information.
2. Access and use the information resources effectively and efficiently. Students will be able to search in different specialized databases in health sciences as PubMed, BVS, EMI, etc. and multidisciplinary databases such as WOS or Scopus
3. Evaluate the relevance and quality of the information. Students will be able to assess the quality of journals by impact factor (JCR & Scimago Journal Rank), and they will be able to apply quality criteria to evaluate informational resources on the Internet.
4. Communicate information. They will have knowledge of scientific writing and citation of documents in the biomedical area, especially in Vancouver Style.
5. Use the information legally and ethically.
6. Work collaboratively in teams with shared responsibility.
7. Use the information obtained to develop new knowledge.

Tables and figures

Figure 1



Asignatura: Gestión de los Recursos de Información en Medicina
Código: 18573
Centro: Escuela FACULTAD DE MEDICINA DE LA UAM.
Titulación: MEDICINA
Nivel: Grado
Tipo: Formación Optativa
Nº de créditos: 3

ASIGNATURA / MÓDULO

GESTION DE LOS RECURSOS DE INFORMACIÓN EN MEDICINA

1.1. Código

18573

1.2. Materia

Documentación médica.

1.3. Tipo

Formación optativa.

1.4. Nivel

Grado.

1.5. Curso

Primero

1.6. Semestre

Segundo.

1.7. Idioma de impartición

Español.

1.8. Requisitos previos

Número máximo de alumnos matriculados para esta asignatura: 60

Poseer conocimientos básicos de informática y deseable un nivel de inglés que permita al alumno leer bibliografía de consulta.

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1.9. Requisitos mínimos de asistencia a las sesiones presenciales

La asistencia a las clases teóricas es obligatoria: el alumno que no haya participado en al menos el 80% de los mismos no será evaluable.

1.10. Datos del equipo docente

Datos del equipo docente

- **Nombre y apellidos:** Amelia de la Llana Martín (Coordinador)
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- **Nombre y apellidos:** Dª Pilar Barredo Sobrino
- **E-mail:** pilar.barredo@uam.es

1.11. Objetivos de la asignatura

Al terminar el programa el alumno habrá obtenido las siguientes competencias.

1.- Competencias Generales.

Conocer la importancia de las fuentes de documentación científica.

Conocer las diferentes fuentes en función de sus necesidades de información.

2.- Competencias Específicas.

El alumno será capaz de:

1. Identificar la necesidad de información: su naturaleza y nivel.
2. Acceder a / y usar los recursos de información de manera eficaz y eficiente.
3. Evaluar la pertinencia y calidad de la información obtenida.

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Figure 2

Figure 3

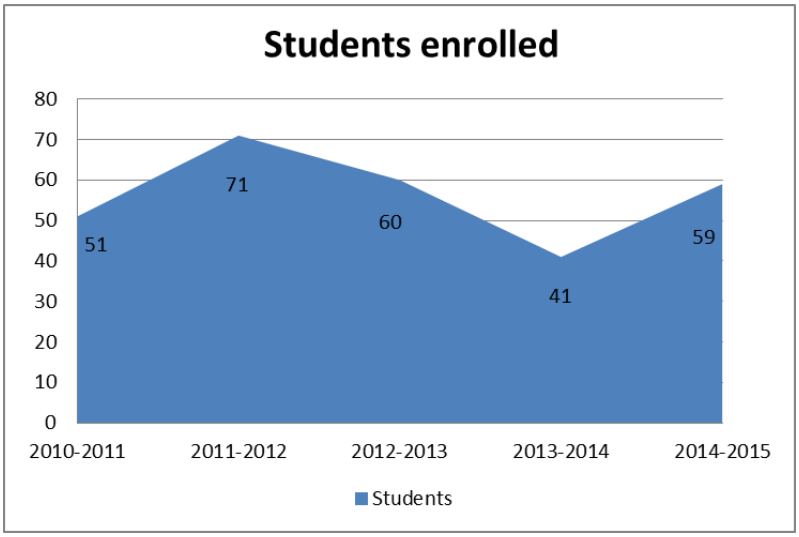

Figure 4

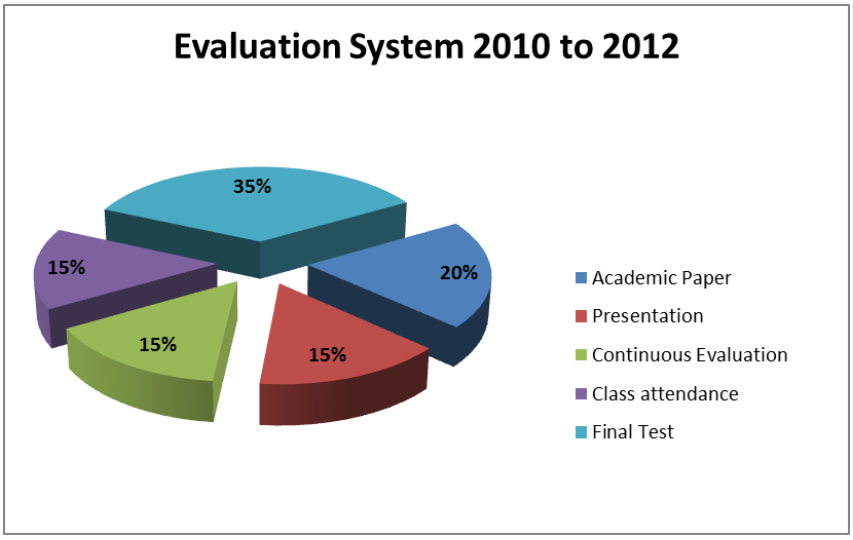

Figure 5

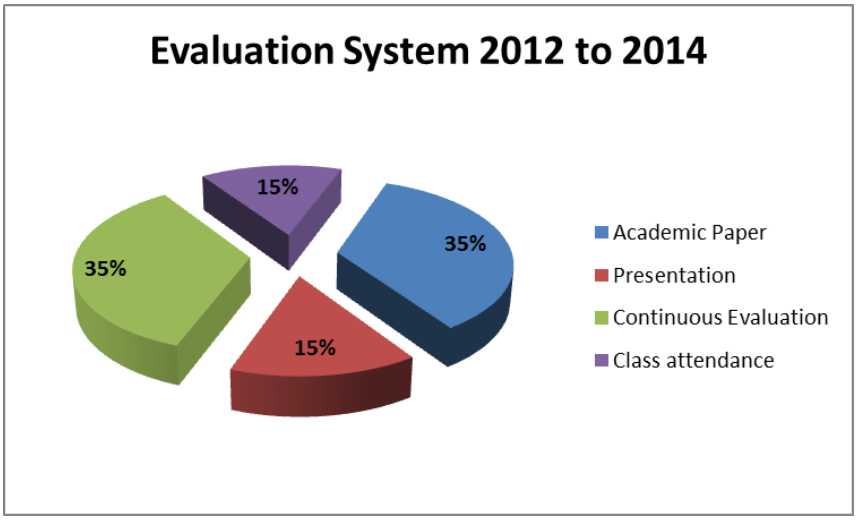

Figure 6

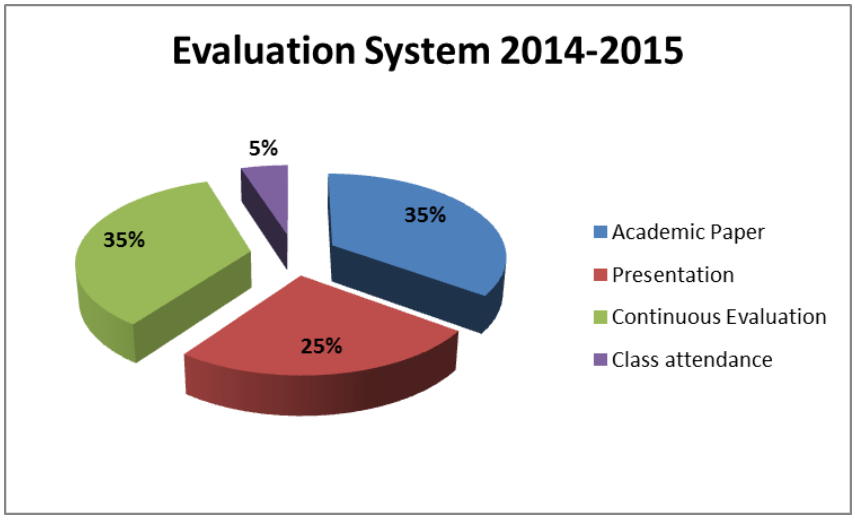

Figure 7

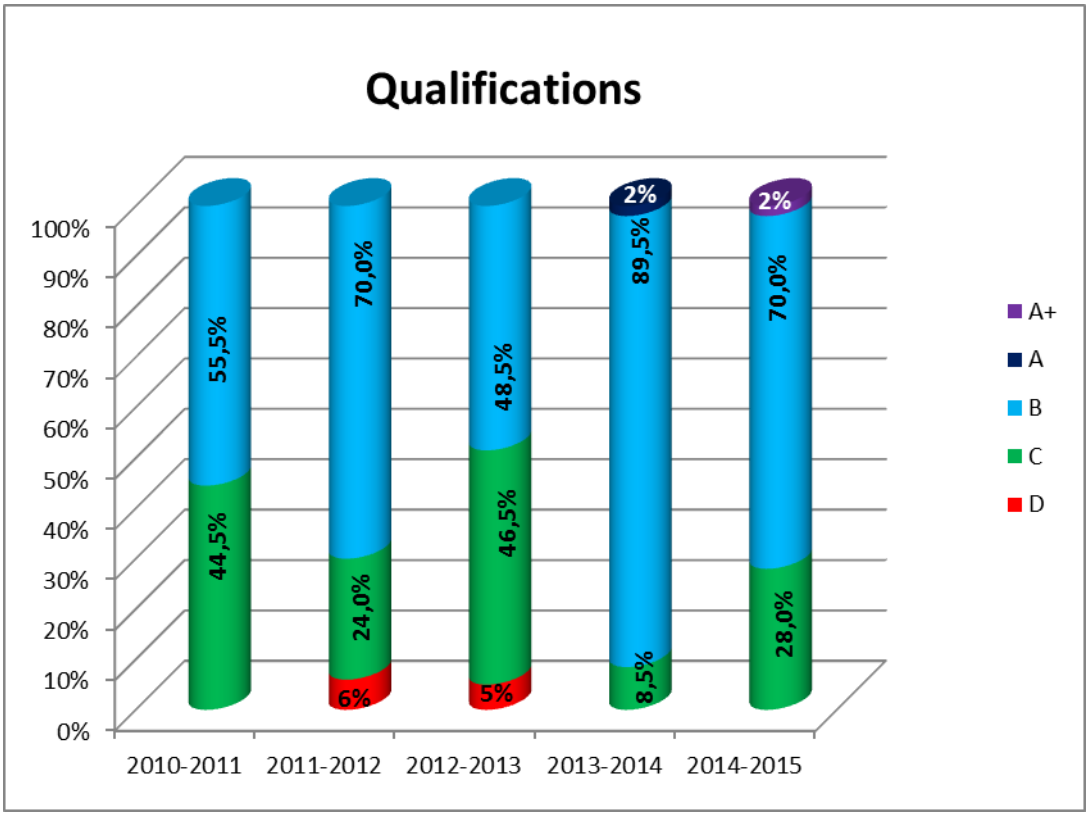

Figure 8