DISENTANGLING LEARNING PROCESSES: HOW TO DESCRIBE THE E-LEARNING EXPERIENCE FOR DISADVANTAGED TARGET GROUPS

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Abstract

MOOCs and more in general the provision of e-learning courses are advocate by many as the way for equalising educational opportunities, independently from gender, nationality, socio-economic status. Moreover, their strength is clear in bridging divides, at least in theory, with more than 25 million people enrolled in a MOOC from 2012 and 2015, nearly 40% of which from developing countries. Still the retention or completion rates are not so encouraging and seem to discriminate particularly specific groups. Even though it is argued that completion rate is not a proper measure of a course success as it could reflect an intentional “cherry-pick” approach to MOOCs and OERs (Clark D.2013, Ho A. et al, 2014; Hayes, 2015), still it is a signal to be taken into account when it concerns learners from developed countries (Kizilcec et al. 2015). Several interventions were made to verify on an experimental basis possible social identity threats during courses (Kizilcec et al. 2017) and they resulted to be successful, but more research is needed to understand which elements in a course advantage or impede learning within a cultural responsive pedagogy (Wlodkowski, et al. 1995). What happens during the e-learning experience with weaker groups of learners, such as those who lack of basic e-skills? Which are the major obstacles in the process to a completion of the course?

In this framework, the ADVENUS project (Developing online resources for adult refugees, ref. 2016-1-NO01-KA204-022090) aims at developing high quality and open access e-learning resources for adult refugees aged 18-40 in order to enhance the basic skills for a positive integration in the European countries. The research group, led by Lillehammer University College (Norway, consortium leader), includes LUMSA University (Italy), Porto University (Portugal) and CDI (Community Development Institute, Macedonia).

This contribution is focused on the second phase of the ADVENUS project. LUMSA University is in charge of organising, monitoring and evaluating the trials of the different learning units (LUs) produced in three different European cultural areas (Italy, Norway and Portugal). Those LUs are devoted, among the others, to help young refugees to write curriculum vitae, to use the Internet to look for an occupation, to enhance basic numeracy skills and to apply successfully problem-solving skills in technology rich environments. In detail, this paper intends to offer a different perspective from the traditional e-performance observation approach, based on the accuracy of recorded tracking of the actions of the learner in the e-platform, given that “the massive databases of MOOCs hold immense analytic potential but are ripe for misuse and misinterpretation” (DeBoer et al., 2014). It is clear that, with disadvantaged target group, critical success factors for learners are beyond the course itself, being centred on valid feedback, dialogue and interaction with tutors. Therefore, according to Whitworth (2004), there is the need to learn about the variation of learners’ experience (phenomenography) (Haythornthwaite et al. 2007), in order to examine it in not exclusively for its outcome but, more importantly, for quantity and quality of learning processes activated. Results include the validation of the integrated “e-observation” in a mediated e-learning experience, analysing and discussing its pros and cons.

Keywords: Adult refugees, Italy, OERs, e-skills, observation, evaluation.

1 INTRODUCTION¹

The ADVENUS project (Developing online resources for adult refugees, ref. 2016-1-NO01-KA204-022090) aims at developing high quality and open access e-learning resources for adult refugees aged 18-40 in order to enhance the basic skills for a positive integration in the European countries.

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The research group, led by Lillehammer University College (Norway, consortium leader), includes LUMSA University (Italy), Porto University (Portugal) and CDI (Community Development Institute, Macedonia). The initial phase of the project included a review of the literature in order to establish the constructs interested by the learning courses and to verify the adequacy of the Culturally Responsive Pedagogy for the target group considered. Then a set of group interviews with cultural mediators and adult educators employed in centres for refugees were carried out, in order to match the learning goals designed for OERs and the actual needs of the prospective learners. After implementing the OERs in the VLE, the setting for their trial and validation was draft.

In details, this paper present a possible model and the tools used in ADVENUS project for evaluating the quality of e-learning resources and their cultural responsiveness offered to adult refugees. First results of the trials are presented, together with considerations on the usefulness of the procedures adopted.

1.1 Theoretical assumptions

First, it is important to realize why a model is needed in research as in a program evaluation process. A model [4], built on an extensive quantity of data, should allow who uses it to:

- Solve the complexity of a phenomenon, discarding optional elements and focusing only on the more significant ones;
- Summarize in a consistent way past phenomena and explain the present ones;
- Predict future events (as a way to control the validity of the model in itself).

Therefore, the evaluation process should not be aimed only at verifying the achievement of minimum qualitative standards, but to report and understand, in a transparent and replicable way, mechanisms and processes activated into the learning path.

Another considerable difference to be considered is the one between assessment and evaluation. The ultimate goal of trials was not be only that of “assessing”, i.e. measuring with quantitative data the validity of the courses, but mostly of “evaluating” the program according to its actual implementation characteristics [3]. In this way, researchers intended to produce a more accurate perspective on the delicate context in which a very selective and specific group of individuals, the adult refugees, is trying to access to an e-learning path again or for the first time. Briefly, from a realistic perspective to a constructivist one, a set of possible outcome of e-learning evaluation and related models/approaches will be described here [1]:

- Case study
- Comparisons with traditional learning
- Performance evaluation
- Product evaluation (software)
- ROI - Return on Investment report

The case study approach to e-learning evaluation has been widely used in specific sectors and geographical areas (Higher Education and Vocational education, particularly in USA). The possibility to make contrasts with results reached into traditional learning path did not give, as recent meta-analysis confirm carried out on over a thousand experimental studies [7], any certain answer on this dilemma. Moreover, it is becoming growingly pointless, for the pervasive use of ICT in pedagogy at all levels.

The first element that is generally considered as a meaningful evidence of the success of a learning path is the level of students’ achievement, or their performance. However, this is not “the” measure that directly allows making inferences on the quality of the courses. Learning outcome are a complex pattern of cognitive, emotional and behavioral aspects, which rarely a final test can measure entirely.

Software evaluation for e-learning solutions is probably one of the widest sectors where data and reports are available, for commercial and promotional purposes. Even though the software can play a major role in the presentation of the learning contents, it is not the only one that makes learning meaningful.
Similarly, the Return of investment reports (ROI) are carried out in the Human Resources areas of many organizations and companies to assess the value for money of their investments in e-learning. Model offered are rightly intertwined with the company’s goals and setting and thus it is very difficult to generalize them to an academic context.

To sum up, many commonalities can be found into the approaches briefly presented so far. However, the classic approach that include questionnaires and tests proposed to the learner in order to catch basic information related to motivation, interest, self-efficacy and achievements are not possible due to language barriers, and in some cases to a lack of e-skills. Moreover, the enormous difference in levels of individuals in target groups, across and within countries involved in ADVENUS project, makes it hard to use a common standardized tool as a questionnaire or a test to collect data as the baseline may sensibly differ. This is why it is necessary to follow a mixed approach [2], that will include not only evaluation activities, but also proper research activities to better operationalized the constructs considered [6]. Without considering here all the implications of the LEPO framework (Learning Environment, Learning Processes and Learning Outcomes) proposed by the authors, it is the dimension of evaluation and research together that was considered for ADVENUS trials interpretation.

2 ADVENUS MODEL FOR EVALUATING COURSES

Technology was not the exclusive focus of the evaluation for ADVENUS courses. If the main idea is that of involving refugees in a learning path, useful for their employability and directed to improve their life in the hosting country, one important measure of success is their willingness, after these courses, to repeat the experience, using similar courses or different opportunities available online for self-improvement. Other than this ultimate goal, the ADVENUS courses experience should achieve participants’ engagement in an e-learning experience, fostering their curiosity into basic e-skills and reinforcing their literacy skills in the language of the host country. What follows is a matrix adapted from Phillips [6] that includes the main research questions that will lead the trials and the tools used to capture data (table 1).

<table>
<thead>
<tr>
<th>Question</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Learning analytics review</td>
</tr>
<tr>
<td>To what extent is the learning design appropriate to the desired learning outcomes?</td>
<td>X</td>
</tr>
<tr>
<td>Is the learning design consistent with the beliefs and expectations of the learners about learning?</td>
<td>X</td>
</tr>
<tr>
<td>How well aligned are the learning and assessment tasks to the desired learning outcomes?</td>
<td>X</td>
</tr>
<tr>
<td>To what extent does the learning design enable learners to reflect on their work and develop generic learning outcomes?</td>
<td>X</td>
</tr>
</tbody>
</table>

More in details, the following variables were considered in each tool for data collection (Table 2) in order to answer to the question of the Evaluation-research matrix.
Table 2. Variables-tools matrix for learning design evaluation (adapted and integrated from [1])

<table>
<thead>
<tr>
<th>Individual learner variables</th>
<th>Learning analytics review</th>
<th>&quot;Small-talk&quot; interviews</th>
<th>Direct Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• demographics (e.g. age, sex)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• learning history, (negative/positive experience, level of attainment, duration etc.)</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>• learner motivation (high/low)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• familiarity with the technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contextual / cultural variables (linked to learner)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• cultural background (e.g. how highly is learning/e-learning valued?)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• cultural sensitivity issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• geographic provenance (e.g. country, language, urban/rural)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Learning environment variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• the immediate (physical) learning environment</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• the organisational or institutional environment</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Technology variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• hardware</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• software</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>• connectivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedagogic variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• accessibility issues</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• language issues (readability of texts, lexicon)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• level and nature of learner support interventions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• learner autonomy and pace (timing, “clicks” tracking)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• assessment (timing)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• assessment (results)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• assessment (comments, perceptions)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• usefulness of the course for learners’ needs</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• willingness of learners to repeat the experience</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Each Partner Organization that was in charge of carry out the trials will follow the procedures indicated below, in order to standardize as many elements as possible even considering the highly relevant differences between and within countries.

Settings for trials were mainly of three typologies:

a) Classroom setting in schools and centres (up to 15/20 learners, individual laptop/pc)
b) Individual study setting, in refugee camps (up to 4/6 learners, 2/4 laptops/pc)
c) Individual study setting, in private houses (up to 2/4 learners, one laptop/pc).

Project researchers participating to the trial sessions were be 2 in trial settings A and B and 1 in trial setting C. One of the two acted as presenter.
2.1 Sampling

Sampling strategies were oriented to promote inclusiveness, in order to increase the probability that the target group of refugees, intrinsically marginalized, is adequately represented. Therefore, starting from the contacts taken with the centers for adult learning and refugees, a snowball sampling was realized, identifying possible “allies” among respondents in order to attract more participants to the trials. Trials lasted more consecutive days when needed exactly for this purpose.

2.2 Context map and description of the trial setting

In order to be consistent in annotations, in trial settings A and B, it was suggested to identify and map the pc/laptops numbering them progressively (1, 2, 3, ...). Those codes were reported into #IDSTUD column in the observation grid. For trial setting C, where there was only one laptop and more participants, administration of courses were done one by one. Before the trials started, researchers selected together the set of participants that each of them will interviewed directly. However, it is important that both researchers observed all students in order to verify for the interobservational variability (i.e. to control for substantial differences in the 2 observers logs).

Moreover, Learning environment variables and technology variables, valid for all the participants in the same trial session, have to be reported in a brief description of the context, i.e.:

- the immediate (physical) learning environment (how the classroom is set, if there is any particular feature that can interfere with the learning process – noise, bad light, ..)
- the organisational or institutional environment (is it a learning centre? What are its main aims?)
- hardware (how many desktop / laptop pc are available, if monitors are wide enough, ..)
- software (which browser are available? Are there restrictions in internet use?..)
- connectivity (slow or fast).

2.3 Presentation of the trial session

At the beginning of the trial, the presenter introduces himself/herself and his/her colleague. Then s/he indicates the aims of the ADVENUS courses, specifying that:

- Participants’ help is needed and their opinion is valuable for the researchers in order to revise the e-learning system
- Courses are meant to be user-friendly and especially designed for novice users: in case of problems or malfunctioning, participants can ask for help and clarifications
- Researchers are there to facilitate the learning process and observing if the system fit participants needs, this is why they will take notes on what is happening
- Participants that will end the 2 courses will receive a Certificate of attendance to the ADVENUS online courses in e-skills, literacy and numeracy
- Participants can continue using the ADVENUS courses after the trials indefinitely and freely
- Researchers could ask some general information on participants, but those are needed for the sole scope of research and will not be disclosed
- Participation is on a voluntary basis and anonymous for personal data collected.

The presenter can propose, according to the context of the trial, already known in past stages of the project, to ice-breaking questions and stimuli (i.e. “Is this your first online course?” (if not “which courses did you take?”), “Do you think it would be fun/different to take part into an online course?”).

2.4 Registration into ADVENUS VLE

The presenter shows how to get into the system, registering participants with their personal email if they have one and are willing to use it or with a fake email created from the ADVENUS team for the trial purposes. For trial settings A and B a projector is needed in order to make sure all the participants can follow the procedure while they are registering. In the meanwhile, the observer will take note of every question and problem raised and will help participants to log into the system.
After the registration, and being sure that every participant has entered the ADVENUS platform, the presenter shows the courses and proposes participants to start one of the two courses.

2.5 Approaching participants

Ideal solution would be that of participants asking for help to the researchers, in a way that researchers can insert observation notation and questions on the courses during this verbal interaction. In case the participants will use the ADVENUS platform successfully by themselves, researchers can wait to pose some questions at the end one of each course (see “Chronolog” in the observation grid).

2.6 Observation and small talk interviews

During trials, researchers start moving across the classroom (setting A and B) to help the students and carry out the observations. If there are not particular problems, it is suggested to wait some minutes before circulating into the room, in order to make participants moving freely into the ADVENUS VLE at the beginning and to form an opinion before the interaction with the researchers.

The researchers have an observation/small talk interview grid (in 2 versions, one for small and one for large groups) with a set of topics for small talk interviews. The aim was that of filling the grid when possible, covering all the participants to the trial. To this aim, when the trial setting is large (A), researchers have to decide in advance which participants will be interviewed by whom.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Place</th>
<th>Observer</th>
</tr>
</thead>
</table>

### Version 2 (Small Groups)

Please fill in the following boxes with the help of small talk questions before starting the trial session. If needed, engage small talk interview (e.g. “Where do you come from?”, “Did you live in a city or in a rural area?”, “How many languages do you speak other than Italian? Portuguese? Macedonian? Norwegian?”).

<table>
<thead>
<tr>
<th>IDSTUD</th>
<th>Age</th>
<th>Sex</th>
<th>Country of origin</th>
<th>Unrelated background</th>
<th>Language spoken</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>F</td>
<td>U</td>
<td>R</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please fill in the following table rating scales on the basis of small talk interview during the trial session (e.g. “Did you like to study?”, “Did you go to school in your country?”, “Do you like to study now?”, “Are you familiar with purpose?”, “Do you access the internet with your phone?”).

<table>
<thead>
<tr>
<th>Learning history</th>
<th>Education</th>
<th>Qualification</th>
<th>Motivation to learn</th>
<th>Familiarity with technology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>++ + 0 - -</strong></td>
<td><strong>++ + 0 - -</strong></td>
<td><strong>++ + 0 - -</strong></td>
<td><strong>++ + 0 - -</strong></td>
<td><strong>++ + 0 - -</strong></td>
</tr>
</tbody>
</table>

Please fill in the following table on the basis of observation of learners during the trial session.

<table>
<thead>
<tr>
<th>Cultural sensitivity issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility issues</td>
</tr>
<tr>
<td>Level and nature of learner support interventions</td>
</tr>
<tr>
<td>Assessment (comments, non-verbal behavior, perceptions)</td>
</tr>
<tr>
<td>Chronolog (Course 1)</td>
</tr>
<tr>
<td>Chronolog (Course 2)</td>
</tr>
</tbody>
</table>

Please fill in the following rating scales on the basis of small talk interview at the end of the trial session (e.g. “Do you think ADVENUS courses are useful?”, “Do you like the topics?”, “Are there any missing topics you would like to talk?”, “Did you find difficult to understand the language of the course?” “Do you feel confident in going ahead alone in the ADVENUS course?”).

<table>
<thead>
<tr>
<th>Usefulness of ADVENUS courses</th>
<th>ADVENUS Courses language proficiency</th>
<th>Course in the use of the ADVENUS learning platform</th>
<th>Assessment of ADVENUS courses performance</th>
<th>Willingness to repeat the experience with different ADVENUS courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>++ + 0 - -</strong></td>
<td><strong>++ + 0 - -</strong></td>
<td><strong>++ + 0 - -</strong></td>
<td><strong>++ + 0 - -</strong></td>
<td><strong>++ + 0 - -</strong></td>
</tr>
</tbody>
</table>

**Figure 1. The ADVENUS observation grid.**

The observation/small talk interview grid includes the following variables:

- **IDSTUD**: The initial part of the email used for the login. In case of the use of codes prepared in advance by the ADVENUS group. The correct use of these codes was crucial to link the information retrieved with the observations to the learning analytics data deriving from the ADVENUS VLE.
- **Age**: The approximate age in figures of the student
- **Sex**: circle M for male and F for female
• **Country/ies**: The country of origin of each participant (even more than one if needed)
• **Urban/rural background**: if the participants lived in a city or in a rural town/community in her/his country of origin
• **Language/s**: The language/s spoken by participants other than the one of the ADVENUS course

Data on this first set of variables were generally collected in advance with the help of the teachers/educators/cultural mediators once the participants take place in the classroom (in order to match the information with the IDSTUD code). Alternatively, it was suggested to engage a conversation on their origins and country of birth (e.g. “Where do you come from?”, “How many languages do you speak other than <Italian / Portuguese / Macedonian / Norwegian>?”, “Did you lived in a city or in a rural area?”).

The following set of variables were retrieved on the basis of small talk interview during the early stage of the trials or later on when the researcher first met the participant one-to-one:

• **Learning history (Qualification)**. The education level achieved by the participant
• **Motivation to learn**. The interest in general toward learning, operationalized with the frequency to other courses / being engaged in other learning activities currently
• **Familiarity with technology**. The level of autonomy that participant declares in the small talk interview

For these variables, the grid proposes either a box to fill in or a rating scale, that varies from ++ = high / positive to -- = low / negative and has an intermediate neutral point (0, zero). Examples of questions that can be made to collect this information are: “Did you like to study?”,” “Did you go to school in your country?”, “Do you like to study now?”, “Are you following other courses now?”, “Are you familiar with pc use?”,” “Do you access the internet with your phone?”.

The following fields are instead to be filled in on the basis of the direct observation of learners during the trial session:

• **Cultural sensitivity issues**. Report here any problems that can arise during the courses related to cultural approach used
• **Accessibility issues**. Report here any problems in e-learning platform interface (where to click, how to go ahead, malfunctioning in displaying activities or registering activities,..)
• **Level and nature of learner support interventions**. Report here if participant asks frequently for help or not and the main typology of intervention requested
• **Assessment (comments, non-verbal behaviour, perceptions)**. Report here any spontaneous comment or particular non-verbal behaviour of the participant on assessment (even if observed at a distance)
• **Chronolog for Course 1 (and 2)**. Report here separate behavioural episodes noted, together with the time at which occurred, both for course 1 and for course 2 [5].

The last batch of information should be collected at the end of the trial session on the basis of small talk interviews in a rating scale.

• **Attitude towards ADVENUS courses**. The interest toward ADVENUS courses for the topics considered in courses
• **Language perceived difficulty**. The opinion of the participant on the language used in the ADVENUS courses (words, conciseness).

For these variables, questions that can be posed are for instance “Do you think ADVENUS courses are useful?”, “Do you like the topics?”, “Are there any missing topic that you would like to take?”, “Did you find difficult/understand the language of the courses?” “Do you feel confident in going ahead alone in the ADVENUS course?”. In general, all these questions, if answered negatively, can be followed by a request of specific details, i.e.: “if you had difficulties during the course, where exactly it was? / Why? / How did you manage to finish the course anyway?”.
2.7 Follow-up to participants

In order to allow data collection process and outcomes to benefit the communities being studied, other than follow-ups and final events for dissemination, a brief summary of the findings collected during the trials were given to participants. Follow-up could mention:

- Errors and malfunctioning of the system to be fixed
- Unclear instructions to be reformulated
- Culturally inappropriate contents to be adjusted
- Possible integrations and future topics courses should deal with
- General feelings of the group toward courses.

It was suggested to wait for participants’ feedback on the follow up, confirming or clarifying its main points. Researchers were then invited to thank participants for their precious help and to indicate the project website as a place where to find the results of the project.

3 THE TRY-OUT RESULTS

The first trials of the ADVENUS courses took place in Rome, at “Il Faro” centre for professional training and were arranged in two separate sessions, each lasting 2 hours and involving 10 refugees (for a total of 20 refugees). The focus of these first trials was twofold: on the one hand to try out on the moodle platform two ADVENUS courses created by LUMSA and aimed at providing refugees with help and tips on curriculum writing and job searching on the web (both courses were developed in Italian language); on the other hand to trial the “e-observation” grid for the evaluation of the quality of the learning process in a mediated learning environment.

Two observers from LUMSA conducted the trials, with the help of two teachers/cultural mediators. The try-outs were carried out during regular Italian language classes, in order to facilitate refugees in considering ADVENUS courses usual learning activities. In this view, the role of the teachers was of paramount importance in creating a relaxing and fruitful environment.

At the beginning of each session, the observers decided which refugees to observe and completed the sections related to background information. Provided that in Italy classes for immigrants and refugees often include students with different educational backgrounds (some of them were illiterate when they first came to Italy) and language knowledge levels (Italian language knowledge in the case of LUMSA’s trials) the observation protocol envisaged to conduct this preliminary work before starting the trial’s sessions. In order to effectively interact with refugees during and at the end of the try-outs (through support interventions and small talks), the observers needed to know in advance which was the profile of the learner s/he would be interacting with.

The background information allowed LUMSA’s observers to adapt their language and actions to the heterogeneous target group involved in the trialling of the courses and to manage autonomously small talks’ interviews (although the support from teachers was required for those students with low levels of Italian – or any other European - language knowledge).

After gathering information on the contextual variables of each participant, the observation phase was conducted, while participants were engaged in navigating the platform and in completing the activities. In this phase of the ADVENUS courses try-outs, the “e-observation” grid proved to be a flexible tool in conducting the observations with refugees’ learners dealing with a virtual learning environment, supporting the observers in

1. analysing the basic features of the courses, through the items/entries focused on “cultural sensitivity issues” and “accessibility issues”;
2. recording significant behaviours related to the learning process as a whole, through the items/entries related to learners’ support interventions, verbal/non-verbal behaviours, Chronologs.

Hence, setting these variables as the core of the “e-observation” grid allowed observers to gather a wide range of evidences and annotations on the course and platform itself and on the interaction between ICT, course contents and learner behaviours. Taking into consideration the different educational and Italian language proficiency levels of the participants, the focus on retrieving...
information indirectly, without forcing refugees in verbal comments, proved to be an effective option for carrying out the evaluation of the ADVENUS trials.

The rating scales to be used at the end of the try-outs were developed following the same rationale, that is trying to gather basic perceptions and insights on the courses (in terms of usefulness of the contents, language difficulty, easiness in the use of the e-learning platform, willingness to continue using the ADVENUS courses) with minimum verbal interactions.

Moreover, the flexibility of the grid allowed the observers to expand the topics conveyed through the rating scales, if the refugee was able and/or willing to talk about her/his experience. In those cases, the rating scales worked as an outline from which the observer could start the small talk interview. Most of the refugees with good levels of Italian knowledge showed interest in sharing their experience with the researchers.

Overall, the high level of flexibility of the “e-observation” grid and the preliminary section of background information allowed LUMSA’s observers to collect relevant and detailed information about the e-learning experience with disadvantaged group developed through ADVENUS courses.

However, it must be noted that the central section of the grid related to the observation of participants’ interactions with the courses was not entirely appropriate for those refugees with very low levels of Italian language knowledge. In detail, given the frequent requests for help to understand words and/or activities (and sometimes also in relation to the use of the platform) it was not possible to discern the nature of support interventions from the Chronologs. In the repeated demand for support, it was extremely difficult to highlight specific and/or relevant behavioural episodes.

In addition to this, the constant help of the teachers/cultural mediators raised several questions to the validity of courses completion by these learners. Language proficiency was a strong barrier in making a fruitful use of the ADVENUS courses and activities. But it is not only a matter of a higher degree of difficulties of the resources offered for a specific sub-group of participants: the heterogeneity of refugees’ educational and cultural background questions the concept of learning individualization and pose new challenges for educators and researchers, aiming at involving refugees (and more in general disadvantaged groups) in learning and e-learning experiences.

4 CONCLUSIONS

The idea of blend the interaction with the e-learning platform with the support of a teacher or a cultural mediator was the strategy followed to capture rich information to get a “thick” description of the learning experience. Of course limits of this procedures can be seen in the need for triangulation of data and – particularly for larger groups of learners – in the selection of the focus of the observation. However, these interpretations can be compared and contrasted with the learning analytics collected automatically through the VLE, to verify whether they can be validated or not with results achieved by each participant to the assessment activities. This could allow to assign meaning from a grounded perspective to the learning analytics, clarifying the value of the completion and the retention rate in the light of the wide differences in learners’ transversal/basic skills.

More trials were carried out in southern regions of Italy (Sicily, Calabria), following the same procedures. The data collected in the 4 participation countries will provide instead a broader overview of possible cultural sensitivity issues.

ACKNOWLEDGEMENTS

The ADVENUS project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

REFERENCES


