



Digital Health - Developing Skills in third age

Trainer's handbook (PR2)

Project number: 2021-1-DE02-KA220-ADU-000033744



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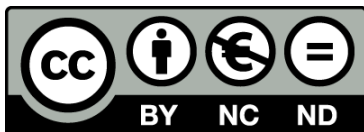
List of abbreviations

DE	Germany
DHL	Digital Health Literacy
DHT	Digital Health Technology
eHealth	Electronic Health
eHL	Electronic Health Literacy
EHRs	Electronic Health Records
GPs	General Practitioners
GR	Greece
ICT	Information and Communications Technology
IT	Italy
ISTAT	Italian Statistic Office
M-health	Mobile Health
MOOC	Massive Open Online Course
NGOs	Non-Governmental Organizations
OECD	Organisation for Economic Co-operation and Development
PHR	Personal Health Record
PR	Project Result
SMEs	Small and medium-sized enterprises
3rd age	People in third age (>65)



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1 Introduction

The main objective of the DIGIHALL project is to educate and train informal (as priority) and formal caregivers and volunteers occupied in health and social care of older people to act as agents for the promotion and best possible adaptation of digital health literacy among their beneficiaries. Caregivers are the people who experience first-hand the living conditions and challenges that older people mainly in LTC face, as well as share their concerns, needs and aspirations. In order to reach this main objective, DIGIHALL developed an interactive e-Learning platform and a mobile app, with podcasts, videos etc. providing education and training materials in the form of theoretical and experiential lessons, person-centered behavior change and psychosocial interventions for:

- Raising awareness on the adoption of digital health literacy by critical evaluation of both negative and positive determinants.
- Fostering patient empowerment and tackling functional decline and quality of life as the main consequences of chronic conditions.
- Connecting digital health literacy with active and positive ageing.

1.1 DIGIHALL project target groups

Since working with seniors is a target group that is in a specific life situation, it can be helpful to take a closer look at it. The target group "older people" is by no means a homogeneous category. It is therefore always useful to maintain an individual view of the senior citizens you work with.

Does the senior citizen still have the skills and abilities to provide services to others? → If applicable, can the senior citizen work on the DigiHall learning platform largely independently? Perhaps she/he would also like to act as an (informal) mentor afterwards?

Does the senior have the main goal of acquiring and retaining skills and abilities for herself (full self-competence)? → The DigiHall platform and the digital health technologies mentioned there may offer the right support for this.

Is the senior dependent on help from others (limited self-competence)? → Then the DigiHall learning platform can help to maintain the remaining independence where possible. At the same time, it can be helpful to have a mentor available on a permanent basis.

Is the person already totally dependent on others (lack of self-competence)? This phase of life represents the last years of life, which are characterised by an increasing need for support, physical limitations and an often limited range of activities due to the increasing need for support. → Here, it may be more the (informal) carer who uses the DigiHall platform and the technologies mentioned to help ensure that the senior's life remains as liveable as possible.

Within the different stages of (in)dependency mentioned above, there are different motivations and resistances to the self-determined acquisition of new knowledge (learning), which are based on the level of education, experience and biography.



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Take these aspects into account when planning your learning programmes. To create a stimulating learning environment for your seniors, think about suitable and motivating didactic methods.

Overall, it is also important to know that the DigiHall learning platform and the content are aimed at people who already have at least basic digital skills. If you (or your senior) have never started a PC before, do not have an email address or do not know what a browser is and how to open it, it certainly makes sense for you to first take advantage of a suitable learning programme on basic digital skills. It is then even more fun to return to the DigiHall platform, which deals with the specific field of digitalisation in the context of health.

Although our programme is primarily aimed at senior citizens, we do not want to address and inform our participants solely from the point of view of "age". No one should be left behind by digitalisation and no one should suffer disadvantages due to a lack of digital skills.

1.2 The scope of this handbook

The main purpose of this handbook is twofold:

- On the one side to familiarize trainers and instructors in adult education institutions around care of older people, to the DIGIHALL platform and its different applications, and provide them specific information on how to use the platform at the most efficient way, (for example deliver the training content)

Trainers learn the principles of adult education and how to use them. They learn how to create a positive and productive learning environment for training adults, how to organize the training sessions, monitor the progress, establish and keep communication with learners, give constructive feedback, and identify potential challenges to delivering effective training.

- On the other side to provide the opportunity to informal caregivers to use the platform in their spare time in order to learn and use basic principles and methods for raising the awareness and educating older people about components and applications of DHL.

In general the development of the DIGIHALL platform considered the different needs of the project's target groups (informal caregivers, older people, adult trainers), providing a user friendly, not demanding in terms of prior knowledge deposit, adjustable and low-threshold training content. Furthermore, the training platform is presented through a multimodal approach, since digital technologies are in different progress and adaptation level in EU countries and amongst project partner countries, both regarding the use and policy framework of technologies used.

DIGIHALL platform starts with an Introduction part, where the learner at first gets acquainted with digital health literacy, and secondly, with the particularities of DHL in third age.

The second part of the DIGIHALL platform is dedicated to the analysis of important didactic and teaching principles, highly adaptable to

a) the ecosystem of the training content (adult learning, online learning), and



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b) the versatile profiles of learners (informal caregivers, older people, adult trainers),

Here the scope is for the learners to follow a certain methodology in order to deliver with the biggest possible success the training content,

All information and training guidance provided in this handbook, for both adult trainers and caregivers, is accompanied by the explanations of basic didactic principles for more effective and customized delivery of the training content.

1. 3 Role of the DIGIHALL online platform

Erasmus plus projects, as one of their priorities, favor and encourage the delivery of the training material through open e-learning platforms. The benefits are obvious since – as in DIGIHALL – educational issues refer to wide audiences from different countries, who despite belonging to certain target groups, have different requirements and needs.

1. Flexibility. Online training courses can be taken at any time convenient for the learner. The only requirement is an internet connection. This flexibility is very important especially for DIGIHALL target groups who usually are people aggravated with their caregiving tasks and with little free time.

2. Accessibility. Avoiding transportation to and from the classroom is beneficial in terms of time, tiredness and expenses. Furthermore the training material itself is getting much more accessible through downloadable online notes, online interaction, training videos that can be replayed, and assessments/quizzes that can be taken anytime during the course helping participants to learn better and faster.

3. Communication. Participating in online courses gives the opportunity to learners to interact with different people that have the same interests or the same learning goals exchanging questions, doubts, and ideas.

4. Support. Online course trainers can be emailed and interacted with, when students have any questions, so in many cases the solution to a possible question or troubling may come much faster than in the traditional face to face courses.

5. Online assessments give the luxury to evaluate their understanding of a given subject without the pressure of taking an actual exam. Some assessments can also be retaken and reconsidered if students are not satisfied with their scores.

Nevertheless, it is vital for the projects and for the instructors to preserve the biggest possible and most efficient interaction between the mentors-trainers and the learners.

Any form of interaction within the e-learning platform (learners interacting with the content, learners interacting with the instructor, and learners interacting with each other), require the support and surveillance of the instructor.



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1.4 Technical and functional specifications of the platform. Overall time length of the course

- 5 hours and 15 minutes (315 minutes).

Time length of each module

Below you can see the time length of each section:

- Digital Health Literacy /DHL: 31 minutes (Videos: 11 minutes, Readings: 20 minutes)
- 3rd age and DHL: 36.5 minutes (Videos: 1.5 minutes, Readings: 20 minutes, Practice Exercises: 15 minutes)
- Teaching tips: 28 minutes (Videos: 3 minutes, Readings: 20 minutes, Practice Exercises: 5 minutes)
- Internet & social media: 12 minutes (Videos: 6 minutes, Readings: 6 minutes)
- Telemedicine: 30 minutes (Videos: 15 minutes, Readings: 15 minutes)
- Wearable Technology: 38 minutes (Videos: 3 minutes, Readings: 20 minutes, Interactive Resources: 15 minutes)
- Health Apps: 21.5 minutes (Videos: 1.5 minutes, Readings: 20 minutes)
- Electronic prescriptions and e-pharmacy: 37 minutes (Videos: 2 minutes, Readings: 30 minutes, Interactive Resources: 5 minutes)
- Electronic health records: 38.5 minutes (Videos: 3.5 minutes, Readings: 30 minutes, Interactive Resources: 5 minutes)
- Ambient Assisted Living - AAL: 42.5 minutes (Videos: 2.5 minutes, Readings: 25 minutes, Interactive Resources: 15 minutes)

How to create account

Creating an account in Digihall platform typically involves registering on the platform (<https://edu.digitalhealth-project.eu/>). Here are the general steps to create an account in our platform:

1. Visit the platform:
Go to the website of our platform <https://edu.digitalhealth-project.eu/login/index.php>.
- Locate the Registration Page:
- Look for the "Create new account" link on the login page.
- Fill in the Registration Form:



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You will typically be asked to provide the following information (The fields with the exclamation mark are mandatory to be completed):

- Username: Choose a username that is not already taken. It might be your email address or a custom username.
- Password: Create a secure password. Our platform has requirements for password complexity, such as a minimum length and a combination of letters, numbers, and special characters.
- Email Address: Enter a valid email address. This email will be used for account-related notifications and password reset requests.
- Other details (First name, Surname, City/town Country).
- Submit the Registration Form:
- After filling out all the required information and completing any security checks, click the "Create my new account" button to submit your registration.
- Confirmation Email: You will receive a confirmation email with a link to activate your account. Follow the instructions in the email to confirm your registration.

How to login

1. Log In: Once your registration is confirmed, return to the Digihall site's login page and enter your username and password to log in to your newly created account.

2. Access Courses and Content: After logging in, you should have access to the course and content provided by the Digihall platform, depending on your role and permissions.

If you encounter any difficulties during the registration process, you may need to contact the site administrator or support for assistance (karachrist@eap.gr).

How to log out

When you're done using our platform, make sure to log out for security reasons. You can usually find the "Log Out" option in the user menu, typically near your profile picture or username.

How to navigate

Navigating in Digihall platform is relatively straightforward once you've logged into your account. The platform provides a user-friendly interface that allows you to access your courses, view resources, participate in discussions, and more. Here are some basic navigation tips for using our platform:



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- Home Page:
- After logging in, you will typically land on your homepage. This page provides an overview of your enrolled courses.
- Accessing Courses:
- To access a specific course, click on the "My Courses" link in the navigation menu. You will see a list of your enrolled courses. Click on the course title to enter the course.
- Course Content:
- Within a course, you will typically find various sections or topics containing course materials, resources, assignments, quizzes, and discussions. Navigate through these sections by clicking on the respective links or tabs provided.
- Assignments and Assessments:
- If you have assignments or assessments to complete, navigate to the corresponding section and click to the corresponding assignment within your course.
- Participating in Discussions:
- To participate in course discussions or forums, navigate to the discussion board within your course (section "Digihall Platform". Click on discussion topics to read and respond to posts. 2 forums are provided within the course. A forum called "Announcements" which is used only from the teacher of the course in order to send announcements to his/her students. Another forum is the "general Discussion Forum" which is used by everyone in order to post a topic.
- Notifications and Messages:
- Keep an eye on the notifications and messages section for important updates and communications from your instructors or peers.
- Profile and Settings:
- You can access your user profile and adjust settings by clicking on your username or profile picture, typically located in the upper right corner of the screen. Here, you can edit your profile, update preferences, and change your password.

How to participate into the forum?

Participating in a forum in Digihall platform is a common activity for course participants to engage in discussions, ask questions, share ideas, and collaborate with peers. Here's a step-by-step guide on how to participate in a forum in our platform:

- Access the Course section "Digihall Platform":
- Navigate to the Forum:



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- Once inside the corresponding course section, look for the forum activity you want to participate in. This might be listed as a topic, discussion, or forum, depending on how your instructor has set it up.
- Read the Forum Posts:
 - Click on the forum's title or the specific discussion topic to enter the forum. You'll see a list of posts and replies from other participants.
- Reply to a Post:
 - To reply to an existing post within the forum, click on the "Reply" or "Add a reply" link typically located beneath the post.
- Compose Your Reply:
 - A text editor will appear where you can compose your response. You can format your text, add links, and include media if allowed by the forum settings.
- Subject and Message:
 - In the text editor, you may be prompted to enter a subject or topic for your reply. This helps to clarify the content of your response. Type your message in the main text box.
- Submit Your Reply:
 - After composing your reply, review it to ensure it conveys your intended message.
 - When you're ready to post your reply, click the "Post to forum" or "Submit" button. Your response will be added to the forum discussion.
- View and Interact with Other Replies:
 - You can now see your reply along with other participants' responses in the forum discussion. You can interact with others by replying to their posts, clicking the "Reply" link beneath their messages, and following the same process.
- Subscribe to the Forum (Optional):
 - If you want to receive email notifications when new posts are added to the forum, you can typically subscribe to it by clicking a "Subscribe" or "Subscribe to this forum" link within the forum.
- Edit or Delete Your Reply (if allowed):
 - Depending on the forum settings, you may have the option to edit or delete your own replies. Look for the appropriate links or options near your reply.



Which browser you can use?

Our platform is designed to be compatible with a wide range of web browsers. When logging into the platform, it's a good practice to use one of the following commonly supported and up-to-date web browsers for the best user experience:

1. Google Chrome
2. Mozilla Firefox
3. Microsoft Edge
4. Safari
5. Opera

When using any of these browsers, it's essential to keep them updated to the latest version to ensure security, performance, and compatibility with our platform and other websites. Additionally, if you experience any issues while using Digihall platform, such as login problems or display errors, check whether your browser is up to date and try clearing your browser cache and cookies, as this can resolve some common issues.

Which software is compatible?

Our platform is a web-based platform, which means that users primarily interact with it through a web browser. As such, there are no specific software dependencies on your local device for using Moodle beyond having access to a compatible web browser, an internet connection, and a device (e.g., computer, tablet, or smartphone) capable of running a web browser. However, there are some additional considerations and optional software tools that can enhance your Moodle experience:

1. **Web Browser:** As mentioned earlier, you'll need a modern and up-to-date web browser such as Google Chrome, Mozilla Firefox, Microsoft Edge, Safari, or Opera for accessing Digihall platform.
2. **Internet Connection:** A stable internet connection is essential for accessing Digihall platform, as it is a cloud-based platform. A high-speed broadband connection is recommended for an optimal experience, especially when viewing multimedia content or participating in live online classes.
3. **PDF Reader:** Some course materials on Digihall platform may be in PDF format. Having a PDF reader such as Adobe Acrobat Reader or a built-in PDF viewer in your web browser can be useful for viewing and downloading these files.
4. **Media Players:** Our courses include audio or video content, so you need a media player capable of playing common formats (e.g., MP4, MP3). Most modern web browsers have built-in media players, but you can also use standalone media player software like VLC.



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How to use the platform's various learning applications

1. Regarding Genially resources

Genially is an online tool for interactive content creation and presentation. It provides several options to its users.

- 1) By clicking to the button to the upper right side of the presentation you can see all active links and spots in each slide.

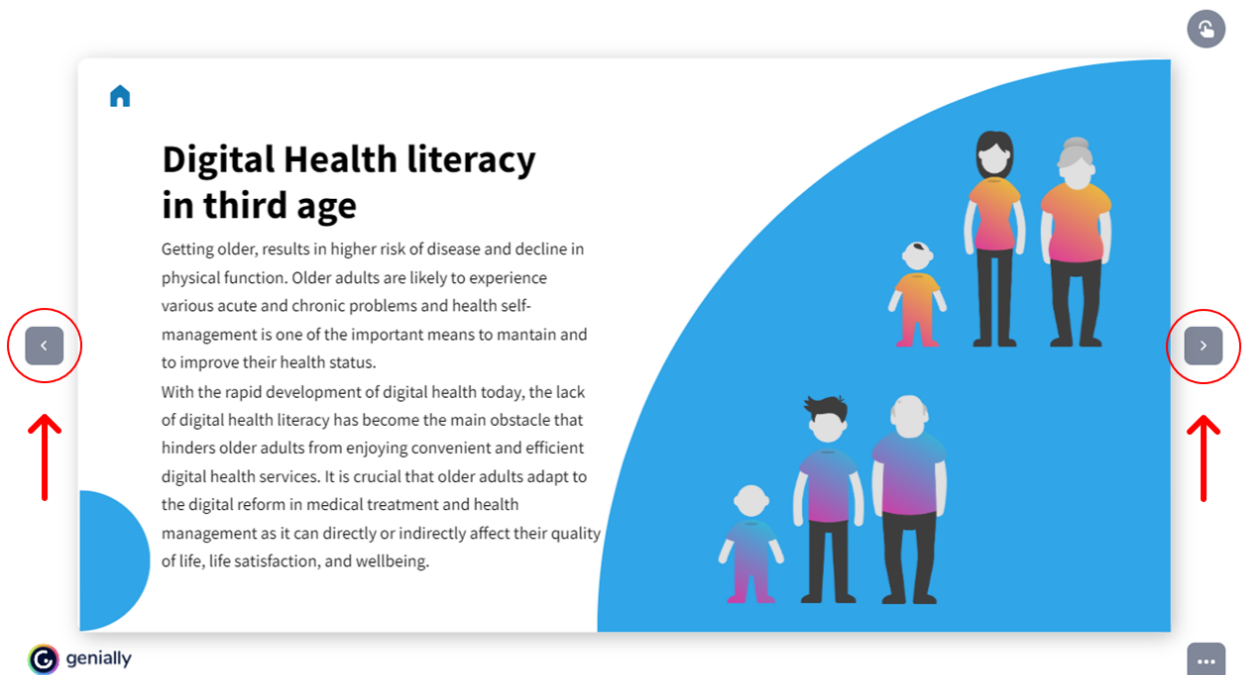


- 2) By clicking the side bars of the presentation you can move forward (or backward) to the next slide.

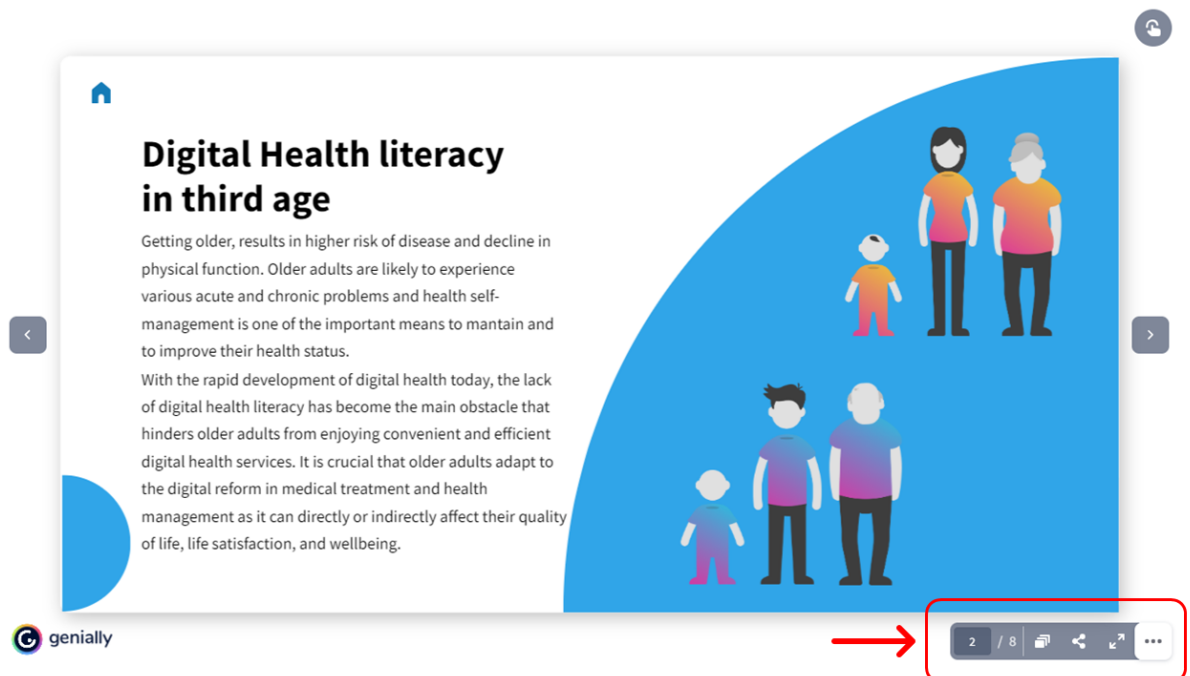


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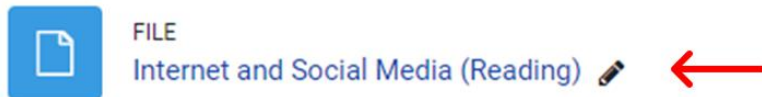


- 3) Finally by clicking the button to the right bottom side of the presentation several options appear. You can choose to go to a slide directly, to see all the slides in thumbnails, to share the presentation or finally to see the presentation in Fullscreen mode.



2. File (PDF) resources

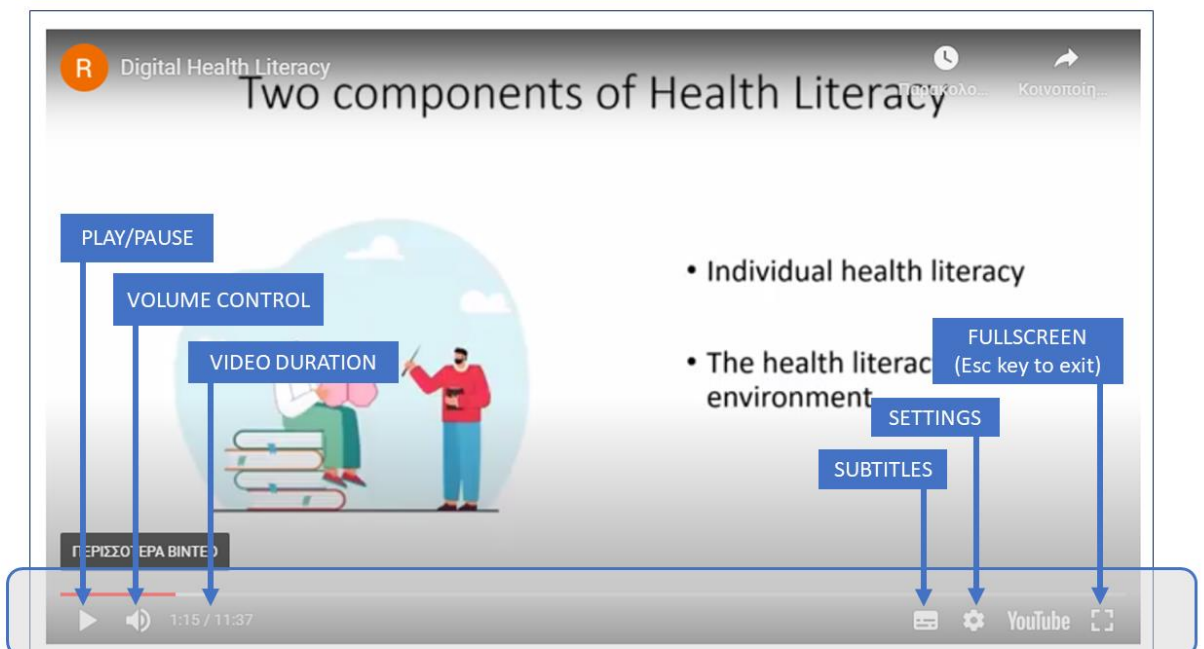
You can download the PDF files directly to your computer by clicking the corresponding link:



After this step you can find the downloaded file in your destination folder.

3. Video resources

All the video resources of the course are hosted to YouTube platform. So the player below each video support all the basic functionality that the YouTube platform offers.



4. Embedded interactive presentations

Another type of resource that our platform supports is the “Embedded interactive presentations”.

Some of the functions that are supported are:

- 1) Move Forward/Backward.
- 2) Autoplay, Presenters notes, Fullscreen mode.
- 3) Download the presentation in PDF format locally.



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1.6 The role and skills of the instructor

In general, online teaching requires educators to combine different roles, sometimes in a bigger scale than when in a physical classroom. Main aspects that an instructor should keep in mind when in online training are:

Pedagogical: The pedagogical role is about encouragement, direction and guidance of the learners taking under consideration their individual ability and needs to follow the course and get the most out of it.

Social: Social aspect refers to the ability of the mentor even through an online environment to create a friendly atmosphere that promotes learning and sharing. Just like your physical classroom, you want your online class to be a positive and welcoming environment. In principle, DIGIHALL platform is structured as self-supporting platform that can be used by both mentors and seniors with the appropriate digital skills. It also seems appropriate to combine the possibility of self-study with appropriate face-to-face meetings. E.g. a joint face-to-face start and then a self-study phase and then again a compilation of the results.

In addition, depending on the individual situation and the very different needs of the learners (for example an older person not having a caregiver, or a caregiver that prefers to follow a course due to lack of time or personal resources), learners may be presented with the option of following DIGIHALL as online training platform.

Technical: The technical aspect refers to the successful online interaction with the learners, the monitoring of their progress, the use of the platforms interactive parts and the response to any of their needs.



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Important training principles in online training are:

Guide the student

Facilitator in online learning has to make sure that he is present from the beginning to the end, starting from making clear the whole process, ranging from how to use and access the tools, to how to organize themselves in order to successfully complete the evaluation of the course. Moderator is also in charge of organizing the agenda, sharing knowledge, creating a stimulating environment for student participation, monitoring, answering questions and evaluating.

Facilitate learning

Another key role of a mentor in an e-learning platform is to know how to transfer his/hers knowledge and experience through the online format. Furthermore, facilitators should take advantage of existing tools to make courses more dynamic, by encouraging the use of different resources and activities: reading, audiovisuals, gamification or other practical exercises that help to maintain interest and encourage self-learning

Motivate

For effective teaching, you should reinforce the emotional part of learning so that students **remain interested** and have a good attitude towards learning from the beginning to the end of the course. Especially for the DIGIHALL's target groups:

1. non formal caregivers they do not have the luxury of time, many times they are physically and mentally aggravated
2. older people who often put other priorities, some of them might have computer anxiety and others are not keen in using online tools

To do this, it is recommended, as a role of education, for example, that you provide your learners with clear course objectives and a timetable with deadlines.

Don't forget to also provide them with feedback that will serve as both learning and support, which will help them to feel guided during the learning process on their own, something that often causes **some learners to drop out** of the course. It is also important to respect their learning speed so that they can experience one of the main benefits of online training: flexibility.

Communicate

Communicating is the key for the effectiveness of teaching. As an instructor, even at the beginning of the course, you should generate a direct discussion with your students to solve their doubts or provide feedback in a friendly and trusting environment. The most common options are tools such as chatting or videoconferencing for individual tutorials.

Moderate

Moderation is mainly about fostering open discussion and exchange of opinions. Learners should feel free to ask any question and participate into a conversation. Just as it is necessary to encourage participation, for the instructor it is also necessary to moderate all those



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discussions that are generated in **group debates and forums and** to take advantage of collaborative learning among students?

It is crucial for the moderator to show respect and non-judgmental listening, so that everyone can feel free to express their opinion. Also to introduce new concepts, encourage discussion and give feedback on interventions to reinforce participation.

Evaluate

Correcting and providing feedback according to the activity carried out by the learners is essential for their motivation and is a way of confirming whether or not the knowledge has been mastered correctly.

Most relevant Skills needed:

As the demands in the field of e-learning is growing, the rising number of participants in e-learning modules in Europe is continually expanding. The new era of e-learning education opens up a new problem space for researchers in order to redefine the educational needs that arise in this sector. The demands for e-learning facilitation are:

Digital media competence:

Technical Skills:

- Familiarity with online equipment

Socio-communicative Skills:

- Understanding principles of online communication
- Application of e-facilitation methods

Digital pedagogical competence:

- Managerial/planning skills:
 - Ability to plan facilitation throughout the course
 - Ability to monitor student work in terms of time
- Pedagogical and methodological skills:
 - Instructional skills
 - support self-directed learning
 - create motivation & collaboration
 - steer/cope with group dynamics
 - evaluate learning process



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2. Outline of the DIGIHALL e-learning platform and training content

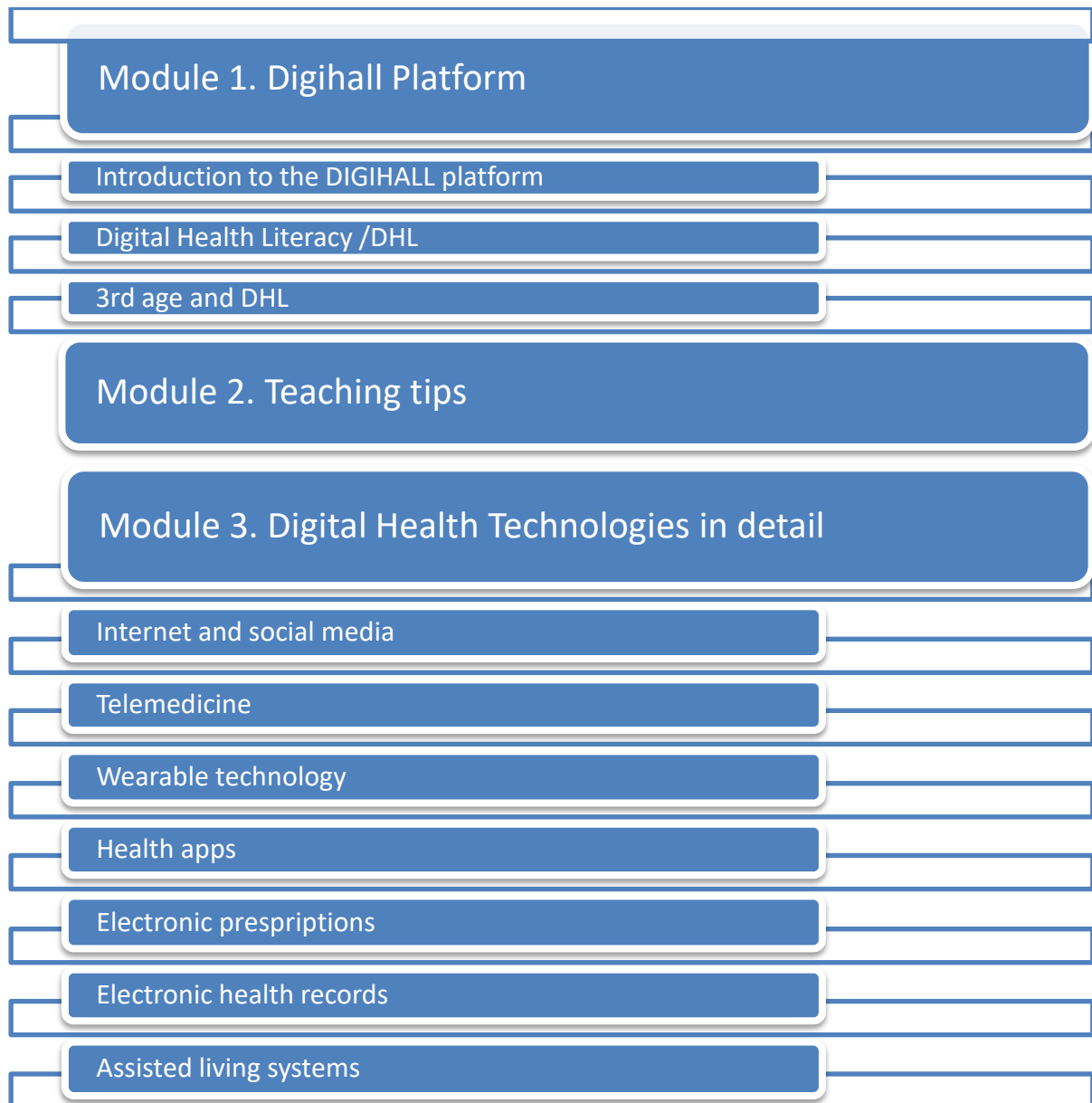


Figure 1 DIGIHALL outline of online platform

Source: own illustration



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DIGIHALL e-learning platform is divided into three modules.

2.1 Module 1 Introduction

The introduction consists of three sessions.

In the first session there is a general introduction to the platform regarding:

- Why to use it, its contents, and its different components
- Benefits for the learners
- Features of the platform

The second session is called Digital Health Literacy/DHL. It contains:

- Definition of Health literacy
- Components of digital health literacy
- Factors that improve health literacy
- Definition of digital health literacy (DHL)
- Risks of low DHL
- Challenges of DHL
- How to improve DHL
- Person centered care
- Patient centered care
- Integrated care
- Examples of digital health applications

The third session is called 3rd age and DHL, and analyzes:

- The context of digital health literacy in third age
- Facilitators and barriers that affect the promotion of DHL in third age
- Competence levels

2.2 Module 2 Teaching Tips

Didactics is about applying the right methodology answering on "how" the material can be more efficiently delivered to the final learners.



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Educational Objectives

Instructors gain knowledge about:

- Your own role and attitude as a mentor
- Some special features of adult education
- The needs for the specific learning group of older people

Instructors will be able to:

- To choose and apply didactic key concepts that can help you in your work
- To find these didactic concepts on the Digihall learning platform
- To facilitate learning and promote desired behavioural changes.

2.3 Module 3 Digital Health Technologies

Internet & Social Media

Description

Learning Path LP3 – „Internet and Social Media“ in Health Management will provide you with all the necessary information to become proficient in utilizing internet and social media regarding health management, particularly as tools for assisted living in the context of digital health.

At the beginning of this learning path, you will encounter an informative section featuring a Simpleshow video and a PDF that analyze the characteristics and functionalities of internet and social media platforms as well as their health potential. You will also discover the benefits of using these platforms for mentors and their beneficiaries. Additionally, we address potential concerns mentors and users may have and provide tips and recommendations for their safe and effective utilization.

In the second part of the module, you will explore a case study, offering a real-life example of how internet and social media can be applied in health management. This section covers factors essential for making informed assessments and presents the usage step by step. Following the presentation, you'll have the opportunity to assess your knowledge with a self-assessment quiz.

Educational Objectives

- You will gain knowledge about:
- Main factors about the internet and social media and the health benefits when using it
- How a mentor should act
- Main factors that influence the attitude and behavioral intentions of older adults to use the internet and social media



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- Basics on the didactic methodology that a mentor should follow

You will be able to:

- Make a well informed choice in relation to the older person's needs regarding health benefits
- Follow a certain didactic methodology outlined
- Create application scenarios that can be replicated
- Transfer the acquired knowledge to the target audience

Telemedicine

Description

Within the Learning Path LP4 – Telemedicine you will find a first informative section with a Simpleshow video and a PDF concerning: main contexts and ways of using Telemedicine in everyday life, benefits and advantages derived from its daily application, tools needed to start approaching telemedicine, useful links to get more information and deepen the topic (concerning Greece, Italy and Germany). In the second part of the module you will find a genial.ly presentation where a case study and several activities, including hints on didactics, are proposed to help you better understand what are the barriers and motivations of the elderly person and how to help him/her to overcome them. At the end of the presentation there will be a self-assessment test.

Educational Objectives

You will gain knowledge about:

- Telemedicine tools;
- Main needs and expectations of the elderly with regard to telemedicine;
- Contexts of telemedicine use;
- Intrinsic and extrinsic barriers of the elderly user;
- Technical requirements for the use of telemedicine;
- Didactic approaches related to adult learning;
- Habit formation process.

You will be able to:

- Prepare a work plan based on the didactic principles outlined;
- Create application scenarios that can be replicated;
- Transfer the acquired knowledge to the target audience.



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Wearable Technology

Description

Learning Path LP5 – Wearable devices will provide you all the necessary information for getting acquainted with a very important part of digital health which is the usage of wearable devices especially as assisted living tools.

At the beginning of the learning path, you will find a first informative section with a Simpleshow video and a PDF analyzing the characteristics and how these devices work, what are the benefits for mentors and the final users, answers to possible concerns mentors and beneficiaries may have, and tips and recommendations for safe and efficient use.

In the second part of the module you will find a Canvas presentation where a case study serving as a real life example is analyzed, regarding factors for making the right assessment, and didactic tools that a mentor could use in order to provoke a positive predisposition towards the acceptance of wearable devices by older adults in need of care. At the end of the presentation there will be a self-assessment quiz.

Educational Objectives

You will gain knowledge about:

- Main factors for the right assessment of a wearable device
- How a mentor should act?
- Main factors that influence the attitude and behavioral intentions of older adults to use a wearable device
- Basics on the didactic methodology that a mentor should follow

You will be able to:

- Make a well informed choice in relation to the older person's needs
- Follow a certain didactic methodology outlined
- Create application scenarios that can be replicated
- Transfer the acquired knowledge to the target audience.

Health Apps

Description

Learning Path LP6 – "Health Apps" in Health Management will equip you with all the essential knowledge and skills to effectively utilize health apps for health management, especially as tools for assisted living in the context of digital health.



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At the outset of this learning path, you will encounter an informative section that includes a Simpleshow video and a PDF focusing on the characteristics and functionalities of health apps and their potential for enhancing health management. You will also explore the advantages of using these apps for mentors and their beneficiaries. Moreover, we will address potential concerns that mentors and users might have and offer tips and recommendations for their safe and efficient utilization.

In the second part of the module, you will delve into a case study, providing a practical example of how health apps can be applied in health management. This section will cover essential factors for making informed assessments and will guide you through the step-by-step usage of health apps. Following this presentation, you will have the opportunity to assess your knowledge with a self-assessment quiz. Also there will be input to the topic “Artificial Intelligence” if you wish to intensify your knowledge.

Educational Objectives

You will gain knowledge about:

- Key aspects of health apps and their health-related benefits
- Effective mentorship practices
- Influential factors shaping the attitudes and intentions of older adults regarding health app usage
- Fundamentals of the didactic methodology that mentors should follow

You will be able to:

- Making well-informed decisions regarding health app selection based on the health needs of older individuals
- Implementing a specific didactic methodology as outlined
- Creating replicable application scenarios
- Transferring the acquired knowledge to the target audience effectively

Electronic prescriptions and e-pharmacy

Description

LP7 in its first part, analyzes the mechanism and role of e-prescription as indispensable part of the e-health services. Electronic prescribing (e-prescribing) is the health information technology that enables prescribers to send prescriptions directly to pharmacies from the point of care. Within electronic health records (EHRs), e-prescribing systems can be linked to facilitate access to other electronic resources, such as pharmacy benefits information, patient medication histories, clinical notes, laboratory results and orders, clinical decision support, and fill-status notification.



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Also, since e-prescription (as electronic health records), depends on the technical infrastructure and organizational level of each project country, the status in each project country is described and useful links for interested parties to find practical information is provided.

In the second part of LP7, you will receive valuable information about which are the benefits of e-prescription not only for older adults and their caregivers, but also for other fields as it is pharmacists and medical acts. Furthermore this part reports the challenges for e-prescription to be fully used by the project's target groups (caregivers and older adults), as well as the barriers that may impede this effort. Finally the right didactic approach is analyzed for a caregiver to follow and make more accessible e-prescriptions application, especially as part of the general e-health ecosystem.

After this analysis, follows some activities for the promotion of older people's and their caregiver's participation, and a quiz for anyone wanting to test the acquired level of knowledge.

Educational Objectives

You will gain knowledge about:

- What information is needed for and older adult to use the e-prescription
- Why is important for Mrs. Olympia to use the application of e-prescription and make her parents aware about this
- What is an efficient way for a mentor to promote e-prescription to his/her beneficiaries
- Which are the main barriers that impede this effort?

You will be able to:

- Facilitate your work as caregiver and make the life of your beneficiaries easier
- Minimize mistakes and be aware of risks
- Apply the right behavior change methods for accepting e-prescriptions as vital part of e-health ecosystem
- Transfer the acquired knowledge to the target audience.

Electronic Health records

Description

In LP8 you will receive valuable information about the role and use of electronic health records (EHR) as vital interactive components of:

- a) the project partner's National health care systems
- b) the personal management of older people's own health, in cooperation with the GP's



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- b) Informative section with a video and a PDF concerning what is an EHR, how it can be used and in which contexts, as well as the benefits connected with its daily application. Furthermore, is also analyzed for anyone interested, how the system of EHR's works in in the National Health care system of each of the project countries.

In the second part of the training session, the function of EHR's is analyzed through a case study, including hints on didactics, and guidelines for a mentor to be able to raise the awareness of older beneficiaries and make them use the system successfully. At the end of the presentation there will be a self-assessment test about how an older person can incorporate EHR's in his/hers health management routine.

Educational Objectives

You will gain knowledge about:

- What information is needed for and older adult to use the EHR
- Why is important for Mrs Wagner to use the application of EHR
- How a mentor can motivate an oder person use the EHR despite its reluctance or doubts
- Which are the main barriers that impede this effort?

You will be able to:

- Have better management of your (or your beneficiary's) own health
- Have better cooperation with the medical staff on the progress of your (or your beneficiary's) health
- Apply the right behavior change methods for accepting EHR's as part of a shared responsibility between the patient and the medical staff
- Transfer the acquired knowledge to the target audience.

Ambient Assisted Living - AAL

Description

The demographic change towards an aging population has introduced new challenges to today's society from economic, societal and health standpoint. Over the last decades, Active and Assisted Living (AAL) systems continuously increase their share on supporting the autonomy and independent living, especially for older adults. In its first part this LP9 educating session through a video and a PDF, describes what AAL systems are, how they can be applied, and presents the array of solutions that AAL systems provide. In the second part, through the analysis of a selected case study, it is examined the challenges, the facilitators and barriers and the right didactic methods for their fullest incorporation, wherever needed, into the everyday reality of older people allowing them to live healthier and independently for longer, helping people with disabilities, and supporting caregivers and medical staff.



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Educational Objectives

You will gain knowledge about:

- The sequence of actions a caregiver or an older adult should follow in order to understand how AAL technologies work, what services they offer, and which types of AAL technologies are suitable for the beneficiary's living needs
- Challenges that should be taken under consideration for the successful and tailored use of AAL's
- Facilitators and barriers that impact the implementation of AAL's into the living environments of older adults
- Basics on the didactic methodology that a mentor should follow

You will be able to:

- Understand the general context under which AAL systems function
- Be able to match individual needs to the technical and ethical requirements of AAL's
- Apply the right behavior change methods for using AAL's if proved appropriate
- Transfer the acquired knowledge to the target audience.

3. Didactic approach

1. Providing information in a practical and concrete manner

Taking under consideration the learning needs of the project's target groups, information and training material provided into DIGIHALL e-learning platform, introduces learners to all basic notions and applications of digital health literacy, so for them to be capable of understanding and using them. This knowledge is presented in concrete sections accompanied with visual elements and interactive games or tests.

2. Customization and individualization of the teaching approach

Both Informal caregivers and older people form two heterogeneous groups with different needs dictated by the physical and mental conditions of the beneficiaries (and of the caregivers) and a possible chronic disease management. Exactly digital health technology comes to alleviate any such burdens, minimizing the time and distances, and lessening primary care interventions as much as possible.

3. Being aware of the inhibiting and encouraging factors that influence the learning process



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For all mentors, it is important to be aware of all the main inhibiting and encouraging effects that can influence the learning process. Learning blockades, defensive reactions, social and individual prejudices, all these factors might eventually lead to mental and physical immobility and a reduced likelihood of leading a self-effective life (premature loss of self-competence).

4. The role of motivation

Based on the Social cognitive theory (SCT), an individual's motivation to engage in physical exercise may be influenced positively or negatively by internal factors (intrinsic motivation, e.g. knowledge of exercise benefits) and by external factors (extrinsic motivation e.g., support of others).

SCT is a behavior theory of human motivation and action. It is an offshoot of the social learning theory proposed by Bandura to explain the various internal and external processes (cognitive, vicarious, self-reflective and self-regulatory) that come into play in human psychosocial functioning. Social cognitive theory posits that motivation for behavior change is the result of dynamic and reciprocal interactions among individual, environmental, and behavioral influences.

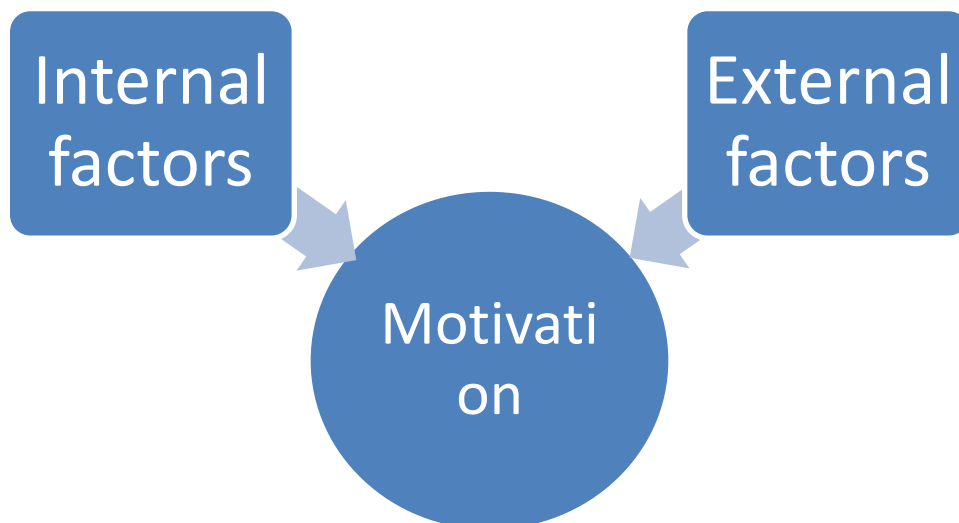


Figure 2 Source: Own illustration

3.1. Didactic principles

Authenticity

Make reference to the concrete everyday experiences of your counterpart; this makes the learning situation "authentic" and particularly meaningful.



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Interest

The way you design the learning situation should be exciting, i.e. arouse curiosity and tempt people to try things out and explore. Interest arises when there is an opportunity to gain direct and self-directed experience.

Multiperspectivity

In contrast to textbook situations, everyday situations are complex. What seniors need for sustainable learning is flexible and not rigid knowledge. It is important:

- to focus on different perspectives on a problem and
- to allow for different application situations.
- the use of different coding (language, pictures, videos) helps to remember what has been learnt.

Situated and inert knowledge

If you teach knowledge without a context of use, you create "inert knowledge". The learner cannot link the content to his concrete situation and thus cannot apply it to his own concerns.

Self-direction

Every person has developed an own "learning rhythm" over the course of life. Allow the freedom to choose their own learning path and preferences. At the same time, you can offer structure by describing/agreeing on the learning goal and possible intermediate goals as precisely as possible.

Self-efficacy

We are often tempted to guide the learner as closely as possible to the (supposed) goal. In the best case, this initially reduces the risk of failure. However, it has a major disadvantage: if it works, the seniors cannot attribute the success to themselves (which would increase their self-efficacy). Further learning thus becomes less likely.

Cooperation

Learning together with others satisfies the need for social inclusion in many people. It also contributes to multi-perspectivity through different opinions and experiences of the participants. Consider whether and how it is possible for you to facilitate shared learning experiences (digital or on-site) for seniors.

Learning with all senses

Use different senses to create interesting and learner-friendly diversity:

- Take in information: offer the same learning content with text, spoken word, pictures, videos, sketches.



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- Process information: memorise something linguistically, memorise an inner image, find your own words.
- Reproduce information: explain what has been learned to others, visualise it, apply it to concrete problems.

3.2 Enabling and supporting behavior change

The process of building a habit can be divided into four simple steps: stimulus, craving, response, and reward. Breaking it down into these fundamental parts can help us understand what a habit is, how it works, and how to improve it.

- The first stage is the stimulus that signals your brain to act or start behavior. When a piece of information predicts an outcome, it causes a desire or craving for that outcome to develop. This is the point at which all real change starts. This is the point at which you take one of your dreams, one of your ideas of yourself, and decide upon taking a simple, concrete step towards making that dream a reality for yourself.
- Unless we have a strong passion for change, we have no reason to act unless we have some degree of motivation or desire driving us to work for it. What you want is not the habit itself but the shift in the condition that it brings about. It is at this point that you will begin to develop habits gradually. You will start with the smallest possible element of the objective you defined in the previous step and commit to bringing it to reality as quickly as possible.
- This is the real habit that you engage in, which may take the shape of a thought or an action, depending on the situation. How committed you are and how much resistance is connected with your conduct determine whether or not you will get a response. We refrain from engaging in an activity that leaves us dissatisfied or otherwise unappealing and difficult to carry out.
- Every habit has a primary objective in the form of rewards. The cue is concerned with the act of noticing the reward. The craving is motivated by a desire for the reward. The response is inspired by the desire to receive the reward. When we seek out rewards, we do so for two reasons:
 - (1) they fulfil our desire, and
 - (2) they teach us which acts are important to remember in the future. As a result, a habit is formed.



3.3 Self-determination theory

Self-determination refers to a person's ability to make choices and be of control of his/her own life.

The basic assumption is that people are motivated to grow and change by three 3 basic needs that all people have in common. If these are fulfilled, intrinsic motivation arises, i.e. the activity itself is already perceived as fulfilling.

Autonomy: People need to feel in control of their own behaviors and goals. This sense of being able to take direct action that will result in real change plays a major part in helping people feel self-determined.

Competence: People need to gain mastery of tasks and learn different skills. When people feel that they have the skills needed for success, they are more likely to take actions that will help them achieve their goals.

Connection or relatedness: People need to experience a sense of belonging and attachment to other people.

Self-determination theory suggests that people can become self-determined when their needs for competence, connection, and autonomy are fulfilled, and is an important concept in psychology since it plays a role in psychological health and well-being.

Self-determination theory makes two key assumptions:

The need for growth drives behavior. The first assumption of self-determination theory is that people are actively directed toward growth. Gaining mastery over challenges and taking in new experiences are essential for developing a cohesive sense of self.

Autonomous motivation is important. While people are often motivated to act by external rewards such as money, prizes, and acclaim (known as extrinsic motivation), self-determination theory focuses primarily on internal sources of motivation such as a need to gain knowledge or independence (intrinsic motivation).

3.4. Awareness of your role as mentor

In concrete terms, you should be able to answer the following questions at the end of this learning unit:

- What are my own role and attitudes?
- What are the special features of adult education?
- What needs to be considered for the specific learning group of older people?
- Which didactic key concepts can help me in my work?
- Where can I find these didactic concepts on the DigiHall learning platform?
- What can I do concretely to facilitate learning and promote desired behavioral changes?



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3.5 Adult Learning Principles

This training is based on important adult learning principles, including:

- Respect – Adult students must feel respected and feel like equals.
- Affirmation – Adult students need to receive praise, even for small attempts.
- Experience – Adult students learn best by drawing on their own knowledge and experience.
- Relevance – Learning must meet the real-life needs of adults for their work, families, etc.
- Dialogue – Teaching and learning must go both ways, so that the students enter into a dialogue with the teacher.
- Engagement – Adult students must engage with the material through dialogue, discussion, and learning from peers.
- Immediacy – Adult students must be able to apply their new knowledge immediately.
- 20-40-80 Rule – Adult students typically remember 20% of what they hear, 40% of what they hear and see, and 80% of what they hear, see, and do.
- Thinking, feeling, and acting – Learning is more effective when it involves thinking, feeling (emotions), and also acting (doing).
- Safety and comfort – Adult students need to feel safe and comfortable in order to participate and learn. They need to know that their ideas and contributions will not be ridiculed or belittled.

Trainer's checklist

- Uphold the principles of adult learning.
- Be respectful.
- Treat everyone equally.
- Listen and observe.
- Maintain good eye contact.
- Use open and friendly body language.
- Be flexible and adjust training activities and approaches as needed.
- Be patient, open, and approachable.
- Encourage participation from all participants.
- Give participants time to respond to questions.
- When participants ask questions, take them seriously and respond promptly.
- Give participants constructive, positive feedback.
- Be aware of participants' interest, energy, and level of understanding.



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- Be honest. If you do not know the answer to a question, say so. Then tell the participant where she/he can get the information, or find the information after the training and give it to the participant later.
- Be aware of participants' literacy levels and adjust activities accordingly.
- Thank participants for their participation and effort.

Training preparation

Before the training

- Identify when training will take place.
- Identify where training will take place, and reserve and prepare the space.
- Identify participants, inform them, and arrange for transportation, food, and lodging as needed.
- Read all training materials thoroughly so that you are very familiar with training content and activities. If you have questions about the training content, get them answered.
- Complete all preparation for training activities (making photocopies, contacting guest speakers, gathering supplies for demonstrations, etc.).
- Gather all supplies needed for the training (flip chart paper, tape, markers, supplies needed for demonstrations, AV equipment, etc.).
- If you are working with another facilitator, decide ahead of time who will handle which parts of the training, and divide up the work accordingly. At the start of the training
- Make sure that all training materials are ready and that chairs and tables are arranged.
- Welcome participants as they arrive for the training.
- Welcome the whole group formally when everyone has arrived.
- Review the location of bathrooms, water, the Anonymous Question Box, and other logistics.
- Ask participants to introduce themselves.
- Use an icebreaker to put participants at ease.
- Brainstorm and establish ground rules for the training.
- Review the training objectives and agenda.
- Ask participants to name their hopes and expectations for the training.
- Assign specific participants to help you with timekeeping, energizers, flip charts, etc.
- Give participants the Pre-Test, collect the tests, and correct them during a break.



Throughout the training

- Uphold the principles of adult learning.
- Keep track of time and pace activities accordingly.
- Provide drinks and food.
- If the room is becoming hot or uncomfortable, arrange for fans, open windows, etc.
- Write neatly and large enough so that everyone can see. ... Position visuals so that everyone can see them.
- Explain instructions clearly and repeat instructions as needed.
- Use energizers and breaks to raise participants' energy levels.
- Summarize the main points at the end of each activity.
- Acknowledge and thank participants for their ideas and contributions. At the end of the training
- Thank participants for their participation and effort.
- End with a final energizer and applause.

After the training

- Make notes of what worked well during the training, what did not work well, and what should be revised for future trainings.
- Make notes of challenges or problems that arose during the training that need to be addressed. For example, they may have an older operating system or they may have low-bandwidth internet and problems with WIFI. You can also help people overcome technical hiccups by providing constant, easy-to-access support. Build a troubleshooting guide or provide a number to call or a chat button to click for more specific questions.



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