**aN Eu Curriculum
for chef gasTro-engineering
in primAry food caRe**

D 4.1.1 Educational toolkit platform description

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1 ABSTRACT

This document (Deliverable 4.1.1.) addresses the description of the educational toolkit platform, which builds on the results of work package 3 (WP3) and in turn will be used to support implementation and performance of localized pilot courses within work package 5 (WP5).

The platform emerged from an initial "needs assessment/maturity analysis" among the pilot partners. The structure of the course content was created with the contribution of partners amongst others (co-creation approach). Therefore, prioritization of learning outcomes (LO's) to be delivered during an online and open content educational course was developed under the lead of Medical University of Graz (MUG) and with support from vocational education and training (VET) partners running the pilots during the ongoing project.

Deliverable 4.1.1 describes the process on how the platform and content was developed, and outlines technical, legal, copyright and data privacy issues related to the open content course as well as to the toolkit platform used for the delivery of an online educational tool in the NECTAR project.

The platform will be multilingual in its final version (materials and subtitles of videos will be translated into English, Dutch, Italian, Portuguese and German) and mainly aims at three user/target groups: VET providers, teachers of the NECTAR program located across the European Union as well as students and/or end-users of the NECTAR program.

2 KEYWORDS

Educational toolkit platform, training platform, iMooX, online course, e-learning, MOOC

3 REVIEWERS

REVIEWER NAME	EXTERNAL REVIEWER	ORGANIZATION	DATE OF APPROVAL
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4 VERSION HISTORY AND AUTHORS

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*Status indicates if:
• A - Author (including author of revised deliverable)
• C - Contributor
• IF – Internal Feedback (within the partner organization)

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6 LIST OF ABBREVIATIONS

CGE	Chef Gastro-Engineering
D	Deliverable
ECTS	European Credit Transfer and Accumulation System
ECVET	European Credit System for Vocational Education and Training
EMC	European MOOC Consortium
ITS-BACT	Fondazione Istituto Tecnico Superiore per Tecnologie Innovative per i Beni e le Attività Culturali e Turistiche (Foundation Higher Technical Institute on Innovative Technologies for Cultural Heritage and Activities and Tourism)
LO's	Learning Outcomes
LTI	Learning Tools Interoperability
MOOC	Massive Open Online Course
MP	IPSEOA Marco Polo
MUG	Medical University of Graz
OER	Open educational resource
SCMA	Santa Casa da Misericordia de Albufeira
UoL	Unit of Learning
VET	Vocational education and training
WBL	Work-based learning
WP	Work package

7 INTRODUCTION

Work package 4 (WP4) of the NECTAR project (Grant Agreement Number: 621707) aims at developing and employing training methodologies and tools in order to support the subsequent implementation of the Chef Gastro-Engineering (CGE) curriculum, developed in WP3, and application as NECTAR pilots in WP5. In this context, the NECTAR consortium is expected to create and use an online educational toolkit platform including a dedicated Massive Open Online Course (MOOC, see chapter 11) (NECTAR, 2020). The overall teaching and learning methodology will build on blended learning strategies (NECTAR, 2020) and the materials developed during the NECTAR project aim at supporting this training methodology. As the training materials developed in WP4 will therefore serve the further implementation of pilot courses, WP4 is expected to also deliver an assessment tool to evaluate target audiences' requirements to follow the curriculum and a further regional structural analysis (regional maturity assessment) (NECTAR, 2020).

Aside from the pilot courses, designed learning materials will be one of the main results of the project, which could be reused by any VET provider across Europe implementing the CGE Curriculum.

The document delivered as Deliverable 4.1.1 (D 4.1.1) will describe the technical processes of the e-learning platform used during the NECTAR project. It will outline its technical requirements, possibilities and feasibilities as well as legal and copyright issues as foreseen in the project proposal, in order to finally describe the content outline of the course (NECTAR, 2020).

8 Basic Requirements for the Delivery of the newly developed Curriculum to become a Chef Gastro-Engineer

As outlined in Deliverable 3.2.1., the new curriculum to become a CGE is based upon the concept of work-based learning (WBL). WBL refers to learning that occurs when people do "real work". This work, independent if paid and/or within a curriculum at a cooking school, must be "real work" that leads to the production of real meals and services.

In this context, CGE students' work is supported and monitored by trainers directly related to their field of study, which is very applicable for training to be a chef (Waketech, n.d.). In the case of the NECTAR project, partners have developed a curriculum based upon work-based learning that is part of vocational education and training (VET). This type of learning is hardly ever stand-alone, but is usually combined with classroom-based and/or online distance learning (Cedefop, 2021). This implies that CGE students attend a dual training system in which the apprentice is already employed in a company, but receives supplementary training in a compulsory vocational school.

As recommended in D 3.2.1., the VET training to become a Chef Gastro-Engineer should additionally include e-learning to support and enrich the WBL educational strategies at the NECTAR pilot sites. This approach allows for the integration of academic learning with practice learning and optimization of learning results.

8.1 E-learning in the context of Work-placed learning

Currently, training organisations are forced to respond to the growing levels of diversity around the contexts for training and to examine a wider range of training solutions than in the past. This implies a new definition of e-learning and its capacities. There appears to be a misunderstanding that e-learning equates only with learning at a computer - doing mostly boring, text-based online courses with no interaction with a trainer or other learners. Nowadays, e-learning encompasses a wide range of learning models, with technology as enabler of increased access to flexible, quality and just-in-time training. However, there is no one right answer for how to develop and deliver e-learning

effectively. Tapping the actual needs of the organisations and the learners is key to success of e-learning.

At present, there are different technology-based learning models promoted to answer the individual learners' needs and training requirements. The next section gives a short overview on those models to explain the choice of e-learning toolkit platform used in the NECTAR project:

There are many different approaches to learning in general, and particularly in the field of technology-based learning.

In this context, Siemens (Siemens, 2005) introduced contemporary approaches for technology-based learning, guided by the concept of "connectivism" as a learning theory. To this extent, learning is recognised as a process taking place in the community where individuals concentrate on the same topic. As such, "connectivism" as relevant learning theory may offer a solid basis for technology-based learning processes (Duke, Harper, & Johnston, 2013). Educational experts believe that "learning by connecting people" provides a supportive function to reinforce learning progress in technology-based learning; however, individual learning processes may still build on traditional learning theories such as "connectivism", "behaviourism" and "constructivism" as major underlying concepts.

Day-to-day teaching and learning methodologies at universities and in higher education are usually focused on "cognitivism learning", where information is collected and processed by the learner's mind, thus generating knowledge. It is evident that nowadays simple transfer of knowledge can be adopted by technology-based learning sets (Bell, 2011).

In view of the "behaviourism" learning theory, the learning process itself is strongly determined by the learner's attitude and individual viewpoints (also known as "black box theory") and therefore knowledge gain remains an erratic procedure, often subject to behaviour changes of learners (Aliakbari, Parvin, Heidari, & Haghani, 2015).

In addition to this, the "constructivism" learning theory states, that learners construct their own knowledge as they make new experiences, reflect upon them and embed this new information into their pre-existing knowledge within their individual context (Driscoll, 2000). This concept of experienced learning in real life ideally is incorporated into traditional classroom teaching techniques as real-life settings often exhibit complex and unstructured characteristics. Therefore, learners are equipped with knowledge and skills integrated into a dynamic life-long learning approach, reinforcing the rationale to effectively combine learning offers with teaching methodologies in real-life settings (Roller-Wirnsberger et al., 2019).

Technology-based learning revolves around the impact and benefits generated from networks and social complexities that arise during the learning process. Learning individuals and groups are connected via information and communication technologies within various (social) networks and are able to effortlessly act as part of an integrated entity and exchange knowledge as well as experiences. Especially in adult learning environments, with limited time for learning processes and preferred contextual orientation, the utilization of e-learning approaches is recommended, as particular learning objectives focusing on specific knowledge are well addressed. Consequently, traditional face-to-face lessons in presence can be supplemented by interactive multimedia material, videos or downloadable content. In addition to that, e-learning also can be used to focus on further kind of learning objectives and to realize active learning approaches.

It is therefore important to learn what kind of educational material partners would like to offer in an e-learning approach among the new CGE curriculum. Partners already had expressed their preferences within their feedbacks in the flexibility matrix (see D3.2.1) developed jointly in the consortium during task 3.2. of the NECTAR project.

9 Target audience & user-groups for the NECTAR toolkit platform

The educational toolkit platform is provided in the format of an open educational resource (OER), free to access for anybody interested in the content offered. This open access policy may lead to a broad target audience possibly attracted by the topics offered during the NECTAR online training course, probably with varying professional and socio-cultural backgrounds of the participants.

However, during the development of the NECTAR project, partners decided to focus specifically on three target audiences to be closely involved in the NECTAR open educational course content employing a blended learning approach for the overall program. Those three target groups will be described in short in the following sections:

9.1 VET Providers

Based on the need to support the localized curriculum by the platform, the VET providers involved in the pilots represent the first user groups: IPSEOA Marco Polo (MP), Foundation Higher Technical Institute on Innovative Technologies for Cultural Heritage and Activities and Tourism (ITS-BACT), Medical University of Graz (MUG), ODISEE and Santa Casa da Misericordia de Albufeira (SCMA). However, it is to be expected that the number of VET providers interested to scale-up the program developed in the NECTAR project will increase beyond the end of the project, expanding the CGE-VET offers for chefs also in countries others than the project participants. This implies that the toolkit platform needs to be easily accessible globally, with open content free of charge, to ensure sustainability of the overall project.

Therefore, VET providers may mostly benefit from a flexible open and online educational training platform (i.e. can be used anytime, anywhere). In addition to delivery of a whole NECTAR training course to chef students trained at different VET providers across Europe, VET providers may wish to reuse single materials by downloading and modifying content according to local training requirements, strengthening their educational approach whilst implementing the newly developed NECTAR training curriculum on their local level. Furthermore, and also attributed to the latest educational developments during the SARS-COV-19 pandemic, VET providers try to improve their online training offers using innovative approaches.

9.2 VET teachers

Many teachers offering training for chefs during VET programs have been forced to re-align their training offers during the past two years, given the restrictions to offer face2face trainings during the Covid-19 pandemic. Many courses were run virtually during these times, challenging teachers globally. Teachers were urged to use educational platforms set up on short notice to offer asynchronous teaching for students in remote fashion. Furthermore, teachers were challenged during trainings offered online in synchronous training sessions, mostly without prior e-didactic trainings.

The NECTAR project offers solutions to this situation, taking into account special needs of trainers in VET institutions not only in the context of the newly developed curriculum of a Chef Gastro-Engineer, but also in offering train-the trainer programs in synchronous as well as asynchronous mode for those, who will be responsible for training of the future CGEs.
Trainers' classes are supported by the e-learning platform, thus complementing synchronous parts, making teaching more varied and flexible overall.

9.3 Chefs/Cooks working in health and social care settings

Chefs/Cooks working in health and social care settings, who are interested in completing the new CGE training, represent the major target audience and end-user group of the educational toolkit platform.

This group will benefit from the possibility to enhance their work-related skills, knowledge and qualifications in an innovative way, particularly through the teaching platform.
The educational toolkit platform and curriculum in general offer a new training opportunity as well as better professionalization and qualification for students (chefs/cooks) that can be used to meet the increased demands in the field of social and health care.

Especially for students (chefs/cooks), the platform represents a great benefit in terms of facilitating training into everyday life due to the high level of flexibility (place and time) and high accessibility for every student. To ensure this claim for students (chefs/cooks), the toolkit platform needs to be accessed safely from any IT device (such as laptops, computers as well as smart phones), with a maximum of technological stability and safety.

10 Needs Assessment of technical issues & learning environments related to the Toolkit Platform

Figure 1 shows the overall methodology underlining the needs assessment process.
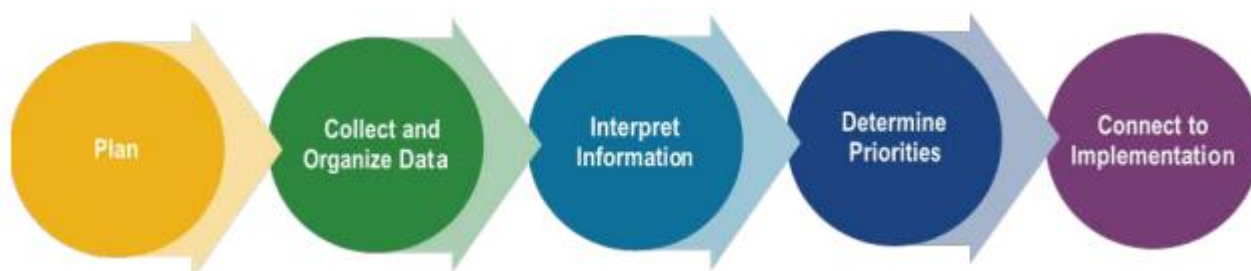
Figure 1: Phases of Needs Assessment Implementation retrieved from (Cuiccio & Husby-Slater, 2018)

As may be seen from, Figure 1 the process of the individual and evidence-based needs assessment from VET pilot partners of the NECTAR project was split into five steps, to ensure the alignment of the work carried out in WP4 with the overall aims of the NECTAR project as well as integration of data and results collected with WP3 and WP5 of the project.

During the planning phase all information outlined in the project proposal and results achieved during WP3 (especially Task 3.2.) were reconsidered within the coordination team for construction of information needed to design the educational toolkit platform (Goals setting).

According to the project outline, the educational toolkit platform had to satisfy requirements and online training needs of three major target groups listed above (see chapter 9). Furthermore, the newly developed NECTAR CGE curriculum should be developed as workplace training delivered by VET providers and supported by e-learning offers. The coordination team decided to collect data in a mixed-method approach. Basic quantitative information was collected from VET pilot partners as representative of the beneficiaries described above (i.e. VET providers, VET teachers, chefs/cooks working in health and social care settings),running an online survey using LimeSurvey™, including following areas and topics:
- Technical institutional background in terms of platforms or online courses already in use; the modality of using training material (local use of NECTAR training materials and/ or

additional pre-existing resources); considerations of (online) evaluation and local accreditation
- End users' needs regarding the platform in terms of modality of training, training materials already in use as well as planned to be used for the CGE curriculum; interactive tools for teaching to be used for CGE curriculum
- Consensus on mandatory learning objectives for the future CGE curriculum within the online educational NECTAR course

In a next step, feedbacks were categorized and analyzed by the coordination team. This approach allowed a clear prioritization of feedbacks and needs expressed by partners, such as which training content may be included within an e-learning course and which formats of training materials may be useful for end-users to be included in the new e-learning course of CGE offered on the NECTAR training platform.

To further deepen insights, data were discussed in individual structured interviews with every pilot site partner (lasting approximately 30 minutes per partner). Information was transcribed and categorized according to the taxonomy used during the survey and a final interpretation of results was performed by leader of WP4, Medical University of Graz. In the end, data were condensed into a joint e-learning environment supportive for delivery of the new CGE curriculum at the pilot sites.

The following table (Table 1) shows feedbacks on e-learning environments from five pilot partners responsible to deliver the CGE pilot courses during the NECTAR project.

Table 1: E-learning environment of individual pilot partners

Legend: ✓ = Yes/ Planned; ? = not sure/ don't know, × = No/ Not planned

Austria – MUG/WIFI
Currently used resources:
➔ Learning / storage platform: Moodle
➔ Interactive Tool: Big Blue Button
Type of training material:
➔ pdf
➔ power point,
➔ videos,
➔ learning platform: questions for exam
Requirements for the e-learning environment during the NECTAR project:
➔ Intends to use e-learning content from existing resources in addition: based on scripts from two existing diploma courses of the Austrian VET provider WIFI
➔ Download and use of training materials after translation (locally): ✓
➔ Modality of training: e-learning & face2face
➔ Evaluation through the learning platform needed: ?

Belgium - Odisee
Currently used resources:
➔ Learning / storage platform: Blackboard (primarily used), Microsoft Teams
➔ Interactive Tool: Microsoft Teams (to teach & share documents between students)
Type of Training materials:
➔ pdf
➔ power point,
➔ videos,
➔ websites

Requirements for the e-learning environment during the NECTAR project:
- ➔ Intends to use e-learning content from existing resources in addition such as pdfs, ppts, videos
- ➔ Download and use of training materials after translation (locally): ✓
- ➔ Modality of training: e-learning & face2face
- ➔ Evaluation through the learning platform needed: ×

Italy – IPSEOA Marco Polo

Currently used resources:
- ➔ Learning / storage platform: Google Classroom
- ➔ Interactive Tool: Google Meet

Type of Training materials:
- ➔ pdf
- ➔ power point,
- ➔ videos,
- ➔ word,
- ➔ images,
- ➔ websites

Requirements for the e-learning environment during the NECTAR project:
- ➔ Intends to use e-learning content from existing resources in addition: based on former/ already existing courses
- ➔ Download and use of training materials after translation (locally): ✓
- ➔ Modality of training: e-learning & face2face
- ➔ Evaluation through the learning platform needed: ✓

Italy – ITS BACT

Currently used resources:
- ➔ Learning / storage platform: Claroline
- ➔ Interactive Tool: Google Meet

Type of Training materials:
- ➔ pdf
- ➔ power point,
- ➔ videos,
- ➔ word,
- ➔ images,
- ➔ websites
- ➔ books

Requirements for the e-learning environment during the NECTAR project:
- ➔ Intends to use e-learning content from existing resources in addition: ?
- ➔ Download and use of training materials after translation (locally): ×
- ➔ Modality of training: e-learning & face2face
- ➔ Evaluation through the learning platform needed: ×

Portugal – Santa Casa da Misericordia de Albufeira

Currently used resources:
- ➔ Learning / storage platform: Moodle
- ➔ Interactive Tool: Zoom (primarily used), Microsoft Teams, Google Meet

Type of Training materials:
- ➔ pdf

> ➔ power point,
> ➔ videos,
> ➔ word,
> ➔ images,
> ➔ websites
>
> Requirements for the e-learning environment during the NECTAR project:
> ➔ Intends to use e-learning content from existing resources in addition: ✓
> ➔ Download and use of training materials after translation (locally): ✓
> ➔ Modality of training: e-learning & face2face
> ➔ Evaluation through the learning platform needed: ?

For a more detailed overview of the results from the survey and follow-up interviews, see appendix 1A1, 1A2.

10.1 Condensed joint e-learning environment

According to the results of the needs analysis, the target audience/user-group referring to the responsible VET provider needs for the new curriculum comprises the following overall three components:

> (1) E-learning content from the educational toolkit platform in the format of specific e-learning material, videos, virtual classrooms as well as guided activities to be carried out by students for successful attendance of the e-learning course (also including the format of MOOCs, see chapter 13.3)
> (2) Storage of material on the particular institutional account (ranging among the pilot regions from Moodle, Blackboard, Google Classroom to Claroline)
> (3) Face-to-face and/or online communication with trainees via the particular tool for interactive teaching (ranging among the pilot regions from Google Meet, Zoom, MS Teams to Big Blue Button)

Figure 2 demonstrates the ecosystem for the training environments within the different VET pilot partners in the NECTAR project.
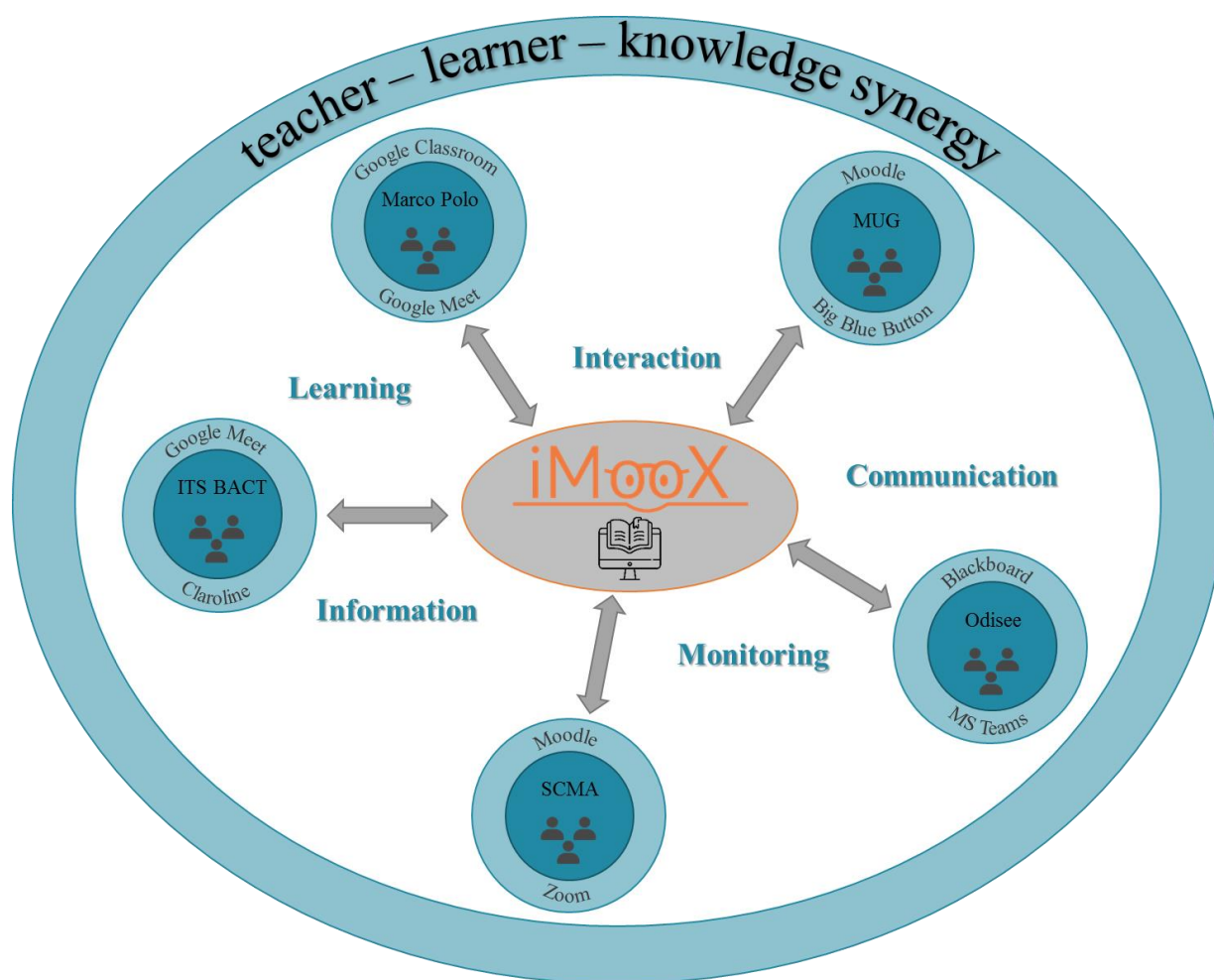
Figure 2: Learning environment among VET pilot partners of the NECTAR project

As may be seen, all pilot partners build on pre-existing remote teaching environments, which allows for a swift integration of the NECTAR e-learning toolkit platform.

Furthermore, and due to the recent teaching challenges during the Covid-19 pandemic, all institutions are already using communication platforms to run synchronous e-learning sessions. During the interviews it became clear, that using these pre-existing platforms of data storage as well as the communication platforms, which regional teachers are familiar with, may be the best solution to create individual teaching and learning environments for the partners involved in piloting the new NECTAR CGE curriculum. This development was not foreseen at time of project start, however, perfectly fits with all other activities foreseen in WP4 of the project.

Partners were in strong agreement on the shared and common e-learning training course, reflecting the backbone of mandatory learning outcomes of the new curriculum. Details on the content development may be found in chapter 13.5 and 15.

11 Technical Background of the NECTAR E-Learning Platform

The online training within the NECTAR project will be hosted on the Austrian education platform **iMooX** (University of Technology, n.d.). This educational platform is based on the open-source software **MOODLE™** (Moodle, n.d.), one of the leading and well-known learning management systems in educational institutions worldwide (e.g. universities).

Moodle is designed to facilitate personalized learning environments for educators and learners by providing a secure, robust and integrated system. It is a flexible tool-set where everything needed for a course can be easily integrated, using its complete range of built-in features, including external collaborative tools such as forums, wikis, chats and blogs. Moodle allows storing and presenting educational materials of all kinds of files (e.g. word-processed documents, pdf format or power point presentations) amongst others. Besides the provision of a convenient file management and of collaborative tools and activities, Moodle's extremely customizable core comes with many further standard features such as the support of open standards (e.g. readily export and import SCORM courses into Moodle) or high interoperability in terms of integration of external applications and content (Moodle, 2020, 2022a, 2022b).

At this moment, iMOOX makes use of the MOODLE 3.90 and is expected to be continuously updated according to latest technical developments. The ongoing support by the iMOOX support team is guaranteed, also beyond the end of the NECTAR project. This feature allows a sustainable delivery of the NECTAR training content and regular updates of the OER courses for project partners. MUG as leading project partner in WP4, for this purpose, will keep the duty and right to manage the NECTAR training course during and beyond the NECTAR project. In case partners decide to develop further training materials, which must be based upon the CGE curriculum developed in WP3, the consortium will have continuous access to the training platform as well as the technical support of the iMOOX team.

To ensure a smooth scaling-up of the CGE curriculum across Europe, it is possible for eligible persons to download educational material, either the complete training course and/or single training elements to other training platforms free of charge. The iMOOX platform allows a smooth transition of data directly to other platforms or by making use of SCORM™. Furthermore, it is possible to export data content by LTI (Learning Tools Interoperability). In case users wish to transfer data from the iMOOX platforms to other technical features, accessibility must be clarified on a case-by-case basis with the iMooX support team, available during weekly working hours.

iMooX may be easily accessed from all major operating systems (e.g. Android, Windows) of different devices, like Tablet-PC and smartphones.

All online-courses on iMooX are free of charge and accessible to everyone. With the appropriate licenses, others (e.g. teachers) can reuse the content of a course in lessons, courses and learning scenarios. Based on this the online courses offered on this platform are "**Massive Open Online Courses" (MOOCs)**.

The table below (Table 2) provides an overview of the characteristics of MOOCs on educational platforms.

Table 2: Characteristics of MOOCs training courses based on (Ayyanar, Clarance, & N, 2019; Ebner, 2021a, 2021b)

Massive	Courses for the mass (for a huge amount of people). Any person can get registered to start learning and receive an online courses certificate upon successful completion
Open	Often available freely, in the best case the content is openly licensed
Online	The courses are available online and can be accessed "anywhere and anytime" without any geographical boundaries or limitations
Course	There are many courses available across all disciplines that can be conducted by users with any educational background

MOOCs are supposed to be of high quality, because the content is often developed by institutions of higher education, such as universities and they can be used for different didactical scenarios, for example flipped classrooms and inverse blended learning environments (Ebner, 2021a, 2021b).

Depending on the subject matter, MOOCs can be used by different users with various backgrounds (Baturay, 2015; Ebner, 2021a, 2021b):
- **Vocational**: professionals looking to maintain their knowledge or explore new areas to develop their careers
- **Educators, Researchers**: they use MOOCs for reuse and remixing MOOC (content) in their own work with e.g. students
- **Higher education student**: as learning and teaching resources
- **Hobby learners:** courses in the personal field of interest
- **Prospective students:** may come to be inspired to embark on more formal studies
- **Labour market:** relevant professional education and training courses

There are many MOOC platforms for educational purposes in Europe and beyond, such as EdX, Coursera and Udacity. Due to the high quality confirmed by the membership in the European MOOC Consortium (EMC), the NECTAR project is based on the Austrian MOOC platform **iMooX** (https://imoox.at/mooc/) of the Technical University of Graz (University of Technology, n.d.). EMC is the leading platform for MOOCs in Europe (European MOOC Consortium, n.d.). Furthermore, Medical University of Graz is one of the 39 partners of iMooX and is able to release a new MOOC on the platform free of charge until 2023. iMooX started in 2013 and to date there are more than 90 courses on various subjects available at university level with more than 65,000 students. The University of Technology in Graz launched the MOOChub (https://moochub.org/) in 2020 with the aim of combining various MOOC platforms to one platform in order to broaden the resources for online teaching at national and international level. iMooX is already included in this combined platform.

The iMOOX platform, with its courses offered, may support training formats within the particular learning environments in the NECTAR project.

Since IT systems are regarded important to ensure learners, employers and VET schools remain in contact, for example during work-based learning, certain virtual environments for the implementation of a technology-based WBL approach should be considered within the CGE courses (see Designers' KIT, DK1 & D3.2.1., page 79). Subsequently, features to be supported in this virtual environment are discussed in this context with considerations to the iMooX platform:

- e-portfolio: This feature allows teachers to have a collection of electronic evidence (students' works) that let him/her evaluate student portfolios via internet. E-portfolios, like traditional portfolios, can facilitate students' reflection on their own learning, leading to more awareness of learning strategies and needs. Training courses like MOOCs, once passed successfully, will be graded with a certificate delivered automatically to graduates. The certificate outlines the learning content as well as learning volume passed successfully and may be transferred into credit systems such as ECVET and/ or ECTS, once a training institution and/or VET provider decides to do so. In the NECTAR project, an open educational resource training course, including agreed learning objectives of the new CGE curriculum will be offered in the format of a MOOC as described before. Students' learning progress in the MOOC will be documented automatically and registered within the platform. Students can therefore clearly see how many units they have already completed and how many units as well as weeks of training are still to be completed.

- Functionalities that support resource sharing (database): The iMOOX platform allows to import and export resources in order to support resource sharing. Moreover, links can be easily uploaded to the educational toolkit platform and thus students can be referred to further resources (papers, videos, webpages...).

- Wikis or forums: to allow asynchronous tutoring and peer-tutoring practices. It is important to notice that MOOC courses can be offered either as supervised or self-learning courses. Supervised and self-learning periods can be determined individually. In a phase of the course defined as supervised, a forum to allow asynchronous tutoring is included. Furthermore, MOOCs have the capacity of forums where participants can exchange information about the content (kind of peer-tutoring) (Siemens, 2005). In addition, links to wikis may be integrated during course production into the platform.

- Instant messaging apps for synchronous tutoring are traditionally not part of MOOCs. In classroom presence teaching, foreseen by all VET pilot partners in the NECTAR project, different didactic methods as well as messaging apps can be combined more easily and there are different scenarios for the integration of MOOC courses available.

12 Analysis of Legal, Copyright and Privacy Issues

iMooX online courses must be open according to creative common licenses. The following figure presents all possible licenses (see Figure 3):
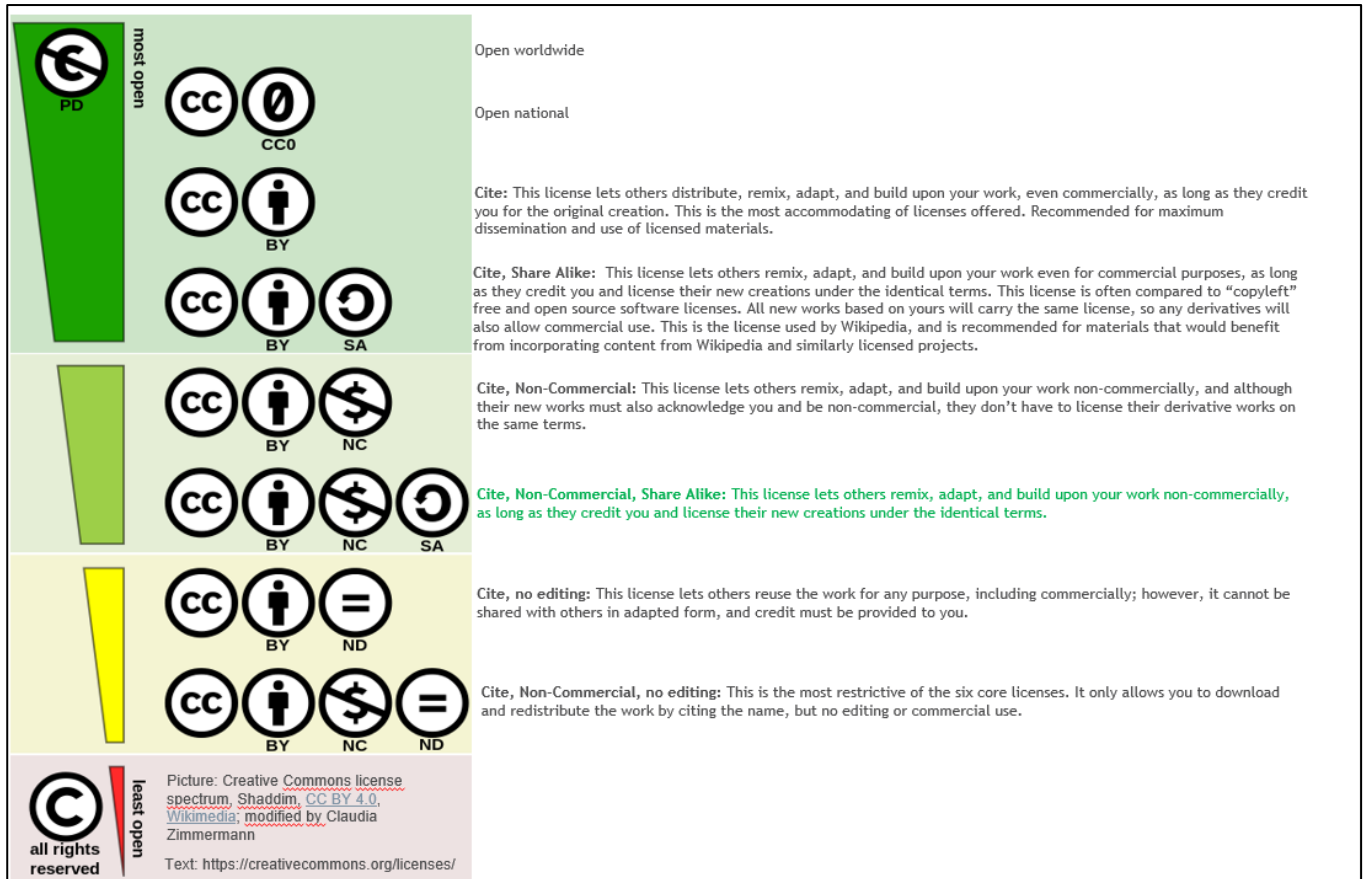

Figure 3: License (based on modification by Zimmermann)

Within the consortium meeting, license possibilities for the courses on the educational toolkit platform were presented and discussed with the partners. To reach consensus on a preferred license for the underlying online course, a quick survey was conducted using the online tool Mentimeter™. The following figure shows the results of this vote, which led to the decision on the license used for the training course.
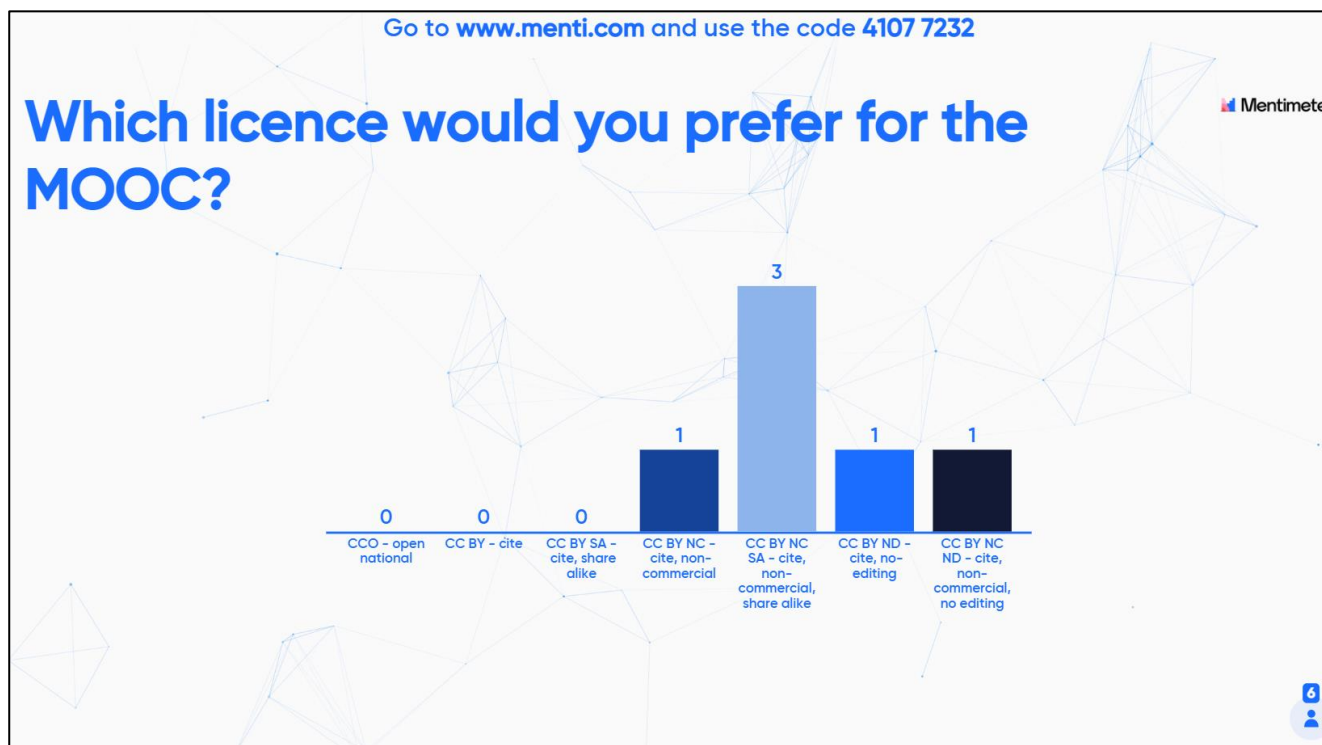
Figure 4: Online survey via MentimeterTM within the consortium meeting (pilot partners, Si4Life)

In total, 3 of the 6 partners (pilot leaders & Si4Life) voted for the license CC BY NC SA (cite, non-commercial, share-alike), which refers to the fact that the license allows others to remix, adapt and build upon your work non-commercially, as long as they credit the developer and license their new creations under the identical terms (see Figure 4).
Based on this result, the complete training course will be developed under this license.

Course developers must ensure that only license-free content (e.g. pictures, articles, music, measurements) from external resources is used within the e-learning platform, otherwise written permission from the copyright holder is required to use the content.

All people external to the project team have to sign a permission to be included in the videos produced for the MOOC.
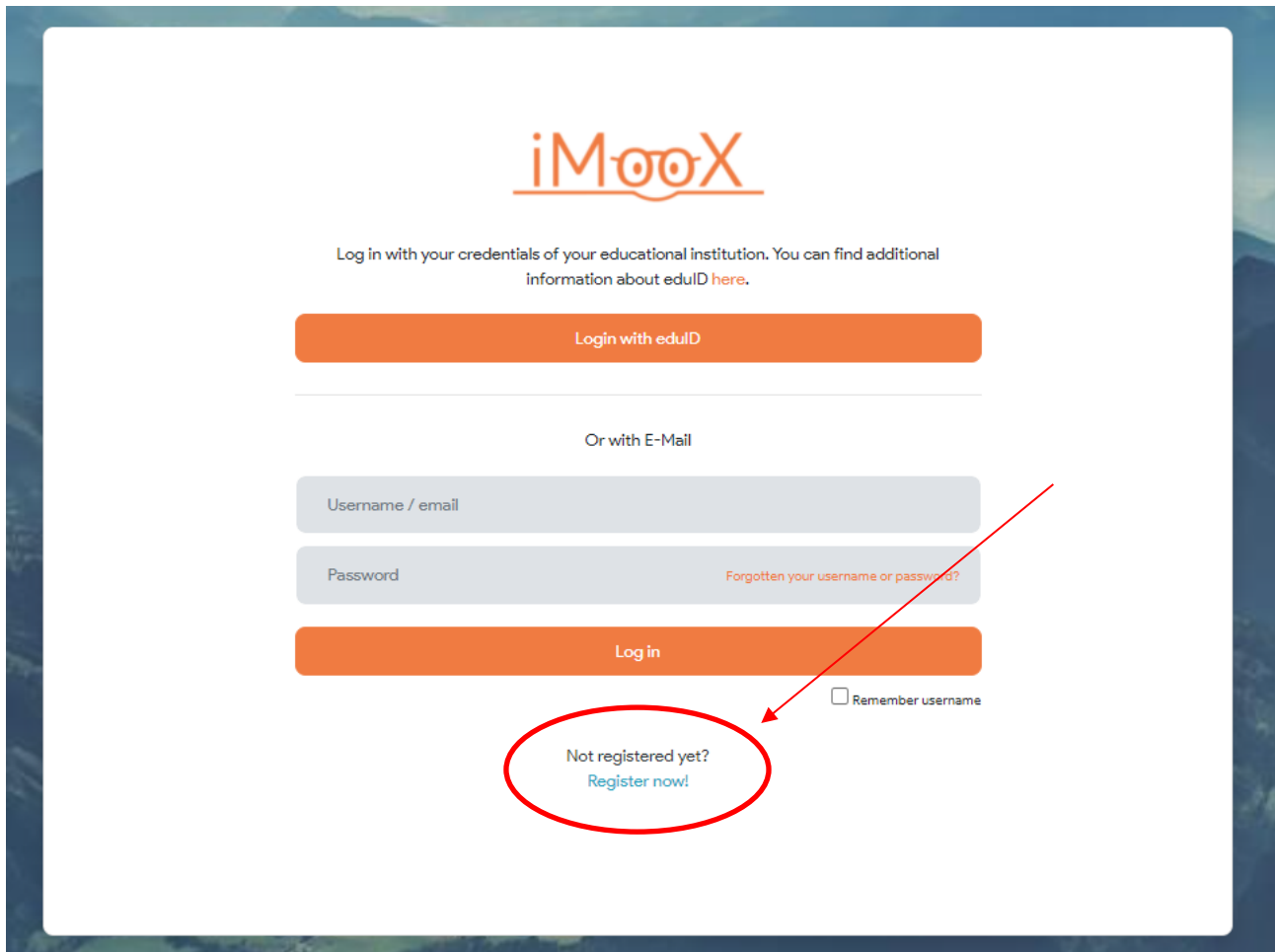
Only course creators hold full access to the platform to create the structure and upload data (WP4 leader MUG). All other people can be assigned the role of course viewers, which means they have access during the development phase (before the course starts) to view the content of the platform and make suggestions for changes (pilot partners).

Information on data protection from iMooX can be viewed under the following link: https://imoox.at/mooc/local/dataprotection/views/view.php

13 Processing of the NECTAR E-Learning Platform and Course

13.1 How to register on the iMOOX platform & access the NECTAR training course

1. Registration on the iMooX platform: https://imoox.at/mooc/login/index.php

2. Login via the iMooX platform (after completed registration): https://imoox.at/mooc/login/index.php
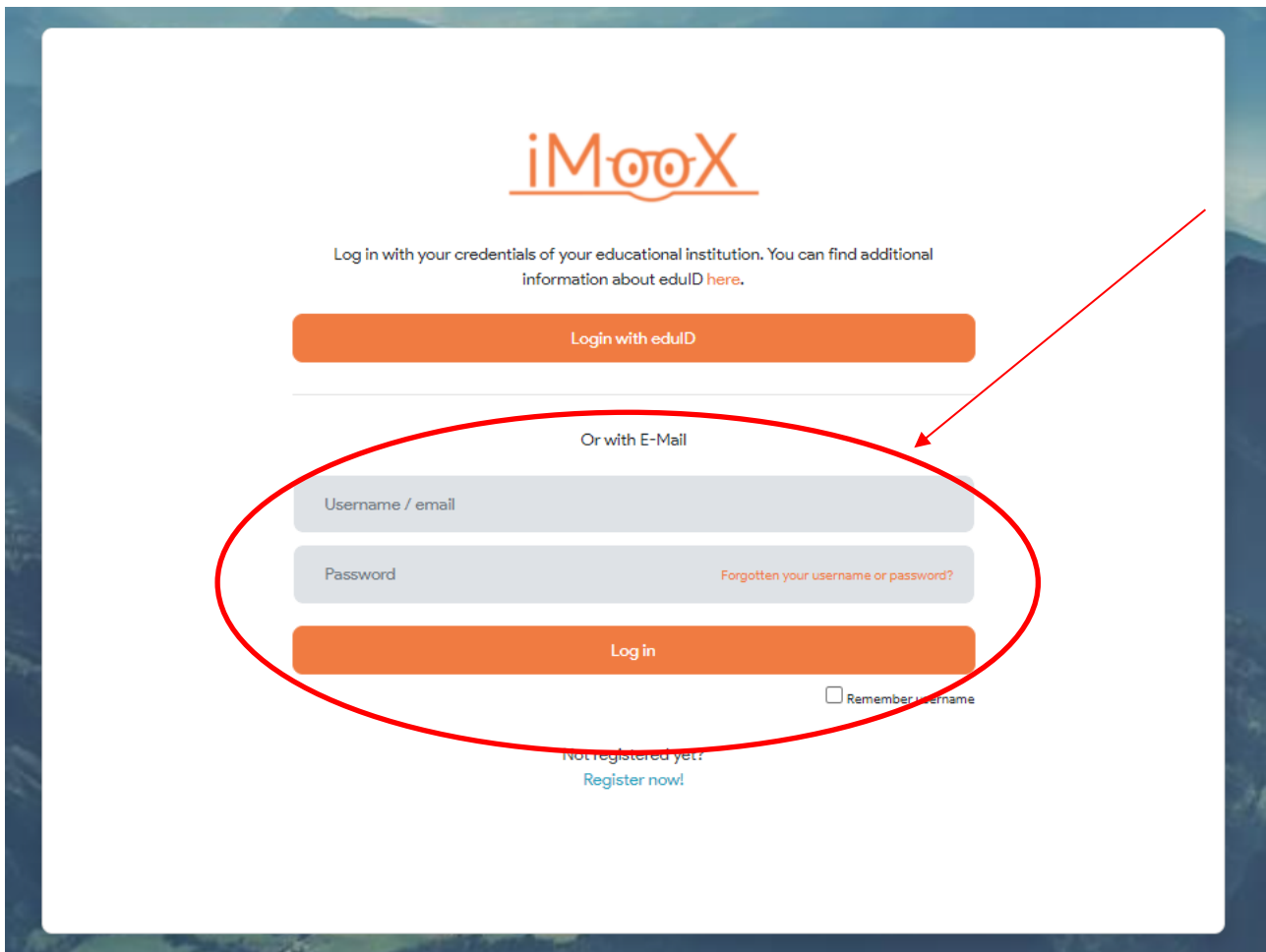
3. Search course (possible once the online course has officially been released): "Chefs in future integrated health care" (https://imoox.at/courses) and click on the dedicated course item (see below)

  ➔ Preliminary created course: currently hidden for public until the start page is officially released!!

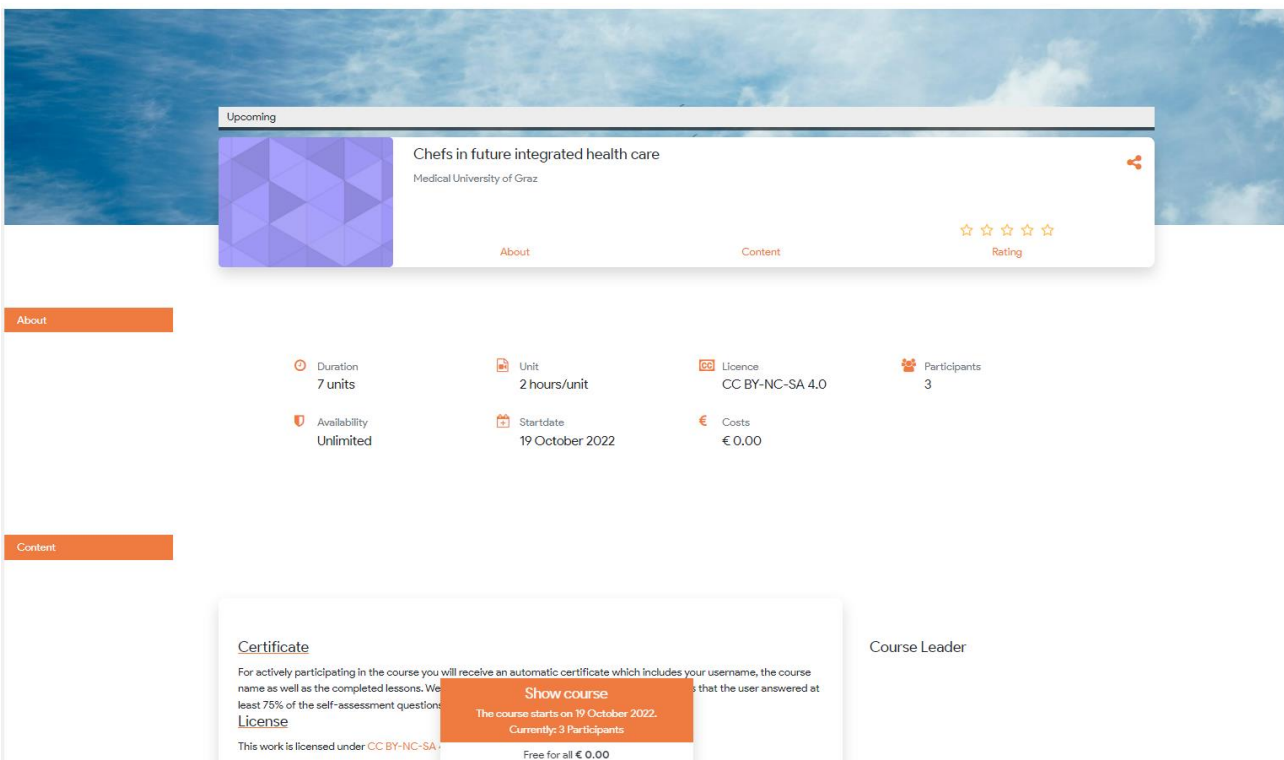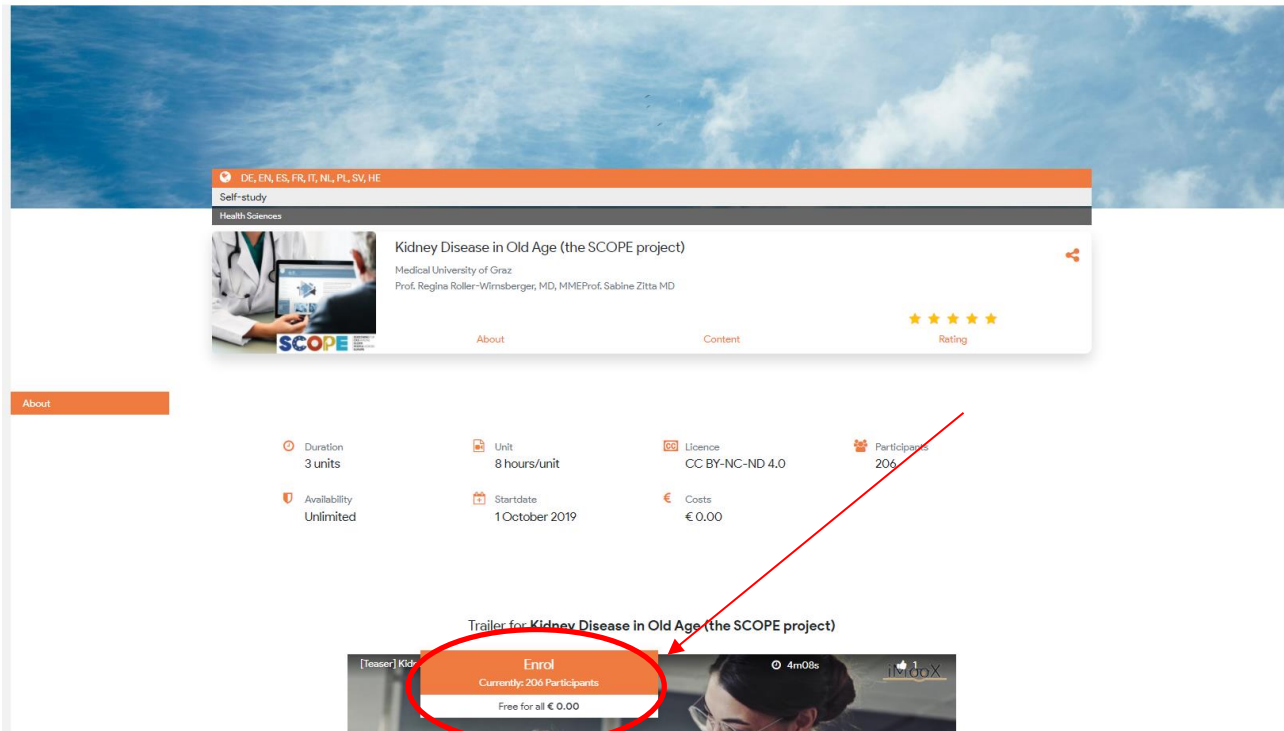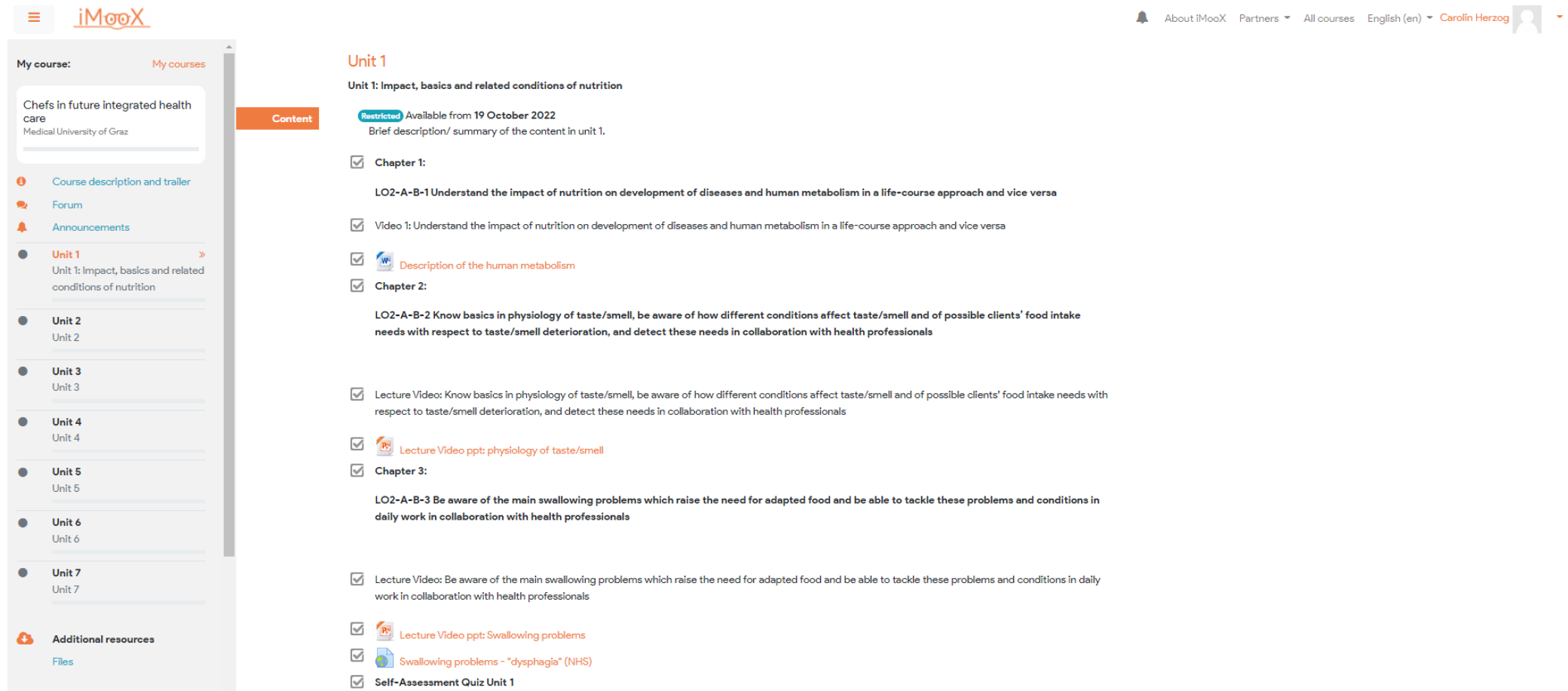4. Students need to enroll in the course (possible once the course has officially started)

Figure 5: Example start screen - enrollment button (above) & Preliminary start screen of the NECTAR MOOC course on the iMooX platform (beneath)

13.2 Structure of MOOCs/ training courses on iMooX

Training courses on iMooX follow the structure of units. Each unit is typically released in a weekly structure. It is suggested to have 4 - 6 units (max. 10 units) within one online course, with a minimum of one video per unit, complemented by additional material (e.g. exercises, transcripts, PDFs), links and a self-assessment quiz at the end of each unit. The figure below shows an example of the structure of a MOOC on the iMooX platform.

Figure 6: Example Structure Unit 1 (Video/ Lecture Video – Additional material – Links – Self-Assessment Quiz)

13.3 Training formats that can be included in a MOOC

As already described in the structure of the courses (see section 13.2), there are different training formats that can be included in MOOCs.

When it comes to educational videos, there are several possible format options, the most important ones are briefly outlined below (Ebner & Schön, 2017):

- *Screencasts and Slidescasts:* a recording of the screen (PC, Tablet) including the sound via an internal/external microphone with or without the video of the presenter
- *Lecture via (web) cam:* for topics that are easy to explain verbally
- *Laying technique instructional video:* explanations with the help of cut-out figures and illustrations that are placed and shifted to form short texts (e.g. https://www.commoncraft.com/video-library)
- *Chalkboard or whiteboard recording:* this format records what is shown and/or drawn on a chalkboard/whiteboard. It corresponds to front-of class teaching including illustrations, as used in conventional teaching.
- *Recordings of live lectures, web conferences*
- *Reportage:* when practical activities or processes are transferred or when it is a matter of reporting on things as realistically as possible. On-site recordings are in focus.
- *The studio recording:* key aspect is that recordings take place in a blue box or in front of a green screen in a studio. This enables the opportunity to additionally display slides or other information next to the speaker.
- *Interview:* one or more experts are questioned by a moderator on an area of expertise
- *Animation and cartoon:* both techniques can also be produced with tablets and smartphones
- *Blockbuster:* videos that actually look like a conventional film

The type a course developer chooses depends on the content, interests, skills and available resources, although it is also possible to mix video types.

In order to present, the videos as uniformly as possible and to reach a project-related standard, the formats lecture and interview were chosen for the MOOC of the NECTAR project (see also chapter 15.2).

In addition to educational videos, various types of learning and supplementary materials e.g. pdfs, documents, transcripts, YouTube videos or exercises for learners, that match the given topic and can be combined thematically, can be used. A further possibility is to provide links to sources in order to supplement content or to support what has already been said or contained.

Each unit has to be completed by a self-assessment quiz (75% of correct answers to pass), in which multiple-choice questions (at least 8) are intended to evaluate students and to enable the online course to be successfully completed.

13.4 How to MOOC?

Due to their characteristics, MOOC courses require a specific conception, which differs from the conception phase of a traditional course in tertiary education or further continuing education courses in general. Aspects such as the large number of participants and the possible heterogeneity of the audience in terms of age, level of knowledge, ethnic and social background for example, must be taken into account during the conception and design of this course type. In the following table (Table 3) you will find some methodological and didactic considerations that can be used as a starting point for the conception of a MOOC to provide ideas and support the upcoming work (Lackner, 2015).

Table 3: Check list for conception and design of a MOOC adapted from (Lackner, 2015)

Basic Considerations	
	Attend a MOOC yourself.
	Note the openness of the MOOC
	Choose an appropriate language
	Plan for a diverse audience
	Test the platform and its features
	Consider whether tools are required in addition to the platform
	Test activities, tasks and quizzes before they are activated/launched
	Promote the course
	Define the desired level of interaction
Structuring	
	Divide the course into equal parts ("course units")
	Think about and implement a recognizable structure for each unit
	Time work orders and units so that they are manageable from a time management point of view
Media design	
	Choose appropriate methods/media in accordance with the content
	Try the tools before you create the content
	Design the content as Open Educational Resources (OER) under a CC license
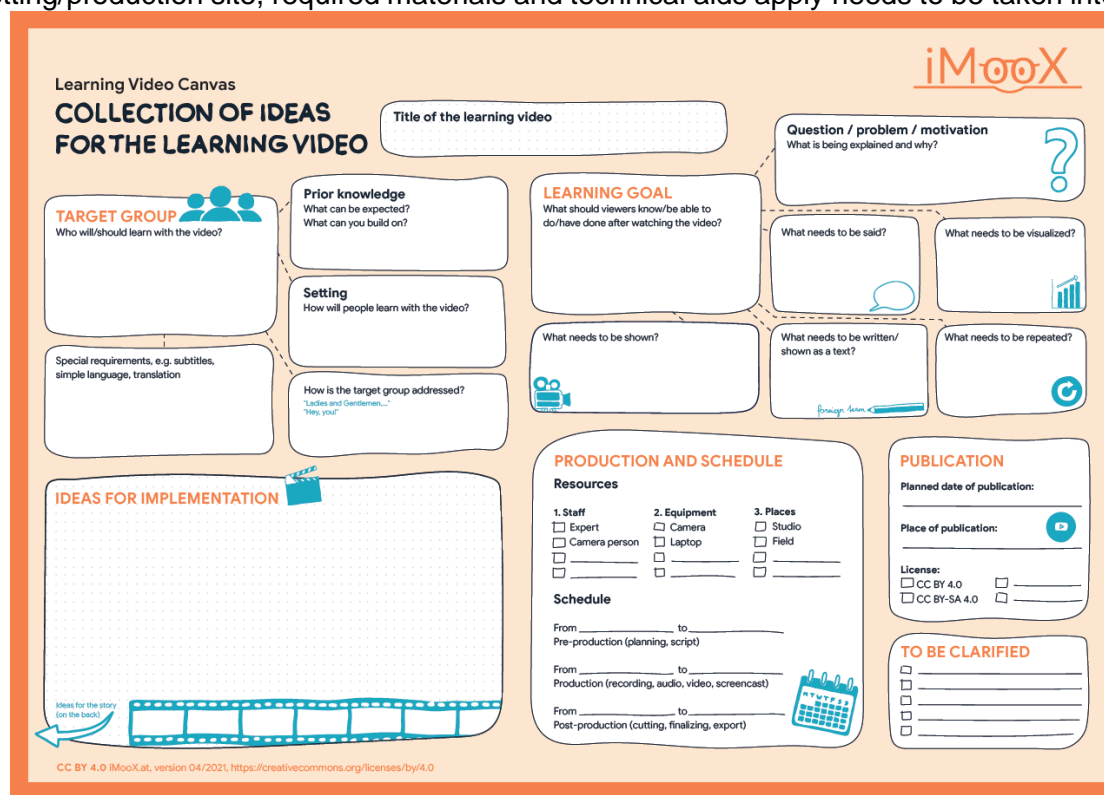
	Include materials available on the web if their use is permitted ("License")
	Create short videos on the teaching content (five to ten minutes)
	Make sure that the materials can be used independently of the operating system (e.g. preferably providing PDFs)
	Note the uniformity in the design of the materials ("master template")
Communication	
	Provide space for communication (e.g. in wikis or forums)
	Give impulses that stimulate communication processes inside and outside the course
Resources	
	Consider longer preparation times when creating multimedia content (e.g. learning videos)
	Network with colleagues
	Hold the MOOC as a team or invite colleagues as guest speakers
	Contact the multimedia or IT department (e.g. help creating video footage) if available

13.4.1 Creating a learning video for a MOOC

Learning/ teaching videos are asynchronous audiovisual formats that aim to transport teaching and learning content that is prepared in a didactically suitable way or can be used in a didactically embedded context. Learning and teaching videos are currently around 3 to 20 minutes long and are made available via web services. In order to receive an overview of an educational video to be created and to enable a structured composition, the Canvas template (see Figure 7) can be used for an initial collection of ideas. Issues related to the target group, objectives, content and presentation as well as considerations regarding the setting/production site, required materials and technical aids apply needs to be taken into account (Ebner & Schön, 2017).

Figure 7: Learning Video Canvas Template
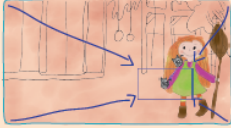
After this initial collection of ideas using the Canvas template, the actual creation of the storyboard begins, with the storyboard describing the video design in detail (spoken text, graphic elements, preferred setting/ background...). Figure 8 shows a possible template for this purpose.

Figure 8: Storyboard Template

The detailed video design can also be described by a video script for example as developed in appendix 1A5 for the NECTAR project.

13.5 How to integrate MOOCs – Learning and teaching scenarios

In general, e-learning tools in the format of MOOCs can be run as single courses or may be integrated into VET programs according to the training needs and didactic design chosen. A single MOOC is often used in different scenarios by teachers, trainers, lecturers as well learners. It is important to note that every course on iMooX uses Open Educational Resources explicitly, so, each single learning object holds open licenses (creative commons) (Ebner et al., 2016). iMooX interprets "open" in the sense of offering Open Education based on open licensed learning objects and also does not delete or hide an ended course. Therefore, each course is also available after its run for self-paced learning.

Each MOOC on iMooX follows more or less the same structure:

- Each MOOC is offered by a number of weekly sections. Usually, a MOOC lasts 6-10 weeks typically.
- The main content of each MOOC consists of a number of learning videos. At least one per week, often more than two.
- Each MOOC offers additional learning content (presentations, documents or hyperlinks) for in-depth study.
- Each MOOC holds a discussion forum for the exchange between lecturers and students or students and students.
- Finally, each MOOC holds a self-assessment for each section. If those are done with a success rate of at least 75% for each assessment, the learner gets a certificate for the whole course. Additionally, each week so-called badges can be earned (Kopp & Ebner, 2017).

According to experience originating from the last 10 years of work with e-learning and MOOCs, researchers at the Technical University of Graz have evaluated the typology of teaching and learning scenarios, as higher education institutions as well as VET providers worldwide make use of MOOCs. The following section gives a short overview on the results gathered from the scientific work done by experts and based on day-to-day teaching by educational institutions globally; adapted from (Ebner, Braun, & Schön, 2019).

13.5.1   The conventional MOOC

The conventional MOOC is used as pure online educational offer. It is used for transfer simple competencies and takes approximately 5 weeks (Grandl, Ebner, Slany, & Janisch, 2018).
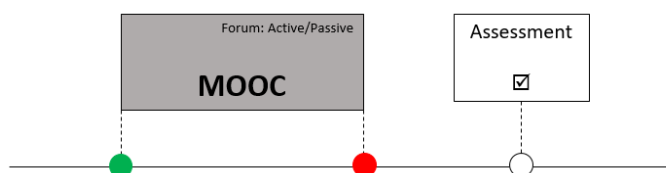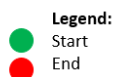
Figure 9 Type 1: The conventional MOOC

13.5.2 The "Pre" MOOC

In this educational format, the MOOC is already combined with face-to-face educational events. The figure below shows the didactic concept underlining this approach. It is used whenever students (learners) need knowledge prior to live educational events. This implies that the MOOC starts and ends before students come to classroom live teaching.
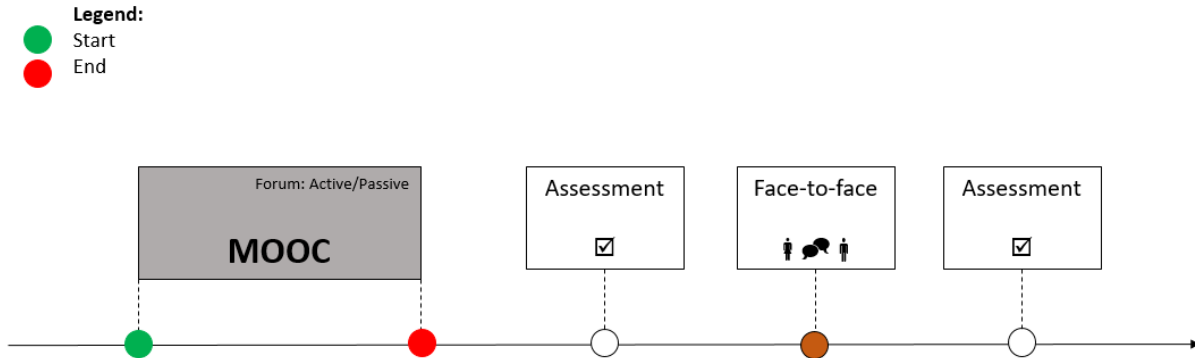
Figure 10 Type 2: The pre-MOOC

In some cases, there is an additional assessment before the face-to-face interaction and in some cases, the lecturer decided to have it after holding the presence meetings. This approach also raises the opportunity to upload materials from students and learners and ask all participants to carefully watch the MOOC before attending the live educational sessions. This facilitates future discussions and interactions among students and their teachers as it may be assumed that all participants act on base of equal prior knowledge.

13.5.3 The Blended MOOC

This approach using MOOCs follows the traditional blended-learning approach (Duque et al., 2013; Ruiz, Mintzer, & Leipzig, 2006). Students get theoretical skills via video at home and are prepared for the on-site training, which focuses on skills primarily. MOOCs are repeated in a structured follow-up in between face-to face trainings.

The following figure shows the concept of blended-learning MOOCs:
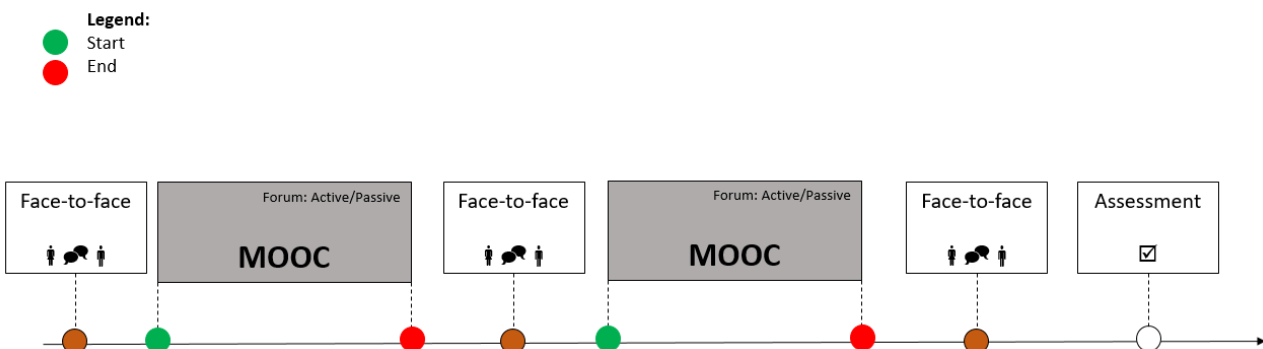
Figure 11 Type 3: The Blended-MOOC

Feedbacks from students showcase very good feedback. Most students have the perception, that the in-between use of theoretical input by MOOCs allowed them to be better prepared for practise-

based onsite trainings. In this training format assessments are usually taken during face-to-face trainings.

13.5.4 The In-Between MOOC

The in-Between MOOC can be seen as a special form of the blended MOOC, with the MOOC as only online phase. The following figure shows this adapted concept.
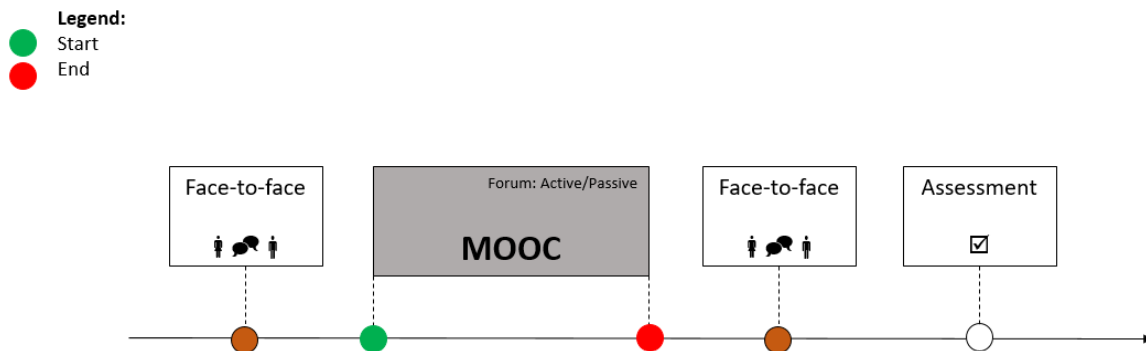
Figure 12 Type 4: The In-Between MOOC

This type seems to be used very often in the area of continuing education. Very often students get an offline introduction section on one topic. Afterwards students will then have to do a MOOC and are offered additional tasks and exercises to be taken in preparation of a face-to-face training. This use of MOOCs is often combined with assessments in face-to-face trainings, literature combined with students' presentations and/or practice-based onsite assessments.

13.5.5 The Inverse-Blended MOOC

The Inverse-Blended-Learning MOOC is following the design approach of 'Inverse Blended Learning' (IBL) which is the opposite of Blended Learning. Instead of enhanced face-to-face education with online events, IBL enriches online courses with face-to-face meetings by offering additional offline learning events on a regular basis. The following figure illustrates the concept of IBL MOOCs.
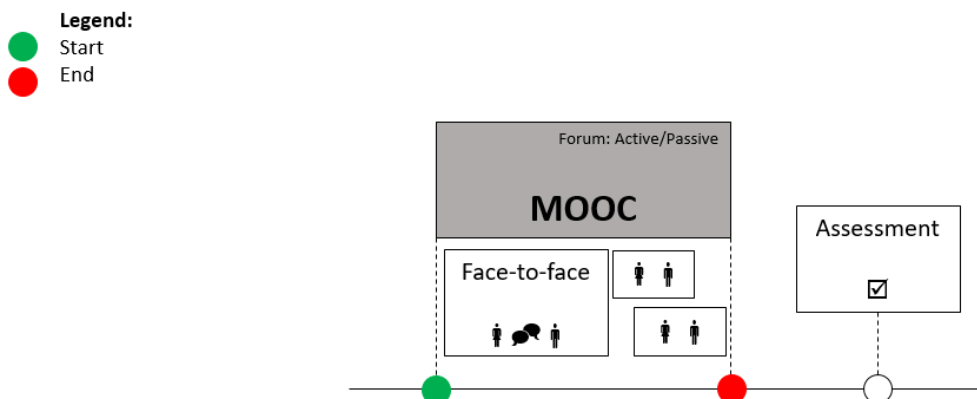
Figure 13 Type 5: The Inverse-Blended MOOC

The offline sessions are not arranged like typical classroom lessons. Face-to-face trainings open space for active interaction between participants exchange of learned content. This approach should

help that learners can get guided training sessions to reflect on their knowledge and skills. Typically, these sessions are held offline in very small groups all over the world. As for the NECTAR project this format may primarily be considered during the train-the-trainer programs.

In practice, trainers prepare offline learning events at different geographical locations. The events may differ in frequency (from weekly to occasionally), in duration (from half an hour up to two hours), in costs as well as in terms of content (from repetition to reflection of the content) (Ebner & Schön, 2017). The direct comparison makes it possible to offer guided self-reflection independent from live educational events.

13.5.6   The Flipped MOOC

The Flipped MOOC mainly follows the teaching scenario of flipped or inverted classroom (Li, Zhang, Bonk, & Guo, 2015). The following figure shows the concept of Flipped-MOOCs.
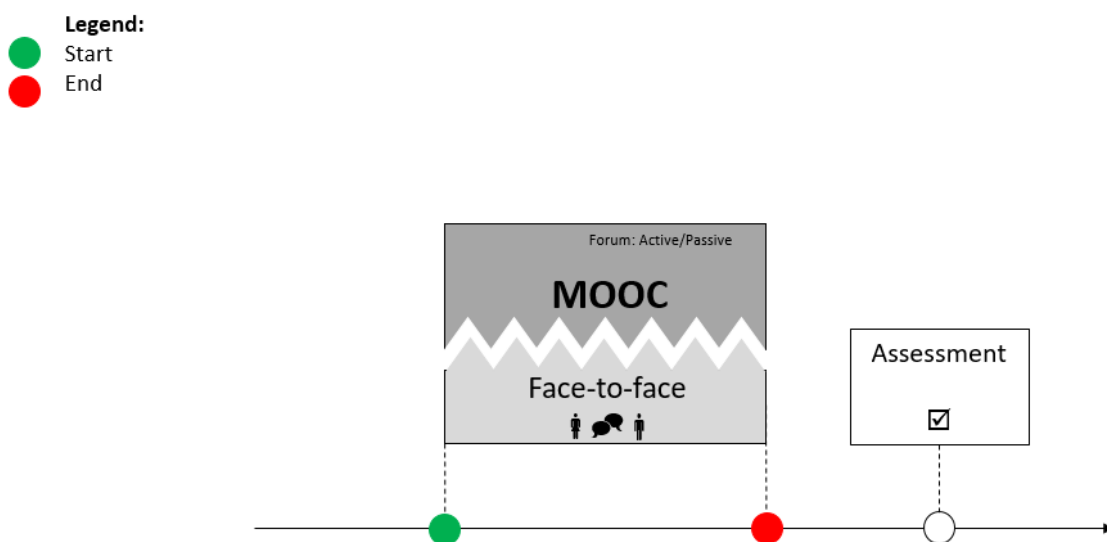
Figure 14 Type 6: The Flipped MOOC

Students study the content of the lecture at home by regularly using a MOOC as learning tool. After watching the videos, they come back to class for discussions, practical examples and exercises. The Flipped MOOC could be seen as a variation of Type 3, a blended MOOC, with a focus on a special didactical approach: the MOOC is used for sharing knowledge to get room and time to apply, train or discuss within the face-to-face meetings. Students watched the whole MOOC at home and come to class every week to discuss their personal experiences with the lecturer, asking questions or giving feedback.

13.5.7   The Lecture MOOC

Lecture MOOCs are typically used in university settings. The MOOC itself is used as the online resource and a second system for the tasks. In order to get grades the students have to complete tasks which they also find online. The following figure shows this concept of lecture MOOCs.
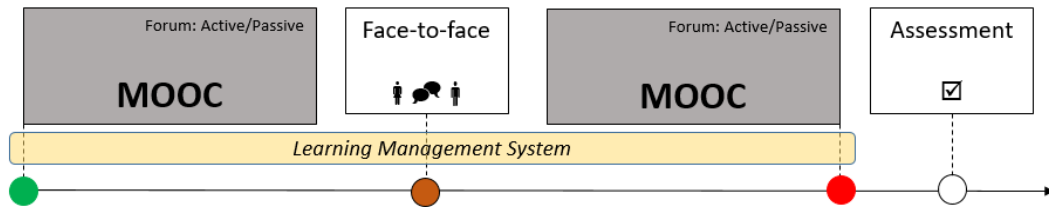
Figure 15 Type 7: The Lecture MOOC

Sometimes the MOOC is interrupted with face-to-face events and, if necessary, there can be a final examination. This format is an opportunity to use MOOCs in combination with other, regionally or locally used training platforms. Students attend the MOOC courses and are asked to perform tasks at home. These tasks are then uploaded to learning platforms used by universities and/or VET providers.

In this context, assessments are mainly taken at the training institutions. Of course, as course material is openly accessible, external participants can use the MOOC in the conventional mode (see 13.5.1. conventional MOOC).

13.5.8   Technical Features of the iMOOX Platform to create different Learning Scenarios

The typologies of MOOCs described for different educational scenarios is only a description of all potential usages. The iMOOX platform offers all technical features to create courses to be used in any of the scenarios described before. Content may be downloaded for free once a participant has been registered on the platform, directly without linkage to transfer plugins such as SCORM™. However, all transfer systems used over the past years are still installed to the iMOOX platform and may be used whenever wished by users and students.

MOOCs should therefore not only be reduced to course materials available online, as the MOOCs have the feature of a public available resource as well. iMoox' Open Educational Resources approach is regarded an enabler for many of new scenarios, especially if they are not provided by the original MOOC developers (and copyright holders). The open licenses allow to reuse any content anywhere. Over the decade, platform providers report that with more or less the same content different MOOC usages were provided by different educational providers.

This makes the iMOOX platform a strong partner to support NECTAR's current and future needs as core educational platform for delivery of educational content related to the CGE curriculum. Independent from this core educational platform all pilot partners in the project currently run their own education learning systems (see chapter 10, and figure 2). This fact offers a huge opportunity for every pilot partner to create learning scenarios for the CGE curriculum at their respective institution at their needs and convenience. The MOOC materials are easily downloaded from the iMOOX platform to the online learning systems of the VET providers participating in the NECTAR project as well as any future VET provider interested to offer the innovative CGE curriculum. Furthermore, students subscribed to the platform and receive access from any device and are also able to download materials as they wish.

It can be summarized that MOOCs have a very high potential to assist not only mere online learning situations but also to enrich face-to-face and online learning scenarios.

14 Needs Assessment on Content of the new CGE Curriculum to be included in an OER NECTAR course

Only learning outcomes of the new CGE curriculum rated as "mandatory" in the work of WP3 of the NECTAR project were considered as possible aspects for the OER NECTAR training course, as those learning outcomes had been agreed as the "backbone" of the new training course, to be delivered uniformly across all NECTAR VET pilots (see WP3, Deliverable 3.1.1.). It was the aim of this needs evaluation, to allow for an evidence-based rating among NECTAR pilot partners, which learning outcomes to include in an open educational course. To create common sense, MUG chose a mixed-methods approach, combining feedback by a set up survey including all mandatory learning outcomes developed during WP3 and ratings among pilot partners. Before starting the consensus process, following cut-off values for inclusion of content in the online training course had been determined:

3/5 pilot partners rated „High need for training"

4/5 pilot partners (at least) rated „High or Moderate need"
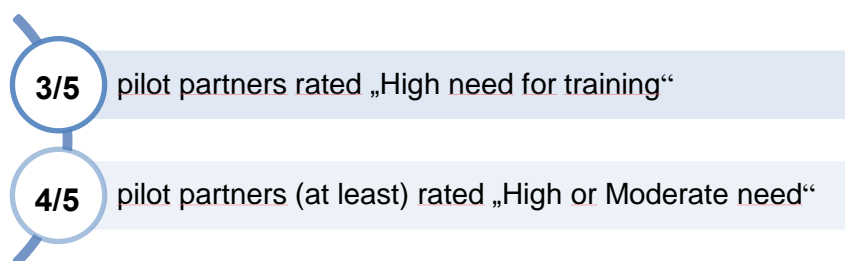
Running the process as described, it was possible to extract the following learning outcomes to be covered in the online NECTAR OER training course (please also see the table of appendix 1A1, highlighted in grey and red):

Unit of Learning 2: Screen, assess, and monitor on client-level
LO2-A-B-1 Understand the impact of nutrition on development of diseases and human metabolism in a life-course approach and vice versa
LO2-A-B-2 Know basics in physiology of taste/smell, be aware of how different conditions affect taste/smell and of possible clients' food intake needs with respect to taste/smell deterioration, and detect these needs in collaboration with health professionals
LO2-A-B-3 Be aware of the main swallowing problems which raise the need for adapted food and be able to tackle these problems and conditions in daily work in collaboration with health professionals
LO2-C-D-0 Know and understand the concepts of 'Primary Food Care", 'Gastrology' and 'Gastro-engineering' to prevent malnutrition in healthcare and to promote active and healthy ageing, is aware of the main characteristics of the CGE professional profile, of what a "gastrological intervention" implies and of the main "gastrological tools" a CGE can rely on
LO2-C-D-1 Identify and select test protocols on taste disturbances and use them to detect and classify taste deterioration and to monitor it
LO2-C-D-2 Create solutions for the results of assessment from a CGE perspective and within the context of a comprehensive and holistic food care approach
LO2-C-D-3 Know the main ICT tools for screening and assessing clients' individual food preferences and individual food intake needs and wishes, be able to select the proper ones and be able to use them, complying with data privacy and confidentiality guidelines and in collaboration with health professionals
LO2-C-D-4 Know the main ICT tools for recording and monitoring assessment results, as well as interventions, be able to select the proper ones and be able to use them, complying with legal ICT structure, addressing all data privacy and applicable confidentiality guidelines
Unit of Learning 3: Create recipes for a general population and for people with specific needs, complying with recommendations of health professionals

LO3-D-1 Know the basics of chemistry of food and combine food items in order to both respect food quality and obtain appetizing menus adapted to care settings
Unit of Learning 4: Manage the kitchen and coordination personnel
LO4-C-1 Plan daily work optimizing workflow, draw up the work schedule and shifts for the kitchen team (balancing team capability) and ensure through constant monitoring that it is followed by the staff
Unit of Learning 6: Use and adapt cooking techniques to the specific care setting and client
L06-A-B-3 Prepare cold and hot dishes (or supervise their preparation) according to clients´ requirements and the meal plan approved by healthcare professionals, taking into account food intolerances and allergies.
LO6-D-2 Know the chemical composition of fortified food and correctly perform fortification in meals
Unit of Learning 7: Communicate, interact and collaborate with clients and interprofessional team
LO7-A-1 Define a customer satisfaction protocol and place customer service at the hearth of decision-making and activities
LO7-C-1 Be aware of the main roles and responsibilities of health/social care professionals in food care and work coherently, acting as a member of an interprofessional team, maximizing the added value of each professional, and identifying possibilities for interdisciplinary development and cooperation
LO7-C-4 Apply creative thinking techniques developing creative solutions to abstract problems, propose solutions and discuss with goal-orientated attitude, reaching shared decisions, applying the main problem-solving techniques
LO7-C-5 Exercise management and supervision in contexts of work, reviewing and developing performance of self and others

14.1 Connection with implementation

Within this framework, the results and outcomes of the needs analysis helped in the actual design of the educational toolkit platform and in particular in the creation of the course content outline for the online training (as prioritized above), presented in more detail in chapter 15.

Based upon the results collected during the initial phase of needs assessment (as described in chapters 10 & 13.5) the NECTAR educational toolkit platform has to meet open educational resource requirements with high technical safety and accessibility. These needs will be addressed making use of one of the already established European open content educational training platforms, offering massive open online courses.

Since WP4 leader MUG, as the course creator, is responsible for compliance with data protection within the context of the online course, all partners have to sign a data protection form (in terms of the appropriate use of licenses). To meet data security requirements, iMooX has a daily backup.

15 Outline and Preparation of the Content (incl. Teaser)

The NECTAR educational toolkit platform contains the teaser to promote the future CGE training course as well as the subsequent MOOC divided into several units and sub-units as a complementary to the localized curricula.

15.1 Outline Open Access Teaser Course

The open access teaser course or introduction video serves as a dissemination tool to raise interest and arouse curiosity among professionals possibly eligible for the future CGE training. To achieve this, content that represents the project and background, the aim of the new curriculum and dedicated educational toolkit platform, as well as the incentive to participate by obtaining a European certificate in case of completion of the overall CGE course will be used. The open access teaser course will only last a few minutes (approx. 2-3 minutes) in order to draw attention to the following MOOC.

15.2 Outline Online Course

As already described in more detail in chapter 13.5, the content outline is based on the results of the needs analysis (in particular on the rated need for training regarding the mandatory learning outcomes) in order to best meet the needs of the pilot regions and to optimize support for the implementation of localized curricula in turn.

The NECTAR online course for learners will target the selected LOs through the materials developed by Partners in T4.2 in English language, however, in order to meet language requirements of all pilot regions, courses will potentially be offered with subtitles and text translations in other languages (German, Italian, Belgian, Portuguese). The figure below illustrates an example of how multilingualism is addressed within one course by offering videos with subtitles and translated documents/attachments.

Flyer

DE   EN   FR   HE   IT   NL   PL   ES   SV

Figure 16 Exemplary multilingual approach in iMOOX courses

The NECTAR online course for learners contains four units including three to five learning outcomes for each that need to be covered and developed with learning materials according to the required form of presentation. Each unit will therefore contain several sub-units corresponding to the learning outcomes.

Below is a short outline of the learning units, whereby the preliminary titles were partly taken from the CGE curriculum while others were adapted or created:
1. Impact, basics and related conditions of nutrition
2. Screen, assess and monitor on client-level
3. Create recipes for a general population and for people with specific needs, complying with recommendations of health professionals & use and adapt cooking techniques to the specific care setting and client
4. Manage the kitchen and coordination personnel & communicate, interact and collaborate with clients and interprofessional team

Since the need for training with regard to the learning outcomes from Unit of Learning (UoL) 2 of the CGE curriculum is very high (8 LO's), those were divided into the first two units of this online course. While unit 3 of the online course consists of learning outcomes from UoL3 and 6 from the CGE curriculum due to thematic proximity (recipes & cooking techniques), unit 4 of the online course contains LO's of the UoL4 and 7 of the curriculum (Management & Communication).
It is intended that each unit of the online course will end with a self-assessment quiz, as already explained in the context of the structure of MOOCs as well (see chapter 13.2).

In addition to the thematic and structural outline, the design of the platform also provides a description of the preferred types of presentation of the material within the sub-units. There are currently three types of presentations planned:
 (1) videos (in the form of an interview),
 (2) lecture videos and
 (3) learning material/pdfs.
While the videos relate to an interview format (question-answer format), video lectures are recorded speeches including accompanying power point slides. Learning materials/pdfs are used for the sole development of a learning outcome or to accompany/supplement a video or a lecture video in order to present a learning outcome. See appendix 1A3 for a more detailed description and further requirements on these formats.

Within the consortium meeting, a thematic division of the content to be developed was targeted in terms of cooperation and co-creation between the responsible partners. This led to the decision that WP4 leader MUG will share necessary material and templates with partners and tries to find a solution that works for everyone, if needed.

Instructions were already delivered to the future authors of the learning material, with regard to the course content outline including the thematic distribution among partners (responsibilities) and required form of presentation of the content within bilateral meetings. In addition to the responsibilities, a description of the approach, instructions for the design of learning material, requirements and references to the respective templates can be found in this document (see

appendix 1A3). Templates for the collection of ideas and storyboards/ video scripts for learning videos are shown in the attachment (see appendix 1A4 & 1A5) as well as further templates for introductory text & title, links to sources, self-assessment quiz and NECTAR power point & document templates have been provided additionally.

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17 Appendix documents

A1 Results Survey Needs Analysis

Needs Assessment Survey Results (Pilot regions)					
Partner name	**Odisee**	**Santa Casa da Misericórdia de Albufeira**	**IPSEOA Marco Polo**	**ITS BACT**	**WIFI**
Name of respondent	Ellen De Cuyper	Patrícia Seromenho	Roberto Solinas	Valentina Compiani	Martina Sonnleitner
Contact for interview	Ellen De Cuyper	ana.isabel@scmalbufeira.com; maria.silva@scmalbufeira.com	Olga Pedemonte	Valentina Compiani	Martina Sonnleitner
Please indicate those groups mostly involved into trainings at your respective pilot site.					
Trainers	No	Yes	Yes	Yes	No
Students	Yes	No	Yes	Yes	Yes
VET Providers	No	No	Yes	No	No
Learning platform - Please describe which platform (learning management system) you are currently using in your institution.					
Moodle	No	Yes https://formacao.scmalbufeira.com/	No	No	Yes
Canvas	No	No	No	No	No
Blackboard	Yes The teacher communicates written messages to the students, the teacher provides didactic material (course texts, powerpoint slides, videos) to the students	No	No	No	No

D2L Brigthspace	No	No	No	No	No
Schoology	No	No	No	No	No
eFront	No	No	No	No	No
Google Classroom	No	No	Yes	No	No
Microsoft Teams	Yes To teach online, to share documents between students (for example notes on a class session)	No	No	No	No
Others, specify	No	No	No	Yes Claroline	No
Are you confident that students/ trainers/ VET providers will use the general access to the NECTAR training platform from their cell phones and computers?	Yes	Yes	Yes	Yes	Yes
Comment	Students use a laptop to do assignments, to attend to online classes, to work together on documents. If the teacher provides a link on blackboard to the Nectar platform, students will easily find the link. Laptops are used more often than	-	-	laptops and smartphones	-

	mobile phones for study purposes.			
Will you use e-learning content from pre-existing resources additional to the Nectar training platform during your pilot courses for the CGE Curriculum?	Yes	Yes	Yes	I don't know	Yes
Comment	Apart from the elaborated e-courses on the Nectar training platform, teachers will give additional lessons and will use their own teaching material for this. It is likely to be powerpoints, pdfs, videos that they already used before. I have a comment to the following question: We will propose the NECTAR training material to the teacher. But in the end the teacher is the person to decide weather he wants to use it in his class or not.	-	Pre-existing resources from former/ already existing courses/trainings.	-	Use of pre-existing scripts from the diploma courses "WIFI kitchen master" & "dietetic cook"

Will you download training material and use it locally after translation in your language?	Yes	Yes	Yes	No	Yes
Do you need to evaluate the students/ trainers/ VET providers through the learning platform?	No	I don't know	Yes	No	I don't know
Would you acknowledge an online evaluation for local accreditation?	Yes	Yes	Yes	No	No
Comment	-	-	-	usually, the selection process is in presence and in 3 stages: - assessment of previews technical competencies; - motivation interview; - Human capital.	Exams at the WIFI must always be carried out in accordance with our examination regulations.
Do you already hold classes remotely with students/ trainers/ VET providers due to the COVID pandemic?	Yes	Yes	Yes	Yes	Yes
How are your future students/ trainers/ VET providers trained now?	e-learning and face2face	e-learning and face2face	e-learning and face2face	e-learning and face2face	e-learning and face2face
What kind of training materials do your future students/ trainers/ VET providers already use in their basic training now? [Please indicate what kind of materials are now used in the training of chefs]					
PDF learning material	Yes	Yes	Yes	Yes	Yes

Power point slides	Yes	Yes	Yes	Yes	Yes
Videos	Yes	Yes	Yes	Yes	Yes
Word	No	Yes	Yes	Yes	No
Images	No	Yes	Yes	Yes	No
Websites	Yes	Yes	Yes	Yes	No
Others, specify	No	No	No	Yes books	Yes, learning platform – list of questions for the exam
Which training offers do you plan to use for your future students/ trainers/ VET providers during the CGE curriculum?					
PDF learning material	Yes	Yes	Yes	Yes	Yes
Power point slides	Yes	Yes	Yes	Yes	Yes
Videos	Yes	Yes	Yes	Yes	Yes
Word	No	Yes	Yes	Yes	No
Images	No	Yes	Yes	Yes	No
Others, please specify:	Yes websites	No	No	No	Yes, learning platform – list of questions for the exam
Which interactive tools for teaching will you use during the CGE curriculum?					
Zoom	No	Yes	No	No	No
Microsoft Teams	Yes	Yes	No	No	No
Cisco WebEx	No	No	No	No	No
Google Meet	No	Yes	Yes	Yes	No
Skype	No	No	No	No	No
Blue Jeans Meetings	No	No	No	No	No
ezTalks Meetings	No	No	No	No	No
Google Hangouts Meet	No	No	No	No	No

GoToMeeting	No	No	No	No	No
Others, please specify:	No	No	No	No	Yes, BBB - big blue button (link integrated on Moodle platform)
Listed below you will find the mandatory learning objectives of the CGE Curriculum. Please identify the need of training for each learning objective for the future CGE. You can only use one level of training for each learning outcome. This allows you to help decide which 15-20 learning outcomes should be turned into learning materials and made available on the training platform.					
LO1-A-1 Identify the costs of required raw and semi-finished food products, kitchen equipment and consumable items, at the light of quality and sustainability and make and progressively update an inventory of all potential, local, food products, estimating their periodical cost	Skill already exists	Skill already exists	Skill already exists	High need for training	Low need for training
LO1-A-2 Identify international and national quality brands, also exploiting ICTs and dedicated e-data resources and taking into account high quality and parameters of sustainability, and take	Skill already exists	Low need for training	Low need for training	High need for training	Moderate need for training

these brands into account managing suppliers					
LO1-B-1 Define quality criteria of suppliers (including agri-fish-food chain) in order to identify, compare, monitor and evaluate regularly the best high-quality food suppliers	Skill already exists	Low need for training	Skill already exists	High need for training	Skill already exist
LO1-B-2 Plan and manage the supply process related to the specific health or social context	Skill already exists	Skill already exists	Moderate need for training	Moderate need for training	High need for training
LO1-D-1 Promote full use of ingredients, raw materials and leftovers according to Hazard Analysis Critical Control Point-Concept (HACCP) and local law	Skill already exists	Moderate need for training	Skill already exists	High need for training	Low need for training
LO2-A-B-1 Understand the impact of nutrition on development of diseases and human metabolism in a life-course approach and vice versa	High need for training	High need for training	High need for training	High need for training	Low need for training
LO2-A-B-2 Know basics in physiology of taste/smell, be aware of how different conditions affect taste/smell and of possible	High need for training	High need for training	High need for training	Moderate need for training	High need for training

clients' food intake needs with respect to taste/smell deterioration, and detect these needs in collaboration with health professionals				
LO2-A-B-3 Be aware of the main swallowing problems which raise the need for adapted food and be able to tackle these problems and conditions in daily work in collaboration with health professionals	High need for training	High need for training	High need for training	Low need for training	Moderate need for training
LO2-C-D-0 Know and understand the concepts of 'Primary Food Care", 'Gastrology' and 'Gastro-engineering' to prevent malnutrition in healthcare and to promote active and healthy ageing, is aware of the main characteristics of the CGE professional profile, of what a "gastrological intervention" implies and of the main "gastrological tools" a CGE can rely on	Skill already exists	High need for training	High need for training	Moderate need for training	High need for training
LO2-C-D-1 Identify and select test protocols on	Skill already exists	High need for training	High need for training	Moderate need for training	High need for training

taste disturbances and use them to detect and classify taste deterioration and to monitor it				
LO2-C-D-2 Create solutions for the results of assessment from a CGE perspective and within the context of a comprehensive and holistic food care approach	Skill already exists	High need for training	Moderate need for training	Moderate need for training	Moderate Need for Training
LO2-C-D-3 Know the main ICT tools for screening and assessing clients' individual food preferences and individual food intake needs and wishes, be able to select the proper ones and be able to use them, complying with data privacy and confidentiality guidelines and in collaboration with health professionals	High need for training	High need for training	Moderate need for training	Moderate need for training	High need for training
LO2-C-D-4 Know the main ICT tools for recording and monitoring assessment results, as well as interventions, be able to select the proper ones and be able to use them,	High need for training	Moderate need for training	Moderate need for training	Moderate need for training	High need for training

complying with legal ICT structure, addressing all data privacy and applicable confidentiality guidelines					
LO3-A-1 Understand cultural, religious or other trending food choices, recognize their impact on meals and cooking and adapt dishes considering them	Skill already exists	Low need for training	Skill already exists	Moderate need for training	Moderate need for training
LO3-A-2 Follow food trends, try out new meals/recipes and evaluate the trial phase in terms of its feasibility in the business/service, also in collaboration with actors external to the kitchen/institution	Skill already exists	Moderate need for training	Skill already exists	Moderate need for training	Skills already exist
LO3-B-1 Collaborate to create standardized menu plans, grounded on disease adapted meals, starting from clients' needs assessment and in collaboration with health professionals	Skill already exists	High need for training	Moderate need for training	Moderate need for training	Low need for training
LO3-B-2 Adjust baseline menus to satisfy individual preference and needs	Skill already exists	Moderate need for training	Moderate need for training	Moderate need for training	Low need for training

LO3-B-3 Know the effects of cooking on ingredients/raw materials and select the proper methods, maximizing the freshness and quality of the ingredients/raw materials	Skill already exists	Moderate need for training	Low need for training	High need for training	Low need for training
LO3-D-1 Know the basics of chemistry of food and combine food items in order to both respect food quality and obtain appetizing menus adapted to care settings	Skill already exists	High need for training	High need for training	Moderate need for training	Moderate need for training
LO4-A-1 Create budgets for each meal, according to food seasonal price, non-food supplies, and expected equipment durability and lifetime	Moderate need for training	Low need for training	Low need for training	Moderate need for training	Low need for training
LO4-A-2 Calculate and manage the kitchen budget of food, utilities and personnel	High need for training	Moderate need for training	Low need for training	High need for training	Low need for training
LO4-A-3 Make budget plans, negotiate them with superiors and assure they are followed by the kitchen personnel	High need for training	High need for training	Low need for training	Moderate need for training	Low need for training

LO4-B-1 Identify control parameters, evaluate the quality of the kitchen team's performance, conduct employee appraisals and provide feedback to superiors	High need for training	High need for training	Skill already exists	Low need for training	Moderate need for training
LO4-C-1 Plan daily work optimizing workflow, draw up the work schedule and shifts for the kitchen team (balancing team capability) and ensure through constant monitoring that it is followed by the staff	High need for training	High need for training	Skill already exists	Moderate need for training	Moderate need for training
LO4-D-1 Define equipment maintenance schedules and monitor, assess, and record the adherence to it	Low need for training	Moderate need for training	Skill already exists	Low need for training	High need for training
LO5-A-B-1 Comply and monitor compliance with HACCP and with national and local hygiene quality standards in the preparation, storing, delivering and discarding food and beverages	Skill already exists	High need for training	Skill already exists	Moderate need for training	Low need for training
LO5-A-B-2 Understand the risk of common foodborne diseases and the main causes of food	Skill already exists	Not sure	Low need for training	Moderate need for training	Moderate need for training

deterioration; apply this knowledge to food safety					
LO5-C-1 Plan and execute food tasting for healthcare professionals to test and review menus and new dishes	Skill already exists	Low need for training	High need for training	Moderate need for training	High need for training
LO6-A-B-1 Know the main cooking techniques and select the appropriate ones for the different healthcare contexts in order to maintain the nutritional properties and maximize the nutritional value of the ingredients	Skill already exists	Moderate need for training	High need for training	High need for training	Low need for training
LO6-A-B-2 Use or supervise the use of established, innovative and complex preparation methods, also combining and applying various cooking methods simultaneously and developing creative solutions	Skill already exists	Moderate need for training	Low need for training	Moderate need for training	Low need for training
LO6-C-1 Design menus and a la carte dishes and apply proper food preparation and cooking techniques, also	Skill already exists	High need for training	Low need for training	Moderate need for training	Moderate need for training

developing innovative solutions, for different food forms and diets and respect cultures and religions (e.g. vegetarians, vegans, gluten-free, allergy sufferers, people with food intolerances, diabetes, hypertension, etc.)				
LO6-C-2 Recognize the model diets (vegan, vegetarian, zone diet, Mediterranean diet…) and be able to prepare dishes according to them, also developing innovative solutions and creating new combinations of ingredients	Skill already exists	High need for training	Low need for training	Moderate need for training	Low need for training
LO6-C-3 Recognize the food prescriptions and restraints of the main religions and be able to prepare dishes according to them, also developing innovative solutions and creating new combinations of ingredients	Skill already exists	Not sure	Skill already exists	Moderate need for training	High need for training
LO6-D-1 Define consistency and texture of food in a creative,	Skill already exists	Skill already exists	High need for training	Moderate need for training	Low need for training

balanced and flavourful way					
LO6-D-2 Know the chemical composition of fortified food and correctly perform fortification in meals	Skill already exists	Not sure	High need for training	High need for training	High need for training
LO6-D-3 Apply creative and innovative kitchen techniques to adapt recipes for people with taste changes or consistency adjustments (including hot, cold, crisp, soft, moist, dry)	Skill already exists	Skill already exists	High need for training	Moderate need for training	Moderate need for training
LO7-A-1 Define a customer satisfaction protocol and place customer service at the hearth of decision-making and activities	Moderate need for training	Low need for training	Moderate need for training	High need for training	High need for training
LO7-C-1 Be aware of the main roles and responsibilities of health/social care professionals in food care and work coherently, acting as a member of an interprofessional team, maximizing the added value of each professional,	Moderate need for training	Moderate need for training	Moderate need for training	Moderate need for training	High need for training

and identifying possibilities for interdisciplinary development and cooperation					
LO7-C-4 Apply creative thinking techniques developing creative solutions to abstract problems, propose solutions and discuss with goal-orientated attitude, reaching shared decisions, applying the main problem-solving techniques	High need for training	High need for training	Moderate need for training	High need for training	High need for training
LO7-C-5 Exercise management and supervision in contexts of work, reviewing and developing performance of self and others	High need for training	Not sure	Moderate need for training	High need for training	Moderate need for training
LO7-E-1 Browse, search, filter and manage data, information and digital content, evaluating them according to the specific context of application	Moderate need for training	Not sure	Moderate need for training	Low need for training	High need for training
LO7-E-3 Know the main privacy issues and protect his/her own end users' personal data and privacy in digital environments	Low need for training	Low need for training	Low need for training	Low need for training	High need for training

LO7-E-4 Know the main current digital tools dedicated to food (composition, ingredients, combination, properties, treatments, regional resources…)	High need for training	Low need for training	Moderate need for training	Low need for training	High need for training
Is there something else you would like to tell us regarding the requirements of your pilot?	For the choice of the core learning objectives, I completed for many LO's "skill aready exists". These skills are already covered by the CGE-curriculum that is given in long life learning. We will focus the pilot in Belgium on LOs that are not yet covered in the existing CGE-curriculum in Odisee.	No	No, thanks	Possibly professors will add something (from their researches and experience) to the provided learning materials.	The new curriculum should/ will focus in particular on the areas of communication and digital methods as well as in-depth content for practice.

A2 Results Follow-Up Interview

Parnter name	ODISEE (Belgien - 19.01)	Santa Casa (Portugal – 24.01)	Marco Polo (Italien – 25.01)	IST BACT (Italien – 26.01)	MUG (Austria – 25.01)
	Results Follow-Up Interview				
Question MUG 1:	*According to your institutional cooperate identity and your answers to the survey, we sent out, we assume that teachers will continue to use your institutional platform (MS teams, Blackboard)?*	*According to your institutional cooperate identity and your answers to the survey, we assume that teachers will continue to use, your institutional platform (Moodle).*	*According to your institutional cooperate identity and your answers to the survey, we assume that teachers will continue to use, your institutional platform (Google Classroom). Please can you explain to us, if you will also use this for the CGE curriculum & how it works (if it is possible to store material, to meet …)?*	*According to your institutional cooperate identity and your answers to the survey, we have sent out, we assume that teachers will continue to use your institutional platform (Claroline)? Please can you explain to us, how this Claroline works?*	*According to your institutional cooperate identity and your answers to the survey, we sent out, we assume that teachers will continue to use your institutional platform (Moodle)?*
	Yes	Yes	Yes, Google Classroom is the preferred platform. Training material can be stored on Google Classroom.	Yes, Claroline is a place to gather everything → storage of content (learning materials for students developed by teachers, documents produced during a course), personal area for each student also email account is included (for communication with students) & courses there are divided in different learning units with a test at the end.	Yes
Question MUG 2:	*Did we understand you right, the e-didactic platform will look like as follows, e-learning*	*Did we understand you right, the e-didactic platform will look like as follows, e-learning*	*Did we understand you right, the e-didactic platform will look like as follows, e-learning*	*Did we understand you right, the e-didactic platform will look like as follows, e-learning*	*Did we understand you right, the e-didactic platform will look like as follows, e-*

	content from MOOCs, storage from e-learning material on your institutional account (MS teams, Blackboard) and communication with trainees face-to-face and/ or via Teams?	*content from MOOCs, storage from e-learning material on your institutional account (Moodle) and communication with trainees face-to-face and/ or via Teams, Zoom or Google Meet?* *We have seen that you use or willing to use different tools for interactive teaching (Teams, Zoom or Google Meet). Can we assume that those tools will also be available for new CGE training? Or to be more specific, which one are you using now?*	*content from MOOCs, storage from e-learning material on your institutional account (Google Classroom) and communication with trainees face-to-face and/ or via Google Meet?*	*content from MOOCs, storage from e-learning material on your institutional account (Claroline) and communication with trainees face-to-face and/ or via Google Meet?*	*learning content from MOOCs, storage from e-learning material on your institutional account (Moodle) and communication with trainees face-to-face and/ or via BBB-Big blue button?*
	Blackboard: place to gather everything → storage of content (learning materials for students, evaluation, explanations…) & link for meeting/communication with trainees to Teams as well link to the platform used for NECTAR for the planned e-course/ MOOC **MS teams:** just for communication (not storage), courses remotely **MOOC:** link to the MOOC will be included on the Blackboard platform	Yes, **Zoom** is the most frequently used tool for interactive teaching.	Yes. **Google Classroom**: teachers can create classrooms, Students have their email account included, preparation & submission of assignments; storage of content/ material & link for meeting/communication with trainees to Google Meet **Google Meet:** interactive communication with students (not storage)	Yes. **Google Meet:** to attend an online class, usually Google meet is used. Recordings of the class however, can be uploaded on Claroline **Claroline**: see explanations above	Yes. **Moodle**: to store learning material **Big blue button**: interactive communication/ classes with students. Link is integrated on the Moodle platform.

A3 Course Content Outline (including an overall description for pilot partners)

Online Course – Content		
Learning Outcomes	**Responsibility**	**Content Notes**
Teaser		
Training Course Introduction Video	MUG- Austria	This teaser aims at raising interest of professionals possibly eligible for a future CGE training. Storyboard deadline: beginning of April
Unit 1: Impact, basics and related conditions of nutrition		
LO2-A-B-1 Understand the impact of nutrition on development of diseases and human metabolism in a life-course approach and vice versa	MUG – Austria	- Video
LO2-A-B-2 Know basics in physiology of taste/smell, be aware of how different conditions affect taste/smell and of possible clients' food intake needs with respect to taste/smell deterioration, and detect these needs in collaboration with health professionals	MUG- Austria	- Lecture video, - pdf & learning material
LO2-A-B-3 Be aware of the main swallowing problems which raise the need for adapted food and be able to tackle these problems and conditions in daily work in collaboration with health professionals	MUG- Austria	- Lecture video - pdf & learning material
Unit 2: Screen, assess, and monitor on client-level		
LO2-C-D-0 Know and understand the concepts of 'Primary Food Care", 'Gastrology' and 'Gastro-engineering' to prevent malnutrition in healthcare and to promote active and healthy ageing, is aware of the main characteristics of the CGE professional profile, of what a "gastrological intervention" implies and of the main "gastrological tools" a CGE can rely on	Odisee- Belgium	- Video: storyboard to be delivered to Graz for recording →Could Odisee possibly do this together with the Center of Gastrology locally?
LO2-C-D-1 Identify and select test protocols on taste disturbances and use them to detect and classify taste deterioration and to monitor it	Odisee- Belgium	- Lecture video (can be recorded in Graz, but the final version of the power point needs to be ready for recording & sent to Graz) - pdf & learning material
LO2-C-D-2 Create solutions for the results of assessment from a CGE perspective and within the context of a comprehensive and holistic food care approach	Odisee- Belgium	- Lecture video (can be recorded in Graz, but the final version of the power point needs to be ready for recording & sent to Graz), - pdf & learning material
LO2-C-D-3 Know the main ICT tools for screening and assessing clients' individual food preferences and individual food intake needs and wishes, be able to select the proper ones and be able to use them, complying	Odisee- Belgium	- Lecture video (can be recorded in Graz, but the final version of the power point needs to be ready for recording & sent to Graz), - pdf & learning material

with data privacy and confidentiality guidelines and in collaboration with health professionals		
LO2-C-D-4 Know the main ICT tools for recording and monitoring assessment results, as well as interventions, be able to select the proper ones and be able to use them, complying with legal ICT structure, addressing all data privacy and applicable confidentiality guidelines	Odisee- Belgium	- Lecture video (can be recorded in Graz, but the final version of the power point needs to be ready for recording & sent to Graz), - pdf & learning material
Unit 3: Create recipes for a general population and for people with specific needs, complying with recommendations of health professionals & Use and adapt cooking techniques to the specific care setting and client		
LO3-D-1 Know the basics of chemistry of food and combine food items in order to both respect food quality and obtain appetizing menus adapted to care settings	Santa Casa da Misericordia de Albufeira – Portugal	- Video: storyboard to be delivered to Graz for recording, - pdf & learning material
LO6-A-B-3 Prepare cold and hot dishes (or supervise their preparation) according to clients' requirements and the meal plan approved by healthcare professionals, taking into account food intolerances and allergies	Santa Casa da Misericordia de Albufeira - Portugal	- Lecture video (can be recorded in Graz, but the final version of the power point needs to be ready for recording & sent to Graz) - pdf & learning material
LO6-D-2 Know the chemical composition of fortified food and correctly perform fortification in meals	ITS BACT – Italy	- Video: storyboard to be delivered to Graz for recording - pdf & learning material
Unit 4: Manage the kitchen and coordination personnel & Communicate, interact and collaborate with clients and interprofessional team		
LO4-C-1 Plan daily work optimizing workflow, draw up the work schedule and shifts for the kitchen team (balancing team capability) and ensure through constant monitoring that it is followed by the staff	ITS BACT – Italy	- pdf & learning materials
LO7-A-1 Define a customer satisfaction protocol and place customer service at the hearth of decision-making and activities	IPSEOA Marco Polo – Italy	- Video: storyboard to be delivered to Graz for recording - pdf & learning material
LO7-C-1 Be aware of the main roles and responsibilities of health/social care professionals in food care and work coherently, acting as a member of an interprofessional team, maximizing the added value of each professional, and identifying possibilities for interdisciplinary development and cooperation	ITS BACT – Italy	- Lecture video (can be recorded in Graz, but the final version of the power point needs to be ready for recording & sent to Graz) - pdf & learning material
LO7-C-4 Apply creative thinking techniques developing creative solutions to abstract problems, propose solutions and discuss with goal-orientated attitude, reaching shared decisions, applying the main problem-solving techniques	IPSEOA Marco Polo- Italy	- Lecture video (can be recorded in Graz, but the final version of the power point needs to be ready for recording & sent to Graz) - pdf & learning material
LO7-C-5 Exercise management and supervision in contexts of work, reviewing and developing performance of self and others	IPSEOA Marco Polo- Italy	- Lecture video (can be recorded in Graz, but the final version of the power point needs to be ready for recording & sent to Graz) - pdf & learning material

How to develop learning material for the iMooX platform?

Content that needs to be included:
1. Introductory text for a unit
   (If you share a unit with another partner, please develop the unit description in cooperation or at least clarify the responsibility for this purpose)
2. Short title for each learning outcome/material to explain what the following film, lecture or learning material/pdf is about
3. Storyboards for videos OR power points and text, that needs to be recorded for lecture videos
4. Optional: Additional material (e.g. exercises, pdfs…)
5. Optional: Links to sources (e.g. YouTube videos, homepages)
6. Self-Assessment Quiz at the end of each unit

Use the following templates to prepare content of the videos and dedicated learning material:
- Learning Videos Canvas – collection of ideas
- Introductory text & Title
- Storyboards (for videos)
- NECTAR ppt and document template (power point presentation & text for lecture videos additional materials)
- Links to sources
- Self-Assessment Quiz

Description & general requirements for the different formats of learning material

Video   *[Templates: Learning Videos Canvas – collection of ideas & Storyboard]*
This category refers to the design of short educational videos that will later be produced by MUG. For this reason, storyboards of how the film should be produced/ recorded needs to be delivered to MUG no later than **May 20th**.

First use the "Learning Videos Canvas – collection of ideas" template to roughly collect ideas for the subsequent storyboard of the planned film. The storyboard describes the video design in detail (spoken text, graphic elements, preferred setting/ background...), please use the appropriate template for this purpose ("Storyboard"). It is intended that each video is produced as interview.

Requirements:
-   Produce content for a video of 5 to 10 minutes (max. 15 minutes)
-   Format Interview: the format should correspond to an interview (question - answer format) in order to make the corresponding content of the learning outcomes accessible
-   Try to involve learners (with your content) or use techniques such as storytelling

Lecture video   *[NECTAR ppt template]*
This format corresponds to a recorded lecture. The recording can take place in Graz; however, the responsible partners have to prepare and send to MUG the final version of the power point presentation and the accompanying text to be recorded for the lecture.
→   Choose carefully which material you are going to use (consider license requirements!) and do not forget to mention the references adequately in the course of your power point.

Requirements:
-   5-20 slides (max. 25 slides) referring to a lecture of 5 to 10 minutes (max. 15 minutes)
-   Use varied content in your power point (images, graphics, written content) to keep learner's attention.
-   Make your slides clear and use an adequate amount of content (do not overload the slides)

Learning material/pdfs/Links to sources   *[NECTAR template, Links to sources]*
You can use different kinds of learning and additional materials e.g. pdfs or YouTube videos, that match your topic and which can be combined thematically. Additional materials may also include an exercise for learners. In this case, please do not forget to indicate a (possible) solution for the exercise as well.

Please use the NECTAR template for documents if you want to create pdfs, exercises or anything else yourself (and finally convert them into a pdf) and do not forget to mention the references adequately for written material.

It is also possible to provide links to sources in order to supplement content or to support what has already been said or contained.
➔ Choose carefully which material you are going to use (consider license requirements!) and do not forget to mention the references adequately.

Self-Assessment Quiz (template) *[Templates: Self-Assessment Quiz]*

Among the self-assessment quiz at the end of each unit multiple-choice questions are intended to evaluate students and to enable the online course to be successfully completed. If you share a unit with another partner, please split the development of multiple-choice questions.

Requirements:
- at least 8 questions: please provide 8 to 15 questions regarding each unit
- at least 5 possible answers to the questions: ranging from 1 to 5 correct answers (please provide the right answers in red)
- medium level of difficulty of the questions: please make sure that these are not questions that can be answered based on general or prior knowledge (needs to specifically refer to the content of a unit)

Please note the following as well

As decided during the 4th Consortium Meeting (via Mentimeter voting) we are going to use the licence CC BY NC SA, which allows to cite, non-commercial use and share alike. This license lets others remix, adapt, and built upon your work non-commercially, as long as they credit you and license their new creations under the identical terms. Be aware of this condition when using material produced by yourself!

Use of extern materials
Any material used on the e-learning platform such as documents, photos, graphics, illustrations, comics etc. needs to be license-free and may only be used within the permitted parameters.
Therefore, be aware to use only open content (documents, papers, pictures…). Unless otherwise possible, please send us diverging copyrights, so that we can check whether an inclusion of the content among the e-learning course is possible or not.
Below are some examples for image websites, which are free of charge and license free (although check the license or the usage requirements for each image or graphic, also on this websites):
- https://pixabay.com/
- https://www.pexels.com/
- https://www.lifeofpix.com/about/
- https://picjumbo.com/
- https://unsplash.com/
- http://photopin.com/

[Copy and paste, if the link is not working]

A4 Template Collection of ideas for the learning video (example MUG)

A5 Template Storyboard/ Script Learning Video (example Odisee)

Scene Nr.	**Example Scene**
Title *[optional]:*	Fortification of meals
Format:	Interview
Setting:	Kitchen
Characters:	Interviewer: Chef, Anna M. [Profession, Name] Interviewee 1: Dietician, Robert L., [Profession, Name]
Content:	**Question 1 (chef):** Robert, could you be so kind and tell us how to correctly perform fortification in meals. What needs to be considered? **Answer 1 (dietician):** There are various fortification options. The aspects to be considered, depend of course on what type of fortification is involved (e.g. energy/carbohydrate or protein fortification)… **Question 2 (chef)**: What about energy/carbohydrate fortification? **Answer 2**: … …
Requisites/ Material:	- Spoon - Powder (fortification) - Whisk
Additional notes for the scene *[optional]*: Dietician shows the correct enrichment technique --> Detailed instructions on how to perform this in the video.	

<u>Description</u>:
- Scene number: chronological order (Change of scene when a new main topic is dealt with or a new setting is desired)
- Title of the scene *[optional]*: main topic of the scene
- Format: Interview format (mandatory)
- Setting - Choose from the following: office, kitchen, university/ lecture room or other desired setting (in this case, please clarify the possibilities with MUG)
- Protagonist: brief description of the main characters of the scene (interview) in terms of profession (e.g. chef, dietician, doctor…), name and role in the interview (interviewer, interviewee, expert…)
- Content: The content should be adequately prepared for an interview in question-and-answer format.
- Requisites: Material needed to present and underpin the content of a scene (e.g. flip chart, items…).
- Additional notes: Anything else you want to add or annotate about the scene.

Learning Outcome "LO2-C-D-0"
Know and understand the concepts of 'Primary Food Care", 'Gastrology' and 'Gastro-engineering' to prevent malnutrition in healthcare and to promote active and healthy ageing, is aware of the main characteristics of the CGE professional profile, of what a "gastrological intervention" implies and of the main "gastrological tools" a CGE can rely on
Responsible Partner/ author of storyboard:
Odisee, author name
Title of video:
Title
Planned duration of video:
Approximately XYZ minutes

Scene Nr.	**1**	
Title *[optional]:*		
Format:	Interview	
Setting:		
Characters:	Interviewer:	[Profession, Name]
	Interviewee 1:	[Profession, Name]
Content:	**Question 1:** **Answer 1 :** **Question 2**: **Answer 2:** …	
Requisites/ Material:		
Additional notes for the scene *[optional]*:		

ADD as many scenes as you need to produce a script/ storyboard for a video of 5 to 10 minutes (max. 15 minutes)!!!

ANNEX 1 – QUALITY CONTROL CHECK LIST

Quality Control Check	
Generic Minimum Quality Standards	
Document Summary provided (with adequate synopsis of contents)	X
Compliant with NECTAR format standards (including all relevant Logos and EU-disclaimer)	X
Language, grammar and spelling acceptable	X
Objectives of the application form covered	X
Work deliverable relates to adequately covered	X
Quality of text is acceptable (organisation and structure, diagrams, readability)	X
Comprehensiveness is acceptable (no missing sections, missing references, unexplained arguments)	X
Usability is acceptable (deliverable provides clear information in a form that is useful to the reader)	X
Deliverable specific quality criteria	
Deliverable meets the 'acceptance Criteria' set out in the Quality Register:	X
Checklist completed and deliverable approved by	
Name: Date: 15/03/2022	
Serena Alvino	