

CREATING AN E-LEARNING MODULE TO HELP LANGUAGE TEACHING: AN EXAMPLE OF DEVELOPMENT RESEARCH

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***Abstract:** We propose here to analyze the process of development research which was undertaken aiming at setting up the e-learning module of the Institute for French Studies at the University of Warsaw. Doing so, we intend to propose a frame of reflection that can be employed by the institutions which would like to implement such a module in their courses.*

Keywords: Language teaching, E-learning, Development research, Transversal skills.

INTRODUCTION

The emergence of e-learning modules in the higher education context nowadays is a trend that cannot be ignored by institutions which have not taken the decision to follow this path yet. Every faculty has its own specific needs and requirements, specific views and goals. That is why if the main core of an LMS (Learning Management System) is good for most, a solution imported from another environment will, however, rarely fit. Therefore, a good planning and reflection has to be part of the implementation process.

In order to make the best choices and build the ideal tool, a development research seems to be the best process. A development research must be planned, objectives need to be set, steps must be followed, tools need to be implemented to control the development.

But such research is not only a period of the creation of the module itself, but also the basis on which a further scientific analysis can be developed through action research, transforming an educational tool into a scientific research environment. This second part will insure the possibility of checking the didactic efficiency on the long term.

In this paper we propose to discuss development research (which was then followed by action research) undertaken at the Institute for French Studies at Warsaw University from 2010 to 2013.

First we will remind the theoretical model of development research, with steps that should be followed. We will then see in the second part the choices we made to implement our module and analyze the results of a survey conducted among our students aiming at checking their feeling about the platform created.

1. DEVELOPMENT RESEARCH IN THEORY

1.1 Development research: a study from inside

As well as the action research that can follow, the development research is characterised by the very specific position of the scientist: he is not a spectator, but mainly an active actor in the process. His energy will be focused on the development of the tool, and he will have to interact a lot with his environment to shape it for the best results. As Pierre Nonnon (2002:1) underlines, development research is characterized by “an abductive approach, which instead of building a theory of knowledge as it is done during fundamental research, is rather trying to clarify and organize ideas from educational expertise and technological innovation as a template. It is therefore more about deriving ideas and plausible explanations to construct a model of action including constraints coming from both the technological environment and the rules of learning.”

In the context of the development research, various skills are required. These can be the skills of one person or of a team, accordingly to the competence level: researcher to bring the knowledge and set up the parameters for the research, teacher, didactician to plan the content, technology specialist (named “technolog” by Nonnon) to choose and shape the technical aspects of the LMS, educational psychologist to ensure the good cooperation and interaction with the students.

Indeed, Pegrum (2005) reminds us that e-learning is not a methodology but a technological medium for the methodology. Therefore, a sole technology specialist is far from enough to set up the tool.

All of this will have to be taken into account before even starting the project in order to set up a team if needed and have all the skills required for the implementation and analysis.

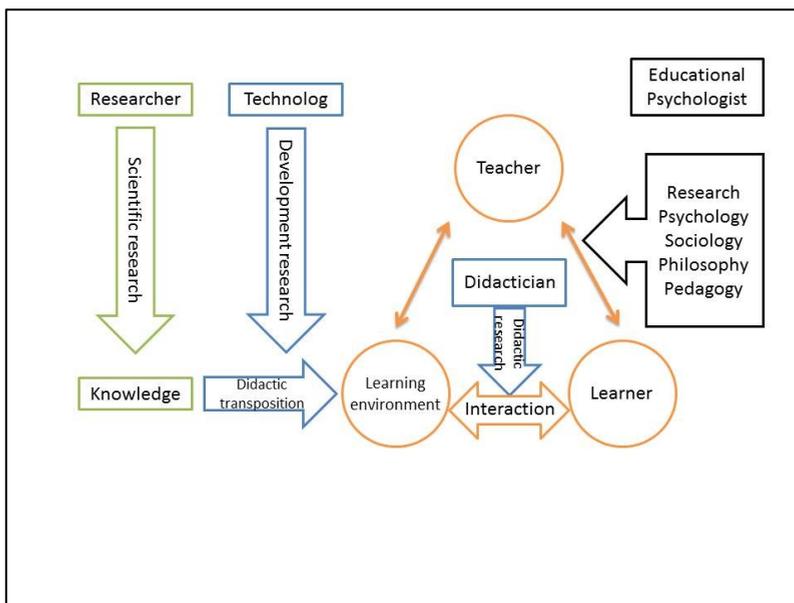


Figure 1. Development research

Source: Nonnon, 2002:1 (Our own translation)

1.2 A roadmap to development research

1.2.1 Step One: Why and what for?

Before even choosing an LMS, the very first step will be an analysis to identify the problem to which an e-learning module could bring a solution and see if the module would really bring something to the student. We can sum this up by a simple question: why do we need it? Such a change must have an advantage over the traditional way of teaching. Such a module must be the answer to a problem met or expected in teaching.

Once the problem has been analysed and being sure e-learning can bring a solution, goals must be set. The role of the teacher and the expert in didactics is crucial here, as they will have to identify their problem and say what teaching goals they have. The technology specialist must consult with them to see if e-learning can bring efficiency and what would be the best LMS according to the kind of use.

In our domain, language teaching, blended learning solutions will be often be preferred. Debra Marsh (2012: 1-2) reminded that interaction with an authentic audience as well as immersion in the target culture will be limited in a classroom, the length of the lessons will be sometimes too short or ill-fitted, the stress conditions due to the expression in front of the others will be too strong for some students and autonomy will remain pretty limited. As Davies (2003:212) wrote:

“Online training is playing an increasingly important role, but practical aspects of training can be delivered better in face-to-face workshops. A judicial mix of online

and face-to-face training is therefore desirable. Online training works best when there is substantial peer group and tutor support. The technology for delivering online training must be robust, the user interface must be transparent, and hardware must be easily accessible to trainees. Content must be relevant and consist of a mix of theory and practical aspects. Trainees need adequate time to complete assignments set by tutors, and tutors need time to mark them.”

There are many e-learning solutions on the market, and just as we do when we buy a car, we must analyse them to see which one best fits our needs and context. To choose, we must take into account:

- What are the laws on e-learning in the country? For instance, for universities in Poland, e-learning modules cannot exceed 60% of the total of the teaching hours included in the curriculum (Dąbrowski 2013: 209).
- What equipment do we possess and need? Are our students equipped enough and do we have an alternative for the ones who are not? As underlined by Dąbrowski (2013 :206-207), if we use a commercial LMS, the faculty has to pay a licence for every student.
- Who will take care of the module and who can solve technical problems in case they appear? Is the LMS fitted with the options we require for the content we want to implement?
- How complex is the use of the LMS? What is the level of computer literacy of our teachers and our students? Is a training course on LMS needed and who can provide it?

1.2.2 Step Two: How?

Once we answered all of these questions and chose the tool for the environment, a strategy must be set up and tools created to check if the module proves to be efficient or not.

For the strategy, didactic materials must be chosen. Which resources will be useful for teaching and in which format? E-learning brings here two aspects: interactivity with the content and multimodality. The repartition between the types of media used and the way we treat them will vary from what is done in a classroom, as the constraints like time and space will differ. However, while setting up the content, the same three parameters must be kept in mind: validity, reliability and feasibility: will the content really help to achieve our goals, will it work the same way for every student and can it be done within the frame given?

One first constraint will be the legal one, linked to copyright. During the conception of the content, especially multimedia, we will always have to check the rights of use. Another one will be the amount of time we expect the student to be able to give: as the time frame is not so clear, it would not be fair that the e-learning goes too far on his private time. That is why the student will have to know

both the limit of time given but also the expected volume of time to achieve the work given through e-learning.

Once content has been determined according to the goals we want to achieve, tools must be put in place to control and evaluate the module. These tools will be essential as they have to tell us how to modify the content or/and the environment to achieve our goals and measure if the module solves the problem met or not. We must keep in mind that all the actors in the environment must have their word, that is why the tools must also include students. We must not only check the efficiency according to their results, but also have a feedback on how they feel about the work in the environment. Canals of intensive communication are needed to have the best feedback as possible. This communication is not only a way to give the students opportunity to express themselves, but also to provide them with technical and affective support. Such a support is required as a student can often feel alone, isolated or even neglected when in front of the screen.

2. AN EXAMPLE OF DEVELOPMENT RESEARCH

2.1 The context of development research and the strategy

In 2010, our Institute for French studies decided to open a curriculum for students who never learnt French before. A specific program had to be set up in order these students could reach after three years of studies an equivalent level to the “classical” students who passed the extended Matura in French, as the final exam for the diploma would be strictly the same. Of course, the number of hours in the curriculum was increased, but it was still not enough to teach the whole complexity of the language. We needed then a way to develop their ability to find by themselves the information they lacked, manage their time, have a critical approach. It is because of these constraints that an e-learning module was thought of. A LMS was proposed in 2009 by the Lyon 1 university and some experiments were conducted on it, but it was not used ever since as no real need was felt.

We had a need and we had an environment, therefore we started reflection on how to fit the environment to our new needs. We chose Spiral which seemed simply the best choice for our goal: it was free, less complex, we did not require any server as it is provided by Lyon, a free technical online support and free training is given and the environment was from the start designed to use multimedia. We chose to use Facebook to communicate with our students as the vast majority of them are present on this social network. For the others, Skype, email and of course meeting in person were other solutions for contact. This kind of communication seemed to us more efficient than to oblige them to connect regularly to a platform they would use only for the module. Another important element of the platform is that it has a restricted access to members, allowing us to take advantage of the Polish legislation about copyright. The law in Poland authorises to use any content for

didactic purposes and to archive them without being subjected to the author's right. This was very important to conceive the content in the environment.

The prime goal of our module is to develop the transversal skills (Roosen in Crutzen, 2005 : 10) of the students, such as:

- use of new technologies,
- information seeking,
- critical judgment,
- text structuration,
- problem solving,
- time management.

A second goal was to facilitate the use of the general and linguistic competences defined in the CEFR (2001:101) in a contextualised environment and to push the students to go and discover francophone culture.

To do so, we used multimedia content inside tasks to be completed every two weeks. 14 groups of activities and 6 tasks were designed; the work being given during the two first years of studies.

To monitor possible problems and check the validity of the tool, we used direct feedback from the students during the whole time, we monitored the results and the connection frequencies and set up two anonymous online enquiries that students had to answer.

In these enquiries we asked the students questions on their expectations during the language teaching, the feeling they had as users on their personal development thanks to the module, the felt degree of difficulty of the module and its various elements, on the advantages and problems of the module and had an open question for proposals of further development.

2.2 The setup and results

2.2.1 Setting up the content

When designing the content, we evaluated the amount of presence of transversal and cultural competences in the work given, using a scale going from never to very often. During the first year, students were working on thematic groups, being a set of various activities having as a link a main subject but without a final goal. These questions were mainly Multiple choice questions, short open questions and texts with gaps, translation often being given. We used lots of pictures, recorded speeches, videos, internet links and original texts. Such group of activities could contain up to 18 videos or 13 pictures.

With tasks, the difficulty increases and multiple choice questions disappear. The text structuration becomes more important as

students have to write longer texts. We also deliberately increased the number of cultural elements to push them to discover the francophone culture.

2.2.2 Modifications of the module and opinion of the students

Thanks to chat and discussion with the students and data collected, discussion with the creators of the platform and administration, changes were brought to the module.

The first array of changes was of a technological nature. For the first two years (2010 to 2012), the version of the LMS was Spiral (Spiral, which then evolved into Spiral Connect followed by Claroline Connect is a LMS created by Lyon 1 University and its team ICAP lead by Christophe Batier. It is used by over 40 institutions. In Lyon 1 only, over 150 000 users are connected daily, and the LMS includes the library and marks systems. The technical support is 24/7 given by the ICAP team, and all the data is stored for free on their servers. We did not choose the newest version of the LMS, Claroline Connect, as it is more fit for MOOCs.). The interface was not really user friendly, there was no integrated chat and the videos and audio files required an internet link. In 2012, Spiral was upgraded to Spiral Connect. This version is in “flat style”, can be personalized, has a chat, is very intuitive. The video and audio files are integrated to the thematic groups and stored on the server. In this way no internet link is required, meaning we always have access to the files. No specific codec is required and any internet browser can open them. There is even a mobile version allowing students to do the work on their smartphones or tablets.

The second array of changes done within these 3 years were of an organizational nature. At the beginning, students were getting a mark counting for the average, and the e-learning was put for 4 semesters. But it quickly occurred that during the second year e-learning was taking them too much time and was a nuisance during their exam sessions as the work often collided with it. We therefore decided that it would be put during 3 semesters, in order the students can focus on their exams. It is important to keep this first semester of the second year, as only then they have the linguistic ability to write longer texts in French and so to perform correctly during the tasks given. Unfortunately, the mark had to be abandoned for administrative issues. This was a good motivator for the students. Students are now a bit less motivated, unless when a competition emerges among them (this was noticed few times). To compensate somehow, it was decided that the validation of the module was a prerequisite to go to the final exams.

Two anonymous enquiries were set online to check the opinions of the students after the 1st year and after the 2nd year of studies. During the development research phase, its aim was to improve the tool and check its adequacy to the goals.

When asked about the weak points of the module in the enquiry after the 1st year after the development research was considered completed (results from 2013 to

2015), only 37 out of the 73 (50,6%) answered this open question. For 9 of them (therefore 12,3% of the total), there were none, 7 underlined technical problems (9,5%), 6 indicated lack of time (8,2%), 4 (5,5%) lack of group projects and lack of live contact, 2 (2,7%) said that the content was not synchronised with the other lessons and only 4 (5,5%) found it totally useless.

Concerning the advantages of the platform, 40 people out of the 73 taking part in the survey answered this question (54,8%). 20 (27,4% of the total) liked the flexibility in terms of time and having the possibility of doing the work at their own pace, 11 (15%) underlined the fact that it was interesting or helped them to develop new useful competences, 8 (11%) loved the work on information seeking and 7 (9,6%) appreciated the diversity of the documents used, especially in multimedia.

We asked the same questions to the 2nd year students but from 2014 to 2016, which means the very same students but after they completed the 2nd year work on the platform. A total of 58 persons answered. About the weak points, 7 (12%) criticized the lack of human contact, which according to them was demotivating. Only 4 (6,9%) talked about technical problems. 17 respondents (29,3%) said that the tasks were very time consuming, one of them admitting that it was the case not because of the given laps of time but the problem that they all do things at the last minute, and then are confronted to a huge mass of work. For 2 persons (3,4%), the lack of immediate correction was a problem. 6 students (10,3%) found the platform useless, not having the impression that they have learnt anything and treating it as a punishment.

2.2.3 Meeting the goals?

About the objectives we had, the results of the enquiry for the 1st year students once the module was considered as stable were the following:

Table 3.

Importance of the help in developing transversal and cultural competences thanks to the thematic groups for 1st year students (scale from 1- never, to 4 very often, n=73)

	1	2	3		average ¹
Text structuration	8	12	40	13	2,8
information seeking	3	6	18	46	3,5
critical judgment	8	19	30	16	2,7
Cultural elements	2	9	24	38	3,3

¹ We only give in our tables a ranking average only to see the underlying tendencies.

Source: Own work

The enquiry did not ask about time management as students did not know how to evaluate it. But as we read in the previous sub chapter: some are conscious of the fact that there is no management, just doing things at the last minute.

We can see that they felt progress in their skills in the scope of information seeking and cultural competence as expected because these were the most trained transversal skills worked on. However, even if the work on critical judgement was big according to us, the students did not feel much progress in this respect.

Table 4.

Importance of the help in developing transversal and cultural competences thanks to the thematic groups for 2nd year students (scale from 1- never, to 4 very often, n=58)

	1	2	3	4	average
Text structuration	5	17	21	15	2,8
information seeking	3	5	14	36	3,4
critical judgment	4	10	25	19	3
Cultural elements	0	2	10	46	3,8

Source: Own work

After the second year, at last they felt progress after the work on critical judgement, but still not much in relation to-text structuration even if most of the questions were open and required a structured text.

CONCLUSION

We tried to show here that creating an e-learning module is not just a technical matter. If development research is focused only on the constitution of a new tool, once completed it will allow for the undertaking of action research to study the processes within the environment created. As we saw here, development research is a good way to structure choices to be made and the team to compose when a faculty is thinking about an e-learning module. It requires time and a lot of consultation with all of the actors to perfect the tool as much as possible.

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