



InSIDE: Including Students with Impairments in Distance Education

**Deliverable
DEV4.7** **Assessment of the training of the end-users**

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Abbreviations

Acronym	Term
DE	Distance Education
HE	Higher education
HEI	Higher education institution
ICT	Information and communications technology
InSIDE	Including Students with Impairments in Distance Education
Iwl	Individual with impairments
JKU	Johannes Kepler University
LMD	Licence, Master, and Doctorate
UABT	University of Aboubekr Belkaid Tlemcen
UAE	Abdelmalek Essaadi University
UB2LA	Blida 2 University
UCA	Cadi Ayyad University
UIT	Ibn Tofail University
UM5R	University of Mohammed V in Rabat
UMMTO	Mouloud Mammeri University of Tizi-Ouzou
UOA	National and Kapodistrian University of Athens
UOM	University of Macedonia
US	University of Sousse
USFAX	University of Sfax
USTO	University of Sciences and Technology of Oran Mohamed Boudiaf
UTM	University of Tunis El Manar
ViHeMo	Visual, hearing, mobility/physical
WP	Work Package

About InSIDE

The aim of the project is to develop accessible DE programmes for individuals with ViHeMo impairments. The concrete aims are to: a) develop an accessible, inclusive and educationally effective model of DE that will deliver key competences for vocational rehabilitation, and provide opportunities for lifelong learning, skills enhancement, and personal fulfilment with the ultimate aim of suggesting an intelligent solution against the problems of limited access or high percentage of dropouts in HE in Iwl, b) structure a strong cooperation between organisations with sound expertise in accessible and inclusive HE and organisations where both the modernisation of HE and the promotion of the right to education of Iwl is imperative, and c) widen the horizons of local HE towards an international and intercultural education through DE programmes.

The overall objectives of the project are to:

- 1) Develop new and innovative, accessible and inclusive DE programmes improving the quality of HE for individuals with ViHeMo impairments and offering flexible learning and virtual mobility
- 2) Upgrade the facilities through establishing accessibility offices and acquiring assistive technology resulting in modernization of university services
- 3) Build capacity and professional development in administrative and teaching staff in developing and carrying out accessible and inclusive DE programmes, and operating the accessibility offices
- 4) Involve individuals with ViHeMo impairments in a user-center design so that accessibility and usability are achieved in conjunction, and the links between education and society are strengthened

The specific objectives of the project are:

- The preparation of the development stage through an extended literature review for precedent trials in DE for Iwl
- The development of the most suitable educational material for Iwl (ViHeMo) in terms of accessibility, usability and educational efficacy through the study of end-user requirements
- The adaptation of a course delivery system that best serves the needs of Iwl (ViHeMo) in DE
- The foundation of accessibility services in HE so that Swl would be supported during their attendance in HE
- The training of advisors in the services of the accessibility offices, and the training of the trainers (advisors and representatives) so that they will be able to train the end-users (teaching staff and Iwl)
- The examination of the regular co-operation of all the above to deliver inclusive DE courses effectively when learning and skill enhancement are concerned, considering end-users feedback too
- The dissemination and exploitation of the project deliverables on an international level.

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1. Introduction

The present report resulted in the context of Task 4.3 “Training of end-users – teaching staff and individuals with Visual, Hearing and Mobility impairments – on the processes and stages of a DE programme”. In this task, the 6 trainers¹ from each university in Morocco, Algeria and Tunisia had to train the teaching staff of their institution on the development of adapted educational material, the delivery of Distance Education courses with the use of the adapted platform (Learning Management System), and the operation and services of the accessibility office. A training activity with the same content should be performed in order for individuals with visual, hearing and mobility impairments to be trained as well. With the completion of these training activities, an assessment of the end-users’ (the teaching staff and the individuals with impairments) trainings over their quality and results was performed a) through interviews addressed to the accessibility advisors and the trainers-representatives, and b) through questionnaires addressed to the teaching staff, and the individuals with impairments.

2. Participants

2.1. Participants in Interviews

Four (4) accessibility advisors and 16 trainers-representatives from four universities participated in the interviews concerning the trainings they performed. Specifically, 1 accessibility advisor and 2 trainers-representatives participated from the University of Sousse (Tunisia), 1 accessibility advisor and 7 trainers-representatives from the Mouloud Mammeri University of Tizi-Ouzou (Algeria), 2 accessibility advisors and 4 trainers-representatives from the University of Science and Technology of Oran (Algeria), as well as 3 trainers-representatives from the University of Tunis El Manar (Tunisia).

2.2. Participants in Questionnaires

A total of 40 trainees with impairments and 111 trainees who were members of the teaching staff participated in the assessment of the end-users' trainings; 27 trainees who were members of the teaching staff and 5 trainees with impairments from the University of Sousse, 44 trainees who were members of the teaching staff and 19 trainees with impairments from the Mouloud Mammeri University of Tizi-Ouzou, 38 trainees who were members of the teaching staff and 15 trainees with impairments from the University of Science and Technology of Oran, as well as 2 trainees who were members of the teaching staff and 1 trainee with impairments from the University of Tunis El Manar.

¹ The group of 6 trainers from each participant university from Maghreb consists of 2 accessibility advisors and 4 trainers-representatives who were trained in previous activities (Task 4.2) to act as trainers in the following activities (Task 4.3) and support the realization of DE pilot courses (WP5).

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3. Instruments

3.1. Interviews

The semi-structured interview was used for the assessment of the quality and the results of the end-users' trainings. The following questions were addressed to the accessibility advisors and the (trainers-) representatives who responded the questions twice – the first time with reference to the training of the teaching staff, and the second time with reference to the training of the individuals with impairments.

- 5) Which are the problems (difficulties, deficiencies) you encountered during the training?
- 6) In your opinion, what are the results of the training for the participants (trainees) regarding the knowledge and skills acquisition?
- 7) What was the reaction of the trainees (their disposition towards participation)?
- 8) What is the satisfaction of the trainees regarding the training they received?
- 9) What would the trainees change (make it differently) in a similar training?

3.2. Questionnaires

For the assessment of the quality and the results of the end-users' trainings, two questionnaires were also addressed, the first was addressed to trainees with impairments and the second was addressed to the trainees who were members of the teaching staff.

The first questionnaire that was addressed to the trainees with impairments included the following seven questions (5-points Likert: 1= not at all, 2= little, 3= somewhat, 4= much, 5= a great deal).

1. In what degree do you believe you acquired the knowledge and the skills regarding the following fields:	
the use of the adapted educational material,	1 2 3 4 5
the attendance and participation in DE courses with the use of the adapted LMS,	1 2 3 4 5
the operation and the services of the accessibility office	1 2 3 4 5
2. How accessible did you find the training?	1 2 3 4 5
3. How easy do you find the use (by yourself) of adapted educational material?	1 2 3 4 5
4. In what degree would you be willing to use adapted educational material in the future?	1 2 3 4 5
5. How easy do you consider the participation in Distance Education courses?	1 2 3 4 5
6. In what degree would you be willing to participate in Distance Education courses in the future?	1 2 3 4 5
7. How informed do you feel you are about the operation and the services of the	1 2 3 4 5

accessibility office of your institution?	
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Table 1. The questionnaire addressed to the trainees with impairments.

The second questionnaire that were addressed to the trainees who were members of the teaching staff included the following six questions (5-points Likert: 1=not at all, 2=little, 3=somewhat, 4=much, 5=a great deal).

1. In what degree do you believe you acquired the knowledge and the skills regarding the following fields:	
a) the development of adapted educational material,	1 2 3 4 5
b) the implementation of DE courses with the use of the adapted LMS,	1 2 3 4 5
c) the operation and the services of the accessibility office	1 2 3 4 5
2. How easy do you find the development (by yourself) of adapted educational material?	1 2 3 4 5
3. In what degree would you be willing to develop adapted educational material in the future?	1 2 3 4 5
4. How easy do you consider the implementation of Distance Education courses?	1 2 3 4 5
5. In what degree would you be willing to implement Distance Education courses in the future?	1 2 3 4 5
6. How informed do you feel you about the operation and the services of the accessibility office of your institution?	1 2 3 4 5

Table 2. The questionnaire addressed to the trainees who were members of the teaching staff.

4. Results

4.1. Interviews

4.1.1. The answers of the accessibility advisors concerning the training of the teaching staff

Question 1: Which are the problems (difficulties, deficiencies) you encountered during the training?

- Difficulty focusing especially on the types of disability that concern our university.
- Generally speaking, we have not encountered problems during the training. The trainers have focused a lot on the details that could disturb during the training. A great importance was given to the content, organization and management of the training.
- During the training, challenges included capacity limitations due to high demand and time constraints for comprehensive topic coverage. Limited accessibility tools hindered

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practical training. However, we proactively addressed these obstacles to deliver valuable and informative sessions for all participants.

- Organization of the choice and high number of participants.
- Problems encountered: the timetable was not well adapted to the commitments of the various trainee participants, bearing in mind that it was exam time for most of them.
- The preparation time of an accessible content.
- The time limits imposed by the European partner forced us to finish the training of the teaching staff before the delivery of the learning material (hardware and software). Some trainees were not able to be available for every training session.

Question 2: In your opinion, what are the results of the training for the participants (trainees) regarding the knowledge and skills acquisition?

- Raising awareness regarding the inclusive education and its specificities
- Concerning our opinion on the result of the training for the participants regarding the knowledge and skills acquisition, we are really satisfied, seeing the interest they have on the content of the training, the effort made by the trainers to help them acquire as much as possible, so, all the participants have improved and learned more about different topics presented and discussed in the training and it was well showed in each practice phase and homework done by the trainees.
- The training positively affected participants' knowledge and skills in assistive technologies and inclusive practices, empowering them to effectively support individuals with impairments. Participants gained valuable knowledge, enhanced skills, and improved their support for individuals with ViHeMo impairments through the training.
- Motivating learners to conduct more research and inspiring enthusiasm for more knowledge in this field.
- The results were very satisfactory for the majority of trainees.
- The results of the training for the participants concerning the acquisition of knowledge and skills and the mastery of new educational material.
- I think that all the trainees acquired important informations about inclusive education, as most of them were not aware of the possibility of including impaired student in regular universities. Some trainees thought that disabled people could never study in normal universities, whereas some of them believed that the most important limit for inclusion is the lack of money, they didn't realize the importance of many aspects developed during the training.

Question 3: What was the reaction of the trainees (their disposition towards participation)?

- Great appreciation from the participants of the training and its importance.
- Adaptation of content to the needs of training in inclusive education in the Tunisian context.
- The reaction of the trainees was positive. All the trainees were motivated, they gave a great importance to this training they really encouraged and supported us to share a lot of information through their deep investment to be a great support to students with disabilities as it has always been done.

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- The trainees exhibited high motivation and enthusiasm, actively participating in training activities and displaying a strong desire to implement the knowledge and tools acquired. They actively engaged in discussions, shared experiences, and showed a willingness to apply the training outcomes.
- Learners are enthusiastic about new and effective ways of helping pupils with special needs.
- The trainees are highly motivated and hope to take part in another cycle of more detailed training on each disability.
- The trainees were motivated to participate.
- At the beginning, participants were thinking that inclusive university was a myth, but they changed their mind when they discovered examples of inclusion in our university.

Question 4: What is the satisfaction of the trainees regarding the training they received?

- Great satisfaction and request for other training related to this subject
- Our training was truly a sharing experience. All the participants were delighted and satisfied, even very satisfied with the conduct and content of the course, to the point where they asked for more sessions of training and practice for the coming days and of course this will be voluntarily carried out by the trainers with great pleasure since we all share a common goal which is to support students with disabilities to facilitate and enable them to follow their studies without obstacles.
- Trainees expressed high satisfaction, stating the training met expectations, provided valuable knowledge, and offered a pleasing learning experience.
- Convinced of the need for participation and co-operation between all members of the university in finding appropriate solutions for students with special needs.
- 85% of trainees are very satisfied.
- Very satisfied.
- Almost every participant was satisfied.

Question 5: What would the trainees change (make it differently) in a similar training?

- Use more tools and especially with open licenses.
- Really nothing was reported during the training.
- The trainees were satisfied with the training and had no suggestions for modifications, finding it effective and valuable.
- Improving knowledge and looking for other examples to enhance learning skills.
- Increase the time allotted for discussion.
- I preferred to have this training at the beginning of the academic year.
- More active participation : many participants did not have any idea about the capabilities of disabled people. The knowledge they had about disability was very limited.

4.1.2. The answers of the trainers-representatives concerning the training of the teaching staff

Question 1: Which are the problems (difficulties, deficiencies) you encountered during the training?

- Lack of certain prerequisites in terms of production of digital resources.

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- Difficulty planning training taking into account the university calendar (exam period)
- The problems we encountered during the training that the trainers need a lot of time and a lot of practice to understand better because everything is new for them.
- Difficulties with some tools/techniques that need more time, more work and adapted versions/computers.
- Generally speaking, we have not encountered problems during the training, because, the team of the trainers has worked hard during the period of the preparation so, the trainers have focused a lot on the details that could disturb during the training, a great importance was given to the content, organization and management of the training.
- Technical issues, such as software glitches.
- Lack of resources or materials necessary for certain training activities.
- Different levels of knowledge specially in accessible mathematics.
- During training, some difficulties included overfitting to specific examples and challenges in handling ambiguous or contradictory instructions.
- Time constraints or scheduling conflicts affecting the effectiveness of the training sessions.
- Lack of time and practice.
- Problems encountered: the timetable was not well adapted to the commitments of the various trainee participants, bearing in mind that it was exam time for most of them.
- Students preferred to have this training at the beginning of the academic year.
- The time limits imposed by the European partner forced us to finish the training of the teaching staff before the delivery of the learning material (hardware and software).
Some trainees were not able to be available for every training session.

Question 2: In your opinion, what are the results of the training for the participants (trainees) regarding the knowledge and skills acquisition?

- Acquisition of skills in terms of production of accessible digital resources.
- Awareness of inclusive education and its importance.
- The results were good. All the presented material was new to the trainees, and therefore they learned a lot regarding the tools for accessibility, the development of accessible materials, the use of LMS, etc.
- Concerning our opinion on the result of the training for the participants regarding the knowledge and skills acquisition, we are really satisfied, seeing the interest they have on the content of the training, the effort made by the trainers to help them acquire as much as possible, so, all the participants have improved and learned more about different topics presented and discussed in the training and it was well showed in eah practice phase and homework done by the trainees.
- Some the trainees “discovered” the “possibility” of the students with disabilities inclusion in our university with training.
- Some others have other experiences with students with disabilities and goes with a benchmarking process to propose in the end the possibilities of collaboration in the university to develop the center.
- All trainees learned about assistive technologies and university center for students with disabilities.
- I see that the trainee participants have acquired knowledge during this training and they need more training to better develop their skills.

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- Enhanced practical skills and ability to prepare lessons.
- Positive feedback.
- The training results vary for participants, but overall, they acquire valuable knowledge and skills that enhance their capabilities.
- Increased awareness and understanding of accessibility issues among the teaching staff, and acquired practical skills to provide more inclusive learning environments.
- A great joy for the consideration of these students and the joy of discovering the material that they did not know.
- The results were very satisfactory for the majority of trainees.
- The results of the training for the participants have better acquired skills.
- I think that all the trainees acquired important information about inclusive education, as most of them were not aware of the possibility of including impaired student in regular universities. Some trainees thought that disabled people could never study in normal universities, whereas some of them believed that the most important limit for inclusion is the lack of money, they didn't realize the importance of many aspects developed during the training.

Question 3: What was the reaction of the trainees (their disposition towards participation)?

- Great appreciation from the participants of the training and its importance.
- Adaptation of content to the needs of training in inclusive education in the Tunisian context.
- The trainees are very interested in the training practically they were present throughout the training.
- Very good. From the first day, there was the disposition to participate and to discuss about the presented subjects.
- The reaction of the trainees was positive. All the trainees were motivated, they gave a great importance to this training they really encouraged and supported us to share a lot of information through their deep investment to be a great support to students with disabilities as it has always been done.
- High motivation and enthusiasm for learning.
- Positive attitudes and openness to inclusion.
- The trainees exhibited a favorable attitude towards active participation, showing enthusiasm and eagerness to engage in the training activities.
- Positive attitude with active involvement and participation.
- Very enthusiastic and happy to discover the project and the equipment.
- The trainees are highly motivated and hope to take part in another cycle of more detailed training on each disability.
- The trainees did not understand what it is.
- At the beginning, participants were thinking that inclusive university was a myth, but they changed their mind when they discovered examples of inclusion in our university.

Question 4: What is the satisfaction of the trainees regarding the training they received?

- Great satisfaction and request for other training related to this subject.

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- Our training was truly a sharing experience. All the participants were delighted and satisfied, even very satisfied with the conduct and content of the course, to the point where they asked for more sessions of training and practice for the coming days and of course this will be voluntarily carried out by the trainers with great pleasure since we all share a common goal which is to support students with disabilities to facilitate and enable them to follow their studies without obstacles.
- The trainees were very satisfied with the training they qualified the training as interesting.
- Positive overall feedback from trainees regarding the training experience.
- High levels of satisfaction expressed through evaluation forms.
- Acknowledgment of the trainer's methodology.
- The trainees' satisfaction with their training varies, as it depends on individual experiences and perspectives. Overall, feedback suggests a mix of positive and negative sentiments.
- General satisfaction and positive feedback on the relevance and practicality of the training content, with some suggestions for improvements by organizing more prolonged practice sessions.
- The possibility of studying at ease at the university.
- 85% of trainees are very satisfied.
- Satisfied.
- Almost every participant was satisfied.

Question 5: What would the trainees change (make it differently) in a similar training?

- Produce resources in disciplines that are more related to students with specific needs of our university.
- Having access during the training to hardware dedicated to individuals with impairments, as the Braille embosser and BrailleSense.
- Nothing was reported during the training.
- Request for additional time dedicated to practice or practical application.
- The trainees suggest incorporating more practical exercises and real-world scenarios for better application.
- Include more interactive activities and group discussions to encourage active participation and peer learning.
- Practice of the equipment well before the training and face-to-face.
- Increase the time allotted for discussion.
- The trainees would like to have more time for the assimilation.
- More active participation: many participants did not have any idea about the capabilities of disabled people. The knowledge they had about disability was very limited.

4.1.3. The answers of the accessibility advisors concerning the training of the individuals with impairments

Question 1: Which are the problems (difficulties, deficiencies) you encountered during the training?

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- Difficulty focusing especially on the types of disability that concern our university.
- Difficulties with the use of computer (ordinary keyboard use) that needs more time so sometimes we haven't enough time for some tools/techniques of the project.
- Participants required additional time and resources to familiarize themselves with assistive technologies and some Technical issues.
- Finding the ideal time for students, availability of students with disabilities.
- the internet speed is very low.
- The training was performed in period of exams. Many students have low skills in using the web and almost all of them never heard about the Moodle platform.

Question 2: In your opinion, what are the results of the training for the participants (trainees) regarding the knowledge and skills acquisition?

- Raising awareness regarding the benefits of using educational technologies for inclusive education.
- All trainees learned about assistive technologies and university center for students with disabilities.
- Participants with impairments gained valuable knowledge and skills in assistive technologies, showing high engagement and readiness to apply them in their lives. The training positively influenced their inclusion and support.
- Learning new methods that helped them in their studies, especially students in their final year of university and preparing final year projects.
- happy to acquire new knowledge and skills.
- The most exciting part of the training was the discovery of the Moodle platform as it offered accessible information, and was easy to use although they did never use it before.

Question 3: What was the reaction of the trainees (their disposition towards participation)?

- Great appreciation from the participants of the training and its importance.
- Sharing of difficulties that are faced by students with impairment in learning and access to the university.
- From the beginning of the training, all the participants showed a great motivation.
- The participants showed strong interest and enthusiasm for the training, eagerly embracing assistive technologies and accessible tools to enhance their educational experiences, emphasizing the significance of inclusive training initiatives.
- Joy and hope to continue studying and choosing technical majors.
- they are highly motivated.
- Every one of our students (visually impaired) was familiar with some accessibility tools, but there was a lack of knowledge in some areas.

Question 4: What is the satisfaction of the trainees regarding the training they received?

- Great satisfaction and request for other training related to this subject.
- Very satisfied and they asked for more session to learn more.

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- Impaired participants expressed satisfaction with the training, showing interest in introduced tools and technologies, enabling them to overcome challenges and participate fully in academic activities.
- Finding appropriate solutions for students with special needs.
- very satisfied.
- So satisfied that we plan to make another training session. We plan to use the Moodle platform of our university for the next year.

Question 5: What would the trainees change (make it differently) in a similar training?

- Use more tools and especially with open licenses.
- Nothing declared to change during the training.
- Participants with impairments recommend incorporating interactive exercises with real-life scenarios, diverse representation, and opportunities for collaborative learning to foster a supportive community during the training.
- Do supplement research in their fields.
- Increase the number of students with disabilities so that they can share what they have learned together.
- As the training was made at the end of the semester, when students are concerned with the upcoming exams, some of them were not 100% concentrated on the training and therefore they were not actively following the training.

4.1.4. The answers of the trainers-representatives concerning the training of the individuals with impairments

Question 1: Which are the problems (difficulties, deficiencies) you encountered during the training?

- Most trainees already use their smart phones to access numerical resources; so it was difficult to install the proposed software on smartphone.
- Some trainees do not know how to use PC.
- Lack of certain prerequisites in terms of using online learning management systems.
- Difficulty of access to physical spaces.
- Difficulties with the use of computer (ordinary keyboard use) that needs more time so sometimes we haven't enough time for certain tools/techniques of the project.
- The problems we encountered during the training of people with specific impairments that many of these people, especially the blind, do not master the keyboard so we took time to do that.
- Difficulty in adapting the training content to meet the diverse needs of the participants specially with auditive deficiencies.
- Some students with visual deficiencies are more familiar with technologies than other.
- Some of the students did not have previous Knowledge about Assistive technologies
- Time constraints or scheduling conflicts affecting the effectiveness of the training sessions.
- Lack of time and practice.
- the internet speed is very low.

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- The training was performed in period of exams. Many students have low skills in using the web and almost all of them never heard about the Moodle platform.

Question 2: In your opinion, what are the results of the training for the participants (trainees) regarding the knowledge and skills acquisition?

- Medium regarding the use of software tools and accessible digital materials because most trainees are already familiar with numerical tools (screen readers, Dictaphone, etc.).
- Good regarding the use of LMS because the trainees have learned Moodle and they appreciated it.
- Acquisition of skills in terms of using of accessible digital resources.
- Acquisition of skills related to the use of a learning management system.
- Knowledge about other screen readers than Jaws and NVDA.
- Knowledge about speech to text tools.
- Knowledge about some eBooks' format readable by certain tools.
- All trainees learned about assistive technologies and university center for students with disabilities.
- The trainees have learned new materials, new working methods, and they need a lot of training to develop their skills.
- Increased confidence and self-efficacy.
- Share knowledge with other students with deficiencies.
- The training results very positive, the students were highly interested in the content and motivated to learn more and more.
- Enhanced ability to address accessibility barriers in educational settings.
- The discovery of the INSIDE project.
- happy to acquire new knowledge and skills.
- The most exciting part of the training was the discovery of the Moodle platform as it offered accessible information, and was easy to use although they did never use it before.

Question 3: What was the reaction of the trainees (their disposition towards participation)?

- It was difficult for students to attend all the training sessions, because they are from different universities, and it was difficult to set a common schedule at each session.
- We have reserved a bus for students, but students were not present at all sessions.
- Great appreciation from the participants of the training and its importance.
- Adaptation of content to the needs of students with impairments in the Tunisian context.
- The trainees are very interested in the training practically they have been present throughout the training and have a strong will to continue the courses.
- From the beginning of the training, all the participants showed a great motivation.
- Very good. From the first day, there was the disposition to participate and to discuss about the presented subjects.
- High motivation and enthusiasm for learning.

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- Active engagement and willingness to participate in discussions and serious games about accessibility.
- At the beginning, it they were a little bit confused because a lot of them were not familiar to assistive technology, but quickly they started to assimilate and practice by their own.
- Positive attitude with genuine interest in learning.
- Content with the participation rate and media coverage.
- they are highly motivated.
- Every one of our students (visually impaired) was familiar with some accessibility tools, but there was a lack of knowledge in some areas.

Question 4: What is the satisfaction of the trainees regarding the training they received?

- Good, but their most urgent need was on equipment such as the BrailleSense.
- Great satisfaction and request for other training related to this subject.
- Request of trainings in ICT skills.
- Very satisfied and they asked for more session to learn more.
- The trainees showed a strong satisfaction with this training, for them it is an irreplaceable support.
- Positive overall feedback from trainees regarding the training experience.
- High levels of satisfaction expressed through evaluation forms.
- I noted that most of the student were highly satisfied.
- General satisfaction and positive feedback on the relevance and practicality of the training content, with some suggestions for improvements by organizing more prolonged practice sessions.
- The need for more time and practice.
- very satisfied.
- So satisfied that we plan to make another training session. We plan to use the Moodle platform of our university for the next year.

Question 5: What would the trainees change (make it differently) in a similar training?

- Avoid presenting technologies that are already known by the trainees (screen reader, loop, pdf, video subscription, etc.).
- Access to further inline courses related to their disciplines.
- Nothing declared to change during the training.
- More practice.
- Specific keyboards.
- Request for additional time dedicated to practice or practical application.
- The trainees suggest more trainings to be able to use the assistive technologies better.
- Include more interactive activities and group discussion sessions to encourage active participation and peer learning.
- To favor face-to-face training and more practice because online training has its limits and shortcomings.
- Increase the number of students with disabilities so that they can share what they have learned together.

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- As the training was made at the end of the semester, when students are concerned with the upcoming exams, some of them were not 100% concentrated on the training and therefore they were not actively following the training.

4.2. Questionnaires

The results derived from the analysis of the answers of the trainees who were members of the teaching staff, are presented below (see Table 3).

Questions	Mean	SD	Min	Max
In what degree do you believe you acquired the knowledge and the skills regarding the development of adapted educational material	3.39	0.881	1	5
In what degree do you believe you acquired the knowledge and the skills regarding the implementation of DE courses with the use of the adapted LMS	3.22	0.857	2	5
In what degree do you believe you acquired the knowledge and the skills regarding the operation and the services of the accessibility office	3.51	0.675	2	5
How easy do you find the development (by yourself) of adapted educational material?	3.26	0.715	2	5
In what degree would you be willing to develop adapted educational material in the future?	3.42	0.737	2	5
How easy do you consider the implementation of Distance Education courses?	3.32	0.679	1	5
In what degree would you be willing to implement Distance Education courses in the future?	3.50	0.765	2	5
How informed do you feel you about the operation and the services of the accessibility office of your institution?	3.50	0.828	1	5

(Note: 1= not at all, 2= little, 3= somewhat, 4= much, 5= a great deal).

Table 3. Mean, standard deviation, minimum, and maximum of the answers of the trainees who were members of the teaching staff.

In addition, the frequencies of occurrence of the of the trainees' (members of the teaching staff) answers were calculated for each question of the questionnaire. The results of the analysis are shown in Table 4 below.

Questions	not at all	little	somewhat	much	a great deal
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In what degree do you believe you acquired the knowledge and the skills regarding the development of adapted educational material	1	18	36	46	8
In what degree do you believe you acquired the knowledge and the skills regarding the implementation of DE courses with the use of the adapted LMS		24	42	36	6
In what degree do you believe you acquired the knowledge and the skills regarding the operation and the services of the accessibility office		6	46	52	5
How easy do you find the development (by yourself) of adapted educational material?		12	61	30	5
In what degree would you be willing to develop adapted educational material in the future?		9	52	41	7
How easy do you consider the implementation of Distance Education courses?	1	6	63	35	4
In what degree would you be willing to implement Distance Education courses in the future?		7	51	40	11
How informed do you feel you about the operation and the services of the accessibility office of your institution?	3	8	35	55	6

Table 4. Number of the trainees (members of the teaching staff) who chose each answer.

The results derived from the analysis of the answers of the trainees with impairments are presented below (see Table 5).

Questions	Mean	SD	Min	Max
In what degree do you believe you acquired the knowledge and the skills regarding the use of the adapted educational material	3.46	1.072	1	5
In what degree do you believe you acquired the knowledge and the skills regarding the attendance and participation in DE courses with the use of the adapted LMS	3.21	0.833	1	5
In what degree do you believe you acquired the knowledge and the skills regarding the operation and the services of the accessibility office	3.54	0.720	2	5
How accessible did you find the training?	3.64	0.486	3	4
How easy do you find the use (by yourself) of adapted educational material?	3.13	0.704	2	5
In what degree would you be willing to use adapted educational material in the future?	3.79	0.864	2	5
How easy do you consider the participation in Distance Education courses?	3.26	0.715	2	5
In what degree would you be willing to participate in Distance Education courses in the future?	3.59	0.880	2	5

How informed do you feel you are about the operation and the services of the accessibility office of your institution?	3.77	0.777	2	5
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(Note: 1= not at all, 2= little, 3= somewhat, 4= much, 5= a great deal).

Table 5. Mean, standard deviation, minimum, and maximum of the answers of trainees with impairments.

In addition, the frequencies of occurrence of the trainees with impairments' answers were calculated for each question of the questionnaire. The results of the analysis are shown in Table 6 below.

Questions	not at all	little	somewhat	much	a great deal
In what degree do you believe you acquired the knowledge and the skills regarding the use of the adapted educational material	1	6	14	10	8
In what degree do you believe you acquired the knowledge and the skills regarding the attendance and participation in DE courses with the use of the adapted LMS	1	6	17	14	1
In what degree do you believe you acquired the knowledge and the skills regarding the operation and the services of the accessibility office		3	14	20	2
How accessible did you find the training?			14	25	
How easy do you find the use (by yourself) of adapted educational material?		6	22	9	1
In what degree would you be willing to use adapted educational material in the future?		4	7	21	7
How easy do you consider the participation in Distance Education courses?		5	20	13	1
In what degree would you be willing to participate in Distance Education courses in the future?		3	17	12	7
How informed do you feel you are about the operation and the services of the accessibility office of your institution?		2	11	20	6

Table 6. Number of the trainees with impairments who chose each answer.

5. Conclusions

The answers of accessibility advisors and trainer representatives in the interviews regarding the adapted educational material and the training procedure were overall very positive. The teaching staff believed that the courses raised awareness regarding inclusive education, increased skills in the

use of the material, offered new knowledge, that they were motivating, induced enthusiasm and met their expectations.

Based on the opinions that are outlined from the interviews, the corrections or improvements that are needed and some other suggestions are not directly related to the course content or the educational material (lack of digital resources, hardware compatibility, software glitches, time constraints, high number of students). There are although some practical considerations deriving from several answers like the need to provide more time for practice on new skills and the greater than expected interpersonal discrepancy in the trainers' level of knowledge, especially in mathematics.

The interview answers regarding the trainees with impairments lead to several important considerations. One thing is that more time might be needed for the trainee to familiarize with the new tool. This is amplified by the fact that many students lack the minimum required level of digital literacy and this was verified from the answers. Under such conditions, technical difficulties (hardware compatibility, software glitches or network efficiency) may have greater impact and they should be addressed before the courses take place. Other suggestions like the need for better organization of prolonged courses, the avoidance of training already known tools and the need for more interactive activities will be taken into account. Finally, it was reported that the trainees were generally satisfied from the courses and the education material, they gained new knowledge and gave positive feedback on the relevance and practicality of the training content.

The teaching staff that was trained, answered a questionnaire based on the Likert scale. Referring to their satisfaction in several aspects of the course and through 8 questions, a total 89% of the answers varied between "somewhat" to "a great deal" of satisfaction. In two questions there was a considerable number of negative answers ("not at all" and "a little" satisfaction). Those referred to the skills regarding the development of adapted educational material and the skills regarding the implementation of DE courses with the use of the adapted LMS. 17% of the questioned staff in the first question and 22% in the second answered negatively. Combining the negative answers to the aforementioned interviews we can attribute the amount of dissatisfaction to parameters related to time limitations and technical weaknesses and not on the content of the courses. To corroborate this, based on the same questionnaire, 91% of the questioned staff would be willing to develop adapted educational material in the future.

The answers of disabled trainees to a similar questionnaire showed that 91% of them stated that they were "somewhat" to "a great deal" satisfied. 90% stated that they are willing to use the educational material in the future.

Based on all of the above, the courses and the educational material have the approval of everyone involved, to a significant degree, while that degree can be increased even more by proceeding to certain adjustments in time management and ensuring the required preparation and technical efficiency before the courses takes place.

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