

Danube Transnational Programme

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www.interreg-danube.eu/approved-projects/indeed

FACT SHEET on IT for INSTITUTIONAL EDUCATION

PROJECT INDEED

Innovation for Dementia in the Danube Region

A stream of cooperation

VERSION: 1.0



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1. Key facts on IT for institutional education

How should an IT-based learning format be designed to fit institutional needs?

- Respecting users` needs and their available time
- Engaging
- User-friendly
- Mobile-friendly (responsive)
- Accessible

Benefits of using IT for institutional education:

- > e-learning represents an important solution for the mass coverage of education;
- > ICT tools can overcome geographical and mobility-related barriers for both learners and teachers;
- > a major advantage of e-learning is the large scale availability and time convenience for learners; a limitation is the level of interaction with educators, which is superior for traditional programmes;
- > massive open online course (MOOC) represent the current tendency to reach a transnational audience for institutions of higher education.

Design:

- > the learning format should be compatible with users` preferences and time availability;
- > with so many and affordable education opportunities, the level of learners` engagement becomes an important feature - the successful programmes are interactive:
- using an introductory video of the course increases the engagement of learners;
- learners' available time is an essential resource; in MOOCs, the weekly work load for learners is in general 2-3 hours, with an average duration of courses between 6-8 weeks.

Technical requirements:

- > e-learning is generally accessed by browser, so the hardware requirements to access the platform are minimal;
- > if multimedia elements are used, broadband access is recommended; low bandwidth (for SD streaming) can also be used with reduced video quality;
- > ICT tools for education can be implemented in a scalable way, can be adapted depending on institution`s needs, budget, IT staff; free as well as paid ICT tools can be used;
- mobile-friendly platforms represent a key feature for accessibility;
- accessibility is a key component of a quality e-learning programme.

It is not just the provided education that matters, it is also the quality of the experience with the platform.



2. The INDEED multimedia platform

The INDEED multimedia platform will be made available to representatives of institutions that are involved in the health and social sector (e.g. professional boards, higher education, public authorities and social businesses). The content of this platform will enhance knowledge about dementia, foster multidisciplinary exchange and promote dementia related business activities. INDEED's multimedia platform is in line with the needs of these institutions in regards to its didactic concept and design. The INDEED multimedia platform is characterised by:

- > highly informative content that is tailored to the user group, respecting the short time that institutions can allocate to this kind of training:
- > a condensed, brief style of information delivery, avoiding excessive medical jargon;
- > optimal application of illustrating and entertaining features, motivating users to discover the whole platform.

By providing an educational e-learning platform, that is up-to date in regards to didactic, technical and design requirements, a change of the mind-set about dementia at the institutional level will be achieved.

Other Danube Transnational Programme (DTP) projects also address educational frameworks. In order to share best practices, INDEED joined the DTP Capitalisation Pole "Educational Governance". INDEED especially contributes to network by demonstrating e-learning possibilities for institutional learning. Please find more information about this Capitalisation Pole Danube Transnational Programme

http://www.interreg-danube.eu/relevant-documents/dtp-capitalisationstrategy/thematic-pole-9-educational-governance

here.

3. Examples of using elearning programmes for institutions

➤ Google Hub Digital Workshop, Romania: training for entrepreneurs https://learndigital.withgoogle.com/atelieruldigital/certification

The Google Digital Workshop Hub is Google's most ambitious digital training project in Romania. An important component of the program is the training on business and digital competences dedicated to **local companies**. The training is offered free and is directed towards Google's services. Access to lesson is free upon registration in the program. The programme contains 106 lessons covering 26 topics about digital marketing. Each lesson contains video presentations made in Romanian. The duration of a presentation is about 2-4 minutes. The number of lessons in a module is 2-7 (in general 3-5). Assessment is done by quizzes referring to case scenarios. Blended learning programs are also provided to ensure the involvement of local learners.

> YOUTOO, Austria: a platform that supports cooperation https://www.youtoo.help/en/

Youtoo is a web platform that aims to support the development and management of **help groups**. It addresses life situations when a carer wants to form a small team to help people in need. It is designed to support users to plan the help in a team, in a coordinated way. Each helper sees when others take on a task of the affected person. The service is used by Austrian charities and health organizations. It offers functionalities useful for case management, including user profiles for helped persons, calendar, activity organizer, forum and chat features, e-mail integration. It is a best practice example of ICT tools that support collaboration and coordination of services.

> Massive Open Online Course (MOOC): new trend for international audience

https://www.class-central.com/course/coursera-grundlagenkurs-unfallchirurgie-2062



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MOOC represents a recent direction in the digital education. Platforms like Coursera, Edx, MiriadaX and fun-mooc.fr gather thousands of learners per learning cycle. Prestige university from USA and Europe are using such platforms in order to attract international learners and to increase institution`s popularity. Using a large circulation language like English is an important feature for MOOCs. Access to learners is free by definition. From the Danube region, several educational institutions, especially from Germany, are taking advantage of the enormous potential of MOOCs.

Other best practices examples addressing entrepreneurs:

- > WIFI Wien Training Center of the Austrian Economic Chamber https://www.wifiwien.at/kurs/22490x-unternehmertraining-elearning-virtuellepraesenz
- PwC Hungary

https://www.pwc.com/hu/en/academy/e-learning.html

> Edumio, Slovakia

https://www.edumio.sk

> Vielgesundheit, Austria

https://www.vielgesundheit.at/en/register

Other best practices examples addressing institutions and professionals:

> E-medikus, Croatia

http://www.e-medikus.com

> The University of Debrecen, Hungary

https://elearning.med.unideb.hu/course/index.php?categoryid=135

> I-Med, Slovak Medical Chamber

https://i-med.sk

> E-Learning-Kurs Demenz, Deutsche Alzheimer Gesellschaft

https://www.wegweiser-demenz.de/startseite.html

> ELMI Project: transnational project

http://www.elmiproject.eu/home-2/



4. Further reading about IT for education

- > European Commission: Digital Learning & ICT in Education
- https://ec.europa.eu/digital-single-market/en/policies/digital-learning-icteducation
- > European Commission: Digital Education Action Plan
- https://ec.europa.eu/education/education-in-the-eu/digital-education-actionplan_en
- European Commission: Digital Single Market Policies

https://ec.europa.eu/digital-single-market/en/policies

- > W3C Accessibility Standards Overview
- https://www.w3.org/WAI/standards-guidelines
- ELearning guideline for the tertiary sector: New Zealand Tertiary College http://www.elg.ac.nz/elearning-guidelines-updated-2018
- Food and Agriculture Organization of the United Nations: E-learning methodologies. A guide for designing and developing elearning courses

http://www.fao.org/docrep/015/i2516e/i2516e00.htm

United Nations: Making sense of MOOCs: A guide for policy-makers in developing countries

http://unesdoc.unesco.org/images/0024/002451/245122E.pdf

> The Encyclopedia of Human-Computer Interaction, 2nd Ed.

https://www.interaction-design.org/literature/book/the-encyclopedia-of-humancomputer-interaction-2nd-ed

5. ANNEX: Important facts for developing an e-learning programme

E-learning: why and how

- > ICT tools can override geographical and mobility-related barriers for both learners and teachers:
- > the quality of e-learning programmes is improving and competes with traditional education:
- > a major advantage of e-learning is large scale availability, time convenience for learners; a limitation is still represented by the level of interaction with educators, which is superior for traditional programmes;
- > current ICT tools used in e-learning programmes can compensate at an important level the limits of distance human interaction, but this requires an advanced IT culture of educators, learners and the institution developing the educational platform:
- > the level of difficulty of e-learning programmes can vary from introductory to moderate and advanced;
- > e-learning system should support all functions of training, including discussion groups, monitoring and student assessments;
- activity modules (such as forums, databases and wikis) enable collaboration among students and with educators;
- > students can self-direct their learning and gain support from the best-inclass remote tutors or trainers;
- > documented learning is ensured by providing references: it is a good practice for quality education to provide supplemental materials with free online access - guidelines, infographics, books, scientific articles etc.;
- when developing an e-learning programme, it is a good idea to check other similar programmes in order to find out important info about the national and international competition, their educational offer and the format of programme proposed to e-learners;
- > e-learning is also an important way for advertising other educational programmes of the institution.



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Engaging learners

- with so many and affordable education opportunities, the level of learners` engagement become an important asset; the successful programmes are interactive:
- > communication with students should be very clear and consistent;
- > instructors should be very clear when setting students` expectations for the course: students tend to leave the course if there is confusion:
- > social media, forum discussions and group work promote interaction within the group;
- > using an introductory video of the course increases engagement of learners;
- > multimedia materials make a dynamic and enriched learning experience;
- interactivities involve learners in the learning process by demanding an active response before proceeding; such interactive elements are gamebased content, drag-and-drop activities, trigger-based actions;
- > assessments (quizzes, homework and tests) support learning of the educational content:
- remember that e-learning is also a human experience with a digital object/service:
- > it is not just the education that matters, it is also the quality of the experience with the platform;
- user experience design, design thinking and human-computer interaction can bring useful insights for the enrichment of audience's digital experience and for the impact of the educational programme.

User-friendly and accessible e-learning:

- user-friendliness and accessibility are key components of quality e-learning programmes;
- > the content should be easily read and understood; solutions are: appropriate headings, concise sentences and paragraphs, lists and bulleted points:
- visually-presented information should support the text content; images, graphics and diagrams appropriately sized are important elements;
- > simple is meaningful in IT; the aim is meaningful interaction, not more information; the design should avoid distractions (excessive information, both text, visual and audio);



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- > web platform`s navigation structure should be simple, intuitive and effective:
- > accessibility is enhanced by using contrasting color schemes, creating a scan-friendly layout and eliminating graphic distractions;
- implementing web accessibility for disabled persons is a best practice in the field; the central idea is to offer information on multiple sensorial channels, in a perceivable format, with simple ways of interaction;
- > teachers/trainers can provide guidance and support to students remotely and there are not limited by geographical distances;
- > content can be accessed as needed or downloaded (option which is important to reduce costs associated with mobile internet connection);
- massive open online course (MOOC) represents the last tendency to reach transnational audience; sometimes it can be offered with virtual tutoring classes or even with a blended learning model;
- > the duration, timing and work load of the educational programme should be adequate both to users` time availability and to programme`s depth;
- learners available time is an essential resource; both students and employees learners have a limited amount of time/week to invest in educational programmes outside their current duties;
- in MOOCs, the weekly work load for learners is in general 2-3 hours, with an average duration of courses between 6-8 weeks.

Infrastructure:

- > e-learning is generally accessed by browser, so the hardware requirements to access the platform are minimal;
- if multimedia elements are used, broadband access is recommended; low bandwidth (for SD streaming) can also be used with reduced video quality;
- internal and external platforms can be used depending on institution's degree of development of e-learning programmes and costs;
- if internal platform is preferred, various content management systems/learning management systems (CMS/LMS) can be used (such as institution`s own system, Moodle or Drupal);
- > mobile-friendly web platform represent a key solution to accessibility;
- Android and iOS apps further extends the mobile friendly orientation;
- > attention has to be given to data protection.



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Costs:

- > free as well as paid ICT tools can be used for e-learning and collaborative work:
- > ICT tools for education can be implemented in a scalable way, can be adapted depending on institution`s needs, budget, IT staff;
- > for small organizations, using free existing ICT services (video streaming platforms, website hosting, social media, online surveys) plus the production of the content (text/video) could represent accessible solutions to build an e-learning programme; for larger organizations, an internal platform and dedicated staff can be used;
- > the structure of financial costs, for institutions, of a digital education programme refers to costs related to:
 - production of educational content (the curriculum items);
 - production of multimedia material;
 - using a content management system (which can be provided by a dedicated platform like MOOC platforms or a learning management system);
 - implementing the educational programme;
 - payment of educators involved in monitoring/participating at the educational programme;
 - accreditation of the programme (which is in general regulated at a national level);
 - hosting;
 - other additional costs (advertising, administrative costs etc.)
- > the costs for learners in general match the complexity of the educational programme:
 - free: MOOCs, continuous professional development programmes provided by professional boards (like medical boards);
 - SMALL fees (in general up to 100 Euros/programme: educational programmes offered by various CPD providers;
 - higher fees, which can be from 2.000 to 20.000 Dollars for online state recognized diplomas like Master of Science;
- > targeting employment ensures cost efficiency of the educational programme, employability for learners, contributes to labor market and brings also benefits to economy.



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