ERASMUS+

Cooperation for innovation and the exchange of good practices

Strategic Partnerships for school education

I SECURE Project

Empowering education systems in information security

Project Number 2015-1-IT02-KA201-015005

The Netherlands

O5-A4. National testing and consultation report

The Open University of the Netherlands
April 2018

Table of Contents

1. Introduction

In this document are reported the data related to our national training and testing events. These took place in the Netherlands in March 2017 and involved 15 teachers from Candea College.

1.1 I SECURE Project: aim, objectives and results

According to the D.O.W. The consortium aims at:

"a. providing concrete support (methods, prototypes, courses, learning materials, 'Technology Enhanced Learning (TEL) I secure ecosystem, etc.) for supporting the digital agenda of the different European countries, and at European level.
b. supporting the strategic use of information and communication technology in teaching and learning programmes as a precondition for the development of innovative pedagogical method at secondary schools level (students of 11-18 years), in the partner countries.
c. developing and testing the TEL I SECURE eco-system' which will represent ready to use tools and instruments for empowering teachers in the field of safe ICT use in school education (ICT based teaching and assessment).
d. providing innovative collaborative practices and tools to foster an informed and aware use of ICT tools in educational activities to develop key skills as: problem solving; collaborative learning; creative team working; writing and reading in ICT based environment.
e. empowering teachers and students for enhanced use of ICT in school education also through creative team working and collaborative learning based on ICT.
f. to provide specific competencies for teacher initial and continuing training dealing with modern and innovative pedagogical methods and tools (e.g. adopting innovative and collaborative learning practices, assessment of employability soft skills)".

As far as the desired results is concerned, each partner country has organized a training and collaborative event in which the ISecure agent course has been presented and evaluated

1.2 I Secure partnership

I secure partnership is composed by seven partners from five different countries. The partners are USR Lazio (IT); Effebi Association(IT); E-CO-learning studio srl (IT); the Open University of the Netherlands (NL); UNWE (BG); Inercia Digital S.L (SP) and MERIG (AT).

2. Testing phase
2.1 Testing methodology and tools

Guidelines and assessment questionnaires/tools were provided by Associazione Effebi, approved by the coordinator USR Lazio. Here the results of the National Training and collaborative learning activities are provided

2.2 National training events (O5-A2) results

15 people were involved in the national training event where OUNL have introduced participants to the platform and the concepts that in our iSecure Agent course are provided.

All participants were online with their iPad. To each of them we have given access to the pre-test and post - test both designed by Associazione Effebi and provided in google Form.

2.2.1 Pre-test questionnaire results

The pre-test questionnaire was composed by seven closed questions.

The majority of our papulation is composed by women (12/15) with an average age of 47,6 age (SD=10.3). it was asked them to rate their ICT skills level using a Likert scale (1-bignner and 5 advanced) and only one person (on 15) declared to have a high ICT skills level. The rest values were distributed as follow
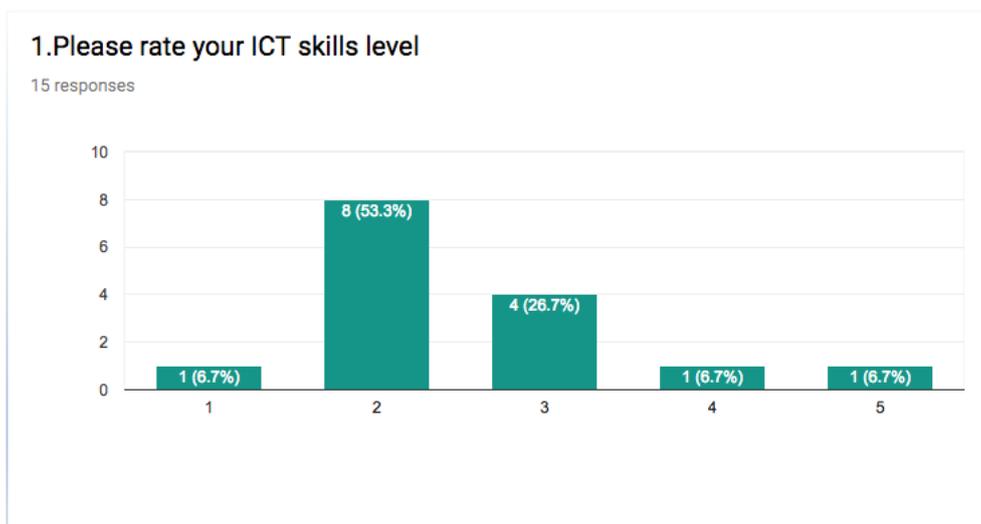
Figure 1- Participants ICT Skills

The majority of our participants have rated their ICT skills level around 2/5.

We have asked them to rate, using a scale form 1(not confident to 5 experienced) their level of confidence in using online tools and resources and the majority of them gave a 2 that means a little.

Figure 2 Participants level of confidence in using online tools and resources

As Figure 3 shows, the majority have little experience in using online tools for their learning, eight teacher out of 15 choose 2 (out of 5) as answer.

Co-funded by the
Erasmus+ Programme
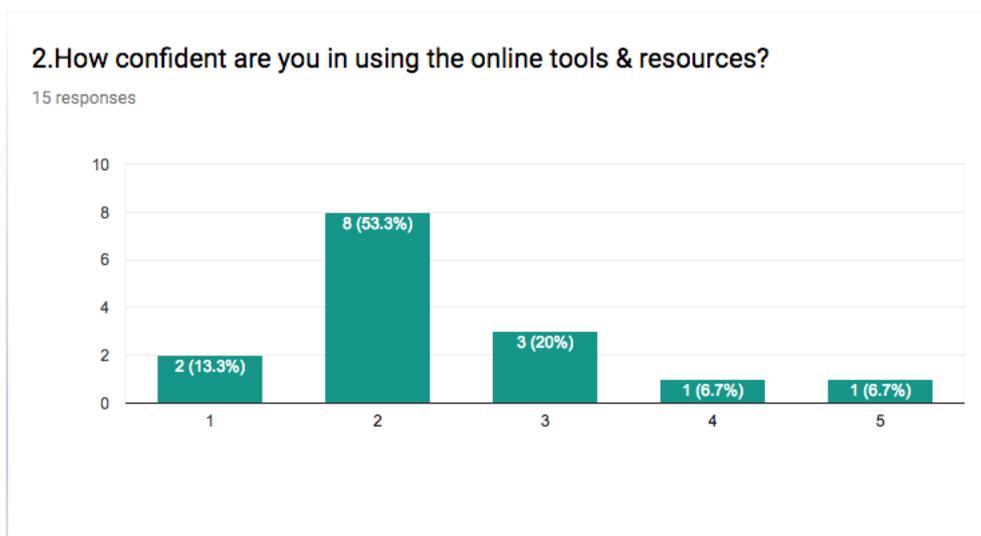of the European Union

I Secure
EMPOWERING EDUCATION SYSTEMS
IN INFORMATION SECURITY

3.What is your experience of using online tools to support your learning?

15 responses
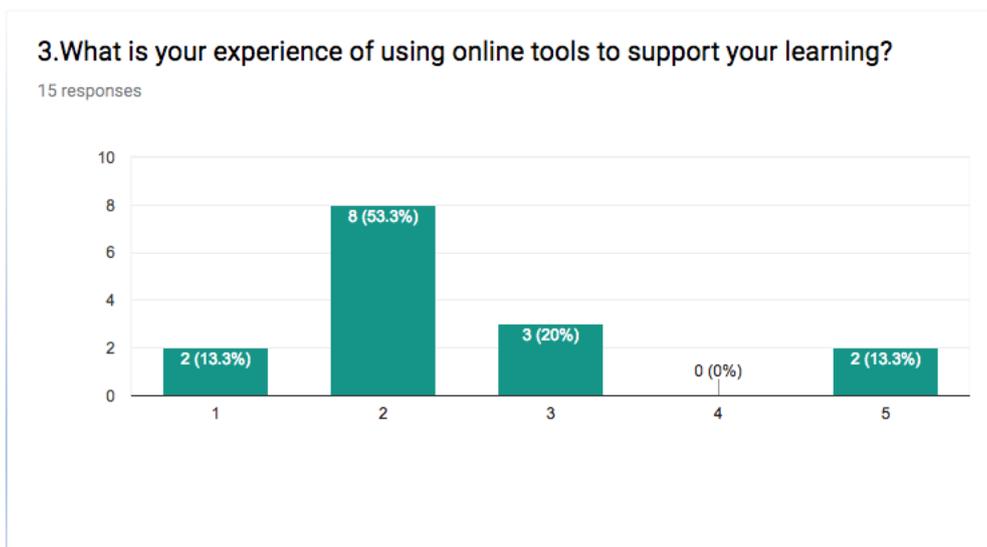
Figure 3 Participants' experience with online tools

As confirmed by the 4th question the majority (86,7%) of our teachers have never participated to an online course before, see figure 4 below.

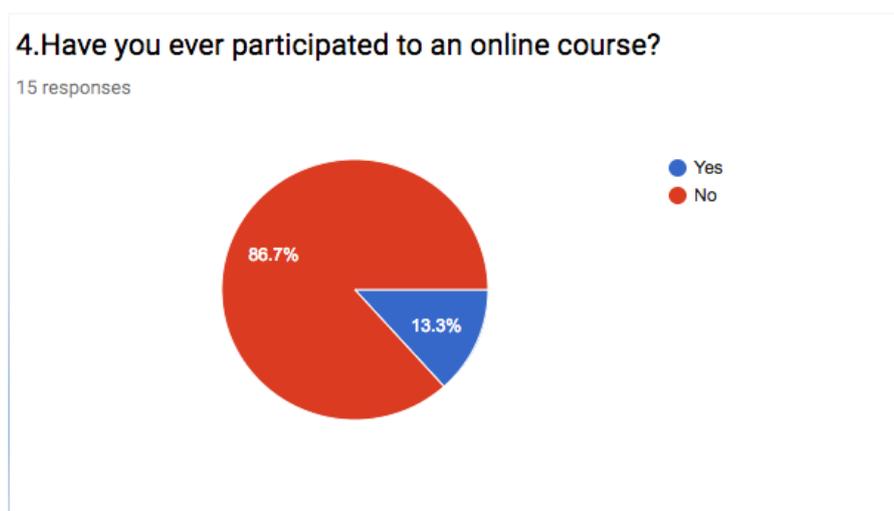### 4.Have you ever participated to an online course?

15 responses

Figure 4 Participants' experience with online courses

As well as the same majority (86.7%) have never follow a course on the safe use of ICT before, see figure 5 below.

Co-funded by the
Erasmus+ Programme
of the European Union

I Secure
EMPOWERING EDUCATION SYSTEMS
IN INFORMATION SECURITY

5.Have you ever taken part in a training course on safe ICT use?

15 responses
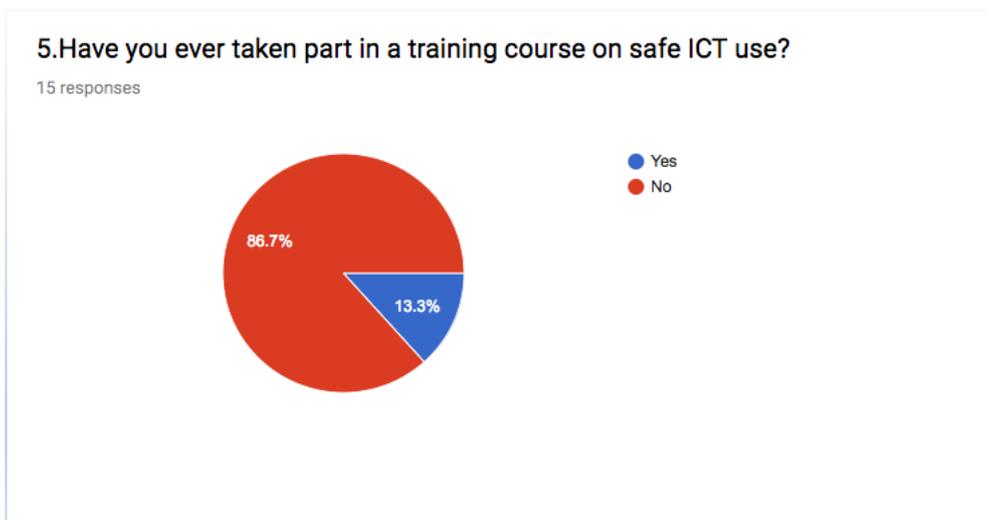
Figure 5 participants' experience on safe ICT courses

Questions six and seven aimed to define users' expectations in relation to the course developed by the I secure consortium. And in both questions the feedbacks from the teachers were positive. As figure 5 shows, the majority of the participants (86.7%) declares that the professional qualification provided could meet their need, see figure 6.

6.Could this Professional qualification meet your training needs?

15 responses

Figure 6 Users' expectation investigation 1

The same majority (86.7) declared that the professional qualification could be useful for improving teachers' professional skills on IT Security, see figure 7 below.

Co-funded by the
Erasmus+ Programme
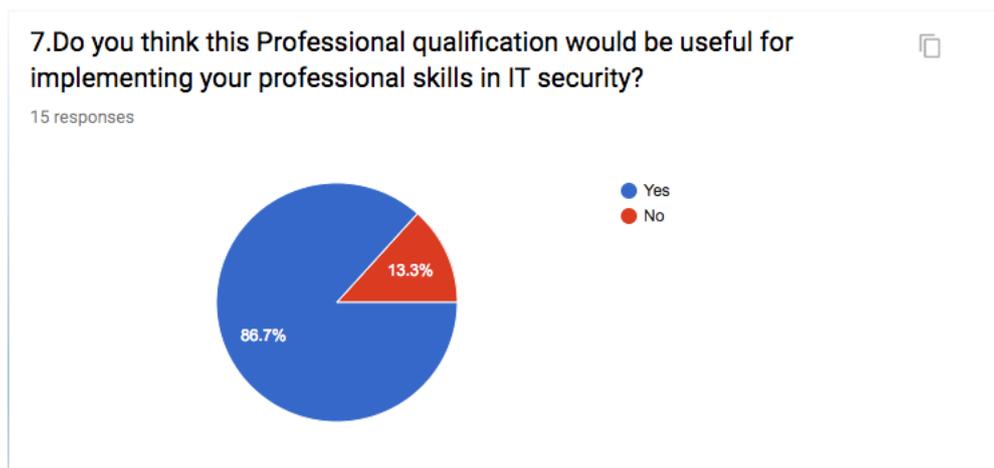of the European Union

I Secure
EMPOWERING EDUCATION SYSTEMS
IN INFORMATION SECURITY

Figure 7 Users' expectation investigation 2

2.2.2 Post-test questionnaire results

The post-test questionnaire was composed of eight close questions, submitted to the same population at the end of the training event, via google form.

The first question was a "yes-no" questions and it has been asked to participants if they did like the training event and all 15 participants have replied with a positive answer (yes, 100%). The rest of the questions were close but participants were asked to give a value to each question by using a Likert scale.

In table 1 we have reported the average score that each question has reached and the standard deviation. The standard deviation (SD) for each item to give readers info related to the variation of the score given by participants. The highest is the SD value the highest is the "distance" between the lowest and highest score given per item.

Table 1- Summary Post -test participants' answers

QUESTIONS	M (SD)
2.How relevant for you was the presentation of the training course?	3.73 (0.46)
3. Are the topics of the course interesting to you?	3.87 (0.64)
4. Is the course clearly structured and easy to use?	3.53 (0.64)
5. Does the course offer a sufficient variety of materials and resources?	3.80 (0.56)
6. Are learning outcomes relevant and clearly stated?	3.37 (0.46)
7. Are the technologies and methods/tools used to support course activities appropriate?	3.80 (0.77)
8.How interested would you be in participating to the ISECURE course?	3.33 (0.72)

2.3 Pilot collaborative learning activity (O5-A3) results

Co-funded by the
Erasmus+ Programme
of the European Union

I Secure
EMPOWERING EDUCATION SYSTEMS
IN INFORMATION SECURITY

The I Secure Agent Course, its design and implementation, within the ECO environment, have been assessed by the same teachers that took place to the training event, via the Evaluation Questionnaire which has been designed by Associazione Effebi and given to participants in google Form. The Evaluation Questionnaire is composed of 41 questions, among which two are open questions. The rest of the questions are close and require participant to assign a value from one (completely disagree) to four (completely agree). The questions are clustered in four sessions, here below the results for each of the session are reported.

Session 1- Curriculum Design Evaluation

CURRICULUM DESIGN

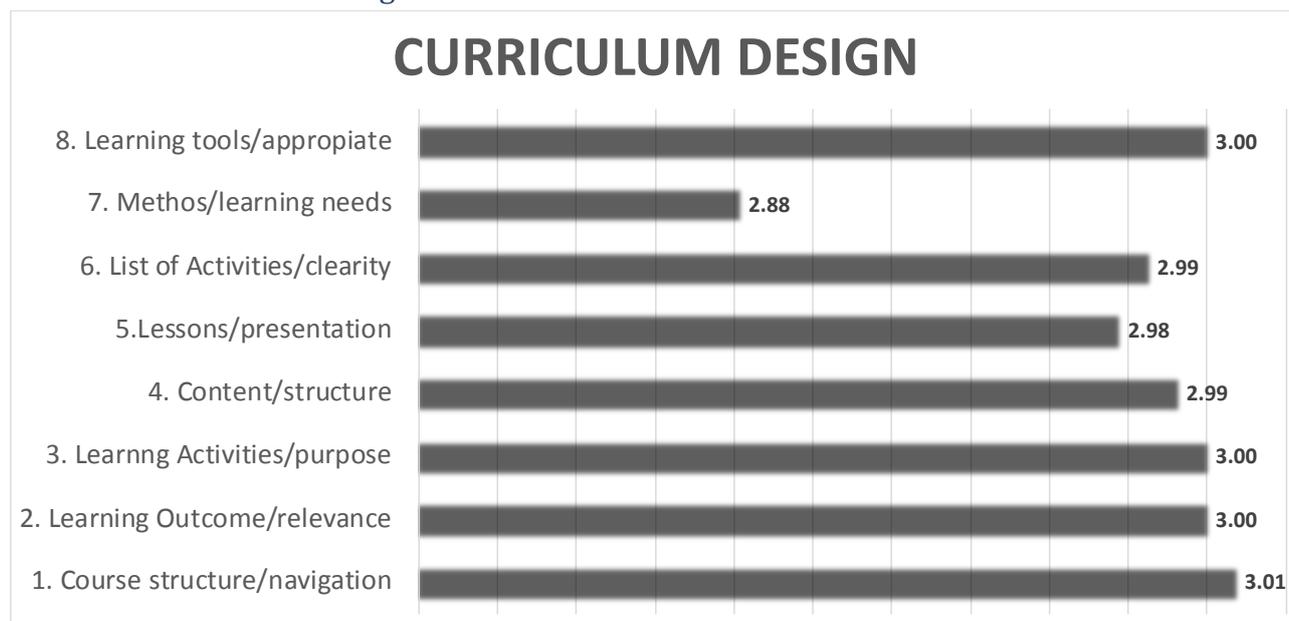| Question	Value
8. Learning tools/appropiate	3.00
7. Methos/learning needs	2.88
6. List of Activities/clearity	2.99
5.Lessons/presentation	2.98
4. Content/structure	2.99
3. Learnng Activities/purpose	3.00
2. Learning Outcome/relevance	3.00
1. Course structure/navigation	3.01

Figure 8- Session 1- Curriculum Design- Summary of the results

As visible in Figure 8, the mean value of the eight questions related to the curriculum design recorded all very high scores. The highest was given to the course structure and navigation (M= 3.01) and the lowest is related to the learning methods, with a M= 2.88

Session 2- Communication, interaction and collaboration through the platform

Communication, interaction, & collaboration through the Platform

Question	Value
11. Discussion/forum/organization	2.97
10 Activities to foster a L-centered	2.99
9. Forum/L-L and Collaboratin	2.99

Figure 9- session 2- Communication, interaction & collaboration through the platform

Figure 9 shows the results related to the second session of the evaluation questionnaire. The forum and the collaboration learner to learner, as well as the activities aim to foster a learner- centered approach record a average of 2.99. While the forum and other discussions tool available on the platform were rated with an average value of 2.97.

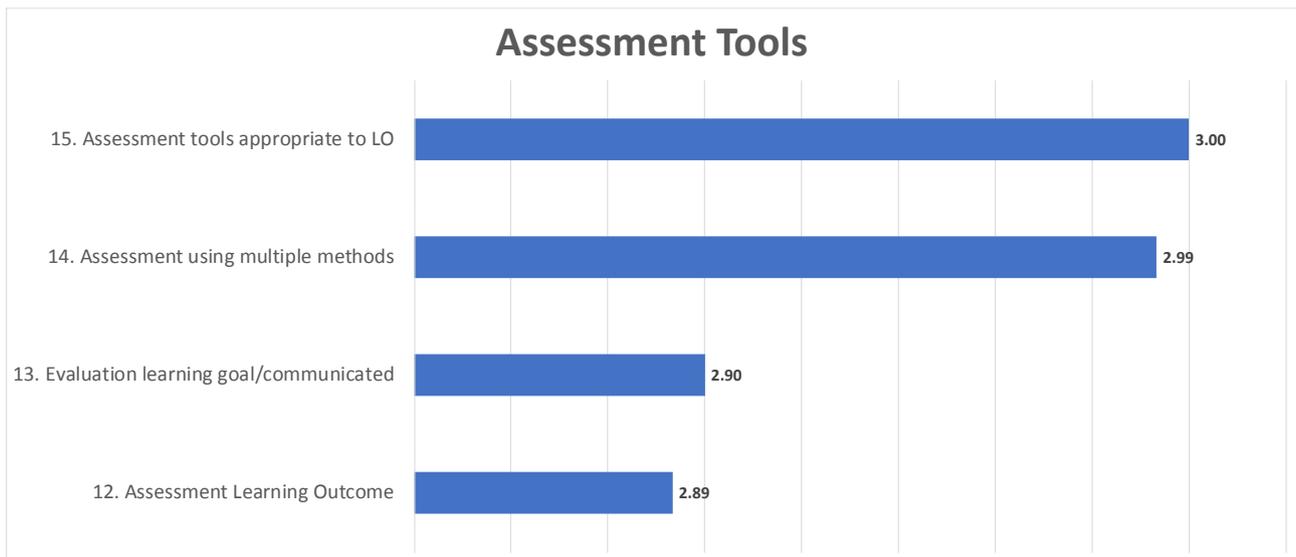## Session 3- Assessment Tools' Evaluation

Assessment Tools

15. Assessment tools appropriate to LO	3.00
14. Assessment using multiple methods	2.99
13. Evaluation learning goal/communicated	2.90
12. Assessment Learning Outcome	2.89

Figure 10- session 3- assessment tools evaluation

Session 4- Learners' support and resources evaluation

Learners' support & resources

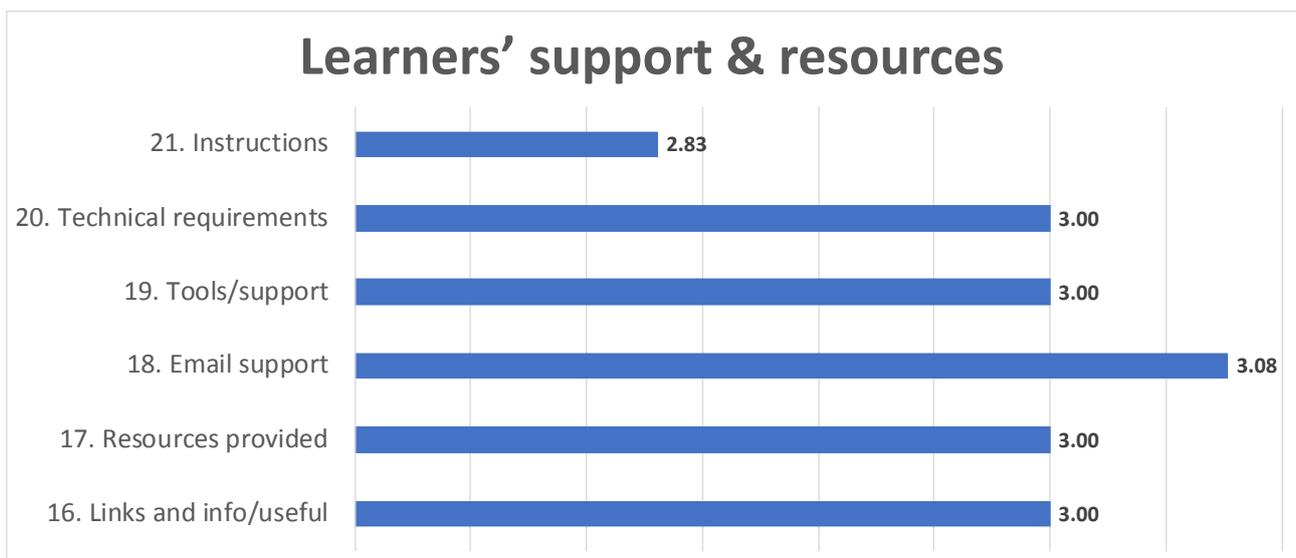|	
21. Instructions	2.83
20. Technical requirements	3.00
19. Tools/support	3.00
18. Email support	3.08
17. Resources provided	3.00
16. Links and info/useful	3.00

Figure 11- Session 4- Learners' support & resources evaluation

As far as session four is concerned, it was evaluated with very high scores by our target audience. The e-mail support, question 18 was scored the highest (M=3.08) and the lowest the number 21 related to the instructions, with an average value of 2.83.

3. National conclusion and recommendations

In the Netherlands, the teachers involved in out testing phase evaluated both the training and the course, as well as the collaborative tools and platform in a very positive way.

The majority of our teachers declared to have low ICT skills and that have never had before an online training on IT safe. After the training they were satisfied and gave positive feedback. The agreement on the score given was also high considering the SD value. The only complain was about the language, they would have loved to have at least Dutch subtitled.

As far as the pilot test collected also positive and high score, considering that the mean value was for the majority above 3 and that the highest value possible was 4 then the results are really promising.

Concluding with the recommendation, to improve the effectiveness of course a multilingual approach will be the best solution.