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STEAMigPOWER

STEAM approaches at higher education for mIGrants, refugees and asylum seekers'

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A9 Guidelines on online STEAM Intensive Program Modules

WP3. STEAMigPOWER Intensive Program

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CONTENTS

1. Introduction. Purpose of the Guidelines and STEAM online learning in the context of migration and forced movement

STEAMigPOWER is an Erasmus+ co-funded project that aims to address the waste of human potential and talent. The philosophy behind the project is based on mutual understanding, on building and building bridges between those countries that receive migrants and refugees and the communities of people who, voluntarily, or involuntarily in the case of refugees, move from their countries of origin/residence to other countries, in this case, to countries of the European Union.

The right to freedom of movement, the right to asylum and access to education are human rights set out in the Universal Declaration of Human Rights[1] , specifically in Articles 13, 14 and 26 of the Declaration:

> "Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms; it shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace."

The Sustainable Development Goals (SDGs)[2] have also identified education as a crucial element in achieving more equitable, just and resilient societies, specifically through SDG 4 "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". SDG 4, quality education, is based on the fact that education contributes to breaking the cycle of poverty, reducing economic and social inequalities, including gender inequality, and also enables the promotion of understanding between people, contributing to building more just and peaceful societies.

In the framework of the European Union, the potential of education is also understood as a "motor for job creation, social justice and active citizenship, as well as a means of living the European identity in all its diversity".[3]

And it is within this international, and in particular European, framework that the STEAMigPOWER project is being developed, which aims to attract migrants, refugees and asylum seekers to higher education so that they can obtain the training they need to enter the workforce and cultivate the knowledge, skills and values that will lead to continued prosperity and wealth for both themselves and their host communities.

To this end, the STEAMigPOWER project has created a training programme divided into two phases:

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[1] Universal Declaration of Human Rights https://www.un.org/es/about-us/universal-declaration-of-human-rights

[2] Sustainable Development Goals https://www.un.org/sustainabledevelopment

[3] European Education Area 2025 https://eur-lex.europa.eu/ES/legal-content/summary/a-european-education-area-by-2025.html?utm_source=chatgpt.com

- Intensive blended learning introductory course consisting of a social inclusion course and a storytelling course.
- Intensive STEAMigPOWER programme consisting of 5 courses:
    - 5 R's (Rethink, Refuse, Reduce, Reuse and Recycle), which addresses the principles of the circular economy and sustainability, focusing on the responsible management of the waste we generate on a daily basis.
    - Climate Change: which explores, from a critical and community action point of view, the basic elements linked to climate change and adaptation to it.
    - Eco-Sustainable Construction: which proposes - in a practical way - to assess the sustainability of the construction sector and the design of sustainable structures.
    - Sustainable and Renewable Energy: Focuses on the efficient use of energy, renewable energy sources and how to reduce carbon footprint.
    - Sustainable Development: addressing the 2030 Agenda and the Sustainable Development Goals (SDGs).

These courses were designed to be delivered in a face-to-face format. They were tested face-to-face and evaluated in order to identify elements for improvement (WP3 Report A5). After the completion of this process, good practices of online courses in similar subjects/contents were identified (WP3 Report A8). Both reports have allowed to feed the contents of the present document, which aims to create a guideline to transform offline content into online content, in order to incorporate STEAM courses into the VET platform of the project, thus promoting the creation and consolidation of accessible, innovative and quality STEAM learning spaces.

The aim of this guideline is to create a practical tool to guide the design of online courses based on the STEAM classroom programme, so that the classroom-based training material can be transformed into an online course with the same quality. The guideline is addressed to those who will be involved in the design and implementation of STEAM online courses.

The STEAMigPOWER project is coordinated by the University of UMinho (Portugal) with the participation of the Universita degli Studi di Perugia (Italy), the Fundació Solidaritat Universitat Barcelona (Spain), the Aristotelio Panepistimio Thessalonikis (Greece), the Middle East Technical University (Turkey) and the S.E.A.L. Cyprus (Cyprus).

For more information on the STEAMigPOWER project, please consult:

Website: https://steamigpower.eu/

Social networking:

- Facebook: http://www.facebook.com/steamigpower/
- X: https://twitter.com/steamigpower
- LinkedIn: https://www.linkedin.com/company/steamigpower
- Instagram: http://www.instagram.com/steamigpower/

2. PEDAGOGICAL FRAMEWORK

2.1 PEDAGOGICAL FRAMEWORK

The pedagogical framework will focus on the identification of the instructional design. Instructional design is defined as "a process of planning outcomes, selecting teaching-learning strategies, choosing relevant technologies, identifying educational media and measuring performance"[4] . This can be used to identify the resources, content, etc. that enable the design, development and evaluation of training proposals.

There are different instructional design models, among them the following stand out:

The ADDIE model, which stands for Analysis, Design, Development, Implementation and Evaluation. It is the basic Instructional Design model. Its phases are as follows:

  - Analysis: focusing on the target audience, the training content and the virtual environment
  - Development of the course objectives, the programme, its sequencing and the organisation of the content.
  - Development of content and training materials
  - Implementation of the course with students
  - Evaluation. Formative evaluation and analysis of results

- Merrill's principles. David Merrill proposed 5 principles of learning that can be considered as elements of evaluation in the design and implementation of courses. These principles are:
  - Task-focused principle. The course focuses on tasks to be performed by the learner. The tasks seek to encourage the resolution of real problems.
  - Principle of activation. The learner is considered to have prior knowledge that must be activated or connected with the new knowledge provided by the training.
  - Demonstration principle: training should be structured with the objective of encouraging the retention of information and knowledge by the learner.
  - Principle of application: knowledge must have an application in the reality surrounding the learner.
  - Principle of integration: knowledge is integrated into the learner through discussion, reflection, etc.

- Gagné's instructional elements. The author identified 10 instructional functions to be achieved, regardless of the learning situations presented. These functions are:
  - Stimulate the student's attention with the aim of motivating learning
  - Report on the expected learning outcomes and the criteria for assessing the achievement of these outcomes.

[4] Domínguez Pérez, Claudia, Organista Sandoval, Javier, & López Ornelas, Maricela (2018). Instructional design for the development of digital educational content for smartphones. Apertura (Guadalajara, Jal.), 10(2), 80-93. https://doi.org/10.32870/ap.v10n2.1346

- Establish prior knowledge and skills relevant to the training and build new knowledge on them.
- Presenting the training content in a functional way, dividing the content
- Guiding and structuring training content
- Checking student learning
- Providing
- Assess performance. Check whether the knowledge acquired meets the established criteria.
- Facilitating information and knowledge retention
- transfer of learned knowledge to other

The STEAMigPOWER training proposals are based on the ADDIE model and incorporate elements of the other two instructional design proposals, especially those focused on Gagné's instructional elements.

2.2 PREREQUISITES. PREVIOUS KNOWLEDGE AND EXPERIENCE

The transformation of a face-to-face course into an online course, also known as virtualisation of content, is a task that goes beyond the mere transposition of face-to-face content to a virtual platform. It is important to adapt the content to the virtual environment and this involves rethinking it.

STEAMigPOWER online courses will be designed with two basic requirements in mind:

- Self-paced online learning: the participant will be able to follow the courses independently, at their own speed and convenience
- In the courses won't be moderation or mentoring provided by a teachers or experts

This implies that interaction with other users and feedback will be limited. On the other hand, these two features will allow thousands of people to access course content asynchronously, and therefore according to their needs and circumstances, without the pressure of a pre-established schedule of activities.

These characteristics are also challenges for the effective adaptation of face-to-face content to online. For example, specific collaborative dynamics (debates or group work, for example) that are developed in face-to-face training and that allow the development of skills such as social interaction, language skills or teamwork, will have to be rethought in specific virtual environment in which, for example, it is possible that forums or other formulas of interconnection with other people will not be offered, or if they exist, they will not have content moderation. This implies that the learning that takes place with these dynamics will have to be offered through other types of strategies. In short, it will have to be rethought.

It is therefore important that the people who will be involved in the design and development of the content of STEAMigPOWER online courses have:

- Basic computer skills and knowledge of the VTE, which will facilitate the adaptation of the training.
- Knowledge of training content
- Knowledge of or access to similar content or similar e-learning courses
- Knowledge of the time and workload involved in the training content
- Knowledge of training evaluation

2.3 COURSE DESIGN AND STRUCTURE

The course design should take into account, apart from the instructional design which is part of the pedagogical framework, the following elements:

- The **target audience**: A main element of the course is the identification of the target audience for the course. In this particular case, the target audience was predefined in the project, and refers to migrants, refugees and asylum seekers, with a special focus on young people, high school students (over 16 years old) and women. A number of circumstances were identified during the blended and offline trainings:
    - Courses' participants had access to mobile devices and/or had access to spaces with electronic devices, such as. public libraries.
    - Regular mobile phone use by participants is common, although not necessarily in an educational context.
    - Most participants are familiar with the use of mobile applications. For those who are not, it is important to incorporate visible and accessible resources so that they can find keys to facilitate the use of the applications, if they are used.
    - In most cases, the target audience will be an audience interested in the content and with a beginner level of knowledge. In the case of people with basic knowledge of STEAM course contents, the use of very specialised terminology may be a disadvantage for following the course and/or activities. It is important to incorporate, as far as possible, accessible language, easy to read and easy to understand documents or videos to guide the participants.

- Realisation of a suitable **platform** for the delivery of the online course. STEAMigPOWER has created a virtual learning platform based on Moodle. This open source platform is mobile compatible, flexible, has a wide range of tools, can be customised and modified as needed, allows video uploads, documents and assessments.

- The **review of the** face-to-face **content** to be transformed. A review and evaluation of the face-to-face training material and its evaluation is necessary. **Tips** for the review and evaluation of the training material:
    - Identify the length of the content. If the content is very long, break it down into smaller learning units or lessons, known as micro-content. If the unit being worked on has multiple subheadings, it would be desirable to consider each of them or a small set of them to be a specific micro-content, and therefore to be worked on separately.
    - Identification of the structure of the contents. Content should be very well organised into headings, subheadings, lists, etc. Visual diagrams should be provided to ensure that people can locate themselves at each point in the training. For those with visual impairment, a tool (audio or alternative text) should be provided to facilitate this location.
- **Selection of the content** to be virtualised. It is important to identify the following selection typologies:

    - Training material to be retained. This material will be directly transferable to the virtual environment

- Training material that needs to be modified. This material needs to be reworked
- Training material to be replaced (perhaps by a video or other learning resource)
- Training material to be removed

The criteria to be used for the selection of the material could be the following:

- Does the material contribute to the understanding of the content or objectives to be achieved?
- Is there any other training material or resource that is wholly or partly similar on this topic
- Is the language used in the training resource appropriate for the target audience?
- Do the training material or resources visually or orally overload the topic?
- Does the training material match the workload of the subject?

- **Definition of course objectives**. Check that the learning objectives, content and training activities are aligned with the new online format. If not, reformulate them.

- **Content structure**. It is recommended that the structure of the courses should be linear, it means that there should be a fixed itinerary along which the participants progress. Along the itinerary, training materials and activities are offered that allow progress to be made in achieving the training results.

  On the other hand, it is advisable that the course content is divided into modules with specific learning content. And each module should be divided into different sections or topics.

  It is advisable that the topics are always articulated following the same structure:
  - Introduction
  - Development: Identify the theme and section(s) or sub-section(s) of the theme.
  - Conclusion

  For each of the modules there will be:
  - Self-evaluation activities
  - Tips
  - Resources (at least 3 per module): videos, texts, podcasts,...

  For example:

  Course

  Module 1
  - Topic 1
    - Introduction
    - Development (content and activities)
    - Conclusion and farewell
  - Topic 2

- Introduction
- Development (content and activities)
- Conclusion and farewell

Self-evaluation activities
Tips
Resources

Module 2

- Topic 1
  - Introduction
  - Development (content and activities)
  - Conclusion and farewell

- Topic 2
  .....

Self-evaluation activities
Tips
Resources

It is important that the participant has clear information about the structure of the course and its progress. It is therefore recommended to incorporate in the course a space that allows the visualisation of the participant's training itinerary and his/her position in this itinerary.

- **Course planning.** It is important to identify the following elements:

  - **Duration of the course and duration of each module**. The concreteness of the course objectives, the implementation of these objectives through materials and resources and the evaluation have different durations in face-to-face and online courses. It is important to identify the duration of the online course in a realistic way, taking into account the real effort and dedication required for the training. This will allow participants to plan their time appropriately

    It is recommended that each topic should last 3-4 hours and that 1 topic per week should be planned.

  - **Identification of the syllabus**. As mentioned above, the final syllabus to be developed will be the revised syllabus, and in any case, adapted to the virtual environment.

  - **Planning the development of the course**:

Please, take into consideration the following topics:

- What compulsory material is to be incorporated in the course? Does this material consist of documents to read, videos, podcasts to listen to,...? It is important to take into account the duration of each of the resources. It is recommended that, in the case of didactic videos, the maximum duration should be 10-15 minutes. Videos should be subtitled and accompanied by a document containing the transcript.
- Will supplementary material be incorporated? If so: Does it fit the objectives of the course?
- What makes supplementary material distinctive?
- Are questionnaires or other forms of continuous assessment included?
- Are questionnaires or any other form of final evaluation included?

- **Development of training materials and resources**. Didactic materials are understood to be all content that is incorporated into the training with a learning objective. This material may take the form of infographics, podcasts, animations, videos, user guides, activities,...

- Characteristics of the training material and resources:

  In the case of the learning activities, multiple proposals involving debates, discussions and other group interactions were developed in the face-to-face courses. These dynamics cannot be reproduced in the virtual environment due to the characteristics of the course. The course designer will have to decide whether to reorient the activities or eliminate them. In any case, the activities should respond to a typology characterised by automation. In this case, activities such as the following could be explored (in consultation with the developer of the VLE platform https://docs.moodle.org/405/en/Question_types):

  1.1 Calculated
  1.2 Calculated multi-choice
  1.3 Calculated simple
  1.4 Drag and drop into text
  1.5 Drag and drop markers
  1.6 Drag and drop onto image
  1.7 Description
  1.8 Essay
  1.9 Matching
  1.10 Embedded Answers (Cloze Test / Gap Fill)
  1.11 Multiple choice
  1.12 Ordering
  1.13 Short Answer
  1.14 Numerical
  1.15 Random short-answer matching
  1.16 Select missing words
  1.17 True/False

  - It should be material and resources that meet the training objective and the expected training outcomes
  - Their quantity should be adequate. Too many can discourage the participant, too few can lead to a feeling of lack of quality.
  - Easy to read. Especially in those cases where very advanced scientific terminology appears.

- Pleasant design. It is important to avoid text-only screens. It is important to present information in a way that is attractive to the eye.
- In the case of videos, it is advisable to use subtitles and supporting material that allows the content of the video to be read in a separate document. In this case, the text should be organised in short paragraphs. Videos should be of standard image and audio quality. It is recommended that the videos be scripted to avoid unnecessary repetition.

It is advisable to introduce different types of resources (videos, texts, audio,...) in order to cover the different learning styles. It should be taken into account that the language used in the different resources should be aligned with the characteristics of the target audience. Language, images and the use of examples should be oriented to collect and value the existing cultural, ethnic, etc. diversity. More information on strategies for the incorporation of inclusive language and images can be found in section 4... .

Self-evaluation activities. Each module should contain, at least, 1 self-evaluation activity. Please bear in mind that STEAMigPOWER online courses will not be moderated or have teaching staff to assess each assessment activity, which means that activities will not have feedback or these feedback will be automatic and based on a limited, pre-established set of answers. The types of questions that Moodle supports and are aligned to the courses are the following (https://docs.moodle.org/405/en/Question_types):

- 1.1 Calculated
- 1.2 Calculated multi-choice
- 1.3 Calculated simple
- 1.4 Drag and drop into text
- 1.5 Drag and drop markers
- 1.6 Drag and drop onto image
- 1.7 Description
- 1.8 Essay
- 1.9 Matching
- 1.10 Embedded Answers (Cloze Test / Gap Fill)
- 1.11 Multiple choice
- 1.12 Ordering
- 1.13 Short Answer
- 1.14 Numerical
- 1.15 Random short-answer matching
- 1.16 Select missing words
- 1.17 True/False

Copyright

When incorporating third party material, it is important to consider **copyright** and to incorporate material or content with open licences that allow copying, distribution and adaptation for non-commercial purposes. The author(s) of the material and the type of permissions of the material should be mentioned at all times: is the material freely available,

is it allowed to be shared and redistributed (both commercially and non-commercially), is it allowed to be adapted (remixed, transformed and built upon from the initial material)?

STEAMigPOWER has to define the use of the training material. In this respect, the Creative Commons licences[5] offer a wide range of possibilities. The most common in the educational and non-commercial field are the following:

- Attribution-NonCommercial (CC BY-NC), which allows the work to be copied, distributed and adapted for non-commercial purposes
- **Attribution-NonCommercial-ShareAlike (CC BY-NC-SA),** whereby the work may be copied, distributed, adapted for non-commercial purposes and further distributed under the same licence. We propose to use this type of licence.

- The **provision of information**:

As advanced in the A8 report, which identified key elements of good practice in online courses with content similar to that of STEAM courses, the need to incorporate clear, concrete and precise information about the course and its characteristics is emphasised.

It is suggested that a general presentation page containing the following elements be developed:

- Pre-requisites:
  - Participants' knowledge
  - Equipment requirements (please specify requirements if mobile phones will be used)
- Introductory video or presentation slides
- Course objectives
- Learning outcomes
- Course outline (modular structure)
- Course materials
- Estimated duration of the course
- Assessment
- Languages available
- Certificate of attendance/ certificate of participation
- Link to the registration form

Subsequently, once on the course page, the information would be structured as follows:

Module 1

Topic 1. Beginning of the training sequence.

a. **Paragraph 1**
   1. **Introduction**
   2. **Content**
   3. **Conclusions**

b. Paragraph 2

[5] Creative Commons. https://creativecommons.org/

1. Introduction
2. Content
3. Conclusions

ii. ...

Topic 2. Second part of the training sequence.

a. Paragraph 1
   1. Introduction
   2. Content
   3. Conclusions
b. Paragraph 2
   1. Introduction
   2. Content
   3. Conclusions

iii. ...

Self-evaluation
Tips
Resources
Farewell

Module 2: (same structure)

Module 3 (same structure)

Module 4 (same structure)

Final course evaluation (if applicable)

Farewell of the course

Certificate of participation

Regarding the content and information structure of the website, the student should be able to move through the course content (objectives, modules -only those that have been completed or are being completed-. assessments,...) and check their progress along the pathway in an intuitive way. Likewise, it is recommended to introduce a visible Help button so that students can have an accessible resource if they need support on how to perform an action.

2.4 EVALUATION

The evaluation allows the participant to check in a practical way the degree of knowledge acquisition and understanding. Due to the characteristics of the course - autonomous learning without external moderation - it is proposed that the evaluation is based on self-assessment tests. Self-assessment tests are automated instruments. They can be used both as a final assessment and as a continuous assessment of the participant's level of learning. They are usually in the form of a questionnaire.

It is advised that:

1. The order of the questions is random (if the platform allows it) and changes at each attempt of the test.
2. The maximum number of test attempts is defined.
3. The minimum number of correct answers is identified for the test to be considered valid. Normally 80% is considered adequate
4. An explanation is incorporated into the correct answers. After the last attempt, if the platform allows it, the answers to all questions may be displayed.

3. ACCESSIBILITY

The accessibility of training content is one of the central elements in inclusion processes. In order to improve accessibility it is important to consider, among others, the following aspects:

Use of alternative texts in cases where images are incorporated. Alternative texts, or ALT texts, are written descriptions that accompany images or visual elements. They are used so that visually impaired people who use screen readers can access the content of the image, even if they cannot see it. These alternative texts consist of 1 or 2 sentences describing the content of the image. For more information on alternative text, visit: https://support.microsoft.com/en-us/office/add-alternative-text-to-a-shape-picture-chart-smartart-graphic-or-other-object-44989b2a-903c-4d9a-b742-6a75b451c669

Where possible, produce documents that are easy to read. Elements that make them easier to read include:

- Page numbering (in the case of documents)
- Use of left justification
- Bold, easy-to-understand headings
- Each sentence has a maximum of 1-2 lines
- Phrases are always positive, avoid phrases such as: The absence of indicators does not imply that the problem has not been reversed.
- Plain language
- Use of examples
- Use of bullet points in case of lists

For further information, please consult the following website:

https://www.inclusion-europe.eu/wp-content/uploads/2020/06/Easy-to-read-checklist-Inclusion-Europe.pdf

Technical accessibility

- Verify that all resources work for Apple and Android devices (mainly) as well as for the most used browsers (Chrome, Mozilla, Explorer,...).
- You can check the accessibility of documents made with:
  - Microsoft Office https://support.microsoft.com/en-us/office/improve-accessibility-with-the-accessibility-checker-a16f6de0-2f39-4a2b-8bd8-5ad801426c7f
  - Google products: https://belonging.google/accessible-features/
  - In the case of using Ubuntu: Settings > Accessibility and enabling the Accessibility Menu.

  In case of using other products, please contact the helpdesk for more information on accessibility verification.

In the case of platform accessibility, the following checkers can be used:

- https://www.accessibilitychecker.org/
- Accessibility checklist: https://www.w3.org/WAI/test-evaluate/tools/list/

4. ENGAGEMENT AND INCLUSIVITY

To promote participation, inclusiveness, intercultural competence and diversity in online and self-paced courses, it is essential to implement pedagogical strategies that ensure an equitable and inclusive learning environment for all learners regardless of their characteristics and conditions.

The challenge of incorporating participation and inclusivity is greatest in mass, self-paced courses where learning is asynchronous and there is no mediation with teachers or between participants. Therefore, in order for accessibility and representation of differences to be properly addressed, the design of content and activities needs to be more specific.

4.1 ACCESSIBLE CONTENT

Designing accessible learning materials for learners with different abilities, backgrounds and learning styles is a challenge. In section 3. Accessibility a number of tips for incorporating accessibility in a broad sense are given. In summary, the use of multiple formats (audio, text, image,...) to respond to different learning strategies, the incorporation of subtitles, among other strategies, favours learners' access to online training.

The fact that the training is self-paced also allows students to adapt their study times and rhythms to their own needs, allowing flexibility and the ability to organise their time and workload in a way that would be unfeasible in other teaching methods.

4.2 MAINSTREAMING DIVERSITY

It is interesting to introduce diversity in the topics, activities and self-assessment tests, which implies incorporating or taking into account other perspectives, using inclusive language or providing data that reflect the diversity that exists in the European Union. This will help students to feel more represented and thus more valued.

In relation to inclusive language, the United Nations produced a guide on the subject in relation to English: https://www.un.org/en/gender-inclusive-language/guidelines.shtml

Images reflecting ethnic, religious, gender, etc. diversity can also be incorporated. In relation to images, there are several image repositories that include free access, among them:

- Canva Pro www.canva.com
- Pixabay. www.pixabay.com
- Pixlr www.pixlr.com
- Picjumbo www.picjumbo.com
- If Artificial Intelligence is chosen:
  - ChatGPT version www.openai.com/chatgpt
  - Leonardo https://leonardo.ai/
  - Playground https://playground.com/

In the case of images, it is important that they take the following issues into consideration:

- Avoid using images that reinforce stereotypes.

- Prioritise images that reflect and represent the diversity of European societies (gender, age, ethnic backgrounds, cultures,...).
- Avoid images that only show people from a single, specific group (only men, or only women, for example).

With regard to the representation and visibility of diversity in training material, progress can be made in this regard by providing examples, case studies, bibliography, etc. that refer to other cultures or regions of the world. The incorporation of videos, podcasts, interviews, etc. that reflect different perspectives or different voices on the subject of learning are strategies that make it possible to give visibility to those who are not normally represented in educational content

5. FINAL REMARKS

It is important to carry out a final review of the contents of the adapted online course before its final dissemination, therefore it is proposed to carry out a pilot test with people belonging to the target group and to collect and analyse their observations and comments. Subsequently, after evaluation of the observations and comments, the necessary changes can be made.

For this purpose, a 10-question questionnaire is suggested:

Clarity and understanding

Was the course content well organised and easy to understand?

(1 = Very unclear, 5 = Very clear)

Navigation and structure

Was it easy to find the materials, activities and resources on the virtual platform?

(1 = Very difficult, 5 = Very easy)

Was it easy to track my progress in the course?

(1 = Very difficult, 5 = Very easy)

Relevance of content

Do you consider the contents to be relevant and useful for learning the subject?

(1 = Not at all relevant, 5 = Very relevant)

Did the multimedia resources (videos, infographics, links, etc.) complement and enhance your understanding?

(1 = No, 5 = Yes, absolutely)

Learning assessment

Are the activities and assessments well aligned with the course objectives?

(1 = Not at all aligned, 5 = Completely aligned)

Do you agree with the following sentence? I consider that the training materials and their organisation have enabled me to achieve the course objectives.

1=Strongly Disagree 5=Strongly Agree

Time and workload

Was the course workload adequate for the time available?

(1 = Excessive, 5 = Very balanced)

Technical accessibility

Did you have technical problems accessing content or participating in activities?

(1 = Many problems, 5 = None)

Accessibility of content (for people with visual or hearing impairment)

Was the content in different formats and did this facilitate access?

1 Yes, 2 No

General learning experience

How would you rate your overall experience with the course in its online format?

(1 = Very unsatisfactory, 5 = Very satisfactory)

Comment

What aspects of the course do you think should be improved? What did you like best about the new format?

(Open answer)

6. Bibliography

Belloch, Consuelo (2013). *Instructional design*. Spain: Educational Technology Unit. University of Valencia. https://www.uv.es/bellochc/pedagogia/EVA4.pdf

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European Commission Guidelines for Inclusive Communication https://civil-protection-knowledge-network.europa.eu/system/files/2024-11/european-commission-guidelines.pdf?utm_source=chatgpt.com