

Project ALIEN

Kick off meeting minutes

Volos, Greece, June 20-22, 2018

Participants

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Partners presentation

The meeting started with the welcoming of all partners by the hosts Hariklia Tsalapatas and Olivier Heidmann from Greece. After the starting speeches by the Vice-Rector of the University of Thessaly and the Dean of the Engineering Faculty, the Project Coordinator Hariklia Tsalapatas gave a project overview and revised the meeting agenda for the following days.

Each partner had the opportunity to present its own institution and country and refer ways on how they are already implementing Active Learning strategies in their teaching approach and institutions. These presentations occupied the mornings of the 20th and the 21st of June.

Keynote speech

The afternoon of the 20th was marked by the keynote speaker Dr. Dimitra Euaggelou, Professor at the Pedagogics Department, from the Dimikroteio University of Thrace. The speech enhanced the importance of transforming teaching engineering and reflected on the subject as a way of learning, since Engineering promotes problem solving and decision-making competences.

The speaker started by emphasising the importance of engaging students in the active learning process — reinforcing the significance of gender inclusion — making them responsible for revealing what is learned and showing them how to unlearn inadequate information and/or processes. In this context of cooperation, that potentializes an autonomous mode of learning, interesting ideas may appear. That said, the learner changes from passive to active, capable of transforming an experience into knowledge. These skills take time to mature in all learners and to be developed in educational

environments. Something to have in mind is that people learn from all sort of ways and that's why we can't exclude passive learners. Both active and passive learners are crucial and need to be involved in Active Learning. Passivity is not a flaw.

For the act of learning to be successful, the keynote speaker also reaffirmed the necessity of having academics and other professionals from other fields such as Sociology, History, Education, etc. Equally important to bear in mind is that the organic contributions of failure are an important element of active learning and the learning process.

The last part of this keynote speech was dedicated to presenting different examples of active learning scenarios.

1st Workshop - Active Learning on ALIEN

After the keynote speech, the partners were divided into three groups to participate in a workshop session aimed at discussing the specification, design and development of the ALIEN platform.

Each group had to reflect upon the following questions:

- How do you think a software could support AL (particularly, PBL)?
- What features should that software have?
- Can you foresee challenges of using this kind of software?

Each of the three moderators, Hariklia Tsalapatas, Olivier Heidmann, and Carlos Vaz de Carvalho, also Project Coordinator, presented the conclusions to the whole group. From that presentation some features were registered as being important to be inserted in the platform:

- Should support the community and the features should be used by everybody, should be user-friendly with a great emphasis on the spirit of community and collaboration;
- Should allow users to access content related to the domains chosen. That said, can't be too generic;
- The target group of the community should be clear: teachers or students (or both) and what type of engineers (from all Engineering fields or just from a specific one);

- Each domain, depending on the target, should have a specific platform (starting from a generic data base);
- Work as a meeting point that provides solutions to the community;
- Include different strategies of active learning with different activities and adapt the community with that in mind (have an option to select which one);
- The platform should reflect the different stages of PBL and manage the learning process;
- Include team work support and extra functions, including communication systems and sharing of information, debates, discussion groups and video reactions.
- Should also include evaluation, applying digital systems (composed of multiple questions with the same level of difficulty):
 - Constant monitoring of results;
 - Also, a test to evaluate the learning experience and understand how the students see the experience, providing a more active evaluation and including peer review. Additional, the evaluation should include the reflection of students, written in a report.

Additionally, the platform should permit:

- Organization of teams to report problems.
- Students can produce evaluation content and problem creation for sharing purposes;
- Should have a list of types of PBL and find software that could help students — a template with multiple interfaces;
- Problems related to software development;
- Applying the same strategy with members from different areas and promote reflection — including the premise of “learning by failure”;
- Multidisciplinary approach and focus on problem solving;
- Explore the strategy of collective storytelling;
- Inclusion of automatic compiler to decide if the solution in case is correct or not. That would facilitate evaluation;
- Translation system in the back end and platform translation into English. Other languages could potentiate more users.

In terms of difficulties, it is advisable to be aware that:

- The platform can't be too difficult to use — it should be user-friendly;
- Having to create external platforms to accommodate the community (depending on the institution);
- Teacher training (if teachers have training in this area or are from a specific Engineering field, they might be able to do it alone, but if they don't, it can be hard for them and training should be provided);
- Should facilitate the transition for teachers (apply some similarities of other existent systems);
- There are different time zones when students are playing and therefore it becomes necessary to handle this issue when students are playing in teams from all over the world;
- Requirement specifications may be applied – who can give the authorization.

2nd Workshop – PBL Labs

On the second day of the meeting, there was another workshop focused on Active Learning, more specifically in sharing the experience of the partners in terms of applying Problem Based Learning to their educational contexts and to discuss what it may be required to install the PBL labs in each institution. Some partners do not have a specific space or institutional support, but are implementing:

- Collaboration strategies between students in classes;
- Other equipment like smart TVs;
- Educational platforms like Moodle;
- Video showcasing in classes.

Others already have spaces adapted or integrated options to facilitate the movement inside the university space.

One significant aspect is to search for guidelines about how to adapt the space to PBL, and partners from the United Kingdom and Estonia are going to search for that kind of information in their own universities to understand if can be used as a model or auxiliary template.

In terms of institutional support, it's important to be aware that some institutions may require authorization from their Ministry of Education in order to implement PBL projects; and the financial support towards buying the necessary equipment.

Focusing on the teachers, it is important to offer incentives as a way to motivate them like:

- Organisation of workshops about PBL;
- Provision of adapted start up content to the teachers - have some guidelines to show how to save time adapting what they already have;
- And instigate teachers to implement an interdisciplinary strategy.

In terms of space, partners agree that it's important to have flexible rooms to adapt to space limitations (indicated as a problem for some partners, specially, from Asian countries). Tables may be something dispensable, and the chairs movable to facilitate interaction. Screens should also be portable in order to adapt to space configurations, which may vary with the number of the students involved, and to be used in different university locations.

In terms of expected difficulties, 1st and 2nd year students may struggle applying PBL once they are still developing skills necessary to be active in their own learning process. Additionally, classes with a big number of students may provide challenges.

Partners revealed that the platform, discussed in the precious workshop, is something important in the development of the PBL Labs, once it may provide technical support.

Administrative issues

The presentation given by Jose Gutierrez in Brussels for project coordinators was presented for the benefit of the partners. Some of the important points include:

The budget is divided in two categories: unit costs and actual costs.

For ALIEN, actual costs include equipment costs as well as subcontracting costs related to evaluation and auditing. Given that the foreseen expenses are less than 25.000 in each category for ALIEN, the partners must follow the "best value for money" process, based on which they need to ask for three offers by providers and select the one with the best value. The partners must present to the coordinator the three offers and the winning offer. The coordinator will then forward the funds for making the purchase, if these are

in excess of the 25% already forwarded to the partners in the first installment. The partners must then present the invoice of the purchase to the coordinator.

The exchange rate to be used is the one for January 2018, because this is the month in which the coordinator received the first grant installment by the administrative authorities.

Unit costs include travel, costs of stay, and staff costs. For ALIEN, travel is related to project meetings. Expenses will be reimbursed through flat rates. For travel, the flat rate depends on the distance travelled, and is calculated using the Distance Calculator. For costs of stay, the cost is typically 120 Euros per day. Each person travelling may be reimbursed to the partner organization up to the number of days that is calculated as follows: the days that the meeting was held on plus two travel days.

For staff costs, the partners will be reimbursed based on flat daily staff rates. They will be reimbursed on days declared. The actual amount to be reimbursed by the administrative agency to the partner depends on the intellectual output addressed.

The partners have the right to move an amount that is less than 10% from one expense category to another without an amendment request. However, the project officer needs to be notified in advance via email. The partners may move according to this rule some funds from the equipment category to staff.

Unit costs are a “lump sum”. This means that independently of the manner that a partner will be reimbursed, the partner may create a pool of money to be deployed for purposes related to the project implementation. For example, if the partner actually spends a little less than the maximum reimbursed amount for staff costs, the partner may use some of the saved funds to covered travel costs in excess of the unit costs or equipment costs.

For staff costs, partners must provide the coordinator with timesheets and the joint declaration form foreseen by the administrative agencies. For travel costs and costs of stay they must provide boarding passes as well as documents proving that the travel took place (e.g. invoices, attendance lists, and more).

Closing activities

The last day, led by Hariklia Tsalapatas and Carlos Vaz de Carvalho, was dedicated to clarification about administration and financial management of the project, providing instructions about how to fill in forms and the legal aspects for obtaining

funding. It was also determined that the next meeting will be from the 9th to the 11th of January 2019, in Kuala Lumpur, Malaysia.