

E-portfolio, a Self-assessment Tool for Evaluating Subject Content

Acquisition: A Practical Example in a European Project

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Abstract: The European project “An INTEgral Teacher Training for Developing Digital and Communicative Competences and Subject Content Learning at Schools” intends to improve subject content learning, communicative and digital competences in an integrated way to train future Primary and Secondary School teachers. The project partners are experts in ICT, Science, Humanities, Language and Applied Linguistics, and are Professors and Senior Lecturers in six Universities: Alcalá (Spain), Coordinator of the project, Helsinki (Finland), Lisbon (Portugal), Comenius University of Bratislava (Slovakia), Leicester (United Kingdom) and Trabzon (Turkey). The project members believe that ICT can transform teaching and learning. Consequently, the project will incorporate every digital resource available to produce didactic materials: web pages, blogs, e-portfolio, wiki, face book, videoconference, etc., either to look for authentic materials to build up the project materials, as well as for implementing the designed materials during lessons. This does not imply that every project partner may use every available tool, for instance, the University of Alcalá is working with blogs and e-portfolio, and in this paper we will try to explain the advantages of using e-portfolio in training future teachers as e-portfolios can be a tool to increase active learning, reflection, analyze and report, get feedback, store information, and foster self-assessment. E-portfolio has been introduced in the materials designed by Alcalá with the aim of providing student teachers and pupils with a digital tool used for self-assessment giving them the opportunity to follow their personal and professional development in the case of student teachers, and in the case of school pupils, the e-portfolio gives them the chance of evaluating their progress in the process of learning. The paper will also deal with the main outcomes of the project, and examples of e-portfolios are included.

Key words: digital competence, communicative competence, education, e-portfolio, evaluation

1. The Project

Nowadays digital and communicative competences are identified as key competences for Life Long Learning and are closely related to subject content learning, personal and professional development in our society, so, a command of both competences are usually required for every profession and employment. Then, if we want to prepare our school pupils for their future life as citizens of this global society, the sooner we start the better results we can obtain, consequently the two key competences should start to be developed in Compulsory Education. Therefore responsibility for this development lies in teachers, the role of teachers is changing, and initial teacher training should aim at changing practice to address these needs. However, we cannot forget that subject content is

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another must for achieving a complete formation of our school pupils considering their personal and professional future, and that communicative and digital competences are closely related to the acquisition of subject content.

Consequently, as it has been said in the abstract, this European project intends to integrate subject content learning, communicative and digital competences to train future primary and secondary school teachers. Now, very briefly we will mention the outputs we expect from the project:

- A methodology based on the integration of communicative and digital competences with subject learning through significant use of different digital tools.
- Didactic materials: each partner will produce a CD including two modules (one in mother tongue and another in English) with didactic activities, addressed to school pupils, and didactic suggestions, addressed to student teachers, for implementing the activities in order to develop digital and communicative competences and subject content learning in pupils.
- Student teacher mobility programme to foster intercultural experience and to enhance project impact.
- Dissemination at national and international levels to spread project impact through seminars, papers in conferences, articles, workshops, etc.
- Internal and external evaluations of the project and outcomes to ensure their quality.

2. ICT: Digital Tools and E-portfolio

The project members are also convinced that ICT can transform teaching and learning, they really believe that ICT and digital tools can improve the process of learning. Then, the first step to intend that these tools are used at school is to train teachers and especially the future teachers to develop digital competence so that school pupils can benefit of this training. That is why the project is addressed to initial teacher training in both levels: primary and secondary school. As far as digital competence is concerned, we think that Internet is an essential resource in teaching because nowadays students are very familiar with it as the Net is the common way for communication and for acquiring and transferring information, furthermore, ICT is a tool that can improve lesson design, motivate pupils to learn in challenging ways using a lot of information and techniques, allow pupils to find texts to be read and analysed their reading and, consequently, their writing, encourage individual and collaborative work, etc. Moreover, as many of the ICT concepts are developed in English, if our pupils improve digital competence, at the same time, they can also improve their English, the language of communication in our global world. Then, acquiring digital competence will prepare pupils for the world of work, enlarging their personal and professional opportunities in the future.

So, the didactic materials created in the project have incorporated most digital resources: internet, web pages, blog, e-portfolio, wiki, moodle, videoconference, etc., either to look for authentic materials to build up the project materials or to implement these materials during real lessons at schools. This does not imply that every project partner may use every available tool, for instance, while other partners have selected wiki, moodle, videoconference, etc., the University of Alcalá is working with blog and e-portfolio, as pupils using them can:

- extract and acquire information about a new concept, topic, etc.
- store and share information,
- construct knowledge,
- improve communicative competence (oral and written skills),
- share ideas, opinions, points of view,

- discuss,
- form a social network with people sharing common interests.

Develop and improve transferable skills:

- making decisions,
- problem solving,
- critical analysis,
- critical thinking,
- group work,
- collaborative learning,
- autonomous learning.

An e-portfolio can have the same potential of a blog, and reinforce the role and functions of blogs, just mentioned, as e-portfolios can be a tool to:

- increase active learning,
- keep on-going reflection,
- analyze and report,
- get feedback,
- store information,
- self-assessment.

However, both tools, blog and e-portfolio, can have advantages and disadvantages. The main advantages are that pupils and student teachers can use both tools as:

- a way of communicating with other student teachers/other pupils and display their writing and knowledge,
- e-portfolio can add other advantages, for example: student teachers and pupils can use e-portfolio for reflection and self-assessment following their personal and professional development.
- There are some disadvantages:
- portfolio or blogs can be damaged or lost,
- users do not have any control over digital copies,
- privacy of documents and work may be compromised once they are publicly available on the web.

2.1 E-portfolio: A Tool for Self Assessment

Now, we will offer some suggestions to use e-portfolio for pupils' self-evaluation, but first, we will say a few words about the elaboration of didactic materials and activities. Thus, for our module I in English, we have chosen a film *The Prime of Miss Jean Brodie*, directed by Ronald Neame (1969), and based on the novel of the same title by Muriel Spark (1961), a complex novel, to illustrate the cultural identity of Scotland/Britain comparing it with the continental values. The film and the book are so rich that they can be used to teach English Language, Literature, History, Art, Music, Geography, Politics, Religion, Cultural, Political and Social aspects. Activities have been organized in three sections, with their subsections including self evaluating e-portfolios:

- Section I. Language and Literature.
- Section II. Language, Literature, Geography, Art, History, Culture, Political and Social concerns.
- Section III. Design and create an e-portfolio with acquired content and a self-evaluation e-portfolio.

We have created five self-evaluating e-portfolios addressed to pupils so that they can analyze their own progress in their process of learning. These self-evaluation e-portfolios are tools that, at the same time, can develop positive attitudes in pupils such as those of autonomy and responsibility. They appear in sections I and II

evaluating the acquisition of subject content, communicative and digital competences, moreover, they have another relevant function, they are activities dealing with digital competence, so they will help the pupils in one of the uses of e-portfolio that of evaluation.

Moreover, we have created guidelines, addressed to pupils, in Section III to design and create another e-portfolio where they can summarize and incorporate the most relevant information they have stored in their blogs and the subject contents they have learnt in module I. This is an activity that can be chosen by the student teachers or the teachers, if they think this e-portfolio can be of interest for their pupils, however, student teachers/teachers may think that five self-evaluation e-portfolios are more than enough for having an opinion about their pupils' process of learning to understand how this digital tool can be used.

We recommend student teachers/teachers to guide their pupils in their self-evaluation e-portfolios but respecting their autonomy as learners, in this way, student teachers and teachers can promote autonomy and responsibility in pupils as well. We also suggest that student teachers design their own e-portfolio which can help them to be self responsible of their own teaching process, considering the:

- aims of their lessons,
- implementation of activities,
- development of their lesson,
- achievement of these aims,
- evaluation of these aims as well as their own process of teaching.

Everything can be integrated in the e-portfolio by student teachers:

- activities or exercises done by the pupils (some samples of the teaching),
- strategies and techniques used in the activities and during the lesson,
- criticism of activities, positive and negative aspects,
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- implementation of activities through digital tools,
- lesson diaries, the lesson reports,
- use of blog and e-portfolio by pupils,
- pupils' progress in the acquisition/improvement of digital and communicative competences, and subject content,
- evaluation of their pupils in several aspects:
 - (a) acquisition/improvement of digital and communicative skills,
 - (b) acquisition/improvement of subject content knowledge,
 - (c) acquisition/improvement of transferable skills.

Other points that can be included in the e-portfolio are:

- analysis, reflection about mobility action,
- evaluation of mobility action,
- analysis, reflection about the intTT project,
- evaluation of intTT project,
- feedback acquired through the project,
- feedback acquired through their training course,
- self-evaluation of their work as student teachers in the training course.

3. Conclusion

Generally speaking, digital tools help pupils to improve communicative competence, pupils can use blogs and e-portfolios for obtaining and organizing the information they have received or they have sought in Internet about subject content, for sharing this information and, at the same time, they are acquiring key competences and transferable skills for their future life. Moreover, these digital tools will favour not only discussion among pupils, but also discussion, reflections and feedback for our student teachers as the project intends that at the end of their initial training, student teachers can design some materials based on the ones presented to them in the project.

Furthermore, the self evaluation e-portfolio can help to develop the reflexive and critical competences in pupils and student teachers. Going further, e-portfolios can be a tool of evaluation of the project not only for student teachers and teachers collaborating in the project, but also for us, as members of the project to modify anything in order to improve the didactic activities and the project. Summarizing, e-portfolio can be a feedback tool for the partners of the project, tutors, student teachers, mentors, teachers and schools.

4. Annex: Examples of E-portfolio

4.1 Progress E-portfolio for Self-evaluation of Your Learning Process (Addressed to Pupils)

Tick ☒ the things you can do in English, I can:

- ☐ Understand texts about Scotland and answer questions.
- ☐ Find information in maps.
- ☐ Understand a video about Edinburgh and answer questions.
- ☐ Discuss and argue about the topics of the video.
- ☐ Read texts about Edinburgh and understand the information.
- ☐ Give opinions and discuss about social concerns.
- ☐ Put forward and react to ideas in discussion.
- ☐ Watch a video about the Highlands and understand the main ideas.
- ☐ Understand a text about Scottish culture and answer questions.
- ☐ Talk about Scottish cultural aspects.
- ☐ Learn something about Edinburgh, the Highlands and Scottish culture, and I can look for more information about them in Internet.
- ☐ Select this information and write summaries about Edinburgh, the Highlands and Scottish culture to be added to my blog.
- ☐ Give opinions and discuss about political views.
- ☐ Infer information observing a portray of Mary Queen of the Scots.
- ☐ Describe this portray.
- ☐ Understand a text about Mary Queen of the Scots, and answer questions.
- ☐ Look for more information about Mary Queen of the Scots in Internet, select it and add it to my blog.
- ☐ Understand information about Calvinism, Calvin and John Knox, given in a text, and answer questions.
- ☐ Look for more information about Calvinism, Calvin and John Knox, given in Internet, select it and add it to my blog.
- ☐ Store all the information I have found in my blog to be kept for my final e-portfolio.

- ☐ Be aware of Language: tenses.
- ☐ Understand specific literary words.
- ☐ Guess the meaning of unknown words within a context.

4.2 Design and Create an E-portfolio with Acquired Content (Addressed to Pupils)

Select the information from your blog, organize it and summarize the most relevant one for the e-portfolio.

Your portfolio can have these parts, but your teachers will help you to select those that are of interest for you:

(1) Literature

- Muriel Spark
- The Prime of Miss Jean Brodie
- Robert Louis Stevenson
- Dante

(2) Geography

- Florence
- Rome
- Edinburgh
- The Highlands

(3) History

- Mary Stuart Queen of the Scots
- The Spanish Civil War

(4) Art

- Italian monuments
- Italian painter: Giotto
- Other Italian artists
- Scottish monuments
- Scottish painter: Nasmyth

(5) Culture

- Aspects of Scottish Culture
- Political and social concerns
- Nationalism
- Social classes

4.3 Design and Create A Self-evaluation E-portfolio (Addressed to Pupils)

Guided by your teacher, put together the five self-evaluation e-portfolios, review them and write about 100 words summarizing your learning experience.

References

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