

# INTEGRATING MOODLE AND PIAZZA IN ONLINE LITERATURE COURSES

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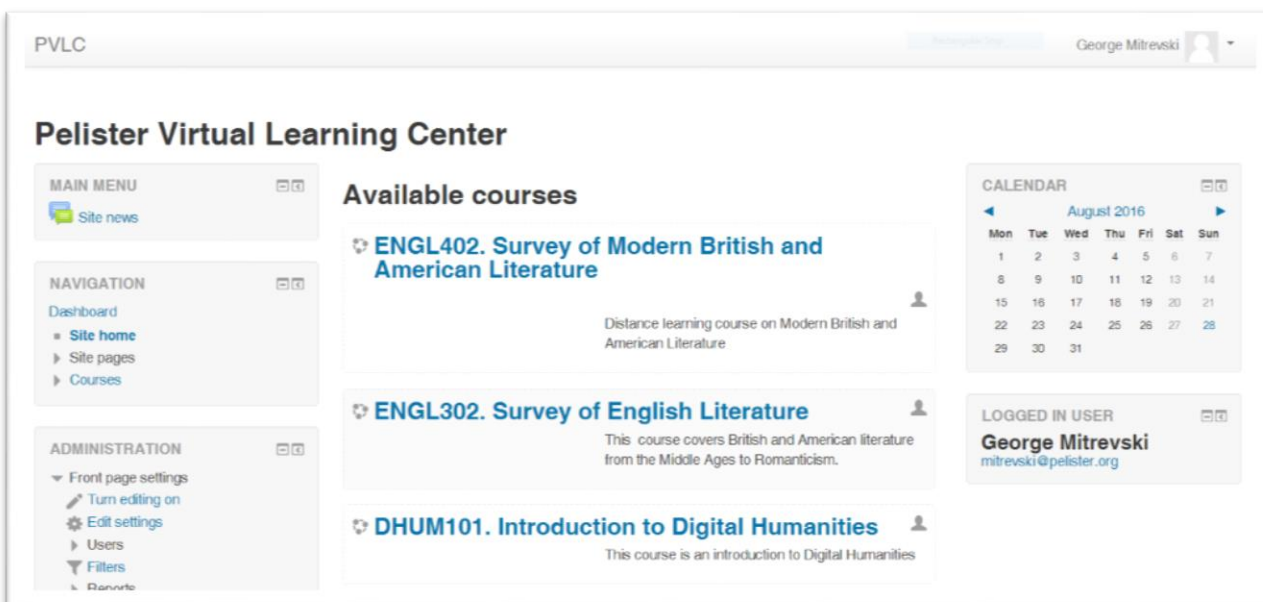
## **Abstract**

In this presentation I will discuss the integration of two Learning Management Systems (LMS), **Moodle** and **Piazza**, in the teaching of online literature courses. LMS tools have created the technological conditions for combining face-to-face instruction with computer-mediated instruction, blended learning, as well as for designing courses that are delivered entirely online. These tools are designed to promote student interaction, communication, collaboration and the sharing of information. Instructors can use these tools to select and adapt teaching strategies that are suitable for encouraging student learning and to engage students in learning activities, which directly contribute to the learning objectives of a course. Moodle is one such highly flexible open-source learning platform with complete, customizable and secure learning management features for creating courses that extend e-learning education anytime, anywhere. Moodle's many features and applications give the opportunity to teachers to enhance the learning experience of the students. The interaction feature of Moodle makes it complete solution for proper and interactive online education, which can enhance the learning experience of students. However, Moodle is not great for discussions in forum format, for student collaboration, or for keeping track of questions and postings by students. For this reason, many instructors consider Piazza, an online cloud-based learning platform that ties into Moodle via Learning Tools Interoperability (LTI) and facilitates students working together to learn better. Piazza solves the problem of convenience and on-demand study help. It provides study-help to students through a collaborative environment. Students can come together to ask, answer, and explore under the guidance of an instructor.

**Keywords:** Moodle, Piazza, English Literature, online courses.

## **Introduction**

This presentation is based on my experience with teaching online and blended courses at Auburn University in the USA, at the University for Information Science and Technology (UIST) in Ohrid, and at the Pedagogical Faculty in Bitola. At Auburn University I taught two literature courses, *World Literature from the Beginning to the Renaissance* and *World Literature from the Enlightenment to the Present*. At UIST I taught a course on *Technical Writing and Communication*. At the Pedagogical Faculty in Bitola I taught two courses as a Fulbright Professor, *Introduction to English Literature* and *Modern British and American Literature*. I am also currently developing an online course titled *Digital Humanities* for Euro-Balkan University in Skopje. All of these courses are now ported onto a personal web server at <http://moodle.pelister.org>. (see **Figure 1**).



**Figure 1. Partial list of courses.**

In general, the literature courses are designed to enhance the student's ability to read, interpret, discuss and write about some of the most significant texts in British and American literature. The readings, discussions and activities are designed to create a learning environment that emphasizes the development of critical thinking, the importance of understanding context, the process of engagement with other learners, and the facilitation of reflecting and acting on reading materials.

In the courses we explore the usefulness of cultural and historical relativism, a particular kind of critical thinking in which phenomena are analyzed in light of the social, cultural, and historical contexts. The readings challenge our assumptions about how the world works and give us a greater appreciation for human and social diversity. Students learn to appreciate human social and cultural diversity over time and across space.

A series of activities during the course encourage students to understand and apply the course material by interacting constructively with each other. The goals of each of the courses are:

- To develop a general understanding of the major literary and cultural periods;
- To practice formal analysis in discussion and writing;
- To learn to situate literary texts within their proper historical and cultural frameworks;
- To become more effective and confident writer;
- To write formal analysis of literary works;
- To become active participant in a dialogue about literature;

### **My Student-Centered Statement of Teaching Philosophy**

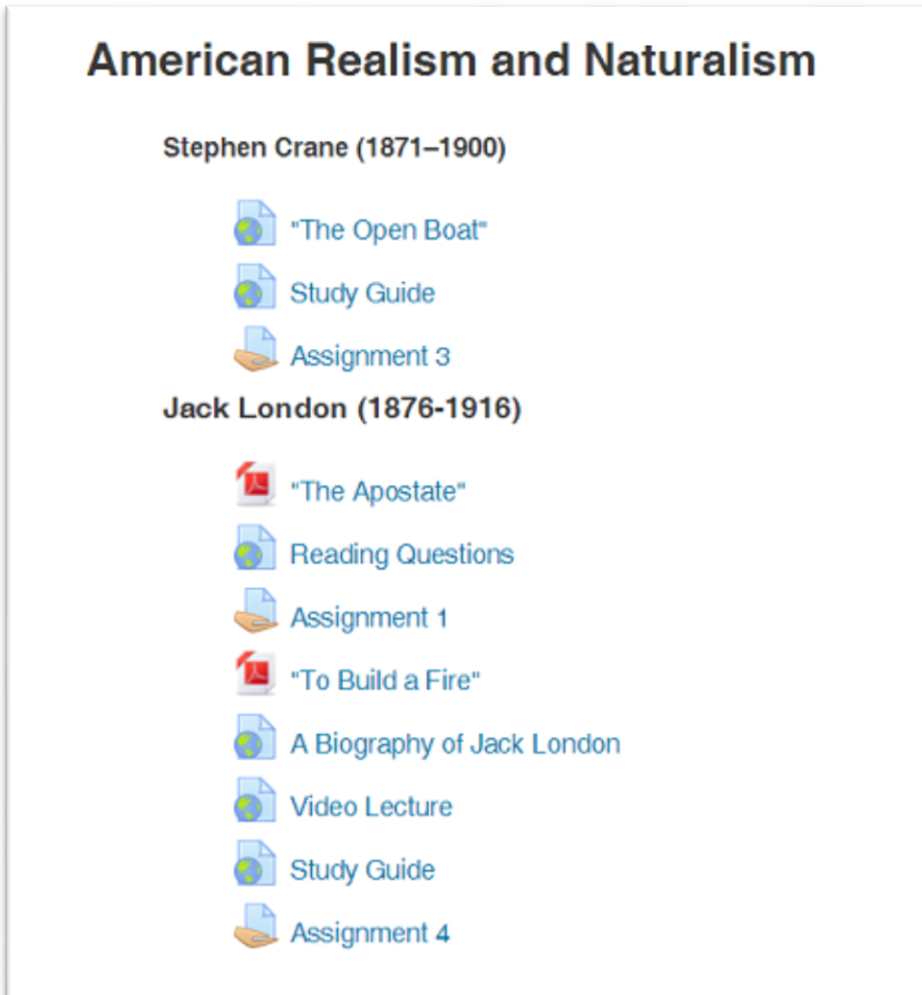
In each of my classes I highlight my expectations for my students in relation to my philosophy of teaching. I define clearly my role in the course and the learning process, and I articulate my philosophy of teaching in the syllabus to provide guidance and direction to the students.

My philosophy of teaching can best be described as a philosophy of learning. I consider the course to be an equal collaboration between the students and me. As such, it is my responsibility to be an effective instructor; this means that it is my job to monitor student learning and adjust my teaching strategies in response to the pace and depth of student understanding of the course content. But as with all successful collaborations, my involvement is only half of the equation. What students will gain from the course depends upon their investment in learning. Learning relies upon the interaction between students, me and the course material; thus, it is their investment in this interaction that will drive their mastery of the course material. As we progress through a course, I utilize a range of instructional strategies to target the abilities and preexisting knowledge that each student brings to the course. I strive to create interactions which foster interest and understanding for each student. In exchange, I expect students to invest full effort in all learning activities, engage in the course material and apply themselves to a deeper understanding of the course material.

### **Course structure**

Each literature course is divided into a series of topics, and the learning activities for each topic include the following (see **Figure 2**):

- A literary work, or works that students are required to read. All of the required readings are located online.
- A list of helpful and relevant online resources that help students understand and appreciate the literary work.
- Lecture notes (usually PowerPoint presentations) produced by myself or by professors at other institutions that outline the most important aspects of the literary work.
- Study and discussion questions related to the readings.
- An assignment related to the readings that students need to complete and turn in at the completion of each topic.
- A posting to a **Forum** on the current topic.



**Figure 2. Sample from Modern British and American Literature**

In developing these courses my focus was on implementing sound student-centered learning strategies and approaches, which are intended to address and facilitate the distinct learning needs of individual students. Student-centered learning is broadly based on constructivism as a theory of learning, which is built on the idea that learners must construct and reconstruct knowledge in order to learn effectively, with learning being most effective when, as part of an activity, the learner experiences constructing a meaningful product. The student-centered forms of instruction give students opportunities to lead learning activities, participate more actively in discussions, design their own learning projects, and explore topics that interest them. The student-centered approach to learning can be summarized into the following elements (cf. Lea et al, 2003):

- The reliance on active rather than passive learning;
- An emphasis on deep learning and understanding;
- Increased responsibility and accountability on the part of the student;
- An increased sense of autonomy in the learner;
- An interdependence between teacher and learner;
- Mutual respect within the learner-teacher relationship; and

- A reflexive approach to the teaching and learning process on the part of both the teacher and the learner.

Thus, student-centered learning focuses on learning outcomes which enable genuine learning and deep understanding. It is characterized by innovative methods of teaching which aim to promote learning in communication with teachers and other learners and which take students seriously as active participants in their own learning, fostering transferable skills such as problem-solving, critical thinking and reflective thinking. (ESU, 5).

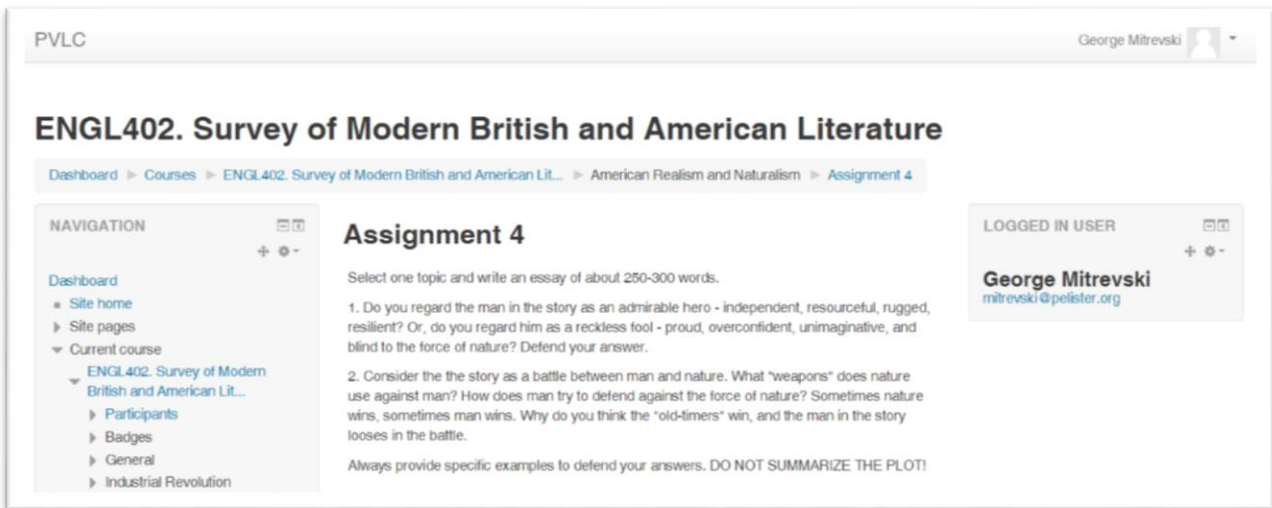
### **Why Moodle?**

As I opted for a social constructivist pedagogy (Moodle, 2012) where students are active and collaborative learners, and they are responsible for much of the curriculum that is covered in the course, I selected Moodle as the learning management system that best exemplified this approach. This LMS promotes creativity, critical thinking, problem solving and above all collaboration and the ability for students to express and share alternate points of view.

Moodle has pedagogical advantages since it was built in accordance with the teaching approach which emphasizes the construction of knowledge through active and interactive learning. The design of Moodle is based on socio-constructivist pedagogy. This means its goal is to provide a set of tools that support an inquiry and discovery-based approach to online learning. Furthermore, it purports to create an environment that allows for collaborative interaction among students as a standalone or in addition to conventional classroom instruction (Kotzer & Elran, 2012). Moodle can be used to share digital resources and also be used for interactive activities. It is designed with the social constructivism of learning, it offers a lot of useful tools such as wikis, forums, chats, blogs, and workshop so that teachers can apply different formats of social interaction and collaboration to their teaching. This means its goal is to provide a set of tools that support an inquiry- and discovery-based approach to online learning. Furthermore, it creates an environment that allows for collaborative interaction among students as a standalone or in addition to conventional classroom instruction. This encourages students to add to the total course experience for others.

In learner-centered instruction, addressing learner interest can be important to a student's academic development. (Tomlinson et al, 10). That is why in my courses I include variety in assignments so that students write on topics that are of interest to them. Interest-based study is linked to motivation and appears to promote positive impacts on learning. Modifying instruction to draw on student interest is also supported by theory and research as a means of enhancing motivation, productivity, and achievement. Questions and tasks that are interesting to students are more likely to lead to enhanced student engagement with the task.

Below is an example of a written assignment (**Figure 3**), where students are given a choice of topics for a written assignment. In other instances, students have a choice of five or more topics, and often they are given the option of suggesting their own topic for a written assignment.



**Figure 3. Sample written assignment.**

Based on theory and research, wikis are one activities that is truly in line with the idea of social constructionism as it allows for collaboration; the students are creating something for others to see and they can observe what others are doing. A portion of the final grade is allocated to collaborative activities. This is largely through participation in wikis and interaction on forums. Again, Moodle grading systems provide a good base for assessing collaborative activity.

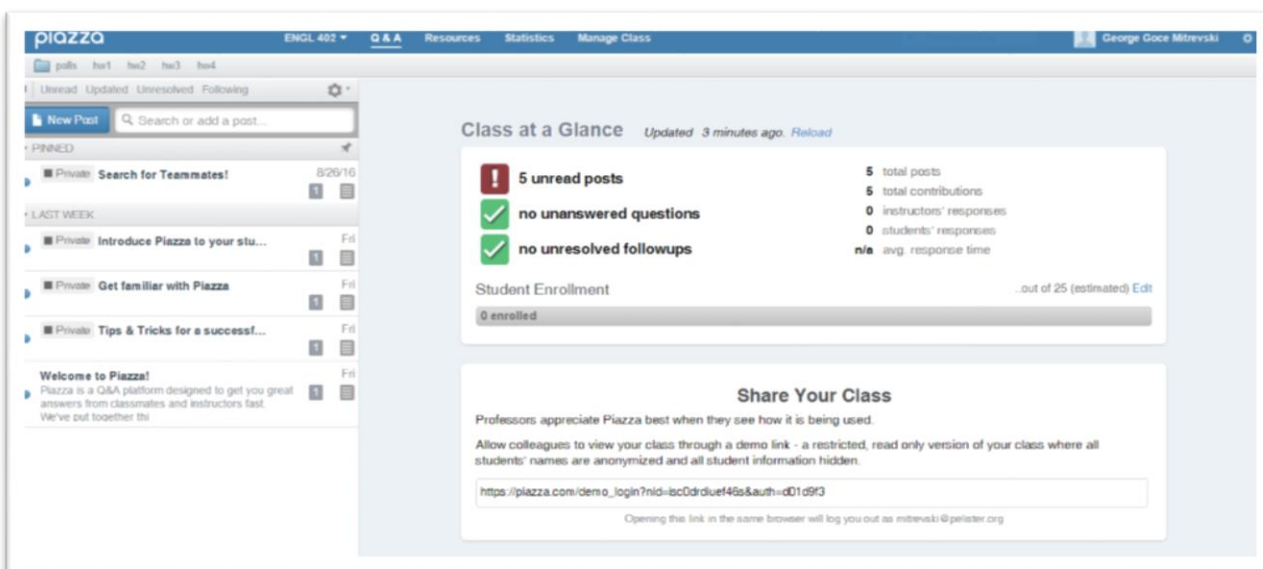
Surveys are regularly undertaken of students about the effectiveness of Moodle as a learning management system in achieving aims of the lectures and courses.

### Why Piazza?

Piazza is an online platform that facilitates interaction among students and instructors in an efficient and intuitive way. Piazza is a discussion tool that is separate and distinct from Moodle. It is designed to be a centralized place for instructors to conduct all of their class-related communication, and it can be used as a forum-based course space. Questions and answers on Piazza are community-edited. Each question has a students' answer that students can contribute to, and an instructors' answer that instructors can contribute to. Since Piazza is a completely separate tool with no relation to Moodle, it includes features that replicate existing Moodle functionality, such as the ability to upload course documents.

Some of Piazza's features include (**Figure 4**):

- ability to post class files and resources, such as a class syllabus;
- polling features;
- communication with whole class or privately with individual students;
- ability for instructors to endorse correct answers;
- anonymity options;
- "wiki-style" collaborative editing;

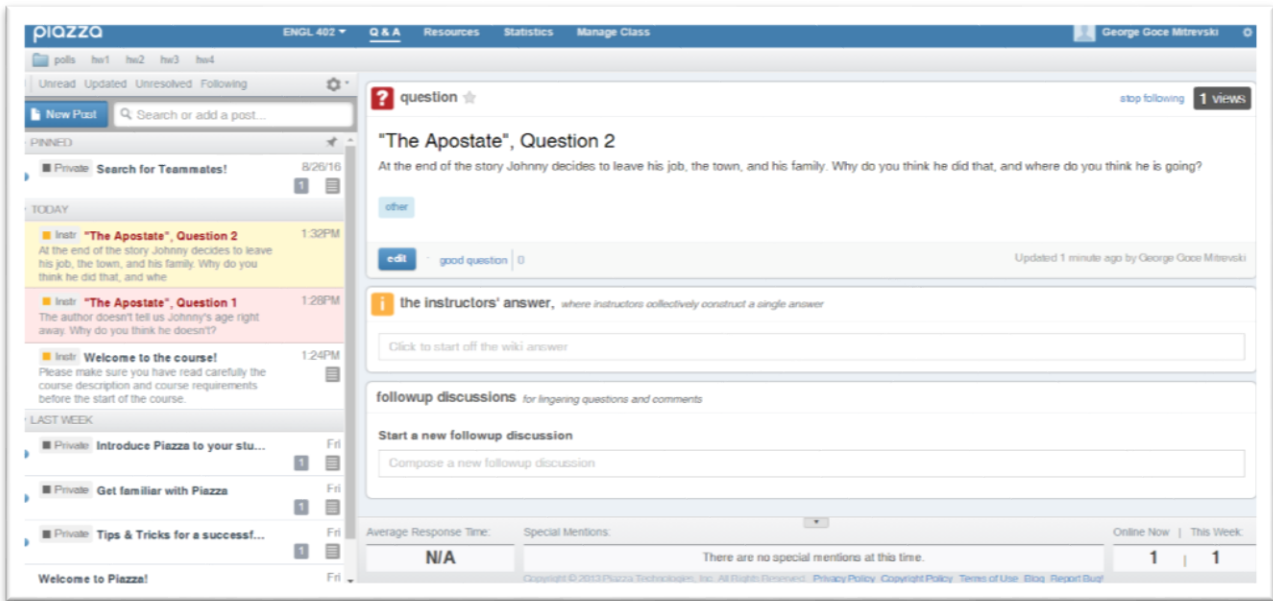


**Figure 4. Front end view of Piazza.**

Piazza's platform is specifically designed to speed response times. The site is supported by a system of notification alerts. All activity happening on Piazza is pushed to users in real time – students see new posts and updates as soon as they happen, and the average question on Piazza will receive an answer in 14 minutes. In Piazza the instructor can answer students' questions once for all students to see, students can engage with classmates in online discussion, the instructor can conduct polls to get a sense of where students stand. Responses are color-coded, so students can easily identify the instructor's comments.

Questions and answers on Piazza are community-edited – a student can edit another student's question. An instructor can edit any student question and answer to a question. On Piazza, the instructor can view detailed class participation information to learn more about the students. The student participation report lets the instructor see which students frequently ask questions, answer questions, or simply read posts.

I always tell my students that I will not answer questions by email (where other students cannot benefit from my response) and will only answer questions on Piazza. I encourage students by letting them know that I will be monitoring and endorsing student participation, and I provided a rubric explaining how I would grade their contributions. Every week, each student is expected to reply at least once to one of the discussion questions posted and reply to another students' responses at least twice. **(Figure 5)** Students are also free to post their own discussion questions. My students often raised topics that I had not planned, and that leads to great further discussions.



**Figure 5. Example question postings in Piazza.**

To earn the points for online discussion, students have to post something substantive. This could be a class related news item they found, comments on course material or reflections on each other's posts. One popular use of Piazza has been to ask questions about course activities, quizzes and exams. Piazza's search functions also make it easy to find posts on a certain topic, or list all of a single student's posts when it is time to grade their activity.

Piazza can replace the traditional classroom e-mail list as well as help the instructor respond to student questions faster.

Research has shown that using online discussion forums for class or group discussions is a great way to enhance communication in an online course environment, or to augment conversations within a face-to-face class. Forums are often the main tool used by class participants to exchange ideas, as well as enable participants to have asynchronous discussions, i.e., discussions where the participants are not necessarily present at the same time.

## Conclusion

Common amongst Moodle and Piazza is the importance of collaboration – both for students and for their learning institutions. Moodle has been shown to be a highly suitable learning management system to enable this collaboration and provides opportunities for further development. (Paynter, Mark and, Bruce, Neville, 38). These two platforms help students develop higher level critical thinking skills through direct engagement with research literature and primary sources. Students develop arguments through observations and engaging in dialogue with fellow students, their faculty member, and, often, with outside experts. The use of an online forum facilitates student understanding of course material, decreases student reliance on instructor assistance and increase peer collaboration.



Moodle and Piazza have become part of the pedagogical framework in my courses. They reinforce the constructivist philosophy of learning which concludes that a cooperative learning environment based on shared experiences toward solving problems enables students to actively contribute to their own knowledge development, rather than rely on the passive uptake of information through instructor led one-way lecture. (Pop, 2011).

## **Bibliography**

- Borko, H., Mayfield, V., Marion, S., Flexer, R., & Cumbo, K. (1997). Teachers' developing ideas and practices about mathematics performance assessment: Successes, stumbling blocks, and implications for professional development. *Teaching and Teacher Education*, 13, 259-278
- Kop, R. (2011). The Challenge to Constructivist Learning on Open Online Networks: Learning Experiences during a Massive Open Online Courses. *International Review of Research in Open and Distance Learning*. 12(3), 19-37.
- Kotzer, Shulamit, and Yossi Elran. (2012). Learning and Teaching with Moodle-based E-learning Environments, Combining Learning Skills and Content in the Fields of Math and Science & Technology. *Proc. of 1st Moodle Research Conference, Heraklion, Greece*. 122-31. 14 Sept. 2012.
- Lea, S. J., Stephenson, D. and Troy, J. (2003) Higher Education Students' Attitudes to Student-Centred Learning: Beyond Educational Bulimia. *Studies in Higher Education*, 28(3), pp. 321–334.
- Moodle. *Pedagogy*. Taken from <https://docs.moodle.org/31/en/Pedagogy>, retrieved on 24.08.2016.
- Paynter, Mark and, Bruce, Neville. (2012). Case Studies: Using Moodle for Collaborative Learning with University and Senior Secondary Students. *1st Moodle Research Conference Heraklion, Crete-Greece SEPTEMBER, 14 - 15, 2012, pp. 33-38*.
- The European Student's Union. (2010). *Student-Centred Learning—Toolkit for students, staff and higher education institutions*. Brussels, October 2010.
- Tomlinson, Carol Ann, Catherine Brighton, Holly Hertberg, Carolyn M. Callahan, Tonya R. Moon, Kay Brimijoin, Lynda A. Conover, & Timothy Reynolds. Differentiating Instruction in Response to Student Readiness, Interest, and Learning Profile in Academically Diverse Classrooms: A Review of Literature. *Journal for the Education of the Gifted*. Vol. 27, No. 2/3, 2003, pp. 119–145.