Models and guidelines for the collaborative design, development and delivery of SLPs

Work package:	**WP6 - Pilots on the collaborative SLPs and related mobility**
Confidentiality status:	**Public**
Date of publication:	**15/05/2021**

Cite as: Henderikx, P., Truyen, F., Kananen, P., Uotinen, V., Curto, M., Gmelch, N., Caforio, A., Ubachs, G & Antonaci, A., (2021). *Report on models and guidelines for the collaborative design, development and delivery of SLPs.* (Research Report No.6.3). Retrieved from European Short Learning Programmes Project https://e-slp.eadtu.eu/images/Report_on_collaborative_design.pdf

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About E-SLP Project

This report is published as part of the E-SLP project: European Short Learning Programmes. The E-SLP project is funded by the Erasmus+ Programme and from 1 January 2018 until 31 December 2020.

Short Learning Programmes (SLPs) are a group of courses (units, modules or other learning building blocks) with a common subject focusing on specific needs in society which can be used as stackable elements of larger formal degrees targeting non-traditional and adult learners. The E-SLP project focusses on online, flexible and scalable SLPs in the European context.

This report is part of work package 6 and was coordinated by KU Leuven.

Partners

P1	European Association of Distance Teaching Universities
P2	Fernuniversität in Hagen
P3	The Open University
P4	Open Universiteit Nederland
P5	Universidad Nacional de Educación a Distancia
P6	Universitat Oberta de Catalunya
P7	Hellenic Open University
P8	Universita Telematica Internazionale UNINETTUNO
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P12	Open University of the University of Jyväskylä
P13	Katholieke Universiteit Leuven
P14	National Association of Distance Education
P15	Akademia Gorniczo Hutnicza Im. Stanislawa Staszica W Krakowie

1. Introduction

This document refers to deliverable 6.3 on the development of models and guidelines for the collaborative development and delivery of short learning programs and related mobility.

Originally started with an introductory document, based on experience and expertise with joint Erasmus Mundus programmes, the Networked Curriculum Project (NETCU) and the work on the EADTU Mobility Matrix, this document builds further on the experience of the pilots in the ESLP project (WP6) and from other work packages, referring in particular to the comprehensive SLP design guidelines that have been developed (WP4).

2. A short learning programme: the concept
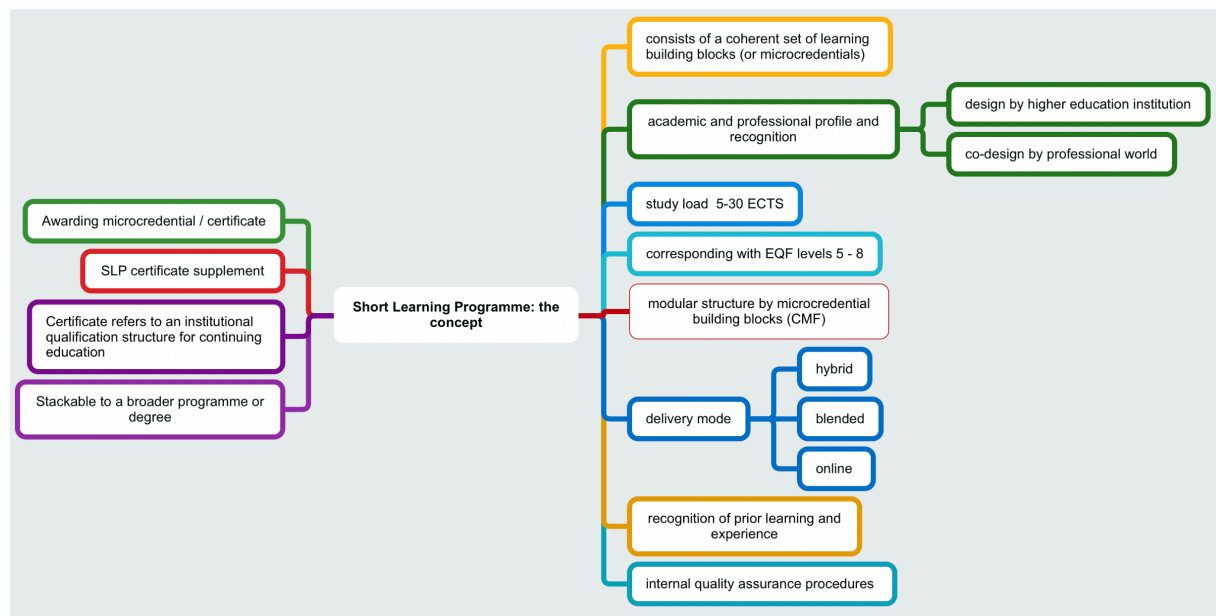
Figure 1: A short learning programme: the concept

2.1. The concept

A SLP can be described as a group of courses (units, modules, learning building blocks) with a common subject, designed in response to a specific need, that targets higher education lifelong learners and awards credit-based (ECTS) certification/credentials:

- SLPs seek an academic and a professional recognition and are always delivered by a higher education institution eventually in collaboration and co-design with the professional world;
- A SLP is awarded with a qualification referring to the study load of the programme varying from 5 to 30 ECTS and the competence level of the programme referring to levels 5,6, 7 or 8 of the national or European qualification framework (NQF/EQF (see section on qualifications);

- SLPs are preferably conceived in a modular way, helping students to structure learning and to improve study progress (see section on course and programme design). CMF microcredentials are instrumental to create modularity within SLPs.

- In order to be scalable and flexible for continuing education learners, SLPs are digitally delivered. Typical modes of delivery are asynchronous online distance education, blended education and synchronous hybrid education (see section on course and programme design). Delivery modes can be mixed within one programme or even within one course;

- If applicable, short learning programmes can be accessed after a procedure for the recognition of prior learning or experience (see section on admission framework);

- SLPs are subject to the institutional quality assurance procedures of the organizing higher education institution;

- The qualification for a SLP can be delivered as a standardized CMF microcredential (4-6 ECTS). Longer SLPs are awarded with a certificate such as an undergraduate or postgraduate certificate, an expert or specialization certificate, a professional programme certificate, a focus diploma, etc. Most of these qualifications are not standardized (see section on qualifications).

- A SLP award is accompanied by a certificate supplement.

- SLPs are conceived to make them stackable to a broader certificate or degree programme.

2.2. Recommendations

Microcredential and SLP qualifications should be further integrated in a qualification structure for continuing education.

2.3. Specific formats

MOOC platforms and universities offer MOOC based short learning programmes, for example CMF microcredentials (Futurelearn, FUN MOOC, EduOpen, Miriadax), Micromasters (Edx) and nanodegrees (Coursera).

2.4. Examples of good practice

- Project-based microcredentials and SLPs (see pilot 3, Online and Blended Learning)
- MOOC-based microcredentials and SLPs (see pilot 2, New Rights).
- See also: micromasters programmes, nanodegrees, etc.
- Digital competent educators (see pilot 5)

2.5.   Observations

A common qualification structure for continuing education would create clarity/readability and is a condition for the harmonization of educational provisions for continuing education and professional development at the national and European level.

The SLP concept is matching with main features in the European discussion on microcredentials, notably the application of the Erasmus instruments such as ECTS, the EQF/NQFs, the DS, ESG and considerations on e-learning

3.   The design of a joint short learning programme: overview
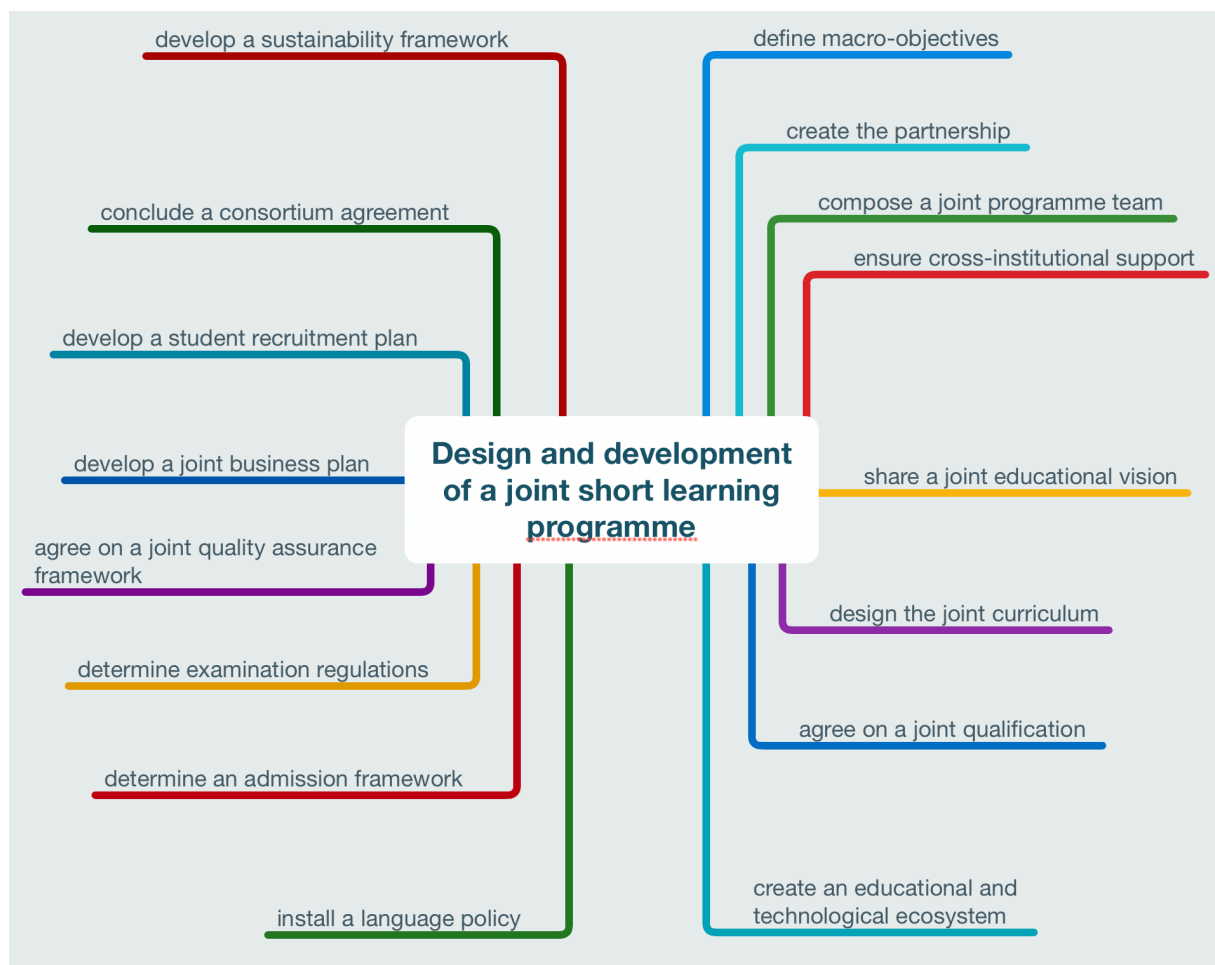
Figure 2: The design of a joint short learning programme

3.1.   Guidelines

Designing and developing SLPs is a complex activity involving several steps:

- situate the program in relation to the macro-objectives of the institution related to wider institutional strategies as making continuing education compliant with learners' life and work conditions, and innovating higher education;

- create the partnership with universities on the basis of trust and past collaborations or common research and innovation interests. Involve eventually other stakeholders for co-design, co-development or co-delivery;

- compose a joint programme team, led by a course team leader, sharing leadership with core staff at the respective institutions and involving teachers to realize the programme;

- ensure (cross-) institutional support by teaching and learning, internationalisation, IT for education, and legal services;

- share a joint educational vision on the short learning programme;

- design the joint curriculum according to state-of-the-art principles assuring that it can be developed and implemented successfully;

- agree on a joint qualification to be awarded;

- create an educational and technological ecosystem for delivering courses;

- install a language policy to make the program accessible across geographical areas;

- determine an admission framework for the joint program;

- determine joint examination regulations;

- agree on a joint quality assurance framework;

- develop a joint business plan;

- develop a student recruitment plan, including financial aspects and prospected student flows;

- conclude a consortium agreement defining responsibilities and tasks;

- Develop a sustainability framework, containing an engagement of universities of several years to assure a basic sustainability.

3.2. Observations

Efforts for (online) continuing education and professional development are strengthened and streamlined in frontrunner universities, eg by creating dedicated structures for continuing education (eg extension schools) and by creating new course and programme provisions such as MOOCs and MOOC pathways;

The EUI alliances are collaborating on continuing education and professional development in many areas, constituting a natural setting for developing collaborative SLPs with possibly embedded mobility;The MOOC platforms in the European MOOC Consortium (EMC) are developing MOOC pathways and have agreed on awarding microcredentials according to the Microcredentials

Framework (CMF). These microcredentials of 4 to 6 ECTS are stackable to wider SLP or degree qualifications.

The European Commission and the Council of Ministers of Education prepare a microcredential framework (Recommendation, 2021; Framework, 2025), stimulating the development of continuing education and professional development;

The expertise for the design and development of joint programmes and related mobility is increasing at all levels, eg by the involvement of universities in Erasmus Mundus programmes. This is supporting the scientific basis for the design and development of SLPs.

4. Define the macro-objectives of the short learning programme
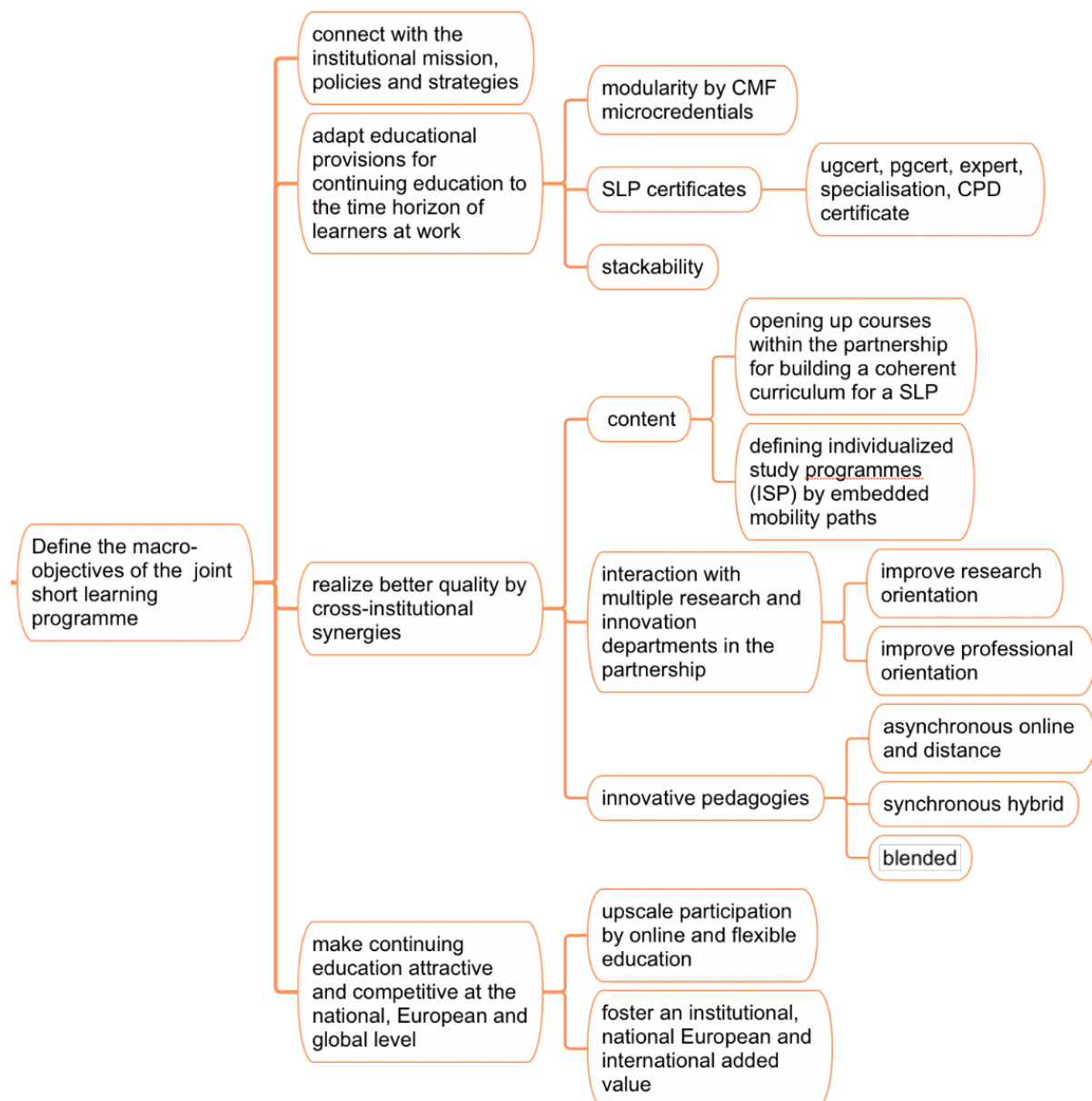
Figure 3: Defining the macro-objectives of the short learning programme

The macro-objectives of a short learning program should fit with the mission of the university and frameworks for continuing education, which can include different aspects:

- Connect with the institutional mission, policies and strategies on continuing education and professional development;
- Adapt educational provisions for continuing education to the time horizon of learners at work;
- Realize better quality by cross-institutional synergies;
- Make continuing education attractive and competitive at the national, European and global level

4.1. Connect to the institutional mission, policies and strategies for continuing education and professional development

European higher education is evolving into three areas of provision: mainstream degree education, continuing education and open education (MOOCs). In the perspective of the transformation agenda for higher education, universities are becoming more intertwined with the knowledge-intensive sectors of society, responding to the needs of the economy and society as a whole.

Some leading universities have already developed comprehensive policies for continuing education and professional development in line with their mission statement. They have built a framework for this continuing education comprising for example an extension school and an institutional qualification structure for awarding certificates for microcredential and short learning programs. These programmes are closely related to research and innovation and mainstream education in their institution.

Nevertheless, for all universities it remains a challenge to create facilities for adult learners.

Because of their mission, open and distance learning universities organize degree programmes for adult learners mainly. They have become aware of the need for microcredential and shorter programs and have started to organize this provision on a larger scale.

4.2. Adapt educational provisions for continuing education to the time horizon of learners at work

Universities are aware that continuing education and professional provisions need to be adapted to learners' time horizons through new educational formats such as micro-credentials and short learning programs. These new provisions should be recognized as stackable modules for broader programmes.

This approach creates new opportunities for the development of continuing education and professional development. It is now supported by the European Commission, which has proposed a Recommendation to the Council of Ministers to prepare a framework for micro-credentials.

Thus, it becomes the new priority for national governments and higher education institutions. Front-runner universities will help determine this development.

4.3. Achieve better quality through inter-institutional synergies

By organizing joint short learning programs, universities achieve better quality through institutional synergies. They make available their best content within the partnership to build joint short learning

programs that respond to real needs in society. These programs are also personalized by organizing individualized study plans and embedded mobility paths.

This collaboration is based on and further promotes close interaction with research and innovation departments in the partnership. Through these synergies, they improve both the research and professional orientation of short learning programs.

Short learning programmes are also an environment for pedagogical innovation that enables institutions to reach learners across Europe, creating an international experience for them and using new ways of delivery. Active learning models will be used in the context of blended, synchronous hybrid and online distance learning.

4.4. Make continuing education attractive and competitive at national, European and global level

Front-runner universities may offer joint short-term learning programs to make continuing education more attractive and competitive at national, European and global levels. Digital delivery methods allow them to scale up participation in their programs and improve quality in terms of content and pedagogy.

In this way they provide institutional, national, European and international added value.

5. Create the partnership
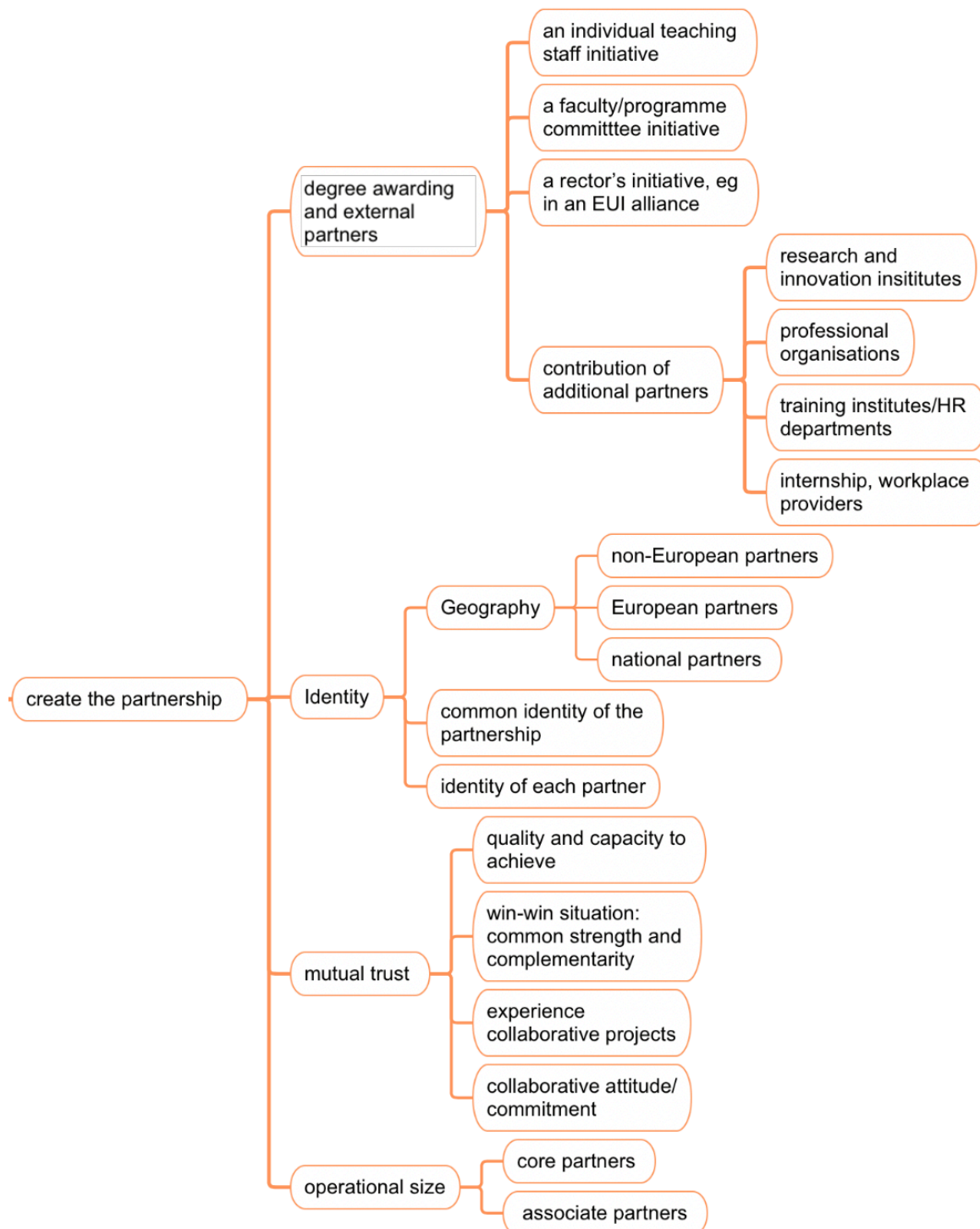
Figure 4: Creating the partnership

The creation of the partnership for the short learning program is based on several criteria:

- The participation of degree awarding and non-degree awarding partners;
- The identity of the partnership to be developed;

- Mutual trust;
- Operational size.

5.1. Guidelines

5.1.1. Degree awarding and non-degree awarding partners

The initiative for a joint short learning program can be taken by an individual staff member, by a program committee at the faculty level, or by a rector or vice-rector at the institutional level, possibly in the framework of a European University alliance (EUI) or another network;

Non-degree awarding partners can contribute to the SLP to strengthen its research, innovation and professional foundation, eg research and innovation institutes, professional associations, sectoral training institutes and human resources departments of enterprises, and workplace providers offering internships.

5.1.2. Identity

The primary identity of a short learning programme is related to the institutional mission of the respective universities in the partnership (see also: Thaler and cs).

Furthermore, the identity of a partnership is to a large extent geographically determined by its national, European or international basis. Partners find a common identity in a joint research and innovation orientation or collaboration. Due to this common identity, partners also want to maintain their own profile.

5.1.3. Trust

Mutual trust is a basic condition for realizing a successful joint SLP. This is based on the educational, technical and organizational capacity of each partner institution to achieve its role in the consortium. The SLP should also create benefits for each single partner by the cooperation, creating win-wins by complementarity and multiplying effects.

Partners show a long-term commitment to the SLP programme of several years and a collaborative attitude.

5.1.4. Operational size

Since the-set up of a SLP is a complex activity, the typical number of partners will vary from two to six partners. A higher number will be complicated as possibly more perspectives are to be reconciled and more institutional and national regulations have to be taken into account;

In case more partners participate, core partners can take the lead while associate partners play a specific role, eg additional labs, specific seminars, mobility schemes, guest lectures, etc.

Associate partners can include non-degree awarding institutions such as musea, national scientific institutions, professional organisations, business sectors or enterprises.

5.2. Observations

Individual staff members start with the development of SLPs because of different motivations related to personal research and innovation in a particular scientific and professional domain. They can also be invited by colleagues of other universities or networks because of their reputation. In an early stage they need a dialogue and an agreement with the faculty or the institutions in order to comply with institutional rules for programming continuing education. From the beginning they should find consultation and support from different services in the university, notably teaching and learning, IT, international offices and legal services;

SLP initiatives at the level of a faculty or a program committee have the advantage of collective decisions and direct support by faculty services. In many cases, they are a new module or a further specialisation of an existing bachelor or master program. Faculty level initiatives are easier to integrate in institutional regulations;

SLP initiatives at the institutional level benefit from the start a top-down support. The issue in some cases is to find a motivated leader at the faculty or individual staff level to design and develop the SLP. Institutional initiatives are taken to implement institutional strategies for continuing education and professional development or cooperation agreements within a university alliance or a network. The institution fulfills the necessary conditions for developing the SLP.

5.3. Recommendations

A SLP partnership should have a strong basis, eg consisting of previous research ties or at least common research interests, expertise in innovation, mobility schemes or other internationalization projects. Universities should have similar institutional characteristics or policies for continuing education and professional development;

Team leader and partners should start from a time horizon of several years, surrounding themselves locally with colleagues and services assuring sustainability;

Engage and collaborate with associate partners such as professional organizations and employers from the start as they are relevant for the co-creation of the programme.

6. Compose the programme team: structure and tasks
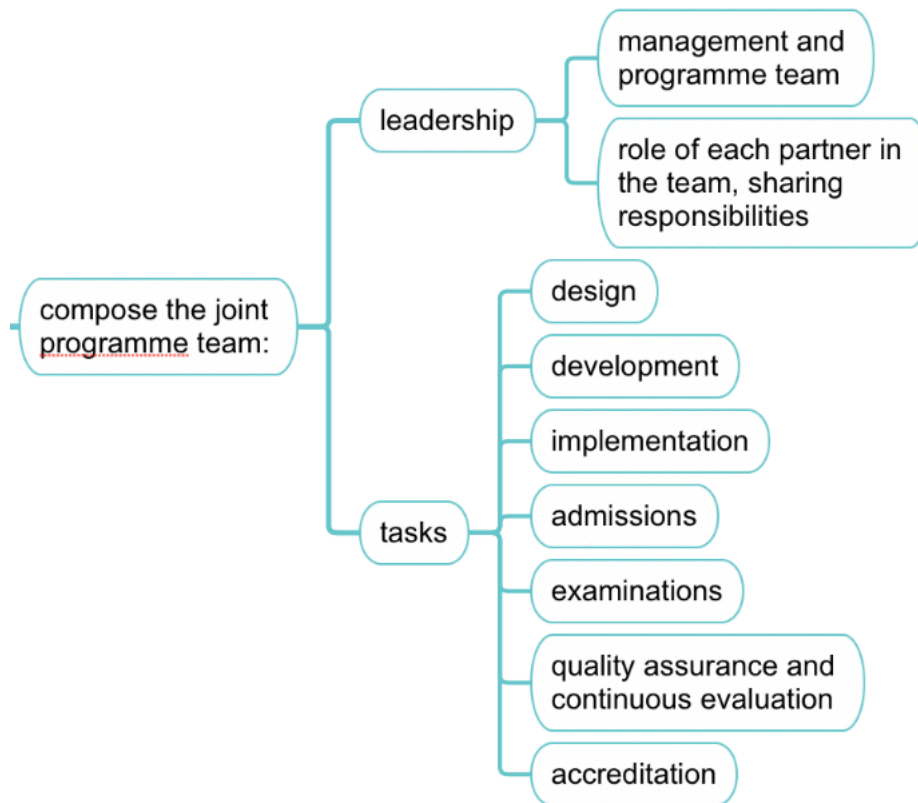
Figure 5: Composing the programme team

6.1. Guidelines

6.1.1. Leadership and roles

The success of joint SLP is largely dependent from the programme leadership and the programme team. The programme leader is a staff member of the university who takes the overall academic and managerial responsibility for the SLP;

This responsibility is shared with the other programme team members who each represent and commit his or her partner university;

In all matters, the leadership is collegial/consensual in nature.

6.1.2. Tasks of the team and individual partners

The programme team is responsible for all stages of the set-up of a joint SLP: the design, the development and the implementation. It takes into account institutional and national regulations;

The programme team defines the admission criteria for the programme as well as the admission procedures;

The programme team functions as the examination board and defines the examination rules, including the grading system and the conditions for awarding credits and the final qualification of the programme;

The university of the course team leader is responsible for the (internal) quality assurance of the programme, whereas each partner university is delivering all data needed to fulfil this task. Together they develop a procedure for the continuous evaluation of the programme;

This continuous evaluation provides the basis for a formal (national, professional) accreditation when requested.

6.2.   Recommendations

The team leader is engaging his university and seeking for alignment with the partners chosen. As pen holder, he should lead the design, development and implementation processes. He invites partners to bring their best input in different stages. The team leader makes sure that he has the educational, technological and organizational support of his faculty and university for leading these processes. Partners do the same for their part;

The programme team has to distinguish the respective stages in setting up a short learning program. Each stage requires a certain amount of time. Depending on the institutional support for the team leader and the partners, the design phase will take at least three months, followed by a development phase of at least six months after which the program can be implemented.

7. Ensure (cross-)institutional support
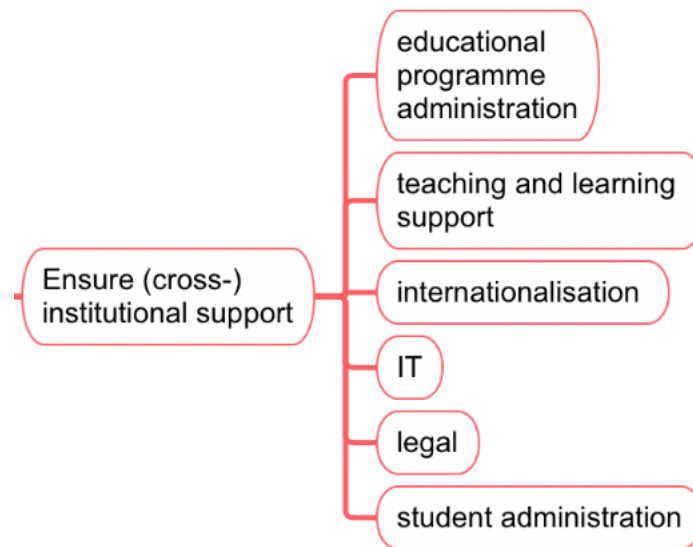
Figure 6: Ensuring (cross-)institutional support

The team leader and the team partners need institutional and faculty support, which is given by professional expert services in the partnership:

- The educational program administration;
- Teaching and learning services;
- Internationalization services;
- IT for education services;
- Legal services;
- The student administration

7.1. Guidelines

7.1.1. The educational program administration

New program initiatives generally need to follow a procedure for approval by the faculty or the university. A dialogue with the central or faculty-level *educational program administrations* has to be started as soon as possible by which the program leader and the team will be informed about all framework conditions and steps to be taken from the inception of the programme up to its publication in the respective program guide and implementation.

7.1.2. Teaching and learning

The *teaching and learning support services* are vital for the design of a short learning program. They have expertise both in course and curriculum development and in collaborative approaches in this

development. Consultancy by this service will reduce the time and therefore the cost needed to design the program as they are familiar with all aspects of the design to be covered.

7.1.3. Internationalisation services

Also *internationalization services* have this expertise. On top of this, they are used to develop staff and student mobility formats in accordance with the curriculum. They are also familiar with all kinds of agreements which are needed for a joint SLP.

7.1.4. IT for education services

IT services will advice the team on technological facilities to deliver all digital components of the curriculum, including synchronous and asynchronous online delivery and collaboration in groups. A main issue concerns the common platform or learning environment to be used for the delivery of the program. For pragmatic reasons, the platform of the lead institution is ordinarily used. In newly established EUI alliances, a new common platform is considered for the delivery of common course offerings but this is proved not yet to be an easy solution.

7.1.5. Legal services

Legal services have the task to solve all (legal) regulation issues and to change restrictions into opportunities in dialogue with the partner institutions. This will sometimes lead to adaptations of institutional rules. This can also lead to advises or requests to the central government to change regulations.

7.1.6. The student administration

The *student administrations* will advise the team on the central enrollment of students and on secondary enrollments in partner institutions for participating in subsequent parts of the programme. Multiple registrations are needed in order to make sure that learners can get a joint qualification and that institutions eventually get funding for all parts of the programme from their respective ministries (See also section on admission framework).

7.2. Recommendations

To enhance the quality of the program and reduce its design and development cost, support services should be contacted right from the start of the design of the programme;

In general, the team leader will first engage the support services at his university and and will then try to align and engage the partners on common approaches for which they have to ask advice in their institutions ;

Representatives of the expert support services all partner universities should create a joint task force or expert group to support teaching staff with the design, development and implementation of the programme. They can build on mutual expertise and are points of contact for solving problems.

8. Share a joint vision on the SLP to be developed

As a first step, partners have to develop a joint educational vision for the program, consisting of:

- A needs analysis;
- The academic and professional profile;
- The characteristics of the learners envisaged;
- The objectives and the unique selling point of the programme;
- The relationship with existing courses and programmes.

8.1. Guidelines
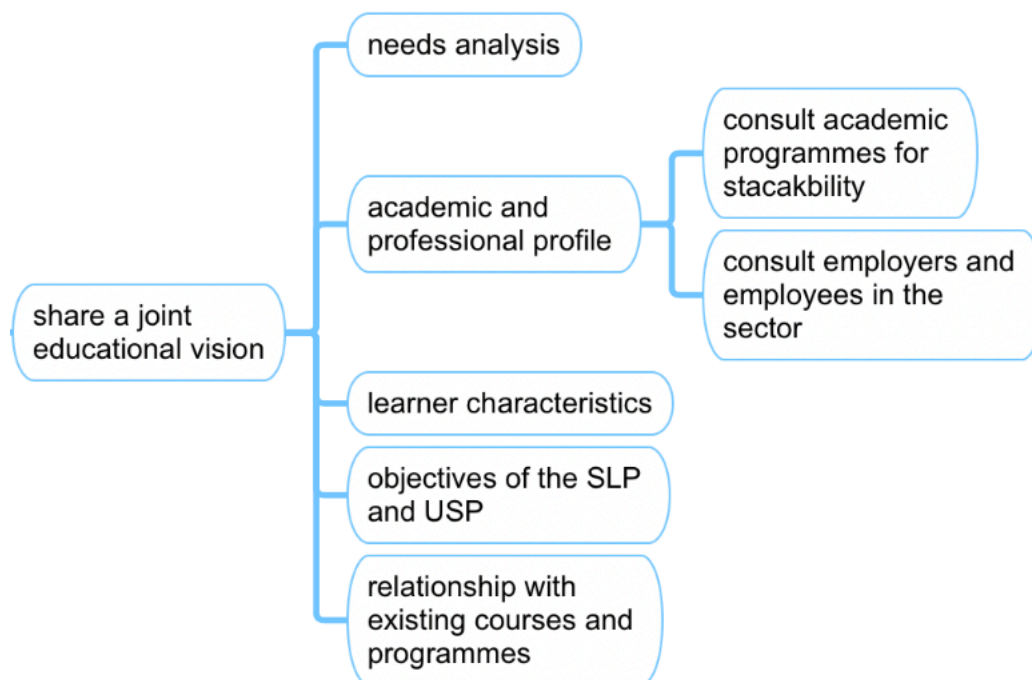
Figure 7: Sharing a joint vision on the SLP to be developed

8.1.1. A needs analysis

A needs analysis on the field envisaged is done on the basis of existing documents or by consultation of stakeholders. Already in this stage, it is convenient to rely on associate partners like professional organizations, sectors and enterprises or public services.

8.1.2. The academic and professional profile

The academic and professional profile of the SLP is defined on the basis of needs identified, the possible link with degree programs and its relevance for employers and employees in the field. The stackability with academic degree programs is investigated as well as the place of the programme in relation with the labor market;

8.1.3. The characteristics of the learners envisaged

The partnership defines the main target groups for the short learning program and the expected learner characteristics. This includes the capability and readiness to improve competences for employment and innovation in particular business sectors or in public services.

8.1.4. The objectives and the unique selling point of the program

The academic and professional objectives of the short learning programme are then defined, taking into account their contribution to the mission, educational strategies and the competitiveness of the higher education institutions involved.

The general objectives of the program are defined in economic, social and cultural terms within the national and European environment.

A "unique selling point" is sought for a sufficient target group in the partnership and beyond.

8.1.5. The relationship with existing courses and programs

The relation with other continuing education and professional development offerings in the partnership is clarified. Eventual collaborations at the course level are explored. The SLP's added value compared with existing short courses in the same field at national and European level is explained. It is also indicated to what extent this added value contributes to university excellence, innovation and competitiveness.

9. Design the joint curriculum

For the design of the curriculum of a joint short learning program, successive joint decisions have to be made as the program is co-owned and co-delivered by all partners in a distributed environment:

- Define the objectives of the curriculum;
- Design a coherent programme in content and structure;
- Make the programme stackable;
- Define delivery modes;
- Share, evaluate and align media and tools;
- Design room for flexibility;
- Enhance the student learning experience;
- Determine the study load;
- Make the program inclusive;
- Design staff and student mobility.

9.1. Guidelines
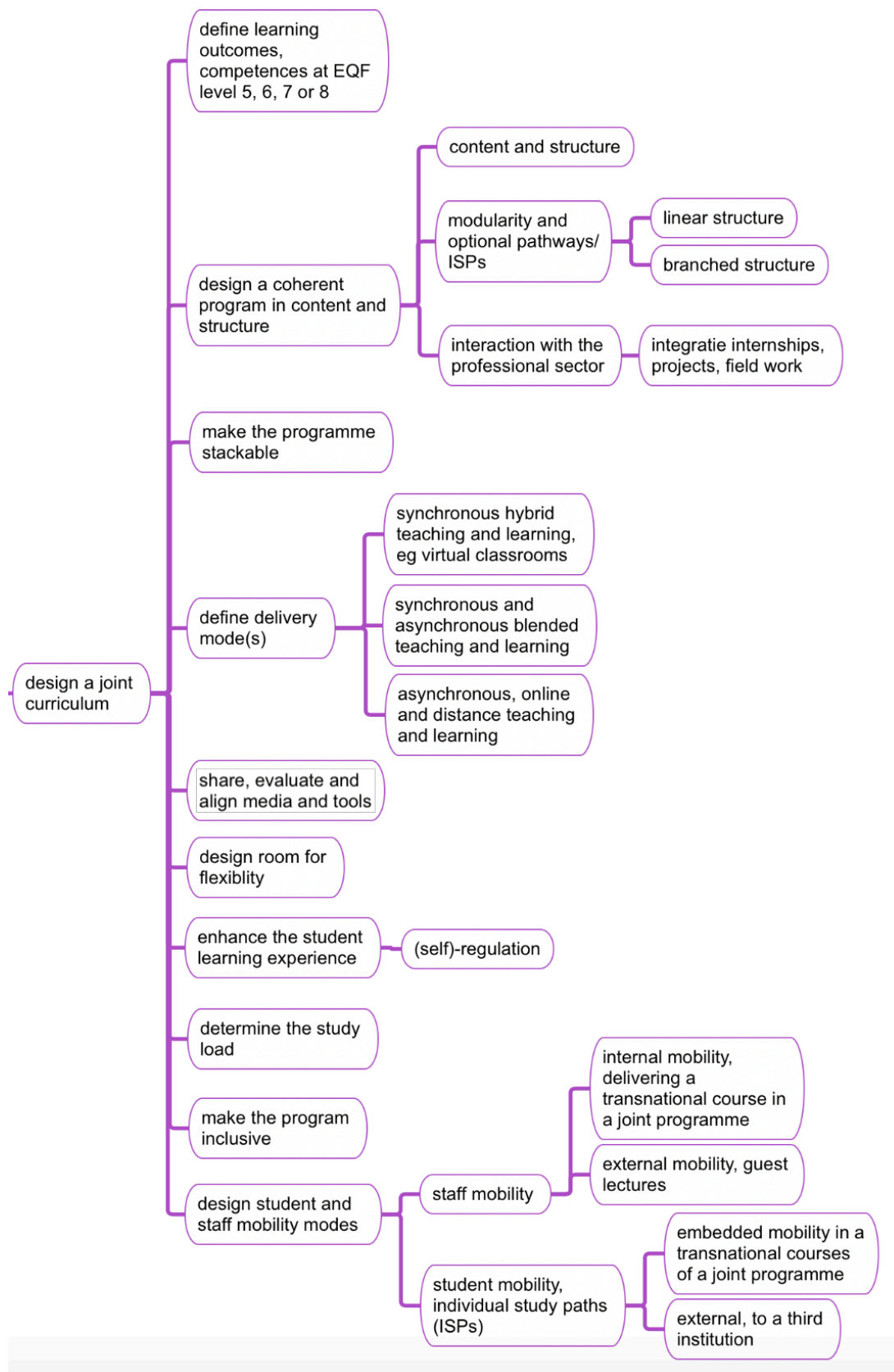
Figure 8: Designing the joint curriculum

9.1.1. Preliminary remarks

In the further design process of a SLP as described here, the focus is on curriculum design based on already existing courses, modules or learning building blocks in the partnership. In this so-called puzzle design, relevant courses from programmes in the partnership are integrated in the new SLP according to the curriculum objectives agreed upon (see Maina and others: https://e-slp.eadtu.eu/images/D42_Guidelines_final.pdf). This is the most common approach for the development of joint degree programs (eg Erasmus Mundus), capitalizing on existing courses and therefore realizing important cost benefits. Of course, also jointly designed learning activities, courses, modules, learning building blocks can be integrated in the SLP. In most cases this is done only for a limited part of the curriculum.

The other option is that the joint curriculum is composed of new courses, modules or learning blocks which have to be designed and developed by the partners from scratch. This is called the primary design approach (Maina and others, ibid.). It will cost much more staff time as the design and development of the courses has to be taken into account. The amount of staff time is dependent on the type and complexity of the learning activities envisaged.

In the programme design guidelines as presented here, we integrate also the maturity dimensions for programme design, developed in the European Maturity Model for Blended Education (EMBED), broadening these dimensions to digital education in general. They are based on up-to-date research on learning design and validated by a Delphi research (See: https://embed.eadtu.eu/results)

Taking into account these dimensions, the programme team looks for a constructive alignment with the objectives of the curriculum and takes into account the characteristics of learners envisaged.

9.1.2. Define the objectives of the curriculum

Define and justify the relevance of the learning outcomes in view of the students' future academic opportunities (notably the stackability to a bachelor or master programme) and employability/ professional recognition.

Translate the outcomes eventually in competence categories to be covered (see European Skills and Competences, ESCO, https://ec.europa.eu/social/main.jsp?catId=1326&langId=en)

Define the European Qualification Framework level envisaged for the SLP curriculum (http://www.ehea.info/Upload/TPG_A_QF_RO_MK_1_EQF_Brochure.pdf). SLPs can be designed at a 5, 6, 7 or 8 level.

This is important for the recognition of the level of the qualification awarded to learners after completion of the SLP. As a consequence, the SLP should be sufficiently homogeneous in terms of NQF/EQF qualification level.

9.1.3. Design a coherent program in content and structure

Define the main teaching topics of the program in relation with the program objectives and the needs of the field. Seek complementary expertise of key academic staff in the partnership to achieve the SLP objectives and engage them to teach the topics needed.

Compose the curriculum out of existing courses in the partner institutions. Possibly these courses need small adaptations to fit him to the objectives if the curriculum or to match them with other courses. Also in the case of puzzle design, some newly designed learning blocks can be integrated in the program, such as online lecture series, (joint) project work, an intensive programme or winter/summer school, webinars, a paper, etc.

Sequence and structure the learning blocks in a coherent curriculum, possibly consisting of stand-alone modules or microcredentials of 4-6 ECTS, which can conveniently be combined with a job during a period of 10-15 weeks with a study load of some 8 hours a week. In the context of continuing education and professional development, these short modules will trigger students to continue studying the program and will decrease dropout and increase study success;

For making the program coherent, both the vertical (course-programme) and horizontal alignment (between courses) are to be considered, based on a shared vision on the content of the programme;

The learning blocks within a SLP can be offered in a linear way (one block after the other) or in a branched structure (common core and differentiated options) by which learners can opt for individual study paths (ISPs). Describe and show the academic and professional relevance of such differentiated options or learning paths.

If applicable, explain how internship / placement / field work activities fit in the joint course model and objectives. Explain the SLP's interaction with the professional socio-economic/scientific/cultural sectors concerned. What type of involvement, if any, do these actors have in the curriculum implementation (co-creation of content, course evaluation, internship/placement providers, financial sponsors, research providers, employment perspectives, etc.)? What is their degree of commitment to the programme?

9.1.4. Make the curriculum stackable

In determining the content and structure of a short learning programs, the stackability of the program for wider (degree) programs should be promoted:

- Seek agreement with degree program boards in the partnership on the extent to which the short learning program is stackable in a bachelor or master program. This will eventually lead to exemptions when the student enters such a degree programme.

- In some universities, (online) master programs are built up in a modular way, by which short learning programmes or microcredentials are awarded with a first SLP qualification (eg an undergraduate certificate, a microcredential award) and finally can be accumulated to the master degree. This is especially the case when the program attracts adult part-time students online.

9.1.5. Define delivery mode(s)

Decide which mode of delivery is used for the program and for each course or learning block in order to make coherent arrangements for digital education.

SLPs need a large amount of flexibility. More flexibility is needed for working and international learners to respond to individual time schedules and eventual different time zones. Particularly for such groups, digital teaching and learning provisions are suitable as the internet is accessible anywhere by anyone.

In addition, scalability is needed, since major needs in the economy and in society must be met in several places. Digital teaching and learning is more scalable and therefore an important asset for continuing education and professional development.

Three main approaches for digital education in this context are:

- *Synchronous hybrid teaching and learning*: based on settings that have in common that both on-site or 'here' students and remote or 'there' students are simultaneously included;
- *Blended teaching and learning with a mix of synchronous and asynchronous methods:* based on a course design with a deliberate combination of online and offline learning activities;
- *Asynchronous online distance teaching and learning*: based on a course design with a continuous physical separation between teacher and learner.

These approaches can be combined: one of these approaches can be dominant while another one can be complementary. This is to be evaluated by the programme and course teams.

9.1.6. Share, evaluate and align tools

The *alignment and coherence of the learning tools* (learning environment, software, media,…) used in the program are to be based on learning activities in courses, coordinated by the teaching and support staff in the program and informed by evidence or experience.

Tools are used for many functions in education such as assessments and assignments, collaboration, communication, conference calls, virtual classrooms, polls and surveys and feedback and videos.

In and inter-institutional setting, probably many tools are available in the respective learning environments and can be shared.

This rubric supports a multi-dimensional evaluation of functional, technical, and pedagogical aspects of eLearning tools:

https://teaching.uwo.ca/pdf/elearning/Rubric-for-eLearning-Tool-Evaluation.pdf

9.1.7. Design more room for flexibility

Although short learning programs are already flexible, mainly by the modularization and the use of digital modes of delivery, learners at work and international learners need a maximum amount of flexibility. This should be subject to deliberate decisions of the programme team.

Consider if learners can be given the opportunity to adapt particular features of the programme. This includes features like the selection of alternative courses/mobility pathways, alternative modes of delivery (blended courses, online distance courses, traditional courses), workload (full time/part time), pace (institution paced/self-paced), study progress in the program or eventually the possibility to follow courses in other institutions.

9.1.8. Enhance the student learning experience

To reach maturity, a programme must actively offer support and guidance for students to develop and improve their self-regulated learning skills (SRL). This implies that SRL-related activities are incorporated in every course of a programme. and that SRL skills are monitored on a regular basis. Methods and instruments to measure self-regulating learning are described and based on both qualitative (e.g., surveys, observations, interviews) and quantitative data (e.g., from learning platforms, student information systems or other applications) (See: Winne &Perry, 2012 and Gonzales-Torres & Torrano, 2008).

9.1.9. Determine the study load

Define the study load of the curriculum you envisage in terms of ECTS credits, bearing in mind that short learning programs or meant for learners at work with a restricted time horizon and willing to study a particular field for academic and professional updating and career development. The study load of an SLP should not be higher than 30 ECTS.

The study load, including deadlines, of different components in a short learning program are aligned.

The study load between courses should be deliberately aligned. The study load and peaks of parallel courses in a programme are taken into consideration.

The study load in a programme must be monitored, evaluated and adjusted.

9.1.10. Make the programme inclusive

Consider the diverse needs and backgrounds of students in order to create a program where all students feel valued, safe, have a sense of belonging, and where all students have equal access to the programme. Align the inclusiveness between all courses of the program. The realization of inclusiveness is based on evidence or experience.

9.1.11. Design staff and student mobility modes

In the design phase of the program, sequencing and structuring the courses into the curriculum, also the added value and relevance of the (virtual) mobility component has to be consider and justified. How to make the staff and student mobility relevant and instrumental to the purposes of the curriculum? How are the mobility pathways in the SLPs designed and embedded?

Staff mobility is needed in all stages of setting up a joint curriculum:

- *internal or embedded staff mobility within the partnership*: staff of the partner institutions among other things co-design the joint curriculum; develop the courses and the technological resources planned; install the administrative framework; jointly implement the program, including the admission, examination and certification of students;
- *external staff mobility from outside the partnership:* external staff and experts can be invited, eg for guest lectures, webinars, projects or demonstrating good practices.

Student mobility is to be structurally provided in a joint curriculum:

- *internal or embedded student mobility:* students participate in the distributed curriculum at successive partner universities. In linear curricula, cohorts of learners follow the same mobility path. In branched curricula, they follow the core curriculum and individual study paths (ISPs), which are planned in the learning agreement when learners start the SLP;
- *external student mobility:* learners can still follow courses in a third institution as part of a learning agreement between the learner, the partnership and the third university hosting the learner.

As courses can be taught in different delivery modes, also mobility can be synchronous hybrid (eg virtual classrooms, webinars), blended (face to face and online combined) or virtual/online always in accordance with the courses.

In the design of the mobility in a joint curriculum, tools from the ECTS Users' Guide are used:

- all components in the joint me are recognized by awarding *ECTS credits* (learning outcomes, workload);

- a *learning agreement* between learner and the partnership on his individual study path (ISP) is signed before the start of the SLP and gives the student the confirmation that the credits he/she successfully achieves (core and mobility parts) will be recognized for awarding the SLP qualification;

- the *transfer of records* (credits and grades for the mobility components are saved in the central database of the SLP).

10. Design a collaborative course, course unit or learning block
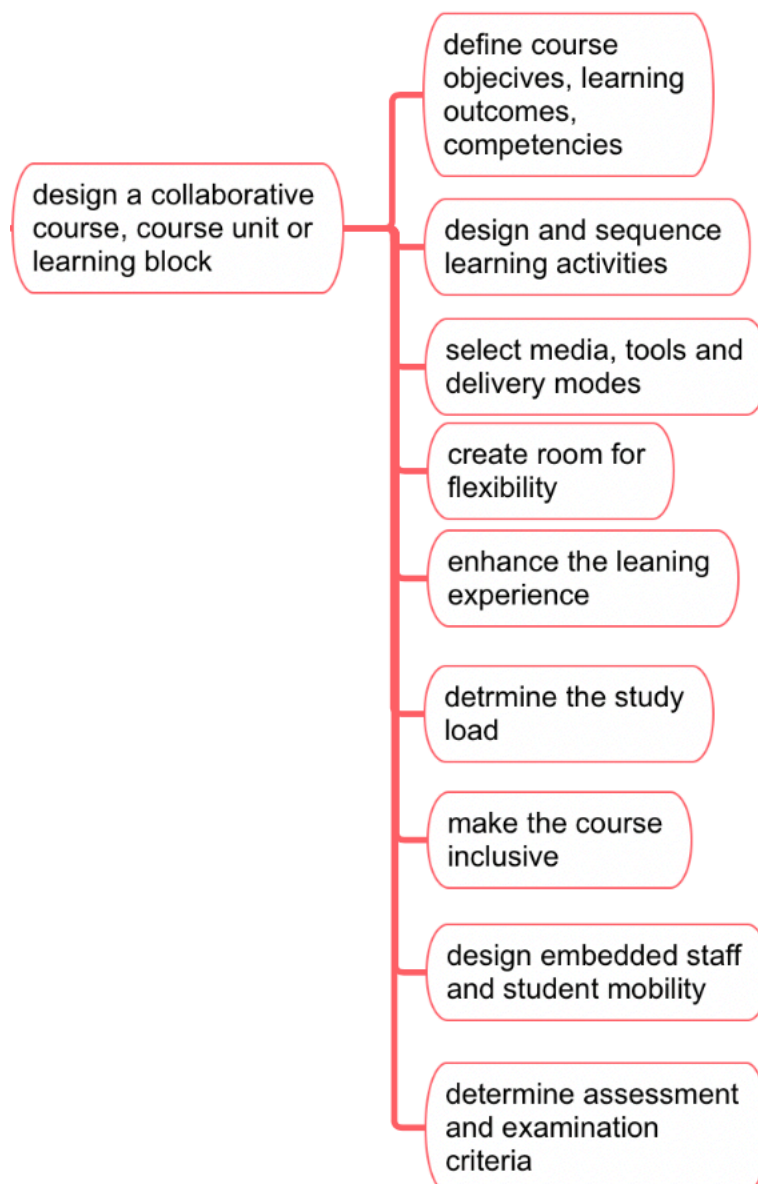
Figure 9: Designing a collaborative course, course unit or learning block

A learning block or course unit is here understood as a self-contained, formally structured learning experience that focuses on a coherent and explicit set of learning outcomes and consists of defined learning activities consistent with the objectives and time allocated within the curriculum, and appropriate assessment criteria (see also the ECTS User's Guide:

https://ec.europa.eu/assets/eac/education/ects/users-guide/glossary_en.htm#ectsTop

When a puzzle design for the SLP is used, courses don't have to be newly designed, but only adapted for integration in the new SLP.

When the programme team is opting for a primary design approach, successive decisions for each course have to be made which are to be consistent with the curriculum:

- define course objectives, learning outcomes, competences related to the joint curriculum;
- design and sequence learning activities;
- select media, tools and delivery modes;
- create room for flexibility;
- enhance the learning experience;
- determine the study load;
- make the course inclusive;
- design embedded staff and student mobility at course-level;
- determine assessment and examination criteria and methods.

10.1. Guidelines

10.1.1. Define course objectives, learning outcomes, competences related to the joint curriculum

The courses or learning blocks are part of the curriculum and therefore derive their objectives from it:

- Formulate and justify the objectives of the course referring to the broader curriculum objectives of the short learning programme or the microcredential. Specify the content to be covered and the cognitive processing level, corresponding with the EQF level of the programme;
- take into account the characteristics and needs of the target groups and assure the corresponding academic and professional orientation;
- Define concrete learning outcomes or competences, using a consistent approach, eg Bloom's taxonomy (See also: https://thesecondprinciple.com/essential-teaching-skills/blooms-taxonomy-revised/) and/or the ESCO classification ((http://www.ehea.info/Upload/TPG_A_QF_RO_MK_1_EQF_Brochure.pdf);

10.1.2. Design and sequence learning activities

Use a learning design approach, for example

- The learning designer (Laurillard, UCL): https://www.ucl.ac.uk/learning-designer
- ABC (Laurillard, Young and Perović, UCL) (acquisition, investigation, discussion, collaboration, practice and feedback, production): https://abc-ld.org/nl/over/
- Carpe Diem Learning Design (Salmon), much related to Bloom's categories: https://www.gillysalmon.com/carpe-diem.html
- 4C/ID (van Merriënboer, OUNL, Maastricht) https://www.4cid.org/about-4cid

In case a short learning program is based on MOOCs delivered by a platform such as Futurelearn, possibly specific templates for course design and learning activities are used. These templates are in some cases based on the learning design approaches just mentioned. MOOC design has to take it into account that the course is open for everybody everywhere and for massive numbers of participants. Increasingly, European MOOC platforms and universities develop microcredential, short learning and also degree programmes based on MOOCs.

Detailed examples of learning activities can further be found in *Design Guidelines for Flexible and Scalable SLPs* (Maina and cs. See: https://e-slp.eadtu.eu/images/D42_Guidelines_final.pdf) such as tasks connecting theory and practice, case studies, peer learning activities, social learning activities, virtual classrooms, interactive video augmented reality, the flipped classroom, etc.

Learning activities are to be meaningfully sequenced: a course can consist of acquisition activities by virtual lectures, followed by virtual classrooms or reading assignments, then by webinars, group discussions, exercises, simulation games and end up by collaborative productive activities such as writing a publishable wiki. This makes teaching a design science (Laurillard, 2012).

The development of learning activities should include elements increasing the motivation of students, for example by interactions with teaching staff and peer learners, formative assessment reinforcing motivation or by gamification (eg learning competition points, receiving an award for an achievement, etc.).

10.1.3. Select media, tools and delivery modes

The choice of media and technology takes into account the range of media and infrastructural support that an institution can make available for teaching and learning (Coomaraswamy & Clarke-Okah, 2009). The selection of tools should facilitate the learning activities.

Some institutions have developed guidelines for supporting materials, for example the Tool Wheel of the University of Maastricht, based on the conversational theory of Laurillard (Last, Jongen & Hardy, 2020), see: https://tutorials.library.maastrichtuniversity.nl/Tool_Wheel/

Institutions support only a selection of tools and media. When institutions develop a joint program, agreements are to be made on the learning environment(s) or delivery platform(s) to be used. Course

designers should be aware that the use of tools and media is often restricted by their availability on the institutional learning environment:

10.1.4. Create room for flexibility

If needed, design deliberately flexibility for the course which means that learners can adjust particular features of the course according to their needs and preferences, for example the choice of learning activities, the selection of resources, the mode of delivery (online, blended, face to face), the pace of study progress (educator-paced/self-paced).

Online modes of teaching and learning support learning schedules enabling flexible pace and places of learning supported by technology. Learning technologies provide new and flexible learning approaches.

Course flexibility makes learning activities accessible by all students (eventually multi-campus), respecting different time zones and course schedules by a trade-off between asynchronous and synchronous activities.

10.1.5. Design course interactions

Design deliberately course interactions. Different kinds of interaction can be organized: learner-learner interaction; learner-teacher interaction; learner-community interaction; learner-material interaction and learner-technology interaction (Anderson, 2003; Stanley, 2013).

In order to be effective, each of these interactions should be facilitated. Examples of interactive formats are whole class discussions, small group or paired discussions, tutorials, seminars, online discussions, virtual classrooms, discussion of others' outputs online, organizing a peer review cycle, building a wiki or preparing a report or presentation together.

10.1.6. Enhance the learning experience

An important aspect of this is facilitating students self-regulated learning (orienting and planning, monitoring, adjusting and evaluating) (SRL) and metacognition, for example by integrating the seven recommendations of Quigley, Muys and Stinger (2018). See: https://educationendowmentfoundation.org.uk/tools/guidance-reports/metacognition-and-self-regulated-learning/

10.1.7. Determine the study load

The study load of a course for the "standard" student is determined in the program design phase of the SLP. The match between intended and achieved study load should be monitored on a regular basis. Course designers should be aware that large differences in study load can occur between students.

Also, it is well known that blended and online curricula can easily lead to overload by independent learning activities inviting learners to devote more time than planned.

Study load indications per learning unit can help students to plan their study.

Furthermore, it is important that courses or learning blocks are structured in such a way that it facilitates learners to structure their studies in blocks of two to four hours, for example by dividing the course in micro-learning units, by structuring synchronous teaching and learning in course sessions or by allocating a "standard" time to assignments.

Structuring the study load four cohorts of students will contribute to avoiding dropout.

10.1.8. Make the course inclusive

Inclusivity is a complex concept, related to issues of digital accessibility, social inclusion, ethnicity, gender, physical disabilities, learning disabilities.

It can also point to taking measures for specific target groups such as learners at work and athletes, artists or prisoners.

This dimension means that different needs and backgrounds are included and students feel valued, safe and get a sense of belonging by, for example by differentiating learning pathways.

10.1.9. Determine examination criteria and methods

It is important that learners know in advance the examination criteria and examination methods for a course, so that they can tailor learning to the learning outcomes and competences they have to achieve through the course. The way in which the examinations are taken is in principle determined during the design of the SLP.

In case of online examinations, proctoring is an issue that has to be solved. Latest developments are discussed in the TESLA project. See: https://tesla-project.eu

During the course of the project, formative assessment is organised to support learning and to adapt or differentiate teaching. Frequently practiced modes of formative assessment in online learning are quizzes, self-assessment, peer assessment and learning diaries for practice learning. For all these modes giving adequate feedback is key.

10.1.10.   Engage in collaborative course design and development

In case individual courses or course units are jointly designed and developed by a collaborative course team, some of the dimensions of digital course design need additional specifications, for example:

- *Distribute the design and development of learning activities* over the partnership. The international course team has to start with a course plan consisting of well sequenced learning units of for example four hours. Each partner develops learning units closest to its expertise. Strong course team leadership is needed to realise the course objectives set and the coherence between courses in the curriculum; [1]
- *Organise international learning activities, involving* international staff and learners within the course, for example in an intensive program, webinar or think tank;
- Share learning tools and media supporting teaching and learning.

10.1.11. *Design embedded staff and student course-level mobility*

Within an individual course, blended and online mobility can be embedded through physical, blended or online learning activities such as intensive programmes, summer or winter schools, international seminars, think tanks, projects. These collaborative learning activities are jointly designed by the partnership. Mobility is embedded in the course and inherent to the course. Interactions between students as well as with staff are a main characteristic in this type of mobility.

Mobility is subject of the learning agreement between the learner and the SLP partnership which is effectuated when the learner enrolls in the program. It is part of the course and thus contributes to the allocation of ECTS credits for the course.

Mobility activities can also be offered as a non-mandatory alternative option for some part of a curriculum at the level , of a learning activity.

In some cases, mobility is provided as an option in an honors program.

The mobility is mentioned in the course description and subsequently on the diploma/certificate supplement.

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[1] See: the TESLA project. https://tesla-project.eu

11.Agree on qualifications for the joint programme
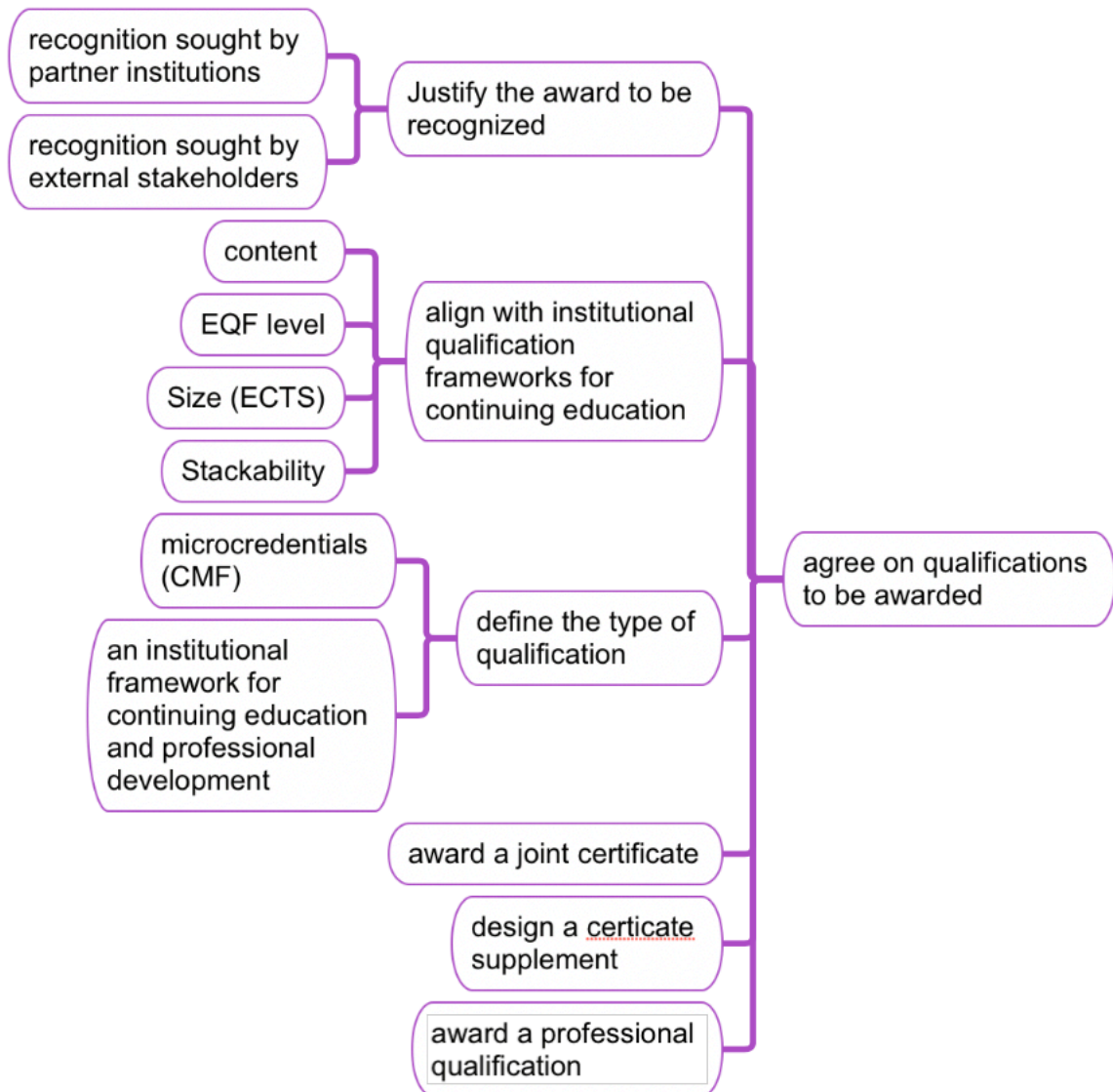
Figure 10: Agreeing on qualifications for the joint programme

The partnership has to agree on a qualification for the short learning programme. Successive decisions have to be made:

- Justify the award to be recognized;
- Align with institutional qualification frameworks for continuing education;
- Define the type of qualification to be delivered;
- Award a joint certificate;
- Design a certificate supplement;
- Award a professional qualification.

11.1. Guidelines

11.1.1. Justify the award to be recognized

Justify why the joint SLP should lead to an academic recognition by the partner universities and which joint certificate should be awarded. Take into consideration the content, the EQF-level, the size of the program and its eventual stackability to other programs.

Seek also recognition by external stakeholders such as professional organizations and employers to allow learners to valorize their SLP certificate for professional development or accreditation by professional bodies (eg related to professions in psychology, IT, medicine/health care, accountancy, education, business sectors).

11.1.2. Align with the institutional qualification structures

Participating institutions probably practice very different institutional qualification structures for continuing and professional development as can be derived from the course catalogs. These qualification structures are adopted by institutions autonomously, eventually fitting national frameworks.

In a collaborative setting, partners have to agree on a common qualification for the joint SLP, as much as possible in line with formal requirements of each institution. This requires a careful discussion.

Not all universities have developed such a f qualification structure, neither did governments always develop a framework. Actually, many institutional structures are in development and in most cases not yet stable. They might converge to following characteristics and cases:

- an online course with a size of less than 1 ECTS is delivered as *a micro-leaning unit*, eventually awarded with a badge of attendance. The course can eventually serve as a learning unit in a credited course or as a micro-learning unit in a corporate training programme;
- an online course of one or more ECTS can be delivered as a *credited online course* after a reliable and valid assessment.
- A short earning programme can be awarded on different levels of qualification depending of volume and EQF level, for example:
  - o it can be delivered as a coherent short learning pathway of 4-6 ECTS, awarded with a *CMF microcredential qualification*. This qualification can be stackable to a broader SLP programme;
  - o It can be delivered as a short learning programme of 20-40 ECTS, awarded *with a undergraduate or postgraduate certificate*. It can also be awarded after a modular sequence of CMF qualifications constituting the SLP;
- A *bachelor or master degree* can eventually be awarded after a modular sequence of microcredential or SLP qualification*s.*

11.1.3. Define the type of qualification to be awarded

Partners have to define the type and a name for the qualification awarded by the joint SLP.

In the framework of the European Education Area and the European Digital Education Plan, the European Commission has prepared a Recommendation to the Council of Ministers on microcredentials in 2021, which is expected to be implemented by the member states by 2024. This will align and engage institutions for adopting a more harmonized approach to qualifications for continuing education and professional development.

In the Common Microcredential Framework, a microcredential qualification meets following requirements, responding to the study time horizon of learners combining work and study:

- A EQF qualification level at 5 to 8;
- A workload from 4 to 6 ECTS or 100 to 150 hours of study;
- A reliable and valid assessment;
- Stackability to other programs.

Broader short learning programs are awarded with an inconsistent variety of certificates in Europe, for example: "Undergraduate/Postgraduate Certificate", "Undergraduate/Postgraduate Module", "Expert Track Certificate" "Specialisation in…, "Expert in…", "Professional Certificate", "Focus Diploma".

Some short learning programs contain MOOCs or are completely MOOC-based with qualifications as "MicroMasters" and "Nanodegrees".

In the meantime, a European consensus seems to be reached about the principles for the recognition of microcredentials and short learning programs, notably in the Microcredentials for Higher Education Consultation Group (2020) and in the Microbol project (2021) on the use of Bologna tools for microcredential programmes and qualifications. These reports use the term microcredentials for all continuing education and professional development programs which are smaller than a degree program. So far, the question of harmonization of qualifications within this field is not answered

11.1.4. Award a joint certificate

Joint programs deliver joint awards or certificates, signed by all rectors or the deans of the faculties involved in the partnership. The award is issued on one single document according to rules practiced in the leading university. Sometimes a joint certificate is bound to national regulations, mainly considering the language of the certificate. In case two universities are involved, a certificate is issued on both sides of the document, signed by both universities.

When a joint certificate cannot be issued for some important reason, a double or multiple certificate is awarded. In the case of a joint program with two universities, this means that the student receives two certificates, one of each university. This double or multiple certification is mentioned on both supplements. Typically, a double or multiple award is also issued in case a learner follows a substantial mobility window or course package at another university (see PA mobility windows). Manifestly, this case is very different from a joint program co-owned by universities in a consortium, for which as a rule a joint certificate should be issued.

11.1.5. Design a certificate supplement

A certificate for a joint program is accompanied by a certificate supplement, containing information as detailed by the ECTS Users' Guide and Europass. This is important for the valorisation of the certificate in academia and by employers. Descriptors are (See:

http://ehea.info/Upload/document/ministerial_declarations/EHEAParis2018_Communique_AppendixIV_952782.pdf):

- information identifying the holder of the qualification;
- information identifying the qualification;
- information on the level and duration of the qualification;
- Information on the program completed and the results obtained;
- Information on the function of the qualification (eg its stackability)
- the certification of the supplement;
- information on the national higher education system;
- additional information.

Additionally, it should contain:

- information on the mobility scheme followed in the joint program;
- Information on the mode of delivery.

11.1.6. Award a professional certificate

In some cases, short learning programs are co-created or accredited by professional organizations, business sectors or public services. These organizations will recognize these programs as part of their continuous professional development activities or professional accreditation. Possibly, these programmes are (co)funded by the sector or recognized for funding fees through a (national) personal learning account.

In other cases, external stakeholders will deliver a specific professional certificate next to the academic award of the program consortium.

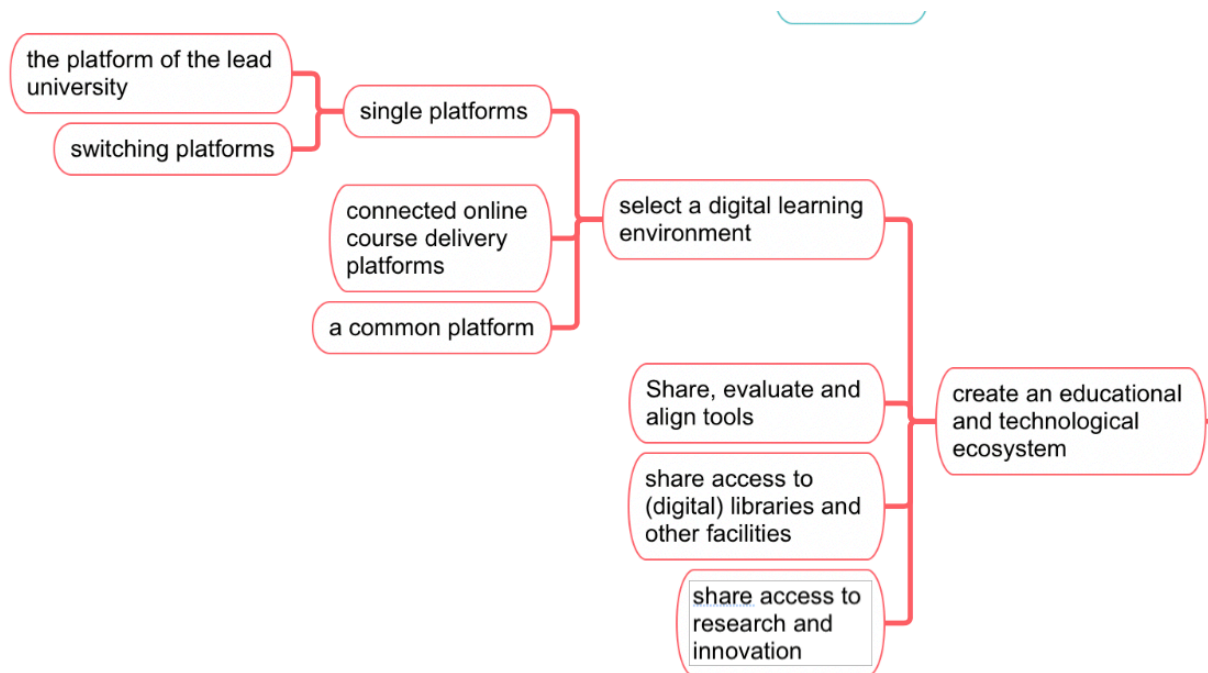## 12. Create an educational and technological ecosystem

Figure 11: Creating an educational and technological ecosystem

The partnership has to take decisions on sharing a joint educational and technological ecosystem for the short learning program:

- Select a digital learning environment;
- Share, evaluate and align tools;
- Share access to digital libraries and other facilities;
- Share access to research and innovation.

12.1. Guidelines

12.1.1. Select a digital learning environment

Decide on which learning environment/platform partners will organize their learning activities.

A first option is that all partners organize online learning activities on a single learning platform, preferably the platform of the leading university, which is comfortable for the learners as they don't have to switch during the course of the programme.

A second option is that learners switch learning platform when they start a course at another partner university, which is probably comfortable for teaching staff, but less for students. In this case, the platform is connected with the course followed. Actually, this is reflecting mobility paths in physical

joint programs, students switching university as the curriculum proceeds. Teaching staff can easily use software and extensions connected with the learning platform they are used to.

A third option is that institutional learning platforms or connected with each other. In European University alliances (EUI), many courses are planned to be co-organized in a blended or online format. In this case, it is useful to look for a smart connection between institutional platforms in the alliance, serving all collaborative courses and programmes and mobility schemes. OpenU is preparing middleware for making such connections.

A fourth option would be that online courses and programs are supported on a national or European platform for all learners. On such common platform, universities and teaching staff are supported for designing courses and programs, including interactive learning communities. National platforms or not yet established for this purpose. In practice, the European MOOC platforms fulfil already this task for online courses (MOOCS) and (MOOC-based) programs up to a degree level, notably Futurelearn; France Université Numérique, FUN; Miriadax and EduOpen.

12.1.2. Share, evaluate and align tools

See above, under "design the joint curriculum - Share, evaluate and align tools

12.1.3. Share access to digital libraries and other facilities

Share access and guide students to use resources in digital libraries in the respective partner universities and faculties, extending their usual learning environment to partner universities.

Give students access to other institutional facilities such as digital labs, simulations, learning games, where appropriate.

12.1.4. Share access to research and innovation

In universities, research, innovation and education are intertwined (the knowledge triangle). Make sure that learners have access to research and innovation in relevant partner universities' departments, for example to webinars, projects, thesis work, opening minds for innovation and triggering motivation for further study. Learners can eventually do so as an extra-curricular activity.
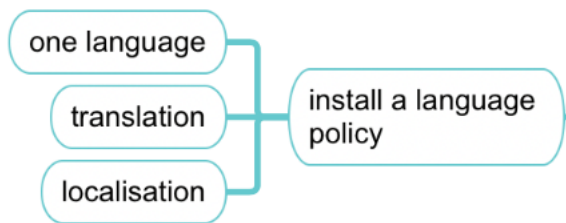
13. Install a language policy

Figure 12: Installing a language policy

In most collaborative programs, one language is used as a teaching language, usually English. In contrast to physical mobility in the Erasmus program, short learning programs are not meant for language acquisition, although learners have to deal with different languages and associated cultural backgrounds. The improvement of intercultural skills can therefore be an explicit objective. In some programs, each university is teaching in its own language, which is more challenging with "small" languages.

The programme team also can opt for the translation of a course or a course package in the programme. This has become easier with the modern language software. The interaction between learners speaking different languages is then still a challenge, although in the European context most (young) learners have a certain level of English proficiency.

Lectures or videos which are part of the programme, can eventually be subtitled.

When courses or course packages are translated, they eventually can be localized which means that the content of the course is adapted to the linguistic, social and cultural context of the partner.
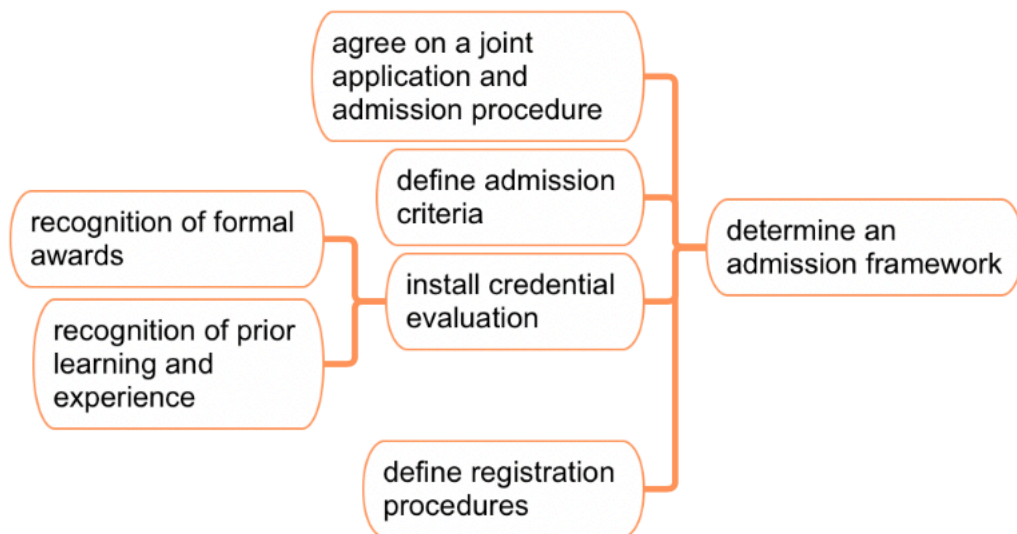
14. Define an admission framework

Figure 13: Defining an admission framework

The programme team determines a joint admission framework, which includes:

- Agree on a joint student application and admission procedure;
- Define admission criteria;
- Install credential evaluation;
- Define registration procedures.

14.1. Guidelines

14.1.1. Agree on a joint student application and admission procedure

The programme team, chaired by the lead university and constituted by a representation of each of the partner universities, is responsible for the admissions (if this is not delegated to an admission committee). It meets each time before a cohort of new students is entering the program.

It adopts a joint application and admission procedure which is transparent, fair and objective. It will also assure equity, taking into account the life conditions of students with special needs or different social backgrounds.

14.1.2. Define admission criteria

Admission criteria are determined by the programme team, considering different options:

The admission for the short learning programs can be open, which means that it is not dependent from formal requirements like a diploma. The admission committee can ask the learner to prove that he has

already acquired prior competences (knowledge, skills) needed in order to follow successfully the programme, showing his CV or learning portfolio, formal education awards, professional training certificates or work experience. On this basis, the board will evaluate the student's readiness for the program and advise him for admission, eventually proposing a preparatory course or course unit.

An open admission is most appropriate for short learning programs, that are intended to contribute to professional or personal development.

An open admission is not always possible, for example in case the short learning program is a stackable module in a formal degree program. Possibly, the learner has to be informed that he can't valorize the short learning program qualification for being enrolled in the degree program, when he doesn't meet all (legal) preliminary conditions for this degree.

In the case of a post-bachelor or post-master short learning program, the examination committee might require the corresponding bachelor or master degree as an admission requirement.

14.1.3. Install credential evaluation

Credential evaluation is only needed in case formal entry qualifications are required for the short learning program. The program team will look into prior formal degree qualifications or course credits obtained at other (international) universities.

The programme team can also assess and formally recognize prior knowledge or experience according to institutional rules and it can award credits (ECTS) for it. This exempts the learner from units or parts of the short learning program. In this regard, most institutions follow the rules of the ECTS Guide.

14.1.4. Define registration procedures

For being awarded course credits and the joint certificate at the end of the program, learners must be enrolled in each of the partner institutions. A learner can register for the program at any partner institution, by which he gets a main registration and a secondary registration with only a small fee in the other institutions according to schemes to be elaborated between the respective student administrations. This results in the capacity for each of the rectors or deans of faculty to sign certificates. The fees associated with the registration can finally be distributed among partners according to joint rules (see below).

It is also possible that the student enrolls consecutively for a course at each of the partner university as the program progresses. This is administratively complicated for the learner and for the program team. Probably, also the total fee to be paid by the learner will be much higher at the end as a full fee has to be paid at each university.
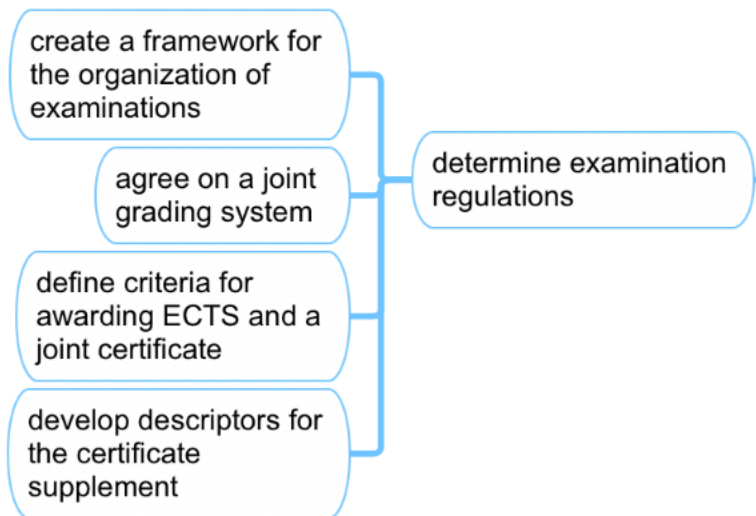
15. Determine examination regulations

Figure 14: Determining examination regulations

The programme team develops joint examination regulations by which following aspects have to be considered:

- Create a framework for the organization of examinations;
- Agree on a joint grading system;
- Define criteria for awarding ECTS;
- Develop descriptors for the certificate supplement.

15.1. Guidelines

15.1.1. Create a framework for the organisation of the examinations

Partners have to agree on a joint examination methods and mechanisms to assess the learners' achievements, notably related to types of examination, academic and professional recognition, ID verification, proctoring exams, etc.

Formative assessment and feedback as well as peer evaluation are tools to improve learning during the course and to promote effective learning.

Explicit summative assessment is needed for awarding credits and certificates for the joint learning program according to criteria communicated before the course is starting. In the case of short learning programmes, summative assessment is often organized at the end of a module after completion of successive formative assessments.

Partners have to agree on a common approach for both.

15.1.2. Agree on a joint grading system

European universities practice different grading scales, for example 1-20; 1-10; 1-5 or 1-30. In some countries, almost a binary pass-fail system without further distinctions is used. The achievements on these different grading scales are often difficult to compare and can complicate the transfer of records as the programme team has to reach consensus for awarding a final grade or certificate to each learner.

Therefore, it is important that partners adopt a joint grading scale for the program (preferably the scale of the lead university, eg 1-20).

Grades and the transcript of records is to be based on a learner's achievement against pre-specified learning outcomes or competences (criterium-referenced assessment) and not on the (normalized) statistical place of a learner in the class group (norm-referenced assessment), which would raise ethical considerations. Partners should keep examination copies in order to eventually enable the programme team to re-scale achievements according to the grading scale chosen.

15.1.3. Define criteria for awarding credits (ECTS) and a joint certificate

Teaching staff organizing a course in the joint program is academically responsible for the final examination for the course. As a consequence, the examination must always be taken by this staff. ECTS credits will be accordingly awarded by the university to which the staff belongs.

The certificate for the entire short learning program is awarded by the programme team, based on the total achievement of the learner on all courses. This requires common rules and sometimes a collegial deliberation and jurisprudence at the end.

From an administrative point of view, the grade records of students should be saved on the joint database developed in the system of the lead university. The certificate supplement can be rolled out by this system.

15.1.4. Define descriptors for the certificate supplement

The certificate for the short learning program should be accompanied by a joint certificate supplement consisting of information as detailed by the ECTS Users' Guide and Europass (see above, under "Agree on qualifications"). The programme team should agree on the descriptors on the diploma supplement.

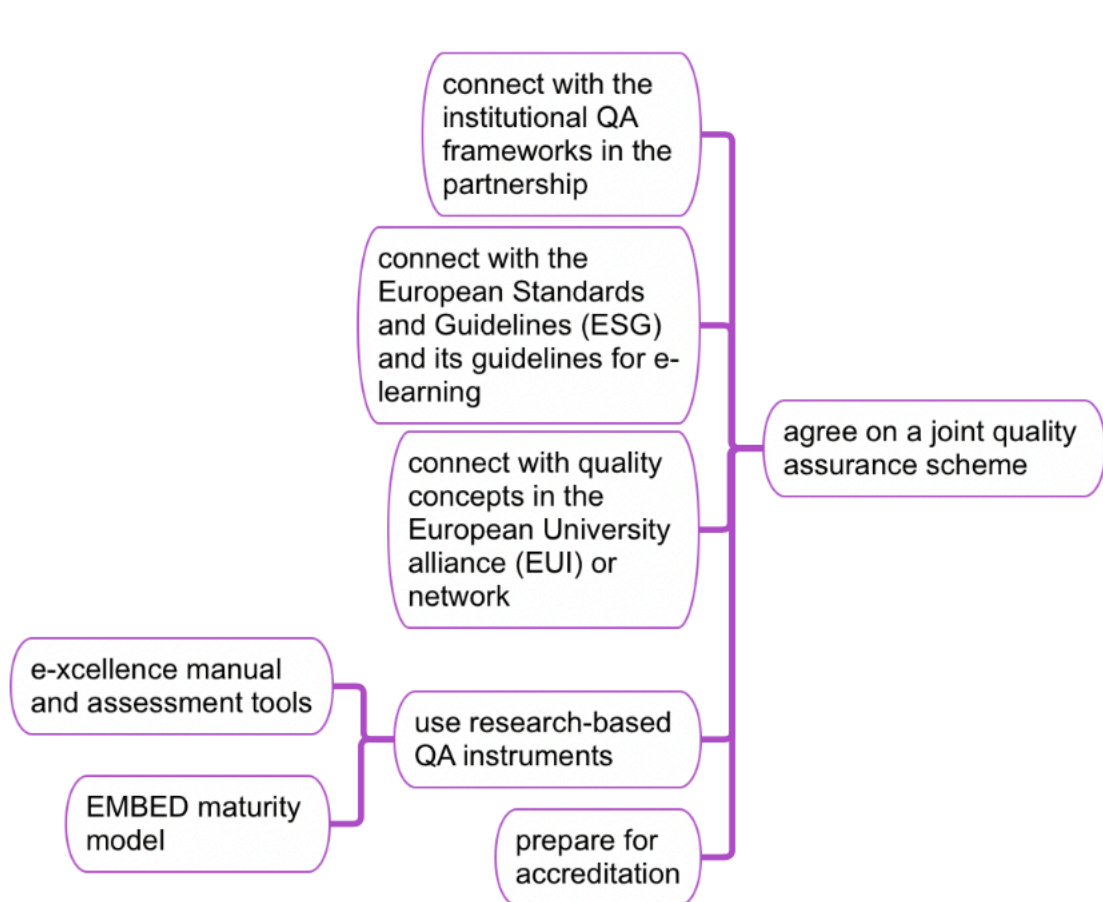## 16. Agree on a joint quality assurance scheme

Figure 15: Agreeing on a joint quality assurance scheme

The quality assurance for a joint short learning program is a common responsibility of the partnership. In this respect decisions have to be taken about:

- Connect with with the institutional quality assurance frameworks in the partnership;
- Connect with the European Standards and Guidelines (ESG) for quality assurance and its guidelines for e-learning;
- Use research-based-based quality assurance instruments
- Prepare for accreditation.

16.1. Guidelines

16.1.1. Connect with institutional quality assurance frameworks

The programme team has to define an integrated quality assurance plan for the joint program, building on the internal quality assurance of the respective universities.

Teaching staff is responsible for the academic content and level of the course within the framework of the joint curriculum. As an institution, each partner university is responsible for the quality assurance of the courses its teaching staff is delivering in the programme. The programme team can add quality criteria and procedures for the entire program, for example in relation to specific (joint) learning activities and for other curriculum-level aspects to be covered.

The joint programme team will bundle the quality assurance reports and discuss the results.

In quality assurance, a variety of criteria and indicators are taken into account, notably:

- study progress and success;
- compliance of the study results with learning outcomes and pre-specified competences;
- learning experience satisfaction during the programme;
- the content and level of the program;
- data from learning analytics.

16.1.2. Connect with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) and its guidelines for e-learning

The institutional quality assurance procedures will meet the ENQA Standards and Guidelines. For the online learning aspects, it will follow the guidelines from the ENQA working group on quality assurance and e-learning.

In a broader perspective, other criteria can be taken into account, for example related to the New Skills Agenda (2020) and the Recommendation of the European Commission on microcredentials.

16.1.3. Connect with quality concepts in the European University alliance (EUI) or network

The EUniQ project (2019-2021) develops a quality assurance approach for European universities (EUI). This approach is focusing on multicampus education of which joint programs are an important part.

The project helps the alliances to both define and self-assess their quality. In the pilot phase, these core questions were leading:

- What is the European University's vision on the quality of its education and, where possible, research, innovation and service to society
- How will the European University realise its vision?
- How does the European University monitor to what extent its vision is actually realised?
- How is the European University working on improvement?
- How is the quality of the European University's provision assured in an internationally accepted manner?

When developing an ESLP, connect with quality concepts and frameworks of your university alliance or network.

16.1.4. Use research-based quality assurance instruments

E-xcellence is a quality assurance instrument for online, open and flexible education. The self-assessment tool is accompanied by and extensive manual offering guidance for improvement, covering blended and online course and curriculum design, student and staff support and strategic management. E-xcellence offers also onsite reviews.

The *European Maturity Model for Blended Education* (EMBED) can be used to assess the maturity level of courses, programs and institution-wide provisions. The concept of 'maturity' relates to the degree of a regular formal and deliberate optimization of the design, evidence-based decision making, documentation and the quality of decisions made by the programme team and individual staff.

16.1.5. Prepare for accreditation

In most European countries, universities are accredited at the institutional level. As a consequence, university programmes are not systematically accredited at the programme level anymore. The institutional accreditation includes assumes that internal quality assurance procedures are in place for the programmes organized.

When an institutional accreditation takes place, it is still possible that individual university programmes have to go through an accreditation procedure. Some short learning programs will be assessed as part of such programs.

If a short learning program would have to undergo an accreditation, an ex post is preferable to an ex ante procedure, which would take time and hinder the responsiveness of the programme to imminent needs in the economy.
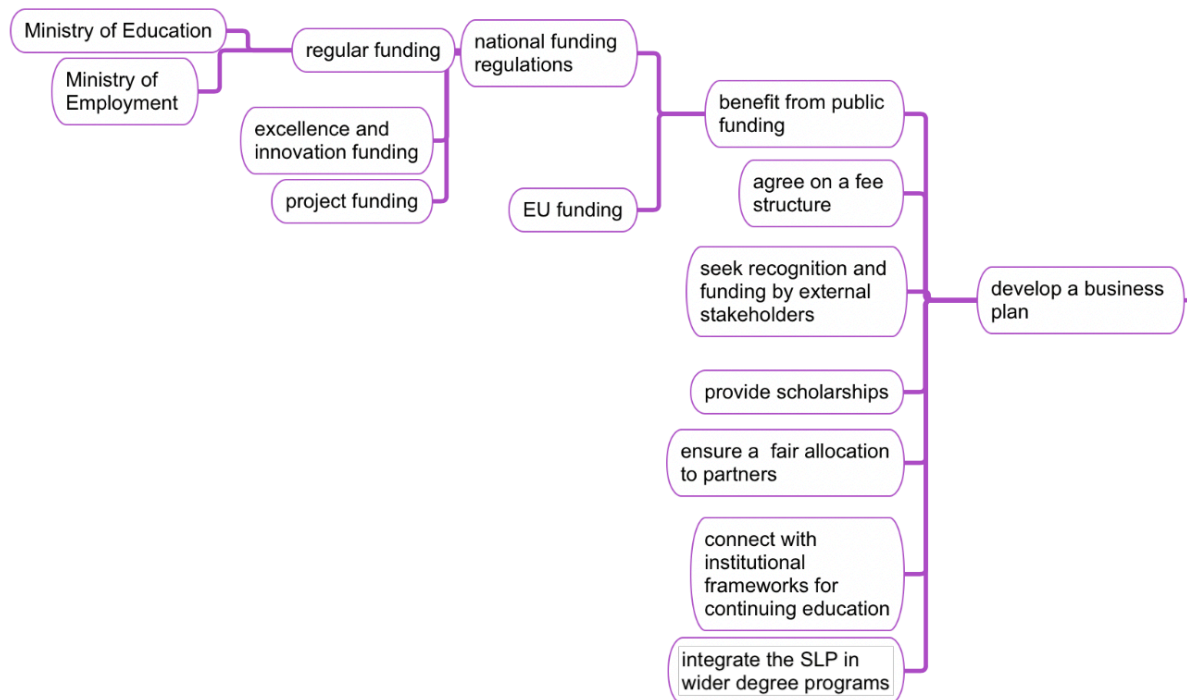
17. Develop a business plan

Figure 16: Developing a business plan

The partnership has to develop a business plan for the short learning, program which is dependent from a set of parameters, depending from national and institutional policies and strategies:

- public funding;
- student fees;
- funding by external stakeholders;
- scholarships.

The partnership has also to decide on:

- the allocation of collective funding streams to individual partner university;

Individual partners have to decide on:

- institutional business models for continuing indication

17.1. Guidelines

17.1.1. Public funding

The *national funding* of short learning programs can vary greatly from country to country. In some countries short learning programs are not recognized for funding.

Recognition would ensure that short learning programmes are funded as independent offerings for continuing education and as a pathway to degree programs.

Project funding is supportive, but not enough to ensure the long-term sustainability of short learning programs.

In a start phase, short learning programs can eventually be funded as strategic experimentations by European programs as Erasmus+ or the European Social Fund.

Recently, the development of joint learning programs is often funded in the framework of the European Universities Initiative (EUI), by which alliances develop innovative educational formats for blended or online continuing education.

17.1.2. Student fees

The partners determine jointly an enrollment fee for the joint short learning program. Eventually, they can differentiate this fee for individual and collective enrollments. They should take care that individual fees or affordable for learners.

A complicating factor is that enrollment fees for higher education in general vary from country to country and that in some countries even no fees are paid.

In determining enrollments fees, partners have to find a balance between the fees in different national systems and other public and private income streams at one hand, and the operational cost of the program at the other hand.

Partner universities can consider that online programs are more scalable and therefore the marginal cost per student can be lower, which can influence the fee structure for a programme.

17.1.3. Funding by external stakeholders

in some areas which are relevant for employability and innovation, partners might seek interest of external stakeholders like businesses, business sectors or professional organizations to recognize and support a short learning program, for example by sectoral funds.

In some countries personal learning accounts are created, supporting students for participating in continuing education programs.

17.1.4. Scholarships

in case of high enrollment fees, joint learning programs might provide scholarships for individual students, sponsored by companies or other stakeholders.

17.1.5. Allocation to partners

In the case of public funding, partners are bound to national regulations. In developing business models, fees and private funding streams can be allocated between partners according to their real contribution to the program.

17.1.6. Institutional business models for continuing education

Joint short learning programs are integral part of the continuing education provisions of an institution. At the same time, they are co-owned by every individual partner university. As a consequence, in every institution they should be managed as a separate entity. To promote innovation, the income streams for short learning programs should be directly allocated to the faculty and to the joint programme team.
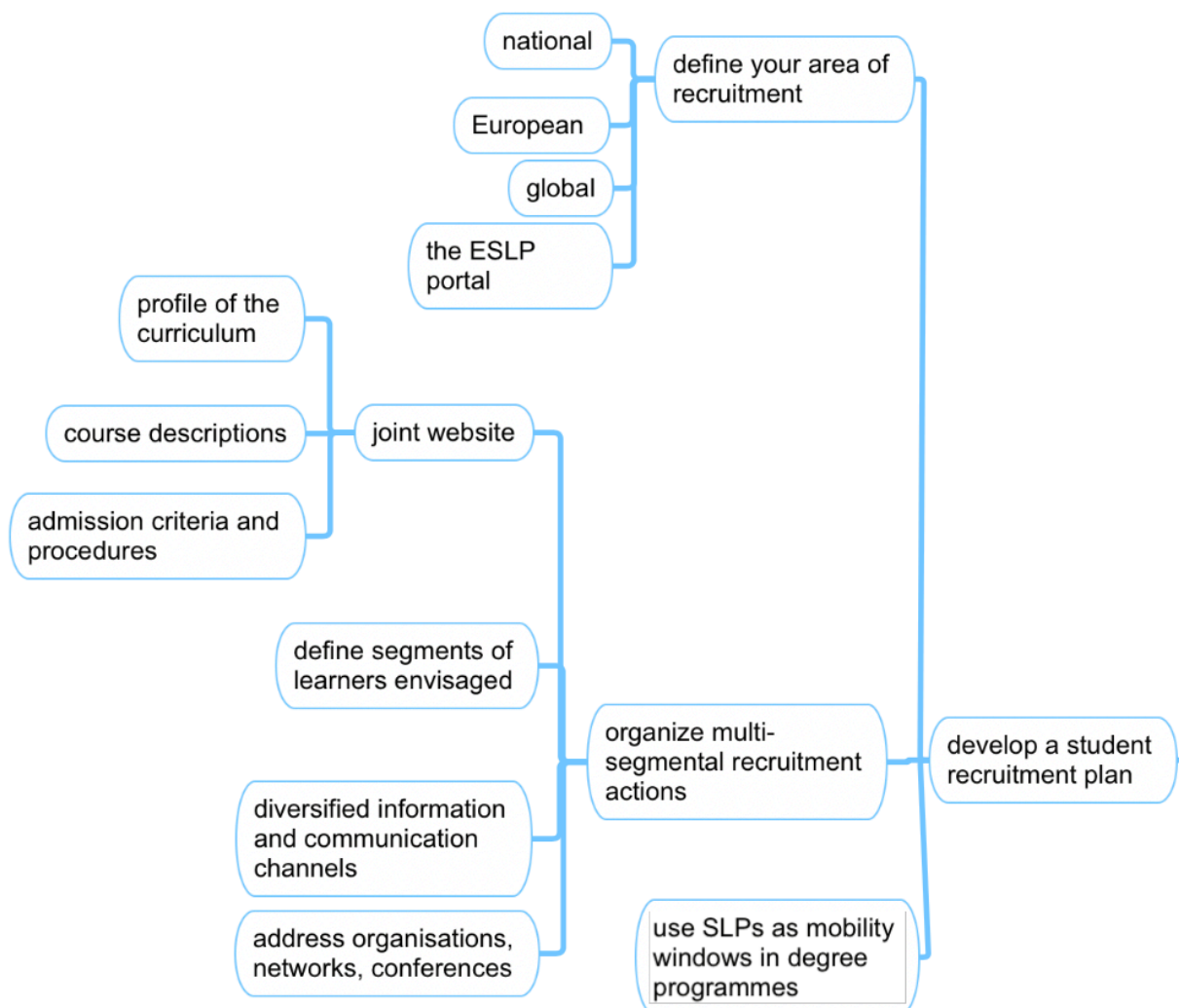
18. Develop a student recruitment plan

Figure 17: Developing a student recruitment plan

Partner universities have to conceive a joint student recruitment action plan for the joint learning program, determining:

- Define your area of recruitment;
- Organize multi segmental recruitment actions;
- Use SLPs as a mobility windows in degree programmes

18.1. Guidelines

18.1.1. Define your area of recruitment

Depending on the objectives and the design of the joint learning program, partner institutions can recruit students at the national, European and global level. In case of a transnational delivery, course and program designers have to take into account learner characteristics and contexts transcending their institutions or partnership.

The ESLP portal gives learners access to information on European short learning programs and links them to the website of the programs concerned where they can register and start the admission process .

18.1.2. Organize multi-segmental recruitment actions

The partnership has to organize recruitment actions for transnational delivery. Therefore, a joint website is needed, clarifying the objectives and the profile of the program, the course descriptions and testimonials as well as the student profile and admission criteria.

Recruitment actions are to be set up, addressing businesses, business sectors, professional organizations, alliances and networks as well as individual students. Different communication channels can be used such as mailings, social media and participation in conferences and fairs. Communication and recruitment actions should be set up per segment of learners envisaged.

18.1.3. Use of a SLPs as mobility windows in degree programmes

Short learning programs are particularly suited to serve as a mobility window for wider university programs. In order to operationalize this for a joint program, a learning agreement between the partnership, the home university and the student is needed (see Priority Action on mobility windows)

19. Conclude a consortium agreement

To consolidate joint responsibilities and activities, a consortium agreement is to be concluded which will concern:

- The composition of the partnership;
- The role of the program team;
- The objectives of the program;
- The main structure of the program;
- The main pedagogical principles;
- The mode of delivery;
- Mobility agreements;
- ECTS credits and qualification awarded;
- The language policy;
- The admission;
- The examination committee;
- Quality assurance mechanisms;
- The financial management, including public and private funding and fees;
- Use and exploitation of the learning material;
- Confidentiality and data protection;
- Agreement period;
- Liability and disputes.

20. Develop a sustainability framework

Figure 18: Developing a sustainability framework

The partnership develops a sustainability framework based on strong basis:

- Develop joint mid-term and long-term policies and planning schemes;

- Keep aligning and engaging partner universities;

- Organize an annual program evaluation for improvement;

- Develop a sustainable financial framework;

- Promote the wider development of continuing education.

20.1. Guidelines

20.1.1. Joint mid-term and long-term policy and planning

The partner universities adopt a mid-term and long-term policy and planning for the joint program with qualitative and quantitative milestones related to attracting national and international students, income streams, study progress and success, learning agreements with third universities, cooperation with stakeholders and other factors they want to consider.

20.1.2. Alignment and engagement of the partner universities

The partner universities remain aligned and committed to the shared objectives, main structure and pedagogical principles of the program and the qualifications awarded. They regularly assess the relevance of the program for the partnership and the individual universities.

20.1.3. Annual program evaluation and improvement

The partnership carries out an annual course and program evaluation with recommendations for improvement. The evaluation can concern dimensions like the relevance and coherence of the program, the alignment with the technological ecosystem for course delivery, the interactions between staff and students, learning communities and discussion fora, the student learning experience and workload, and the inclusiveness of the program.

The excellence instrument can contribute to this evaluation.

20.1.4. A sustainable financial framework

The partnership has to develop a mid- and long-term financial plan starting from the original business plan, consisting of income streams from public funding, student fees, external stakeholders and sponsored scholarships . The plan also relates to the allocation of funding streams to individual partners.

The institutional frameworks for continuing education should also ensure that the program income is allocated to the faculty and to the joint program board according to the financial planning.

The plan will also to be flexible, taking into account foreseen and unforeseen changes. Therefore, it should be assessed on an annual basis with advises from financial experts.

20.1.5. *Promote the wider development of continuing education*

Partner institutions should promote the institutional development of continuing education as a full area of provision, next to mainstream degree programs and in line with the societal mission of the university meeting large-scale needs in society and in the economy. Short learning programs will be structurally embedded and supported in such approach, by which they also will be supported in a comprehensive continuing education structure.

In this perspective, the partnership should also participate in the coming discussions on microcredential and microdegree programs at the level of the national governments in order ensure a national framework for the recognition and funding for continuing education and short learning programs.

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Project Number: 590202-EPP-1-2017-1-NL-EPPKA3-PI-FORWARD

Project Duration: 41 months

Start date: 01-01-2018

End date: 31-05-2021

Coordinator: European Association of Distance Teaching Universities (EADTU)

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