

Evaluation Plan for the Electronic European Language Portfolio (e-ELP)

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Abstract

The purpose of this document is to present the evaluation plan for the electronic European Language Portfolio (e-ELP). The e-ELP is part of a Minerva project funded by the European Union (EU) with main goal to adapt the ELP in an electronic format. Recent EU policies promote language teaching and learning as a key element for European integration and mobility. The EU underlines the necessity of a language passport, called European Language Portfolio (ELP), which is a personal document of the European citizen illustrating a detailed picture of all his/her language experiences and certifications. So far some ELPs have been validated and edited in a hardcopy format. These hardcopy editions present several limitations such as maintenance and long term updating. This paper will discuss the goal of the evaluation, the procedures for data collection, data analysis, and presentation of findings behind the evaluation of the electronic ELP (e-ELP). The main focus of the evaluation will be on improving the project and ensuring the delivery of a quality final product. Therefore, evaluation will be of formative nature.¹

Introduction

The project discussed in this document was developed in attempt to examine the use of an electronic European Language Portfolio (e-ELP). The Common European Framework of Reference for Languages underlines the need for the European citizen to have a personal document describing all his/her linguistic experiences and certifications. It is similar to a language passport, called European Language Portfolio - ELP (see <http://culture2.coe.int/portfolio>). Many European institutions have already accepted the suggestions given by the Framework, including the ELP. The EU encourages individual

¹ It should be noted that this evaluation plan is subject to change depending on project developments and needs.

institutions to adapt the ELP to their specific needs and to submit their new ELP to a validation procedure to verify its conformity to the requested format (see Guide for developers <http://culture2.coe.int/>). So far several ELPs have already been validated and published in hardcopy format. Nevertheless these existing hardcopy editions present several limitations (e.g. difficulties in life-long updating and maintenance). One of the main objectives of this project is to overcome such barriers and take advantage of the affordances of technology in serving the needs of language teachers and students. Furthermore, a e-ELP would bring at the same time advantages in terms of Open and Distance Learning (ODL), such as tracing the students' language learning process over the years.

For any educational innovation, evaluation is essential. There is a strong need for research and evaluation studies that will help improve technology integration in the process of education and examine how technology can improve teaching and learning. Evaluation studies are of critical importance for establishing models for the development, implementation, and support, of teacher preparation program. A coordinated, systematic study and evaluation of online projects will allow designers, developers, researchers, and policymakers to make informed decisions for project development, implementation, as well as for funds allocation.

Description of the project

Overview of the project and rationale

The traditional paper-based ELP consists of 3 main parts:

1. Language passport (presents at a glance the learners' language proficiencies),
2. Language biography (presents documents and information regarding the learner's language learning history)
3. Dossier (documents and samples of learner's work illustrating language proficiency).

For more information about the theoretical and practical issues as well as the structure of print-based ELPs, see <http://culture2.coe.int/portfolio>. The ELP is a crucial tool for European mobility. A widespread use of ELP would give credibility to EU language policies and suggestions (see Resolution on the European Language Portfolio, 20th Session of the Standing Conference of the Ministers of Education of the Council of Europe available online at http://www.coe.int/T/E/Cultural_Cooperation/education/Languages/Language_Policy). An important note is that the ELP, being the European 'flexible standard' for language portfolio, permits an alignment to the language curricula that not all language portfolios guarantee. The powerful tool of descriptors, reports language learning in a transparent and reliable way.

Portfolios and learning

As a pedagogical and assessment tool, portfolios are been used in a variety of ways in education and training. Portfolios interweave several aspects of the education process including, the curriculum, instruction, development of material, evaluation, and assessment of student learning. They have been used extensively in math, literacy, science, language, and art. Activities can be integrated with the use of portfolios in order to encourage students to review their own work, reflect on their learning, analyze their learning strategies, strengths, and weaknesses, and assess their participation within a class context (Calfee & Perfumo, 1993; Glazer & Brown, 1993).

With the growing use of the Internet in education, electronic portfolios have been used extensively by educators. Portfolios, in simple terms, are the collection of selected pieces of work by students. In the context of the ELP, the portfolio includes students work, documentation, and certifications, as they illustrate the student's language proficiencies. One of the main focuses of a portfolio is the students' reflections on their own work and they serve as a record of student learning and growth. When designed and used appropriately following sound pedagogical and design principles, a portfolio can serve as a comprehensive document that can be shared with teachers, parents, the community, and future employers, and which demonstrates the learner's learning history and accomplishments. A digital portfolio can include video, sounds, text, and images.

Pedagogical and technological aspects

Schneider and Lenz (2003), the authors of the official ELP guide for developers, acknowledged the importance of having a e-ELP. However, despite the importance of ELP and the advantages of electronic portfolios, there are no e-ELPs available yet. Some of the additional advantages associated with a e-ELP are:

- A e-ELP is easy to update: during their language learning process, students can update and expand their ELP with no need to buy new hardcopies or to add extra photocopied pages. If a paper copy is needed, it is easy to print either the whole digital version of the ELP or part of it.
- All the information of the e-ELP can be stored in a database, which can be used by the Institutions for longitudinal studies on the language learning process. On the other hand, the students themselves can have access to their ELP in progress to see the evolution of their language learning process in a graphical user-friendly form (e.g. historical function).
- Once implemented, the ELP is freely accessible online by the students.
- A e-ELP can be customized in accordance with the user's language level thanks to the hypermedia nature of the project and selective access to the evaluation grids.
- Considering that the ELP in its textual part is a plurilingual document (e.g. all the instructions must be in three languages at least), the digital structure would permit the coexistence of many languages avoiding graphical overload (e.g. with a change-language function).
- A digital version makes it possible to use multimedia to document ones learning: in the Dossier the student could collect not only paper documents, but also audio and video samples of his work.
- Encourages reflection on the user's language learning.
- A further innovation is that a e-ELP is easy to send by email and it is quicker to fill up than with a pen and paper procedure (Barrett, 1994).

The pedagogical approaches being employed concern some key points of foreign language learning and teaching. First, an e-ELP is an easier format to share and update than a hardcopy ELP. It implies that students will freely download the ELP and will allow them to update it more frequently with no fear of making errors, since they can easily correct them. Ease of access and transfer is crucial to make the e-ELP a usable tool for students, teachers, and administrators. On the other hand, we are aware that the digital massive distribution might lead to a superficial use. Therefore, it is in the partner institutions' plans, once the e-ELP is developed and tested, to provide teachers' and students' training on how to effectively use it.

From a research and assessment perspective, the database underlying the e-ELP is an important instrument to get longitudinal information on the language learning process. This may bring considerable pedagogical innovations to research and evaluation of language teaching and learning. A e-ELP allows researchers, teachers, and students to experiment with new forms of assessment based on a dynamic - not static - concept of language learning. This concept of alternative evaluation would include evaluation of the process of learning (to integrate evaluation of product, e.g. tests) and students' self-evaluation. Implications include: institutions can better monitor the students' learning process in order to improve it; teachers can easily have access to students' progress within the ELPs; students would be constantly stimulated to think about their learning (made visible by the e-ELP which fosters their learning autonomy and reflective thought).

The adoption of the e-ELP on a regular basis implies some new aspects in the organization of the university educational process. Every student would be required to complete his/her own e-ELP and to update it frequently in order to improve it. Furthermore, institutions would take advantage of the ELP database to evaluate the effectiveness of their language courses. We trust this will stimulate an improvement in the quality of language teaching and learning.

Design

This section will describe the project. Please note that the final functionality, look, and implementation of the e-ELP is still developing and changing. Once the pilot e-ELP reaches a complete stage, it will be fully described and the instruments to be used for the evaluation will be developed.

Some of the technical aspects of the e-ELP include the following:

- The global structure of the digital portfolio is a set of files of different type (multimedia, text file, etc.) grouped in a folder and indexed in a file manifest (see the last IMS specifications on e-learning content standards). The manifest will declare the metadata and descriptors of the portfolio and its owner, and will describe and relate the folder's resources. The manifest structure will be standard to permit further cooperative development.
- Stand-alone authoring software will be used to satisfy the need of operating systems interoperability, as well as the necessity of user-friendliness of the interface. The software for the management and the keeping of the e-ELP is a web-based system, which will allow the functions of users' authentication, portfolio compilation, portfolio updating, portfolio transfer and some statistic functions of the database. This will allow easy portfolio creation and updating and will satisfy the need of operative system interoperability as well as the necessity of user-friendliness and simplicity of the interface (usability).

Objectives and outputs

The ELP is a crucial tool for European mobility. A widespread use of ELP would give credibility to EU language policies and suggestions (see Resolution on the European Language Portfolio, 20th Session of the Standing Conference of the Ministers of Education of the Council of Europe; http://www.coe.int/T/E/Cultural_Cooperation/education/Languages/Language_Policy/). This project is in line with this objective:

- The e-ELP would be at first used and tested by the partners and subsequently put at the disposal of every European university willing to adopt it.

The specific objectives for the e-ELP project are to:

- Create an economic, multimedia, fit-for-harness, and easy to deliver e-ELP;
- Produce an e-ELP specific for university language students in view of their entrance into the EU job world;
- Make the e-ELP available in Italian, Greek, Spanish and Swedish;
- Give Institutions a tool to monitor the students' language learning process;
- Promote a pedagogically correct use of the e-ELP.

The expected output of our project is an e-ELP, which will hopefully be validated by the Validation Committee of the Council of Europe in 2005 or 2006. Our envisaged product will be developed according to the EU defined standard format by strictly following all the detailed parameters given by the Council of Europe in its Guide for developers. This will assure the quality and conformity of the e-ELP.

As for the languages that will be used, in accordance with the instructions of the ELP Guide for developers, that state that ELP is by definition plurilingual, we will develop the e-ELP in EN along with the national languages of the partners (ES, DE, EL, IT, SE).

This proposal envisages also these outputs:

- A simple but informative web site to describe this Minerva project and to distribute the executable version of the e-ELP to other institutions. One of the partners will host it.
- An informative e-mail to main EU universities with the invitation to visit the above mentioned web site.
- A pedagogical guide for students on how to use the ELP.
- A short technical guide for students and professors on the e-ELP.

- In case the Committee for Validation validates the e-ELP, apart from a pedagogical instruments, the e-ELP might become an EU recognized document on language knowledge.

Stakeholders

The partners involved in this project are the University of Milan (coordinator), Intercollege, University of Salamanca, GAP multimedia, University of Göteborg, University of Skövde, and Europa Universität Viadrina Frankfurt. The partners involved in this project have a strong tradition of ITC and ODL, as well as experience in cooperating in European projects. During the last few years, the University of Milan and the Intercollege of Cyprus have undertaken some experimental studies in this field: the first producing and using a prototype of language portfolio, and the latter testing the use of portfolios in different educational fields. All the partners share an interest in working on an e-ELP. Furthermore, some of the partners are also interested in producing ELPs in their languages. In fact the existing ELPs for adult or university students rarely support their national languages (e.g. Spanish, Greek or Swedish). The geographical location of the partners does not allow many face-to-face meetings because of the high costs of travelling. Therefore, partners will have to use more economical, but more time-consuming ways to communicate, like e-mail, phone calls, and fax.

Target audience

For the purpose of this evaluation, we identify the following major kinds of users: students, teachers, partner universities, other European organizations outside the partnership, and possible employers. The target users will implement the e-ELP in their daily work as follows:

- After a training period in the use of the e-ELP, university students will have access to, use and update regularly their e-ELP from their university web site. When they end their university studies, they will be able to go on using and updating their e-ELP virtually for their whole life on their home computers. From

the pedagogical point of view, both language teachers and students will need to be trained to use the ELP.

- Teachers will be using the e-ELP to monitor student progress and learning, provide feedback, comment on student work, and assess student's language achievement.
- Universities involved will carry out a research study on how students use the e-ELP to foster investigation into language learning and to gather information on the pedagogical effectiveness of their language courses. ELP data will be personal, but this data can be made available to institutions for longitudinal studies.
- After an experimental period, other European organizations outside the partnership could obtain and introduce the e-ELP in their curricula.

The educational context of this proposal is higher education institutions (universities) and the subjects involved are university students and teachers of second and foreign languages. The target group is wide, since we plan to adopt the e-ELP in the partners' institutions and, subsequently, to put it at the disposal of every European university willing to use it. The impact envisaged is twofold:

1. Students and teachers could have access to a new useful pedagogical tool.
2. Students would have an officially recognized document of their language knowledge to support their mobility in EU.
3. University administrators and employers can use the ELP as tool to assess language proficiency for prospective students and future employees.

Evaluation design

Overview

Evaluation is often defined as the systematic investigation of the worth or merit of an object or program. It is imperative that systematic procedures are used to evaluate the conceptualization, design, implementation, impact, and utility of programs. Only then,

can evaluations gather valid and reliable evidence to document a project's impact, merits, and challenges. A variety of methods for data collection and analysis should be used and data should be collected to triangulate findings and provide a complete picture of the program. The selection of a method depends on several factors such as the nature of the program to be evaluated, the questions of the evaluation, stakeholder needs, and the evaluation timeframe. Stakeholder input and interests were accounted for in planning the evaluation in an attempt to establish a shared vision, ownership, and leadership on the project and allow for multiple voices to be heard.

While several approaches, models, and stakeholders were taken into account, the focus of this evaluation was to collect data to help improve the program (Cronbach, 1982; Heinecke, Blasi, Milman, & Washington, 1999; Heinecke & Willis, 2001; Herman, Morris, & Fitz-Gibbon, 1987; Smith & Glass, 1987; Stufflebean, Madaus, & Kellaghan, 2000; Weiss, 1998). The evaluator worked closely with the project's team to design the evaluation, so that it meets the objectives of the project and furnishes findings that will be used to improve the e-ELP. After conducting a literature review of research and evaluation studies conducted in the field of usability evaluation and evaluation of educational technology projects, and after negotiating the goals and purposes of the evaluation with all the stakeholders and the design team, the evaluation plan will be implemented as described in this document.

The selection of evaluation method and procedures depends on several factors such as the nature of the system to be evaluated, the questions of the evaluation, stakeholder needs, and the evaluation timeframe. The plan was shared via email with the rest of the team so that their input and interests was accounted for in planning the evaluation. This helped establish a shared vision, ownership, and leadership on the project and allowed for multiple voices to be heard. The method is based on a combination of quantitative approaches (descriptive statistics) and qualitative techniques (analysis of documents, data collected from open ended questions, interviews, observations, usability evaluations, and memos).

Quality assurance statement

All partners agree to make every effort to ensure that all stages of a project, from the analysis, preparation, development, implementation, accreditation, and dissemination, are subject to quality assurance. All project partners will follow the documented procedures laid down during the first meeting and accept their responsibilities and provide guidance on achieving high quality standards. All partners will work closely with the coordinator of the project to ensure compliance with the agreements and regularly monitor and review all parts and tasks of the project. The achievement of high quality standards in the various stages of the project will be promoted by the partnership through close collaboration, frequent communication, and hard work. Meetings at local sites will be conducted and regular email/telephone/fax contact with coordinators and partners will be carried out as needed. The dissemination of interim and final reports at specific predetermined periods as well as the proposed evaluation of the implementation of the e-ELP will be used to ensure the quality of the project. A section of the project's website will be dedicated to evaluation and it will act as an online monitoring device for the project via which all reports will be published.

The evaluation plan proposed is one of the mechanisms to be used to ensure the high quality of the project. It follows the stages of the project, each one ending with written evidence that the partners are asked to complete, present, and share. An overview of some of the major aspects of the project to be targeted include the following:

- The coordination plan to be established during the first meeting, clearly defining the goal and scope of the project, each partners' tasks and terms, copyright issues, dissemination issues, accreditation, and implementation The technological design and documentation for the project
- The evaluation of the education value of the e-ELP (conducted in collaboration between evaluation coordinator and language experts).
- The process for establishing the strategy and procedures to be followed regarding the e-ELP design and structure so that it meets the ELP Committee for Validation

- The collection of data from all partners during the experimental try-out of the e-ELP, followed by a list of recommendations for project revisions and improvements to be integrated in its final version.
- After dissemination, feedback will be asked by the other institutions requiring and using the e-ELP. The EU accreditation by Committee for Validation would be considered as the final evidence of the achievement of the project's objectives. However, we need to note that validation might not be completed as part of this pilot project, for reasons beyond our control. For example, the EU might suspend validation of ELPs because of excess of ELPs or because they do not have criteria on how to validate an e-ELP at this stage.

Evaluation Goals and Questions

The major goal of the evaluation is to collect data to improve the project and to ensure it will meet the proposed goals and achieve the outcomes. The evaluation of this project will be driven by the following questions:

- Does the project meet its objectives?
- Were the expected outcomes delivered as planned?
- Is the final product of acceptable quality (pedagogical, reporting, and technical functions)?
- Does it meet the EU accreditation/validation standards?
- What recommendations can be made about the appropriateness and usefulness of the e-ELP?

Data will be collected to address the following:

- Technical aspect of the project (functionality, usability, design, support, manual quality, training quality)
- Pedagogy (strategies used as they apply to language learning, kinds of activities it can support, added value of the project over paper based ELPs, etc.)
- The goals of the EU and its standards on ELP validation and accreditation
- Achievement of the expected outcomes at a desirable level and acceptable quality.

- Deadlines are met by all partners and all have completed their assigned tasks.

Stakeholders

- Partner institutions. The partners involved in this project are the University of Milan (coordinator), Intercollege, University of Salamanca, GAP multimedia, University of Göteborg, University of Skövde, and Europa Universität Viadrina Frankfurt.
- The European Commission which funds the project and has a serious interest in ELP.
- Teachers who currently use an ELP and will potentially use the e-ELP once it is fully developed and accredited.
- Students from European and other countries interested to study or work in the EU and who will use the e-ELP for their education and/or employment.
- Employers who will be hiring individuals who need to possess good language skills and who will use the e-ELP to demonstrate their language proficiencies.

Evaluator Role

The evaluator always acts in political, institutional, social, and historical contexts. My role as evaluator will be closely defined by a social network of relationships with the partners. As an internal evaluator, I have a responsibility toward all partners, teachers, and students to maintain confidentiality and make sure that I do not cause any problems or harm to the parties involved. I will have to create a relationship based on trust and collaboration with the participants, which will allow me easy access to the setting and collection of quality data. The assumption is that, the closer I get to the setting, the more likely it is that I will be able to access information from multiple sources to warrant the evaluation findings.

The evaluator's experience with the subject of study will influence the validity of inferences. Articulation of the background of the evaluator is important. My role as

evaluator will be influenced by my role as part of the design team and by my experience with the topic of study, which will also influence data collection and analysis. There is no bias-free point of view in any approach to evaluation. We all filter our view of phenomena through our theoretical lens. It is not an easy task to block out my preconceptions about the setting and the topic under inquiry. No matter how hard I try, I can never enter a setting as the “fly on the wall.” I enter a setting and depending on the lens I view the setting through and role I assume, I will get a different perspective. I can never renounce my prior knowledge. However, I can discuss my preconceptions and be aware of their existence and how they influence my view of the world and my interpretation of social phenomena. By discussing some of the factors that might have influenced my interpretation in this evaluation, it allows readers to be co-analysts of the study and reach their own conclusions about the validity of inferences. Following, the various data collection procedures are briefly described.

Evaluation procedures and data collection during the stages of development

The major stages of development, according to the proposal submitted are:

1. Analysis and planning
2. Pedagogical project and storyboard design
3. Digital implementation
4. Planning the testing procedures
5. Testing the prototype version of the e-ELP
6. Implementation of the final version
7. Accreditation
8. Dissemination
9. Coordination

The evaluation of the project will be carried out through quantitative and qualitative methods. The proposed procedures to be employed to evaluate each of the above phases are briefly discussed below. Please note that some of the instruments have not been fully

developed yet, since the final functionality, look, and implementation of the e-ELP is still developing and changing. Once the pilot e-ELP, the instruments to be used for the evaluation will be developed. Some general data collection procedures which apply to all stages are:

- Upon the conclusion of each meeting, meeting evaluations will be conducted and reports, reflections, and related material will be disseminated to all partners and feedback will be requested.
- Collection of the all monthly chats between the design team.
- Review of the preliminary storyboards and development of the project.
- Usability evaluation of prototypes (graphical user interface, functionality, free of errors, testing with actual users such as teachers and students, etc.).
- Expert review for the appropriateness of pedagogical structure and content.
- Check for correspondence of our e-ELP with the EU model. Present the e-ELP design to the Validation Committee of the Council of Europe for feedback on the conformity of the project to its guidelines and regulations. The final version of the e-ELP will be presented for accreditation to the Committee.
- Evaluation questionnaires to be completed by all partners and their users involved in the testing process.
- Interviews and/or survey questionnaires will be conducted/administered to all stakeholders including developers, partners, teachers, students, and possibly to other prospective users of E-ELP.

More specific procedures for each of the stages are described below.

Analysis and planning

During the first phase of the project, we have established an outline for the evaluation during the first steering meeting in Cyprus. An outline of the proposed evaluation plan was shared with partners and feedback was received. The final evaluation plan was developed and shared with all partners for further feedback. The finalized agreed upon plan will be implemented as presented in this document.

Pedagogical project and storyboard design

During the development of the storyboard for the project, an informal evaluation procedure was implemented. Language experts will follow the Guide for developers and collaborate face-to-face and online for the development of language descriptors and for the development of the storyboard for the e-ELP. These storyboards are posted on the project secure website for peer review and analysis. Feedback is exchanged among participants to ensure that the pedagogical design is appropriate and that the development of the project follows the EU standards for validation. During the storyboard design process, the pedagogical team will go through multiple cycles of development. They will work in teams and collaborate in the development of language descriptors and in developing a print-based storyboard which will guide the developers design the digital prototype of the portfolio. This process will be completed with a check by language experts from partner institutions who will review the storyboard to ensure that it is in alignment with the accreditation standards prepared by the EU and titled “Application for validation and Accreditation of an ELP model.”

Digital implementation and testing (combined stages 3, 4, 5)

The prototype version of the e-ELP will be developed and evaluated. The goal of evaluation during this stage will be to resolve major technical issues and problems and ensure that the e-ELP is taking advantage of the affordances of technology. The specific goal is to provide recommendations for the improvement of the following:

- Overall quality of the project
- Provisions of training material
- Documentation and user guides
- Usability of the system
- Functionality (downloading the application, entering data, editing, updating, publishing, reviewing, grading, reflecting, sharing, securing, etc.)
- Pedagogical aspect of the project (passport, biography, dossier)

Data will be collected following the procedures below:

Heuristic Usability evaluation and expert reviews

Three experts in interactive multimedia design and usability evaluation will review the prototype following the usability evaluation checklist developed by Vrasidas (2001) and feedback will be provided to developers who will make the necessary adjustments (see appendix for complete checklist). The checklist was based on usability instruments (CSUQ, NAU, NHE, PHUE, PUEU, PUTQ, QUIS, SUMI, WAMMI) and evaluation approaches (Jeffrey, 1994; Jeffries, Miller, Wharton, & Uyeda, 1991; Nielsen, 1993; Norman, 1993, 1999; Reeves & Hedberg, 2003; Shneiderman, 1998). Several questions concern the following quality criteria identified by Nielsen (1993) and illustrated on table 1 (http://www.useit.com/papers/heuristic/heuristic_list.html).

Table 1. Quality criteria and heuristic evaluation (Nielsen, 1993).

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- Visibility of system status
 - The system should always keep users informed about what is going on, through appropriate feedback within reasonable time)
 - Match between system and the real world
 - The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.
 - User control and freedom
 - Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.
 - Consistency and standards
 - Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.
 - Error prevention
 - Even better than good error messages is a careful design which prevents a problem from occurring in the first place.
 - Recognition rather than recall
 - Make objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.
 - Flexibility and efficiency of use
 - Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.
 - Aesthetic and minimalist design
 - Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.
 - Help users recognize, diagnose, and recover from errors
 - Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.
 - Help and documentation

- Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.
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User testing

One teacher and 3-5 students from each partner institution will pilot test the prototype e-ELP. Then, they will be assigned a set of specific tasks to complete. While working on the tasks they will be asked to keep notes and identify issues relating to all aspects of the project.

Survey questionnaires and semi-structured interviews with the teachers and students will be conducted to identify the issues relating to the project. The questionnaires will be administered to collect information on the technical, reporting, and pedagogical aspects of the e-ELP. It should be noted that this is a pilot test of a prototype and the goal is formative. The data gathered from the user testing will be analyzed to draw the appropriate conclusions about the value of the e-ELP.

Two Evaluation Questionnaires will be developed based on the literature review and on the data collected from earlier stages that will target the 2 primary kinds of users:

- Instructors, professors, trainers, and others who will use e-ELP in their teaching (pedagogical and assessment tool).
- Students who will use this instrument to demonstrate their language proficiency and improve their language skills.

Once the e-ELP is developed and its functionality is finalized, the structure and pieces of the questionnaires will be developed to target all aspects of the project. These aspects and specific questions will be added in this section.

In order to develop the evaluation questionnaires, the following will be taken into consideration:

- Teacher and student functions and needs.
- Evaluation goals as they will be negotiated and agreed upon among the partners.
- Review of other usability instruments (CSUQ, NAU, NHE, PHUE, PUEU, PUTQ, QUIS, SUMI, WAMMI) and approaches (Jeffrey, 1994; Jeffries, Miller, Wharton, & Uyeda, 1991; Nielsen, 1993; Norman, 1993, 1999; Shneiderman, 1998).
- Other educational technology evaluation studies, models, and approaches (Heinecke et al., 1999; Heinecke & Willis, 2001; Herman et al., 1987; Reeves & Hedberg, 2003; Stufflebean et al., 2000, Vrasidas, 2001).
- Real users' input.

Once the full functionality of the e-ELP is developed, the major parts of the questionnaires will be developed and discussed in detail. Preliminary sections include pieces with items collecting data regarding the usability of the e-ELP, the technologies used, the functionality provided to the student, the functionality provided to teachers, user guides and documentation, the language part, the language biography, and the Dossier.

Question items will be designed to collect data to address the above issues. Once the instrument is developed, it will go through 2 rounds of revisions. First, during the expert review phase, the instrument will be shared with experts in usability evaluation and educational technology evaluation in order to receive their feedback. Once revisions are incorporated from the expert review the instrument will be pilot tested with prospective users.

After pilot testing the instruments and revisions are made, the instrument will be sent out to partners involved in the project to administer the instrument. Our aim is that we get representative users from as many partner institutions as possible to complete the questionnaires. In addition, during the development process, informal user testing and reviews will be conducted in an effort to pilot test the components of the project.

Data analysis

For data analysis, we will follow two stages: the inductive and deductive. Interview transcripts, project documents, meeting minutes, memos, log files, and survey results will all be analyzed. Upon entering the inductive stage, I will organize all the transcripts, field notes, and documents. I will use data displays, concept maps, and tables to illustrate findings of the evaluation. I will calculate descriptive statistics based on the survey data completed by participants at the end of each phase of the project.

The inductive stage of data analysis is very open-ended, and it is the stage in which the evaluator generates assertions. After I collect and organize all the data, I will read through the data three times and try to gain an overall understanding of the project. As I read through the data, questions will come to mind. I will write notes and memos about those issues and events that strike me and begin to generate assertions. Assertions are propositional statements that indicate relationships and generalizations in the data and which the evaluator believes are true. Once I generate assertions from the data as a whole, I will enter the deductive stage. In this stage I will engage in detailed examination of the data corpus and look for data to confirm or disconfirm my assertions and findings of the evaluation. A report will be prepared with a list for recommendations to be implemented in the final version.

Implementation of the final version

The final version of the e-ELP will be developed, incorporating the feedback received from the pilot testing of the e-ELP described above.

Accreditation

The final component of the evaluation of this project will come at the end, when the accreditation will be complete. We hope that the project developed will meet the EU's standards for validation and that the e-ELP will be validated. We will reflect on the accreditation comments and results.

Dissemination

For evaluating the dissemination of the findings from this project, information will be gathered from the following:

- The official project website
- Articles published in books and journals
- Articles published in newspapers and magazines at the local and international level
- Papers presented and national and international conferences

Coordination

The coordination of the project will be evaluated through the use of a survey questionnaire that will be administered to all partners during the middle and towards the end of the project. The goal of questionnaire will be to get all partners feedback on the strengths and weakness of the coordination and how future projects can be benefited. An email survey will be conducted every 6 months to get feedback on the coordination of the project. The email survey instrument is included in Appendix B. Furthermore, for evaluating the coordination of the project, we will review the official administrative documents we will present to EU (e.g. contracts, timesheets, reports, budgets, etc.).

References

- Barrett, H. C. (March, 1994), Technology-supported assessment portfolios. *The Computing Teacher*, 21, 9-12.
- Calfee, R. C., & Perfumo, P. (1993), Student Portfolios: Opportunities for a revolution in assessment. *Journal of Reading*, 36, 532-537.
- Cronbach, L. J. (1982). Designing evaluations of educational and social programs. San Francisco: Jossey-Bass Publishers.
- Glazer, M. S., & Brown, C. S. (1993), *Portfolios and beyond: Collaborative assessment in reading and writing*, Norwood, MA: Christopher-Gordon Publishers.
- Heinecke, W. F., Blasi, L., Milman, N., Washington, L. (1999). New directions in the evaluation of effectiveness of educational technology. Paper presented at the Secretary's conference on educational Technology. Available online at <http://www.ed.gov/Technology/TechConf/1999/whitepapers/paper8.html>.
- Heinecke, W., & Willis, J. (2001). (Eds.). *Research and evaluation methods in educational technology*. Greenwich, CT: Information Age Publishing, Inc.
- Herman, J. L., Morris, L. L., & Fitz-Gibbon, C. T. (1987). *Evaluator's Handbook*. Beverly Hills, CA: Sage Publications.
- Jeffrey, R. (1994). *Handbook of Usability testing. How to plan, design, and conduct effective tests*. New York: John Wiley & Sons, Inc.
- Jeffries, R., Miller, J. R., Wharton, C., & Uyeda, K. M. (1991). User interface evaluation in the real world: A comparison of four techniques. *Proceedings of ACM CHI'91*, (pp. 119-124), New Orleans, LA, 27 April-2 May, 1991.
- Nielsen, J. (1993). *Usability engineering*. San Diego, CA: Morgan Kaufmann.
- Norman, D. A. (1993). *Things that make us smart. Defending human attributes in the age of the machine*. Cambridge, MA: Perseus Books.
- Norman, D. A. (1999). *The invisible computer*. Cambridge, MA: The MIT Press.
- Reeves, T., & Hedberg, J. (2003). *Interactive learning systems evaluation*. Englewood Cliffs, NJ: Educational Technology Publications.
- Shneiderman, B. (1998). *Designing the user interface: Strategies for effective human-computer interaction*. Reading, MA: Addison Wesley Longman, Inc.

Schneider, G., & Lenz, P. (2003), *European language portfolio: Guide for developers*. Switzerland: University of Fribourg. Retrieved online on April 15, 2004 from [http://culture2.coe.int/portfolio/inc.asp?L=E&M=\\$t/208-1-0-1/main_pages/./documents_intro/developers.html](http://culture2.coe.int/portfolio/inc.asp?L=E&M=$t/208-1-0-1/main_pages/./documents_intro/developers.html).

Smith, M. L., & Glass, G. V. (1987). *Research and evaluation in education and the social sciences*. Needham Heights, MA: Allyn and Bacon.

Stufflebean, D. M. Madaus, G. F., Kellaghan, T. (Eds). (2000). *Evaluation Models: Viewpoints on educational and human services evaluation* (2nd ed.). Boston: Kluwer Academic Publishers.

Vrasidas, C. (2001). Interpretivism and Symbolic Interactionism: “Making the Familiar Strange and Interesting Again” in Educational Technology Research. In Heinecke, W., & Willis, J. (Eds.), *Research Methods in Educational Technology* (pp. 81-99). Greenwich, CT: Information Age Publishing, Inc.

Weiss, C. H. (1998). *Evaluation* (2nd ed.). Upper saddle River, NJ: Prentice Hall.

Appendix A

User Interface Rating Tool

User Interface Rating Tool²

Please respond to all the items below addressing the degree to which the program illustrates each of the indicators listed. For items that are not applicable use N/A.

		bad						good	N/A
1	The program uses simple and natural language	1	2	3	4	5	6	7	
2	The program speaks the user's language	1	2	3	4	5	6	7	
3	The program minimizes user's memory load	1	2	3	4	5	6	7	
4	The program places information, navigation, options and other features in a consistent manner	1	2	3	4	5	6	7	
5	The program provides meaningful feedback to the user within reasonable time	1	2	3	4	5	6	7	
6	There are clearly marked exits	1	2	3	4	5	6	7	
7	The program protects the user from errors	1	2	3	4	5	6	7	
8	Error messages displayed are meaningful and helpful to the user	1	2	3	4	5	6	7	
9	The available help and documentation are helpful to the user	1	2	3	4	5	6	7	
10	It is easy to learn how to use the program	1	2	3	4	5	6	7	
11	The program is accessible by users with disabilities	1	2	3	4	5	6	7	
12	Features and functions are easy to remember	1	2	3	4	5	6	7	
13	Links are labeled meaningfully	1	2	3	4	5	6	7	
14	Using the program helps the user learn the material	1	2	3	4	5	6	7	
15	The user is always informed about the location he/she is at every part of the program	1	2	3	4	5	6	7	
16	The program provides the user sufficient control and freedom to accomplish tasks	1	2	3	4	5	6	7	
17	The user can easily locate information	1	2	3	4	5	6	7	
18	The interface is aesthetically pleasant	1	2	3	4	5	6	7	
19	Information is organized meaningfully	1	2	3	4	5	6	7	
20	Rate the overall experience from using this program	1	2	3	4	5	6	7	

List three negative aspects of the program.

List three positive aspects of the program.

² The instrument below is based on Nielsen's (1993) heuristics and on other indicators identified in the literature (Dix et al., 1998; Gould et al., 1991; Jeffrey, 1994; Nielsen, 2000; Norman, 1993, 1999; Raskin, 2000; Shneiderman, 1998).

Appendix B

Email Survey Evaluating the Coordination of the e-ELP

Email Survey Evaluating the Coordination and Progress of the e-ELP

Name: _____

Institution: _____

Email: _____

1. Rate the overall progress of the project.

Poor 1 2 3 4 5 6 Excellent

2. How satisfied are you with your contribution thus far?

Not at all satisfied 1 2 3 4 5 6 Very satisfied

3. How satisfied are you with the contribution of the partners?

Not at all satisfied 1 2 3 4 5 6 Very satisfied

4. How satisfied are you with the coordination of the project?

Not at all satisfied 1 2 3 4 5 6 Very satisfied

5. How satisfied are you with your participation in decision making?

Not at all satisfied 1 2 3 4 5 6 Very satisfied

6. What are the major difficulties/problems of the project? How can they be resolved?

7. What are the things that work well in the project?

8. Any additional comments?

Please return this survey via email to Charalambos Vrasidas at cvasidas@cait.org.