

ADAPT2JOBS - A SOLUTION FOR RAISING ACCOUNTABILITY AND PROVIDING PROJECT SUSTAINABILITY

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Abstract

Higher education has always been a conservative environment, where education providers have seen their institutions as nuclear, the curricula being decided single-handedly, without much interference from the outside. The past decade, however, saw unprecedented changes in at least two directions. The first one is the outcome of the economic crisis, which has risen the necessity of the collaboration between business and academia in order to provide young graduates able to adapt quickly to the labour-market requirements.

The other direction is related to the advent of new technologies. This obviously challenges the traditional learning space and asks for a dynamic, flexible and collaborative environment, where students are given the choice and can make decisions.

Adapt2jobs is a European-funded project, with a view to adapting teaching methods and academic curricula to the labour-market demands. Its aim is to follow the above-mentioned directions in higher education, by making use of the digital technologies, and by actively involving students in the decision-making process so as to assure relevance and quality of instruction. The commitment of the university is twofold: one to quality and the second to the job-market. While accountable to society to provide qualified, innovative and creative workforce, the challenge of the university is to maintain the balance between quality of instruction and market demands. To what extent are we teaching for the future? This is a question that only the students can answer; their assessment of our educational proposals is essential for a successful program. The benefit of the project is that the student is supposed to assess, make a decision and pass on his conclusions, becoming aware of his/her responsibility not only for his own career, but also for his peers'.

The project outcomes should be seen as benchmarks for developing and implementing improvements in the existing curricula. Students and employers become partners with teachers in the process of adapting teaching/learning methods to present-day labour-market requirements. Students involved in our project are encouraged to explore computer-based learning and, at the same time, to self-assess their progress by taking continuous-assessment tests and to measure their learning effectiveness by taking a final test. University-Business Cooperation concept has gained a lot of attention today because both parties are interested in providing highly trained graduates. In this sense, the project sustainability is firstly meant to establish a well-articulated framework, which can make this cooperation work. Secondly, teachers will contribute to the development of the project sustainability through their constant involvement in adapting the digitized content of the courses to the latest developments in the field and also, in promoting the blended teaching method among their peers. Thirdly, students are encouraged to share their learning experience with their colleagues, a new one to this ecosystem of education.

Keywords: Accountability, sustainability, digitized courses, ecosystem of education, quality of instruction, career preparation.

1 INTRODUCTION: CHALLENGING TRADITIONS IN HIGHER EDUCATION

Career preparation is a key word and concern nowadays. The public perception upon higher education has undergone radical changes, academic achievement is no longer seen as a guarantee to success or to a well-paid (if any) job. This new perception poses serious problems to higher education. On the other hand, the lack of specialists, holders of college diplomas and a solid background, may become soon an acute social problem. So, young people are more and more in the position of providing for themselves and, sometimes, for their families, while training for a specialization required by the job market and for personal development. This new social trend affects higher education, which finds itself often unprepared or behind schedule to face the fast changes in the structure of the job market.

National economic challenges have an impact both on employability and on the approach of higher education. As change and innovation have become two prerequisite concepts for higher education to survive, while trying to maintain academic rigour, the transition to new approaches and methods is only natural. Do we actually need a new model which might be able to bring young people back to universities, or to academic instruction, and make higher education meaningful for them, and remove this sense of an extra-burden in their lives? We think so!

Novelty, transition and reform is nothing new in education. A wide range of works related to education has been elaborated dealing with the need for higher education, in particular, to reinvent itself. In 2008, starting from the “social learning” concept fostered by Brown and Adler, Cormier proposed a model of learning “in which a community can construct a model of education flexible enough for the way knowledge develops and changes today by producing a map of contextual knowledge.” [1]. In this model “curriculum is not driven by predefined inputs from experts; it is constructed and negotiated in real time by the contributions of those engaged in the learning process” [1]. Brown and Adler raised the issue of the impact of the new technology on all domains of life, “The most profound impact of the Internet, an impact that has yet to be fully realized, is its ability to support and expand the various aspects of social learning” [1]. So, while academic quality has traditionally been the prerogative of the expert to determine and measure, these new ideas about the interference and pro-active attitude of the community in the elaboration of the curriculum is a serious challenge worth considering. Higher education has been accustomed to assume responsibility for generating and conveying knowledge to society, in a basically one-way process, for so many years. Now, the social learning concept, concerning the interference of the community in decision-making for the contents of knowledge conveyance is an issue that must be dealt with objectivity, flexibility and responsibility. The need for a close connection between academic training and the job market is a fact nowadays, but while the interference of the community and the requirements of the job market are usually on a short-term, and considering the immediate needs, the university aims at preparing for long-term, providing learners with comprehensible competences which might enable them to adapt to the rapid and, sometimes, radical changes in the society or of the job market, thus maintaining their chances to employability.

The project Adapt2jobs has considered the above-described aspects of the new context of higher education and has launched a proposal of a new teaching/learning model, drawing from the benefits of blended learning and flipped classroom models, and adapting them to Spiru Haret University’s own objectives and views.

Run with the help of European funds, Adapt2jobs, during its eighteen-month implementation, aims at bringing together the traditional academic curricula, the labour-market, and the new learning tools available nowadays due to the advent of new technologies. Seven traditional courses have been revisited and revised (*Budget and treasury*, *The study of the market conjuncture*, *Contemporary technologies in architecture*), or even written from scratch (*International finances*, *Strategies of communication for personal development*, *The management of cultural projects*, *Entrepreneurship and visual communication*), in order to match higher education curricula with the present-day labour-market requirements. Prior to this step, several meetings with important business representatives were organised, so that we might get a clearer picture of what the employers want from their potential employees. Once the courses available in a traditional format, they have been digitized by ICT (Information and Communications Technology) experts, our partners in the project, helped along by a group of experienced pedagogy experts. Following that, 210 students have been enrolled at one of the seven courses and have been asked to “pilot” them, by completing all the stages they usually complete when attending a “real” course. What is more, we have actively involved students in the making of the next generation of academic courses, by having them share their experience, make suggestions, and spot the weak points of the digitized courses. This invaluable feedback will be exploited once the project over, providing project sustainability through students’ responsibility and accountability.

2 ACCOUNTABILITY AND SUSTAINABILITY - PROJECT KEY OBJECTIVES

Accountability and sustainability are two interrelated concepts, widely debated in the academic environment for over thirty years, since the issue of “the time for results” was raised in the ‘80s. Starting from the dictionary definition of *accountability*: “an obligation or willingness to accept responsibility or to account for one’s actions” [2], every higher education institution has attempted to define the two concepts in relation with its own mission and objectives, answering the following questions: Who is accountable *to whom*, for *what* purposes, for *whose* benefit, by *which* means, and with *what* consequences? [3]. The university is no longer accountable only to itself and to its peers, but

also to the society as a whole, and to its students. So, accountability is both internal and external. On the other hand, accountability may be fiscal, ethical and curricular. Spiru Haret University is a private institution, self-funded, therefore not accountable to public authorities and budget from this point of view. The university has a Code of ethics which governs the work and interhuman relationships between the participants to the educational process; this code is acknowledged by academia and students equally and strictly observed. From the point of view of the curricula, accreditation is often invoked as a source of accountability to society. But the accreditation bodies usually evaluate higher education institutions according to “one-size fits all” standards, that is why all the universities provide for very similar - including in names - programmes. This may be a source of confusion for the candidate to higher education: which program is better? Who can vouch for one programme or another, as long as they are all accredited, therefore deemed as valid and reliable? At Spiru Haret University, we think that accreditation is a prerequisite, it is a minimum requirement, it is not a (or, the only) goal to attain. Accountability is, in our opinion, actually delivering what we promised, making sure that the students have acquired the skills and knowledge demanded by their specializations, transparency in decision-making processes and being able to demonstrate that decisions derive from specific facts.

The Association of University Leaders for a Sustainable Future (ULSF) defines *sustainability* as implying that “the critical activities of a higher education institution are (at a minimum) ecologically sound, socially just and economically viable, and that they will continue to be so for future generations” [4]. Since teaching and research are the fundamental purposes of universities, in general, sustainability has been a second top priority in our project, together with accountability, with a particular focus on: enhancement of understanding, additional support provided for students in their learning process, flexible time for teaching/learning, developing opportunities for the students involved in the project to make their own decisions related to the learning process and to the evaluation of the course design. In this model of teaching/learning, the students are ‘decision-making authority’ as well as ‘actors’. They decide what is relevant from the content of knowledge for themselves and for the future generations.

3 STUDENTS’ ACCOUNTABILITY - A BENEFIT OF THE PROJECT

The purpose of the project is to raise quality in higher education by better correlating curricula with the labour-market requirements, and by facilitating access to academic studies via the new e-learning technologies. We believe, however, that these two directions should be supplemented by directly involving students in the decision-making process, at least in what concerns certain aspects of the courses. The benefit of the project is that the student is supposed to assess, make a decision and pass on his conclusions, becoming aware of his responsibility not only for his own career, but also for his peers’. 210 students have been enrolled at the seven digitized courses developed through the project (*Strategies of communication for personal development, The management of cultural projects, Budget and treasury, International finances, The study of the market conjuncture, Contemporary technologies in architecture, Entrepreneurship and visual communication*).

In order to turn up the volume of students’ voices, we have designed four online surveys by means of which we can collect their opinions, their assessment and their proposals regarding the courses. The first survey is available on the Home page of Adapt2jobs and is public - anyone accessing the portal may fill it in. It asks general questions such as the importance of academic training for one’s career or the subject’s prior experience with computer-mediated learning. The other surveys, available only for the enrolled students, ask more specific questions and investigate the student’s reaction to blended learning. Before embarking upon the piloting journey, the students’ prior experience with computer-mediated learning and their expectations regarding the digitized courses are assessed, via a general evaluative survey. After the piloting stage is over, students are asked again to complete a specific evaluative survey aimed at measuring the effectiveness of the courses.

Last but not least, at the end of the piloting activity, students are asked to assess the courses and make suggestions regarding the scientific content of the digitized course they have been enrolled at, their delivery format, as well as the assessment tests they have to take.

So far, we have collected 135 responses, which allow us to draw some preliminary relevant conclusions. Out of the three above-mentioned coordinates, students have mainly found weak points in the digital format of the courses. This has come as no surprise, since the preliminary data gathered by the other surveys have indicated that students are familiar with the use of computer-based technologies applied to education. Suggestively dubbed “digital natives” [5], the generation we address, now in their early twenties, have grown up with the Internet, so they are wizards at the configuration of the virtual space. As for their belongingness to a certain field of study, we have received the most pertinent suggestions from the students enrolled at the architecture courses. Some of the students’ most frequent remarks regard the following aspects:

- a full screen option, or at least a zoom option should be available - this would make reading less tiring;
- the system should allow students to highlight keywords and concepts of their own choice (although the digitized courses include highlighted words and concepts, as agreed upon by the course instructor together with the experts in pedagogy, students still feel the need of customizing their learning process); equally, the system should allow students to make notes on the course and save them for future revisions;
- the key information should be in upper case format, which would have a better impact on the student’s visual memory;
- a graphic with students’ progress should be available for each enrolled student, together with the steps they still need to take in order to complete the course - this will enable students to better organize the time dedicated to learning;
- more interactive tools should be implemented on the portal, such as a chat section, which would allow students to interact with their peers and course instructors in real time;
- some of the most used buttons, such as the forum, should be more visible, so that a “fresher”, who accesses the portal for the first time, would not be discouraged;

Other less frequent suggestions are related to various options the portal could offer, such as a PDF-download option for the courses. Few students recommend that the interface should be more user-friendly, with simpler tabs and more clear-cut sections. Because this survey is not anonymous, we have been able to identify this small group as being made up by more mature students, who are not as accustomed with the new technologies as their younger peers. There are also divergent propositions, which show that each individual has his own learning typology and, therefore, learning needs. Besides that, each course has its own specificity, so these conflicting views on the same problem come as no surprise. If some students consider that there is too much information per page/slide, others suggest that a denser page would make learning more effective.

The suggestions regarding the scientific content of the courses are less substantial, and connected to the digital format more often than not. Many students recommend that the external hyperlinks should be limited or even eliminated, because they lead to internet pages from which it is difficult to select the relevant information for the course. Instead, the ideas and/or the representative fragment should be integrated into the course. Another suggestion is to use in-text pop-ups rather than external hyperlinks. “Video” is a word which occurs frequently in the students’ proposals. Many plead for the insertion of video files inside the course, or at least a video tutorial for each digitized lesson of the course. Others suggest that PowerPoint presentations would also make the course more appealing. A number of five students consider that audio versions of the courses should be available on the portal, so that they might listen to the lectures while driving or while doing other activities which allow them to pay attention to the recorded lecture. One student thinks that a short summary at the end of each lecture would improve his learning effectiveness.

The assessment part of each course includes: three or four intermediary assessment tests, one for each digitized “lesson” of a course, one final test and one individual project, of students’ choice, which further develops a topic from the course. During the piloting stage, students have been allowed to take the tests for as many times as they want, the emphasis being on the final project, which requires more time and documentation. The system does not allow them to move on to the next lesson unless they have completed and passed the intermediary test. Generally speaking, students have made few suggestions regarding the individual project - they consider that not having a certain list of topics imposed on them is a good thing, which encourages them to be creative and, to a certain degree, to be less constrained. The most important comments regarding the project refer, again, to the digital implementation of the traditional courses. Students say that there should not be a limited number of characters per project, while they should be allowed to insert texts of whatever length. Although the

project template allows them to upload longer texts or images, under the form of attachments, this facility should be replaced with in-template insertion option. A particular case is represented by the projects of students enrolled at the two architecture courses (*Contemporary technologies in architecture, Entrepreneurship and visual communication*). Because of the specificity of their projects (many graphics and images inserted and less text), a special topic has been created for them on the Forum section, where they can upload their projects. This is, indeed, one of the weak points of the learning platform, one that has already been brought to the attention of our ICT partners, who will come up with a solution for the future generation of students enrolled at the these digitized courses.

As far as the assessment tests as such are concerned, students suggest that they should be allowed to take the tests only once (a feature that will be implemented at the end of the piloting stage by the ICT experts), and they should be able to see their score after each test. Moreover, some students suggest that a hierarchy of students' answers should be made public on the portal, so that each student may know his position compared to the others', which would increase competition amongst students. Improvements to the content of the tests have also been suggested, such as the inclusion of multiple-choice questions, of practical applications, and of open-answer questions, which would better check learning effectiveness. Questions requiring answers that include numbers/years/percentages should be ruled out because they do not assess understanding but memorization by heart, so they are irrelevant.

The students' feedback points to a somehow expected conclusion: while the traditional form of the courses has little, if any, improvements to be made upon, the digitized format, a tool still in its budding years, can be brought to a better, more efficient, more user-friendly form in the future. It goes without saying that being helped along by young people's opinions, for whom the virtual space is the air that they breathe, has been a great advantage. In the months to come, after the project has been over, we intend to put into practice the students' suggestions, so that Adapt2jobs might become a better learning ecosystem, where the student feels more at ease. This, of course, could not be done without the valuable feedback from students, as we have tried to partially outline above. Holding students accountable and responsible for the courses they attend, the things they learn and the way they learn them, means that a step forward has already been taken. By bringing into the picture the labour-market requirements, as outlined by employers, and by making adjustments to the curricula in order to fit these demands, we hope to bring together students, professors and employers as decision-making factors in the process of preparing higher education graduates who will be successful on the labour market.

4 A MODEL OF PROJECT SUSTAINABILITY

The overall benefit of running such a project comes from the impact generated on the teaching staff, on current and prospect students, as well as on the labour-market representatives, with whom we have been cooperating during the implementation of the project. The project's outcomes (methods, techniques, and tools) have been designed in order to support computer-based learning in terms of effectiveness and accessibility. All the instruments created during the project implementation have been tested by a relevant number of students.

The testing process has been designed to reproduce all the steps of the teaching-learning process on a smaller scale: students have been granted online access to the digitized courses; their access to each sequence of the course is conditioned by the completion of the prior sequences; the scientific content is well structured and articulated by highlighting the most relevant concepts. Hyperlinks have been created inside the scientific content in order to explain, to provide details, to underline what is important to be stored as learning results. Fig. 1 shows one slide of *The study of the market conjuncture*, with certain highlighted elements.

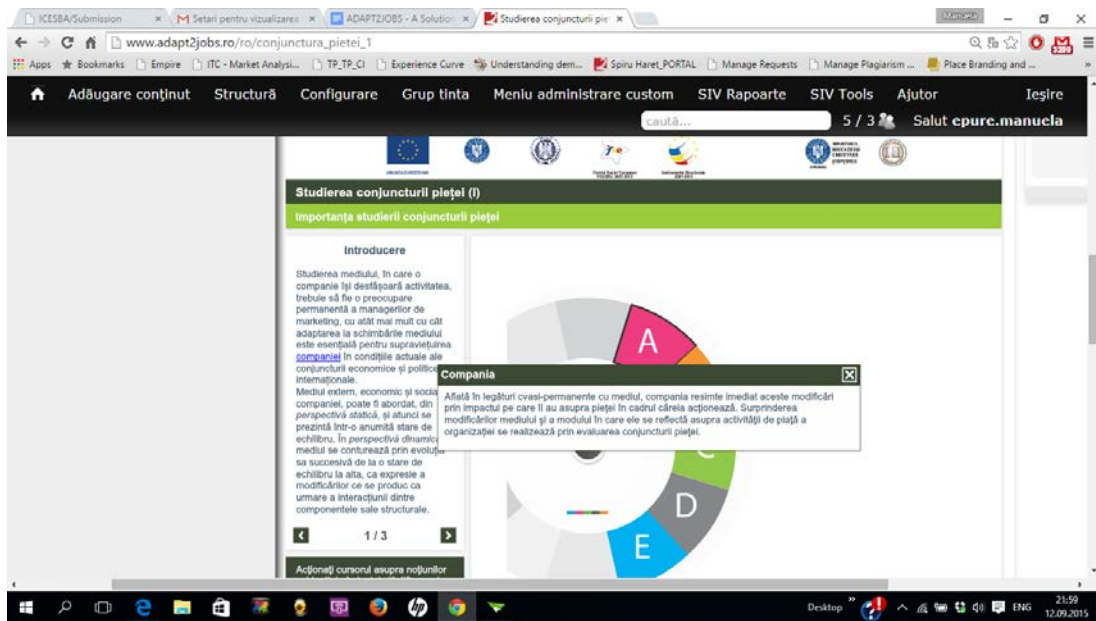


Fig. 1 A sequence from the course *The study of the market conjuncture*

Furthermore, in order to enrich the learning experience, each frame (or page) of the course contains a special area (60-65% of the total visual area) specially designed for interactivity. This area may contain, depending on the course, exercises, schemes, quizzes, students being encouraged to explore, to identify which elements become active, and to discover the tasks required to be completed (Fig. 2).

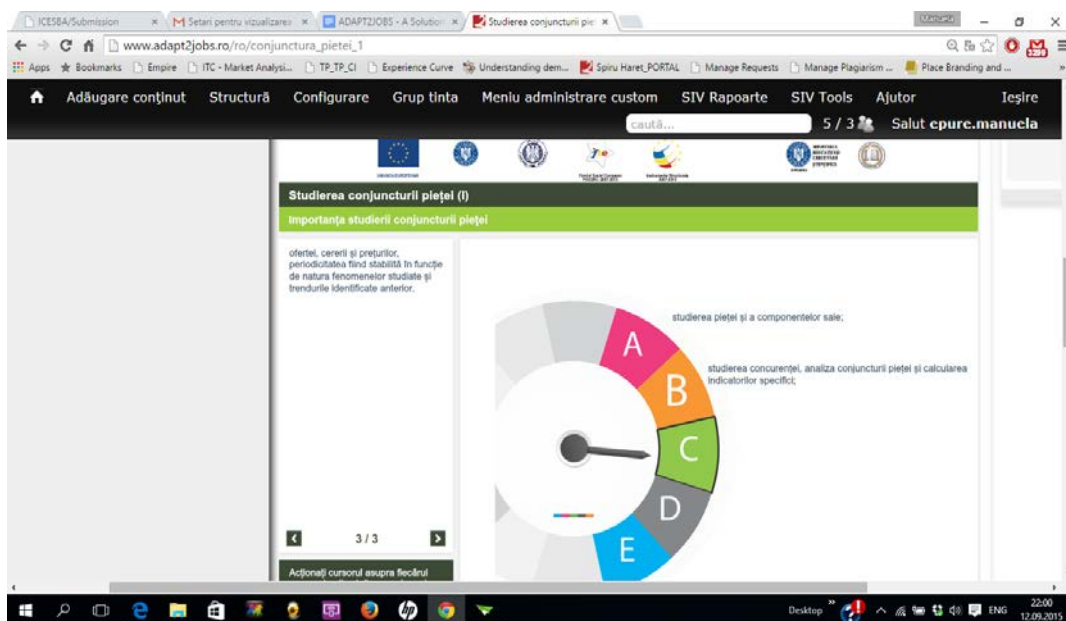


Fig. 2 Interactivity area inside the digitized course

This experience is perceived differently by students, and a strong link has been identified between their learning profile and their learning effectiveness when they are engaged in piloting.

The assessment component of the digitized courses is represented by two types of requirements: intermediary tests at the end of each lesson, and a more elaborated final test at the end of the course (Fig. 3).



Fig. 3 A sample of an intermediary assessment test taken from *The study of market conjuncture*

We are now approaching the end of the implementation period and, encouraged by the results achieved so far, the team of experts have participated in a brainstorming session organised to explore the project's sustainability paths in the short and in the long run. Our team is made up of experts who come from various fields: pedagogy, ICT, economics, foreign languages, architecture, social sciences, with much experience in higher education. The most relevant brainstorming outcomes are:

- the courses should be tailored to students' learning profile;
- the learning experience should be challenging and fun;
- the visual elements and the interactivity are extremely useful to keep students focused and to attract their attention and make them curious;
- good learning results are possible only if learners are convinced to stay connected at least 50 minutes per session;
- learning effectiveness should be constantly assessed because the students' learning profile from one generation to another is constantly changing.

In line with the brainstorming outcomes, we have set up a strategy and an action plan for the next academic years in order to ensure project sustainability. The starting point of this endeavour has been the identification of the main variables and the relations between them, as they have been established during the project implementation. So far, three important variables have been directly involved in project sustainability: teachers, students and employers (Fig. 4).



Fig. 4 The gear-box mechanism which will support project sustainability

Teachers are the initiators, they act as a start-engine variable, being the first component in the chain able to identify what should be changed, how the new technologies can support the learning process, which are the students' strong points and their vulnerabilities, what parts should be improved or redesigned in order to increase the students' learning effectiveness.

Students are the transmission belt in the gear-box, they acquired knowledge from teachers, and their main purpose is to apply what they have learnt to practice. Being all the time between school and employers, students should define their professional path in their early years of study, remaining constantly on the lookout for what the labour market needs. Most of them are interested in taking internships, which last between 6 months to 1 year, and then they come back to school to finish their studies. Apart from internships, they also look for new challenges, which may boost their self-confidence. They are equally interested in acquiring new skills and competencies to increase their competitiveness on the labour market.

Employers are the final link to transmit the desired "speed" to our "engine" in order to adjust it to the real demands of the labour market. Employers are the main beneficiary of our "academic products", and this is how society will validate our academic work. Are these graduates able to perform when faced with the constraints and demands of the real world? Are they competitive enough in order to be called for job interviews and be finally hired? Are they prepared to adjust rapidly at their workplace requirements?

Many questions to be answered, some of them really difficult, but what is important is to work together from the beginning with employers in order to achieve our main goal: to run study programmes tailored to the employers' needs, which will increase students' employability. In this respect, our team of experts find it useful to establish a fully functional framework in order to set up and develop university - business cooperation. Building on solid grounds, taking into consideration all the employers' suggestions means to have as central point the delivery of academic programmes in terms of quality standards. Nevertheless, the project sustainability is closely related to the impact generated in the short and in the long run (Fig. 5).

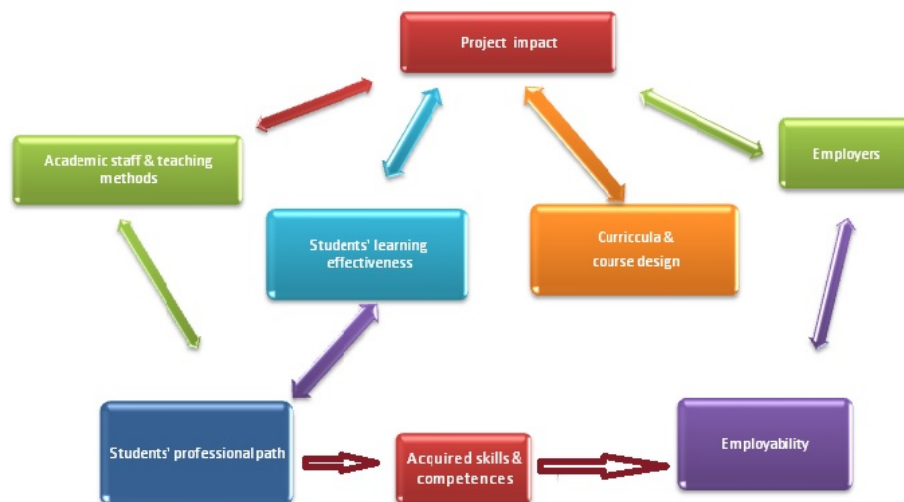


Fig.5 The project impact and the sustainability model

We intend to begin the assessment of the project impact as soon as it has ended. We are mainly interested in the impact on four important areas: the academic teaching staff and their teaching methods, students' learning effectiveness, curricula and course design and employers' perception and feedback. The assessment of the impact will look at the perceptions, the attitudes towards computer-based learning, the desire and the acceptance of change, the expected improvements in learning effectiveness, the employers' needs and expectations, the professional paths of graduates, and other several variables which measure the direct and indirect impact. A series of indicators will be constructed and a mechanism for their yearly calculation will be set in place. The impact study will be based on post-implementation surveys, through which we will collect data from the "actors" involved in the project. After analysing all collected data, we will be able to identify other important factors, which will maximize the impact.

5 CONCLUSIONS

The project outcomes should be seen as benchmarks for developing and implementing improvements in the existing curricula. Students and employers become partners with teachers in the process of adapting teaching/learning methods to present-day labour-market requirements. The project sustainability is firstly meant to establish a well-articulated framework, which can make the university-business cooperation work. Secondly, teachers will contribute to the development of the project sustainability through their constant involvement in adapting the digitized content of the courses to the latest developments in the field and also, in promoting the blended teaching method among their peers. Thirdly, students are encouraged to share their learning experience with their colleagues informally, by word of mouth, and via Adapt2jobs learning platform, which we intend to turn into an interactive environment which can shelter various stakeholders involved in the educational system. We ultimately believe that students' accountability and responsibility are among the main factors that will ensure our project sustainability.

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