Using LAMS to design Nursing Learning Scenes

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ABSTRACT

LAMS is the acronym of Learning Activity Management System. This system was created with open source and General Public License (GPL) that let share learning sequences experiences [1]. By a hand the information and communication technologies spread us each day more options to improve the teaching-learning process. In the other hand the semi-distance education has demonstrated its utility in the health sciences learning [2]. In this work we describe our experience in the use of LAMS to improve nursing learning like part of a semi-distance activity named: Classroom-workshop about care during normal delivery by using simulators.

Keywords: LAMS, graduate nursing education, nursing care, maternal and child nursing, education distance, clinical competence.

1. INTRODUCTION

LAMS is a revolutionary new tool for designing, managing and delivering online collaborative learning activities. It provides teachers with a highly intuitive visual authoring environment for creating sequences of learning activities. These activities can include a range of individual tasks, small group work and whole class activities based on both content and collaboration. LAMS isn’t a distance course that the students do alone. The LAMS activities are designed to work in collaboration with the class partners and the professors. The aim is the integrated and interactive learning.

LAMS features and benefits [3, 4, 5]:
- Adapt and share collaborative sequences based in good practices.
- Intuitive tools and user interface
- Easily sequence collaborative learning activities online
- Web based
- Live monitoring of student
- Standards based
- Open architecture for implementation
- Comprehensive administration interface
- The students can see their learning progress
- The teacher can assess the students with several strategies, and access to a portfolio from each student.
- Each activity may include competence that helps us to

2. THE LEARNING SCENE DESIGN

The learning scene: Classroom-Workshop about care during normal delivery by using obstetrical simulators. It is a blended learning program on undergraduate nursing students' learning of delivery care. (Figure 1)

Activity planning

This activity was designed to improve the nursing students’ competence of “to care women during the normal delivery and postpartum periods”.

This is a learning activity within Maternal and Child Nursing II, a subject in the second course of the Nursing Education Programme in Cádiz University. This subject has got 7,5 credits: 3 theoretic credits; 4,4 clinical practice credits and 0,1 theoretic-practice credits (the workshop).

To plan the activity we had account the needs of the nursing students, the disposable resources and the assessments learning techniques.

The used methodology integrates face to face learning and virtual learning, simulating the care during hospital delivery and postpartum (Figure 2).

Face to face learning

Consists of a sequence of activities in the nursing workshop using simulators:
- Initial assessment of the pregnant woman (role playing)
- Genital exploration
- Breast exploration
- Cervical dilatation assessment
- Leopold technique assessment
- Epidural anaesthesia
- Delivery simulation
- Episiotomy simulation

Virtual learning

Consists of:

The LAMS activity. We added it into the classroom in the academic year 2008-2009 (Fig. 3), in order to perform the workshop. The version used was LAMS 2.2.
3. THE LAMS ACTIVITY DESCRIPTION

The sequence of activities includes (Figure 4):

- Welcome activity, with the initial instructions of LAMS activity.
- Share resources. The students share resources between them and comment the suggestive resources by the professor
- Assess pregnant. It is an activity with a virtual patient. The students learn What, When, How to ask, and what to assess in the first interview, when the pregnant woman comes to emergency for possibly uterine contractions. Finally, the students must do a test assessment.
- Vaginal cytology sample. Video to learn how to do a vaginal cytology sample, using the gynaecologic simulator (The students do this activity later in the workshop).
- Breast examination. Video to learn how to do a breast examination, using the breast exploration simulator (The students do this activity later in the workshop).
- Amnioscopy. Video to learn how to do an amniocopy (The students do this activity later in the workshop).
- Female pelvis. Video to learn how is the female pelvis, the bones ant the muscles using the female pelvis simulator (The students do this activity later in the workshop).

Assessment tests: Several test about:
- Epidural anaesthesia. Include a forum to comment the care during this type of anaesthesia during labor, too.
- Cardiotocographic fetal monitoring. This test is support by an atlas of cardiotrographic images
- Drugs frequently used during delivery
- Postpartum care an breast feeding education

The student’s role

The activity is compulsory for all the students. The virtual subject classroom has all the information for the students support: workshop guide, methodology and assessment of the activity.

Each activity was edited in order to insert all the necessary instructions and collaborative resources to the students (Figure 5)

The students can consult their progress, use the notebook tool and to share their opinions (Figure 6)

This activity is made by the students after the theoretic practice

The activity assessment is the 10% of the final qualification of the subject.

The professor’s role

In LAMS activity, the professor acts not only like a teacher but selection and elaboration of learning materials, tutoring and planning the work of the students.

4. CONCLUSIONS

Our first experience with LAMS has been satisfactory.

The aim object was that the sequence activity was than real as possible by using the adequate tools and resources, with collaborative and interactive participation (Figure 7).

Disadvantages:
- This is our first experience using LAMS
- The version used was LAMS 2.2 that has no much compatibility with Moodle [6]
- Like all virtual activities, it would be better than the design were complete before the beginning

Advantages:
- The students see the sequence of activities as a whole
- The students can see their progress
- The activity adds interactivity
- The activity improve the communication between professors and students and between students
- Each activity lets feedback
- The activity has got an award by the University like recognition
- We can share the activity. In fact, the activity is free available in the URL: http://lamscommunity.org/dotlrn/index
- This experience lets us to get better next year, with LAMS v 2.3 [7].

5. REFERENCES


[6] Integración Moodle-LAMS. [on line][date access 10-17-2009]. URL available in: http://docs.moodle.org/es/LAMS

[7] Canal digital de Tecnología Educativa de la Universitat Jaume 1 de Castelló. OCTETO 2.0. LAMS 2.3. [on line][date access 10-17-2009]. URL available in: http://cent.uji.es/octeto/node/2158
Figure 1. Workshop “Care during normal delivery by using obstetrical simulators”. Academic year 2007-2008. Information available in the virtual classroom of the Maternal and Child Nursing II (Moodle platform in virtual campus of Cádiz University)

Figure 2. Web page with the guide of the workshop
Figure 3. Design of Workshop “Care during normal delivery by using obstetrical simulators”. 2008-2009 course. Information available in the virtual classroom of the Maternal and Child Nursing II (Moodle platform in virtual campus of Cádiz University)

Figure 4. Monitor LAMS. Edition screen. Learning activities sequence.
Figure 5. Editing the share resources tool

Figure 6. Learning activity: Initial valuation of pregnant woman: Student role. At the left column the students see the activities sequence and their progress: red square (actual activity); green triangle (the next activity); blue circle (the activities done yet)
Figure 7. Scheme of the Workshop. The sequence of activities: Face-to-face session and virtual session.