Training for Mentors and Supervisors of Higher Education Apprenticeship programmes

A Generic Structure for a Continuing Professional Development Course

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Acronyms

HE – Higher Education

HEI – Higher Education Institution

VET – Vocational Education and Training

CVET – Continuing Vocational Education and Training

HEA – Higher Education Apprenticeship

SME – Small and Medium Enterprise

CPD – Continuing Professional Development

MOOC – Massive Open Online Course

SWOT – Strengths, Weaknesses, Opportunities and Threats analysis

CEDEFOP – European Centre for the Development of Vocational Training

A. Introduction

Growing productivity of industrial work is resulting in high youth unemployment. At the same time skills requirements are changing: more high level knowledge as well as experience-based competencies are needed. There is a particular need to promote and expand the capacity of work based learning and apprenticeships schemes. ApprEnt's main objective is to bridge the gap between the world of education and business, enhancing partnerships that involve enterprises/industry, Higher Education Institutions (HEIs) as VET providers, and other relevant stakeholders such as public bodies, representatives of learners and representatives of VET providers, with the ultimate aim of promoting the establishment of work-based learning and especially apprenticeship. Thus, the core of the project is to develop tools that facilitate cooperation and improve the results of these partnerships.

A key aspect of the work based learning and apprenticeships programmes is the close guidance that students receive both from the Higher Education's (HE) supervisor and the enterprise's mentor. While the former is able to provide experience in transversal skills, academic methods and more theoretical contents (supervisors), the latter is very much experienced in real enterprise's challenges and implementation of practical solutions (mentors). Two different approaches that need each other and that are fundamental to the full development of future professionals. However, the question that remains is if these two different and complementary profiles are well prepared to guide students in the complex Higher Education Apprenticeship (HEA) programme completion. Are they aware of the importance of collaboration and sharing? Have they acquired the competences needed to carry out HEA supervision? Do they clearly understand the need for developing these competences?

ApprEnt has discussed these points with a wide range of key stakeholders[1] and collected a number of evidences:

▲ Mentors[2] are normally appointed to their mentoring role without introductory preparation to the tasks of giving support to students from HEA programmes
▲ Mentors normally perceive HEA mentoring as simple tutoring of students, however the HEA mentoring is rather more complex
▲ There is no formal training addressed to HEA mentors in every EU country
▲ Mentors from countries that have some type of training available tend to avoid attending the course as it takes too much time and they do not see the need of doing it

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[1] Over 200 individuals have been consulted in different ways during the project (including 103 participants attending workshops and focus discussion groups in six different EU countries, 37 authors of case studies, 56 members of staff from partners' organisations and the participants to different online and face to face consultations)

[2] Mentors (from SMEs and industry) and supervisors (from HEIs) will be called "mentors" in this document, as a global concept, from this point onwards. However, it is important for the reader to understand the differences between the HEI and the Enterprise professionals, explained briefly above.

▲ Institutions/organisations do not envisage a specific period of time for developing mentors' skills or for adapting their existing skills to the peculiarities of this type of programmes

▲ Mentors from HEIs and enterprises do not always work together for a full integrated process of learning of the student, thus creating a communication gap that might affect the learning results

▲ EU countries do not have regulations of the mentoring work nor foresee its proper accreditation

Taking all these factors into consideration, ApprEnt has developed a generic prototype structure for a Continuing Professional Development (CPD) course that intends to give potential users the basis for training mentors of HEA programmes. Being a generic prototype structure, the course gives enough guidance but at the same time flexibility so that any institution/organisation from any country can adapt the model and its contents to their own needs, taking into account not only the national legal strains but also institutional/organisational limitations (especially those connected to time and resources).

This generic structure is a tool that users can define and finalise according to their specific needs and context. The content is divided in several sections: educational principles, HEA definition, description of all the ApprEnt tools, generic course structure and annexes. *Annex 8* (page 56) is a sample course concept, adapted to the local context of Austria, which is based on a MOOC (Massive Open Online Course) approach. The course concept for Austria can give you an insight into how the generic course can be adapted to a specific context.

B. Higher Education Apprenticeship

Before we start defining the ApprEnt generic CPD course structure, it is important to understand what is HEA and which are its main characteristics.

The ApprEnt consortium discussed at length how HEA programmes could be distinguished from other types of apprenticeship programmes. Emerging from these discussions one point was pinpointed as crucial. Since European States have not established a common framework for HEA programmes, each country understands it in a slightly different way and, therefore, certain flexibility is needed when discussing this topic in a global European way. What is common everywhere is the fact that, in a HEA scheme, a HEI in collaboration with businesses or industry design a programme to fulfil emerging needs of that industry or labour market area. It also is common that the objective is to obtain some sort of HE qualification or credit. However, opinions vary as to the way the programme has to be in order to fulfil the HEA criteria. This key point in the discussion is reflected in the HEA definition that ApprEnt has adopted:

> From the point of view of University-Business collaboration, "*HE Apprenticeship*" is understood as programmes that have all or a minimum of **four** characteristics out of the six listed below:

1. learning alternates between a workplace and an educational or training institution

2. the programme has a strong tutoring/mentoring aspect both at work and in the HEI, where the employer and higher education institution in collaboration assume responsibility for providing instruction and meaningful learning opportunities at the workplace with a skilled person, in order to offer the opportunity to acquire the knowledge, skills and competences needed in the profession to the learner

3. the programme is part of formal and/or continuing education and training

4. on successful completion of the programme, learners acquire a qualification or a part of a qualification and receive an officially recognised certificate

5. apprenticeships are based on a contract or formal agreement between employer and learner but, sometimes, can be based on a contract or formal agreement with the HEI

6. apprentices are contractually linked to an employee and to a HEI and receive remuneration in the form of wage, allowance or similar for their work

Within the ApprEnt project, the partners agreed to accept as HEA programmes those schemes that fulfil a minimum of 4 of the above characteristics when collecting case studies. This allowed to find samples of this type of activity in all partner countries as well as other countries too, proving, therefore, the suitability of the definition.

However, taking into consideration the relevance of the six characteristics included in the definition, the consortium stresses the importance to build HEA programmes that fulfil all of these characteristics (not only four of them). In fact, it would be difficult to conceive as full HEA programmes that do not foresee double mentoring, that do not include a contract/agreement or that do not alternate the academic learning with learning at the workplace.

C. Educational Principles

The key principles that underpin the generic CPD course proposed here are:

1. The main objective of this CPD course is to give further expertise to individuals that have become recently or are planning to become in the near future mentors of students undertaking HEA programmes.

2. The prior experience of participants is relevant and a key starting point in this course. It will help participants to understand the cases and situations explained in the course.

3. CPD courses are most effective when they take a problem-solving approach to course design and delivery rather than a didactic one. This means that:

   ▲ Information is provided as a resource not as a long lecture
   ▲ Time is given to sharing of good practice as well as practical cases with potential for improvement
   ▲ Time is given to participants to reflect on their own professional practice and that of their team
   ▲ Time is given to reflect on appropriate institutional arrangements
   ▲ Action planning to make changes is important to enable participants to think about how to implement their new ideas

4. Role models, for example staff who have successfully adapted their policy and practice, are an important feature of the training.

5. It is important that the professionals listen to the voice of the ultimate target group – HEA programme students who have completed their training or are currently studying. This can be done through involving them directly in the course in some way and/or through the use of cases studies.

6. HEA mentoring is carried out by two persons – an individual located at the HEI and another individual located at the enterprise or SMEs. Thus the CPD course should meet the individual needs of those specific roles, allow them to contrast their techniques and points of view about mentoring and help them prepare for building up a "team approach". There is therefore a value in bringing together professionals in the same sort of role so they can learn from each other but also in bringing together the different professionals in complete teams.

7. It is important to start from where the participants are in terms of their institutional position, their personal knowledge and understanding of HEA and the work of mentoring in general, and then build on that. This means that the course should be mould to suit them rather than the other way around.

8. It is important to value what the participants already know and/or can do. For example, some may have no knowledge of academic protocols or HE quality standards but be experts of a specific set of skills required in an explicit industry. The expert should be invited to lead the explanation and discussion in the appropriate moment (when the set of skills are discussed, for example).

D. The ApprEnt tools

The ApprEnt project has developed a number of tools that can be considered integral part of the CPD course for mentors and, at the same time, can be useful for HEIs and enterprises developing HEA programmes.

i. Good Practices

The project has collected 33 different cases showing examples of HEA programmes in 9 different countries of Europe. The template to collect the cases, which focuses on the description of the good practice (why your case is particularly interesting?) and the feedback from users (what do your students say about the programme?), gives concrete evidence of the success or not of each model and helps us consider how the models (or specific aspects of the models) could be adopted in other environments.

All the good practices collected are available in the website of the project **https://apprent.eucen.eu/tools/**. On the first page of each case is shown graphically which of the 6 characteristics of the definition is fulfilled, thus giving a general idea to the reader if a particular case might offer information about what they are looking for or not.

The cases, collected from 9 different EU countries with a different level of implementation of HEA, offer a wide range of examples.

ii. SWOT and comparative analysis

In the face of the project the partnership worked together to identify the perception of HEI representatives and SME representatives in relation to the HEA programmes. This discussion and workshop led to the identification of the strengths, weaknesses, opportunities and threads that the different parties felt are connected to these types of programmes. An issue of reciprocal lack of trust was one of the big problems identified by both parts. But the benefits of HEA schemes were also plenty and well perceived by the groups. This SWOT analysis was integrated later on in the comparative analysis of the case studies and the collected feedback in 6 of the 8 partner countries.

The comparative analysis include quantitative and qualitative interpretation of the cases collected and a set of general recommendations that are based on the feedback that key stakeholders have expressed during the national focus discussion groups. It reflects the concerns of the parties involved in this types of programmes and ideas on how to improve them in order to be more attractive for companies, HEIs and also students.

The analysis is available in the website of the project **https://apprent.eucen.eu/tools/**

iii. Policy Recommendations

The discussions in the partner meetings and, more important, the feedback collected from stakeholders have allowed the ApprEnt consortium to design a set of policy recommendations addressed to different levels of decision makers. Each of the recommendation points out as well how students would benefit from them. The recommendations, important for European, national business and institutional levels, tackle the following key points:

- ▲ Regulations
- ▲ Strategic policy-making planning
- ▲ Training
- ▲ Mobility
- ▲ Guidance and coordination
- ▲ Quality assurance
- ▲ Allocation of resources
- ▲ Funding
- ▲ Transparency
- ▲ Sustainability

This tool intends to summarise the key reasons to support, improve and enlarge HEA opportunities and highlights the benefits that this kind of schemes offer to all involved partners. The policy recommendations (in a detailed and a summarised version) are available in the website of the project **https://apprent.eucen.eu/tools/**

iv. Model agreement

A practical tool developed by ApprEnt is a template model agreement for institutions to use when setting up HEA engagement. The model, meant to be signed by the three parties of the HEA (the apprentice, the HEI and the SME/company), intends to protect everyone and enhance their need for each other and contribution to the partnership. It aims to give information about why each of the parties is important and why a good HEA collaboration will be satisfactory and beneficiary for everyone involved.

The ApprEnt model agreement has been designed on the base of existing models used in several institutions and is available in the website of the project **https://apprent.eucen.eu/tools/**

v. Advocacy pack

HEA programmes are not widely well known. One of the objectives of the project is to produce tools to inform others of the benefits of undertaking such courses. We understand that those who are already benefiting from these programmes will want to become Ambassadors and explain why HEA programmes as a good choice! The ApprEnt Advocacy Pack includes a general overview of what HEA is and includes five focused "fiche" to approach to approach different audiences: policy makers, HEIs, enterprises, potential students and mentors. It also has a number of transcribed quotes from users and a suggested way to approach non-users.

The advocacy pack is available in the website of the project **https://apprent.eucen.eu/tools/**

E. Mentorship – Functions and Skills

Higher Apprenticeship programmes developed in two learning places require guidance and mentorship in both places. Both learning places are informed by different logics of action:

▲ Real work vs. standardised learning situation
▲ Learning by experience vs. theoretical learning

Communication between all the parties is fundamental. The communication flows go in different directions as shown in *Figure 3* (see *Module 6*, page 25) – between the mentors, and between each mentor and the apprentices (in both directions). The ability to work as a team is essential.

The need to communicate and share will be best fulfilled if using tools such as online applications (see *Annex 3*, page 50).

Functions of the mentors

Professional mentor

▲ To help the integration at workspace
▲ To identify places of learning in the work process in accordance with the curriculum
▲ To define a learning pathway in accordance with the curriculum
▲ To guide the student in the learning process within the enterprise
▲ To evaluate the learning progress
▲ To validate academic tools done at workspace

Academic mentor

▲ To advise the student
▲ To look after the adequacy between the work the student is asked for and the curriculum
▲ To keep track of the academic results
▲ To guide the student in the learning process within the enterprise
▲ To evaluate the learning progress
▲ To validate academic tools done at workspace

Skills needed by the mentors

▲ Ability to host
▲ Ability to contextualize
▲ Ability to lay out expected outcome and results

▲ Ability to assess
▲ Ability to provide guidance
▲ Ability to assist
▲ Ability to acknowledge
▲ Ability to integrate
▲ Ability to cooperate with other mentors

Annex 6 (page 54) shows a list of key skills and competences expected in a mentor.

F. Generic structure of the course

The basic structure of this course includes questions for discussion and suggested resources to support the discussion that can be addressed in different ways using different methods and training exercises (e.g. brainstorming, role play, evaluation of case studies, involvement of role models and students).

There are seven different sections envisaged in the ApprEnt generic structure of the CPD training course:

- ▲ Module 1: Preparation – Awareness of peculiarities and advantages of HEA
- ▲ Module 2: Introduction to mentoring HEA students
- ▲ Module 3: Understanding the HEA students' needs and expectations
- ▲ Module 4: Planning the student's learning strategy
- ▲ Module 5: Giving support to the learning process
- ▲ Module 6: Tools for mentoring cooperation
- ▲ Module 7: Continuous training – Action planning for participants

Before you start the training with your group of mentors, please read all the seven parts and plan how you will tackle each of them. This will help you to have a more focused and fruitful session.

You might also want to see a prototype course model turned into a MOOC (see *Annex 8*, page 56). It might inspire you when you prepare your own course.

Module 1: Preparation – Awareness of peculiarities and advantages of HEA

Before the course starts, you should get in touch with the staff who will participate in the course and request their collaboration preparing for the session in advance. Give them some time (a minimum of two weeks) to do this preparation, as there is quite a lot they could read and collect.

Suggested pre-course preparation for the participants:

- ▲ **Individual profiles** - each participant should prepare a one-page file which includes:
    - ▼ description of their current role
    - ▼ expertise areas
    - ▼ experience supervising or working with students
    - ▼ motivation to mentoring
    - ▼ expectations
    - ▼ possible input/contribution to the discussion
    - ▼ other relevant information

- ▲ **General reading** - several areas could be covered, for example:
    - ▼ national regulations
    - ▼ European approach to apprenticeship programmes
    - ▼ CEDEFOP reports on apprenticeship, etc.

- ▲ **Internal reading** - specially:
    - ▼ institutional/organisational policy and regulations for apprenticeship programmes development or involvement (see especially under Assessment)

- ▲ **Reading the key resources** - for example:
    - ▼ some of the ApprEnt case studies
    - ▼ the comparative analysis and the policy recommendations

- ▲ **Evaluating** - for example:
    - ▼ specific case studies and comparing them to own experience

- ▲ **Collecting templates of documents** - such as:
    - ▼ materials used when supervising students

- ▲ **Reading other ApprEnt tools and materials** - for example:
    - ▼ model partner agreement
    - ▼ advocacy pack

- ▲ **Finding out more about mentors' functions and skills** – start with:
    - ▼ Section E of this document

Module 2: Introduction to mentoring HEA students

The main objectives of this introduction are to make all participants known to each other, to share their expectations and motivations, and start tackling the specificities of working with students undertaking a HEA programme.

Who are we?

▲ Introduction and presentations from participants especially if they do not already know each other (if they know each other well, you can skip this point)

▲ Brief introduction of what they want to get out of the course (use the individual profiles that they have written in *Module 1 - preparation phase of the training*, page 16) and discuss the difference in personal objectives from each participant

▲ Presentation of the course programme and rationale

What are HEA programmes?

▲ Work in small groups and discuss:
  ▼ What do you understand by HEA?
  ▼ Do you think these programmes are different from other apprenticeship programmes?
  ▼ How?

▲ Work in small groups – share and discuss:
  ▼ Which structures are already in place at your organisation/institution to enable HEA?
  ▼ What kind of structures or support you think HEA would need to be implemented at your organisation/institution?

▲ Where can we find out more about established HEA and its benefits?

Suggested resources:

❖ Read *Annex 1, UBO's apprenticeship model*, page 30
❖ Read *Annex 2, Case Study P01.4 "Universidad de Deusto"*, page 37

Why is important for the HEA learners to have both an academic and an enterprise mentor?

▲ Work in small groups and discuss:
   ▼ What is a mentor for you?
   ▼ To your understanding, why HEA students need two mentors?
   ▼ Which of the two mentors is more important? Why?

▲ Work in 'mixed' groups and start exploring:
   ▼ What can HEI' staff learn from enterprises' staff?
   ▼ What can enterprises' staff learn from HEI's staff?
   ▼ Why both sides of the coin are important and complement each other in HEA programmes?

▲ Work in 'mixed' groups and start exploring:
   ▼ Imagine the perfect cooperation between the academic and enterprise mentors – Which tools would they need? How work and knowledge about the student they are working with would be shared?

Suggested resources:

❖ Read *Annex 3, Tools for dual mentoring*, page 50
❖ Read *Annex 6, Mentors' key skills and competences*, page 54
❖ Read *Annex 7, Mentors' needs and credits*, page 55

Module 3: Understanding the HEA students' needs and expectations

HEA programmes offer to the learner the opportunity to obtain a foundation, bachelors or master's degree through a blend of work and study. An apprentice will spend part of their time at work and the remaining time allocated for study. This method allows students to continue to develop within their sector whilst also obtaining transferrable higher-level knowledge and skills.

The main reasons why students choose a HEA programme are:

i. They can study in a more flexible way
ii. They are trained in key skills that employers expect their employees to have
iii. They learn at their own pace with the support of mentors
iv. They become more confident and self-assured in their profession
v. They earn money while studying
vi. They have the opportunity to be recruited faster on completion of their training
vii. They are often offered higher salaries than normal graduates

However, apprentices enrolled in HEA go through a very demanding and challenging programme - they need to achieve the academic requirements established by the HEI where they study (as any student in other HE programmes) and, at the same time, fulfil the working demands of the enterprise that has engaged them.

Why HEA is different?

▲ Work in small groups and discuss:
  ▼ Do you think traditional students have the same objectives than HE apprentices?
  ▼ How do you value the idea of working and studying at the same time?
  ▼ Do you think HE apprentices might need extra-support to fulfil their duties both at the HEI and the enterprise? What kind of extra-support do you imagine?

▲ Work in small groups:
  ▼ Design briefly a curriculum, adapting a standard course to the needs and peculiarities of a HEA programme
  ▼ Discuss within your group the essential additions/changes that HEA programmes should have in comparison to other similar traditional courses

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Suggested resources:

❖ Look at *Figure 5 (Annex 1)*, page 31 – are the apprenticeship programmes you know following the structure of this diagram?

How to adapt to the HEA programmes?

▲ Work in small groups and discuss your previous experience with students:
  - ▼ Why your previous experience can help?
  - ▼ Do you think your previous experience could be a burden in your new role?
  - ▼ How can you use your experience and adapt it to the requirements of HEA students?

Suggested resources:

  - ❖ Read the ***Advocacy Pack***, particularly, look at the section addressed to potential students
  - ❖ Read *Annex 2, Case Study P01.1 "University of Chester (UK)"*, page 47

Module 4: Planning the student's learning strategy

In general, HEA programmes are competences-oriented and focused on the learners. Portfolio approaches are recommended to document the competences and to evaluate them[3].

Mentors support the students through continuous supervision. In the course of the HEA programmes, students are expected to:

- ▲ become autonomous learners (reinforce their lifelong learning capacity)
- ▲ document the informal work place learning and reflect on it (*Learning log book*)
- ▲ prove achieved learning outcomes through documents (*Showcase ePortfolio*) and self-evaluate them by an established criterion
- ▲ link theory and practice

The first step towards planning the student's learning strategy is to plan an interview (or several, if needed) to identify the prior learning of the student and match it with the learning outcomes of the current HEA programme that the student has chosen. The following steps would be:

- ▲ Define the HEA learning outcomes that needs to be acquired
- ▲ Discuss with the student and choose the final learning strategy including the project to be undertaken in the enterprise/industry
- ▲ Discuss the learning strategy with the enterprise/industry and set up the parameters to achieve it both at the enterprise/industry and the HEI

Planning the learning:

- ▲ Work in small groups and discuss:
    - ▼ Which are the most important points to find out from the student?
    - ▼ How would you encourage the student to be proactive in the discussion?

Acquired competences:

- ▲ Work in small groups and discuss:
    - ▼ How to find out the practical skills that the student already has?
    - ▼ How to find out if the practical skills that the student already has match the quality required both at the enterprise/industry and at the HEI?
    - ▼ Who should be involved in the identification of practical skills? Why?

> **Suggested resources:**
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> ❖ Read *Annex 4 - Debriefing methods*, page 51

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[3] https://www.sciencedirect.com/science/article/pii/S1557308711000916

Module 5: Giving support to the learning process

Mentoring for HEA students is based on the understanding that at the beginning mentors will give the mentees a strong support, which will be reduced step by step so that the mentees can self-regulate their learning process.

Figure 1 below shows a learning process for HEA and how mentors can support the different stages. The four stages are based on a learning model for transversal skills, which was developed in the EU project ATS20204.

Figure 1 Typical tasks of mentors and students in a learning stage of HEA. Graphic based on the ATS2020 Learning Model for transversal skills through ePortfolio-work (Ghoneim, Gruber-Mücke and Grundschober, 2017).

Figure 1 shows the tasks of mentors around the learning process of a student:

i. **Learning outcomes**: Identification and definition of several (four or five) learning outcomes per learning stage jointly with the students. They are framed within the learning outcomes defined in the curriculum and the previous learning experience of the student. It includes also criteria to measure the achievement of the learning outcomes.

ii. **Learning strategy**: Development of the learning strategy together with the students, which takes in consideration the different places of learning – the HEI and work place.

iii. **Support documentation and feedback**: Discussion of the documentation (learning diary or Portfolio) supporting the learning processes and outcomes with the students. Writing of feedback to give support to the learning process (formative Feedback).

iv. **Reflexion:** Reflexion process through Debriefing-Methods and Feedback. At the end of the learning stages, the students will check if they have achieved the expected learning outcomes. They also identify which additional not expected learning outcomes has been achieved. The students show, using the documentation (point 3), in which degree they have achieved the learning outcomes and resumes the findings in a report or a portfolio view. The mentors will revise the report and give feedback.

How this mentoring process differs from your usual tutoring methods?

▲ Work in small groups and discuss:
    ▼ Which of the 4 points do you normally carry out or have carried out in the past when tutoring non-HEA students?
    ▼ Which of the 4 points do you think is more challenging?

Look at Figure 2 and reflect…

▲ What is this image suggesting to you?
▲ Who can you imagine that are the two persons in the image (in the context of HEA)?
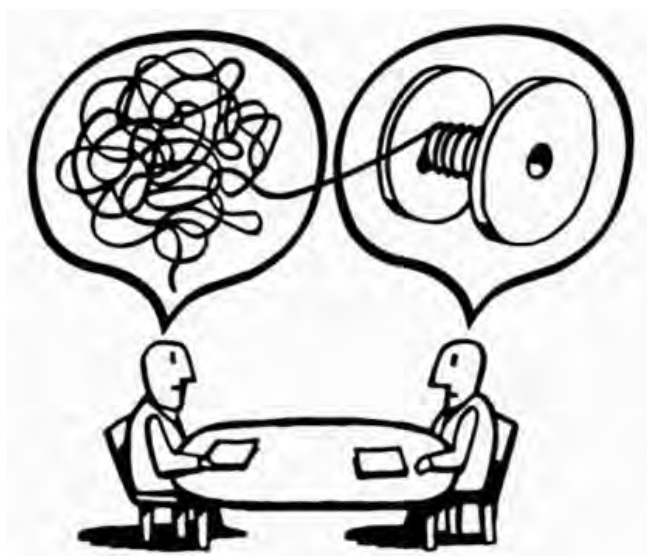
Figure 2 Drawing 'Significado' (*CC BY-NC 4.0 Licence*)

What type of supporting materials do you use and/or need?

▲ Work in small groups and discuss:
- ▼ Have you heard before of the "learning diary or portfolio"? Have you used it before? Why?
- ▼ Do you have special documentation to help you with any of the 4 points identified above? What type of documents? Why these are useful?
- ▼ Would you use any digital tools? Which ones? For what?

Suggested resources:

- ❖ Read *Annex 4 Debriefing methods*, page 51
- ❖ Read *Annex 5 Learning portfolios*, page 53

Module 6: Tools for mentoring cooperation

Higher Education Apprenticeship is a learning process in two different learning environments – higher education institutions and work place – with one mentor in each learning environment. Cooperation between mentors, thus, is an essential of a successful higher Education Apprenticeship programme. *Figure 3* below shows the communication flows between HEA mentors, and between the mentors and the apprentice.
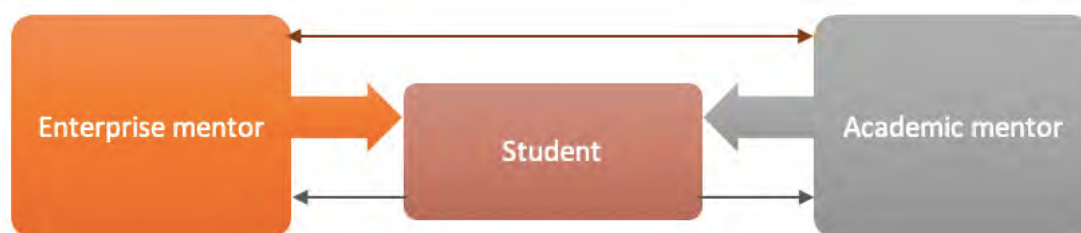
Figure 3 *Communication flows between HEA mentors, and between the mentors and the student/apprentice.*

Higher Apprenticeship programme developed in two learning places requires guidance and mentorship in both places and cooperation between both mentors to assure a successful learning process.
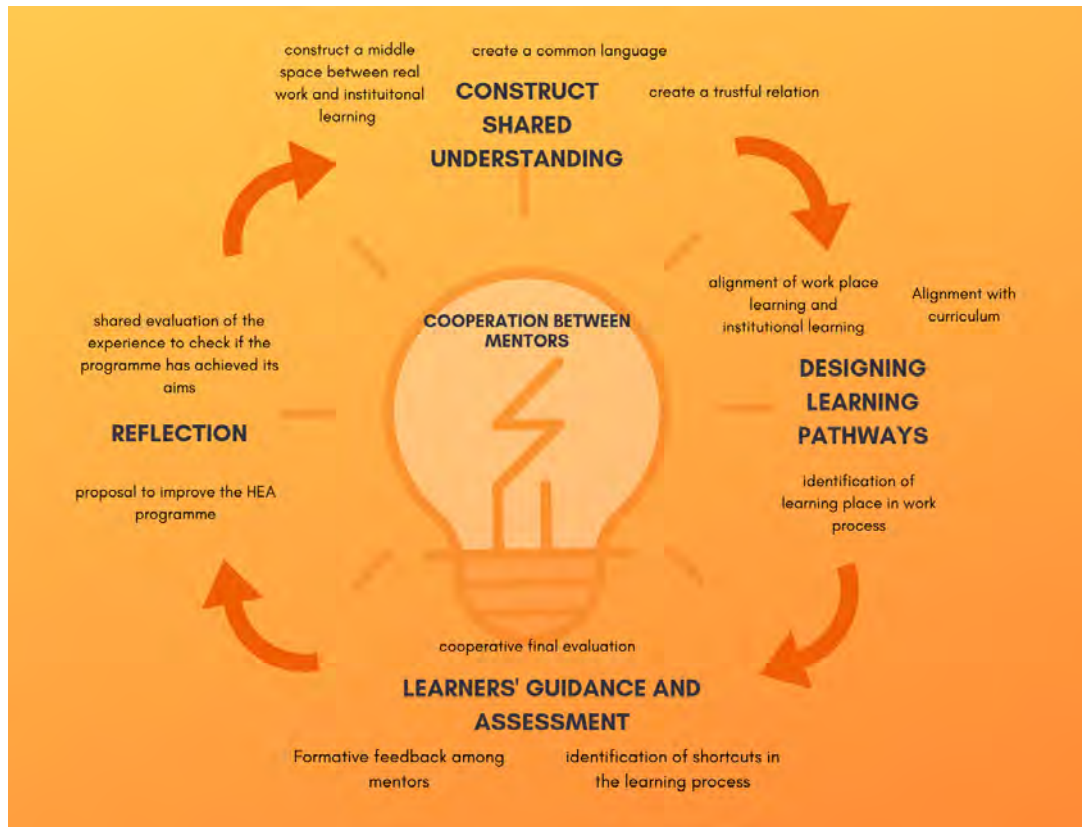
Figure 4 *Typical process of mentors' cooperation in HEA.*

Figure 4 (page 25) shows the field of cooperation between HEI and business mentors:

I. **Share understanding**: HEA brings together the academic world and the real work life. When devising and implementing apprenticeship scheme, it is important to organise a middle space between the two dimensions to meet and to develop a shared understanding of the linkage between theory and practice and to develop a trustful relation between mentors. This could also be part of the Curriculum design in which all stakeholders (learners, employers, mentors and others) should be involved. All stakeholders, but overall the mentors, should understand recognised learning levels and such matters such as learning outcomes, Credit rating and so on.

II. **Design Learning pathway**: HEA programmes are likely to be a combination of traditional, taught discipline based modules or units and experiential learning at workplaces. To designing the concrete learning pathway - including the identification of main learning places in the work process – requires smooth cooperation between the HEI and business mentors

III. **Assessment of the learners' progress**: HEA programmes is in the between of planned acquisition of skills and competences at work places and cognitive development in higher education institutions. In so far, it is an issue of who is competent to assess competence and skill development and when. It affects also how continuous assessment of the learner's progress is incorporated in the feedback processes assuring high quality learning

IV. **Reflection** about the HEA programme.

How to cooperate and when?

▲ Work in small groups and discuss:
  ▼ Which of the different fields is most challenging?
 ▼ How would you encourage the cooperation and the feedback process between mentors?

What type of supporting materials do you use and/or need?

▲ Work in small groups and discuss:
  ▼ Do you need special documentation to support the cooperation? What type of documents?
  ▼ Would you use any digital tools? Which ones? For what?

Suggested resources:

❖ Read *Annex 3 Useful tools for dual mentoring*, page 50

Module 7: Continuous training – Action planning for participants

Once all the previous stages of the CPD have been completed, the course should include a phase of reflection on how to apply the knowledge and tools gathered in the course to real activities. As part of this reflection we propose a number of questions:

- What have I learned?
- How can the learning make me a better mentor?
- From what I have learned, what can I use to improve my practice?
- Of the new tools I know now, which ones can I embed in my practice to facilitate the mentoring process?
- What do I need to work on/follow-up?
- Which other resources would be useful if they were available?
- What can I share with colleagues who start mentoring students in HEA programmes?
- What can we do as a group to improve the policy and practice in our institutions/organisations?

Participants could also build into their personal planning a way of monitoring their own performance by taking note of successful stories, for example, in a diary. Or taking note of facts that they become aware of, for example:

- How is your new approach towards mentoring affecting students?
- How is it helping them?
- Do you receive positive feedback from the students with whom you work?
- Do you know if their positive experience encourages them to talk about HEA to other potential students?

It would be also valuable if participants reflect about the opportunities and improved results that collaboration with mentors from their pair organisation/institution offer:

- How this collaboration improves the learning results of the student?
- Why working in pairs (even online) enhance your own work?
- Which knowledge you learn from your pair mentor that can help adjusting your own mentoring approach?

Another interesting point to reflect upon is on any new developments that co-mentoring might have brought, such as:

- Have you engaged in new university-business collaborations personally?
- Have you developed new contacts that might be useful in the future?
- Do you feel that your institution/enterprise is more visible now to others thanks to your work as mentor?
- Do you think that your institution/enterprise is closer to society now?

This self-analysis can help the participants to refine their approach and become more self-aware of possible obstacles or challenges. In this way, the mentors act as reflective practitioners who learn from their experience and can refine their practice throughout their careers.

Suggested resources:

- ❖ Read *Annex 6 Mentors' key skills and competences*, page 54
- ❖ Read *Annex 7 Mentors needs and visibility*, page 55

F. Annexes

Annex 1: UBO's apprenticeships model in a nutshell

Annex 2: Selected ApprEnt case studies

Annex 3: Useful tools for dual mentoring

Annex 4: Debriefing methods

Annex 5: Learning portfolios

Annex 6: Mentors' key skills and competences

Annex 7: Mentors' needs and visibility

Annex 8: Austrian prototype course model: *MentorMOOC*

Annex 1: UBO's apprenticeships model in a nutshell

UBO Apprenticeship office

The University of Brest (UBO) has developed a centralised office that coordinates all the HEA programmes led by the university in collaboration with industry, the "UBO Apprenticeship office". This office takes care of the pedagogical, professional and personal aspects of apprentices entering one of the HEA programmes of their university. The office gives guidance and counselling to students who start a new programme and when they start their work, especially if it is difficult. One of their main tasks is also to help students to prepare for interviews but also how to find accommodation or how to move to the city where they will work (in the case the company is not local).

This kind of support can only be ensured in HEIs committed to social dimension of universities. Students do not feel alone and the drop-out rate is insignificant compared to other type of programmes.

The apprenticeship agreement includes a three-week trial period for adaptation. It includes a clear note specifying that an apprentice does not replace a standard employee within the hosting company, but rather that the apprentice will bring something new, non-existing in the company.

The availability of these HEA programmes are promoted in different ways. And the match of apprentices-companies is sometimes done by organising "Job Dating" events, where enterprises present their needs and students can see what is available and maybe offer a specific project to be undertaken.

Alliances and co-operation

UBO offers HEA programmes that are delivered sometimes in collaboration with third parties. One of these allies is the University Institute of Technology (IUT) which has a clear strategy towards SMEs and apprenticeship approaches.

Mentors in at IUT are given a manual at the beginning of the course and they are expected to apply it. The role of company mentor is to help apprentices to integrate into the workspace, to define progression and to validate the academic tools used while working. The role of the academic mentor is to give advice the apprentice, to look after the adequacy between the work the student is asked to do and the degree the apprentice is studying, to keep track of the academic results, etc. The academic mentor visits the apprentice at work at least one time. The company mentor attends the "viva" exam at the end of the programme.

Definition of the programme

Once a year academic representatives and of the partner enterprises meet to decide what is important and whether the programme needs to be changed or updated, trying to get closer to what the enterprises need.

Register at the Administrative Office for HEA
- *Applicant to HEA programme*
- *Advisor*

Definition of the programme, skills and competences
- *HEI*
- *Enterprise*
- *Advisor*

Definition of the learning pathway and learning places
- *Student*
- *Academic mentor*
- *Company mentor*

Recording of learnings and achievements
- *Student*

Monitoring of progress and sharing of notes
- *Academic mentor*
- *Company mentor*

Exams and "viva" to obtain Award
- *Student*

Figure 5 Steps in the process towards obtaining a HEA Award and indication of actors involved (C Royo, 2019)

Annex created by Carme Royo (eucen) based on observations during the ApprEnt workshop in Brest, May 2018.

Annex 2: Selected ApprEnt case studies

Annex 2 portraits only a limited number of case studies from those collected during the ApprEnt project. Access to all the case studies as well as to the Transversal analysis of the cases is available from the project website at **https://apprent.eucen.eu/tools/**

List of cases included in this document:

CASE STUDY P08.2 | Universidad Complutense de Madrid (ES)

<u>Authors</u>: Lucila FINKEL

<u>Suitability of this case to the ApprEnt definition of HEA: 100%</u>

Workplace/ training	Mentoring	Remuneration	Formal programme	Certification	Contract/ Agreement

<u>Description of the model</u>:

In recent years, Spain has approved new regulations that aim to implement a new model of active employment policies, embodied in the Spanish Strategy for Employment Activation 2014-16 (EEAE). It is especially important to mention the publication in September 2015 of Act30/2015 regulating vocational training for employment which attempts to face the changes needed to modernize the production model and place Spain on a sustainable path of growth thus generating stable and quality employment for all.

Dual training was also reinforced with a new regulation on certain aspects of the training and apprenticeship contract. Despite the low number of this type of contracts (not more than 1%) there has been a significant increase of 25% since 2014, coinciding with the new regulatory development. Regional authorities may initiate public calls for validation of non-formal and informal learning, depending on local or sectoral labour market need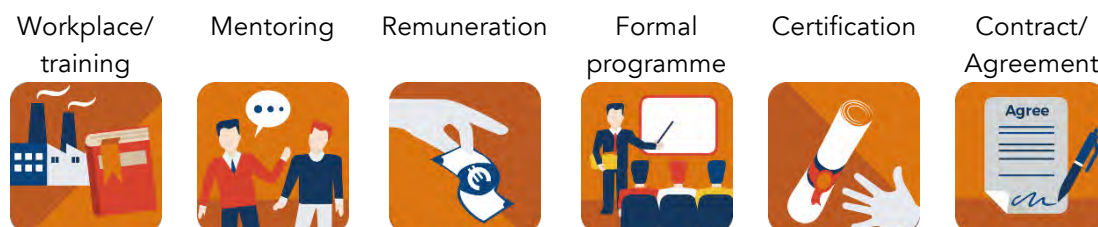s. These procedures empower citizens to engage in further learning and acquire full qualifications. Demand for recognition may be driven by company needs, social partner requests, or minimum qualification requirements from sectoral regulatory bodies.

Adults with no qualification may have their skills recognised or acquire a formal qualification through training. Key competences tests for advanced VET programmes and professional certificate access have been developed. Online or virtual learning environments and platforms are being developed to ease access to VET programmes. Reform in 2015 aims to increase CVET quality and improve the management of public funds dedicated to training for employment to prevent fraud. This is to be guaranteed through accreditation of VET providers and by offering training leading to formal qualifications. Monitoring training outcomes, including transition to employment, will also support training quality; for this purpose, a common training database is under development. Social partners and regional authorities participate in CVET quality assurance.

Possible Learning Schemes For Apprenticeships In Spain:
- ▲ VET system with compulsory training module in working centers;
- ▲ Dual VET or apprenticeships: dual training + contract or scholarships + learning agreement;
- ▲ Continuing vocational education and training programmes (CVET) in the employment system resulting in certificates of professionalism or diplomas;

▲ Institutions of higher education: permanent or continuing education programmes (with or without dual training schemes); industrial doctorates (Torre Quevedo Scholarships); official degrees with long internships programmes.

Strengths and Weaknesses:

The strength and at the same time the weakness of the apprenticeship system in Spain lies in its current flexibility: since it is not well defined, it currently encompasses different formulas, as described. Besides, one must point out the high qualification of the teaching staff in our country and the great space of improvement in fostering the links between the education system and companies, without losing the autonomy, quality, and plurality of the system.

Good Practice:

Objective of the Master's Degree

The aim of the Master's Degree in Auditing and Accounting is to prepare, both academically and professionally, future accounting experts and account auditors. For the latter, it seeks to meet the conditions that the Institute of Accounting and Auditing of Accounts establishes for the theoretical training programmes of auditors and the passing of the first phase of the examination process for legal access to the practice of auditing.

Methods of Teaching and Learning

External internships in companies represent a nuclear part of the academic curriculum "It is very important that the students are not going for coffee for the boss" (Coordinator).

Students have explained to us the activities they usually carry out: visit to clients, annual accounts, and circularisation of banks of suppliers – which means that students directly participate in the audits. They consider that without these internships there would not be a proper learning process, or not the one required in order to acquire the necessary skills.

Students enjoy a training process adapted to the real world of the company, something that, in general, they value very positively. This learning process is carried out in an extraordinary way by the collaborating companies (for example, they teach Excel for Audit). They also have an internal training program in the auditing companies.

These companies offering external curricular internships also take part in the teaching activity. The assessments of external internships are carried out both by the University and the companies; the courses given by companies are also evaluated in the same way. External internships are initially carried out within the company. Here, after a period of one or two weeks, student intern come into contact with customers.

Supervision and Mentoring

Two tutors, one from the University and the other from the company, are assigned to the student throughout the programme; the university tutor is responsible for the internship. In addition, students usually work directly with a senior auditor, who accompanies them in the learning process. What has been learned is incorporated in the University' owns platform called GIPE (Integral Management of External Internships), where all the information related to the management of the internships and the activities developed by the students is collected. In the final report, students have to detail their daily activities, what they have learned, in which way they have contributed to the company, etc.

Selection Criteria

To be admitted to the master it is necessary to possess at least a B2 level of English, to provide both the curriculum and the transcripts of the academic record, and to hold a degree in Business Management, in Accounting, in Finance, a double degree in Law-Business Management, or in related fields. These requirements appear on the web page and in Verifica, a very specific template of an academic CV for accounting. The companies have also established a specific selection process for student interns, which takes into account group dynamics, personal interviews, tests, and English assessments. In addition, some companies include an accounting exam. Other companies only receive the CV of those students whose internships have not yet been assigned.

Level and Target Groups

Advance training for young people with previous training in accounting and finance and with a high level of English (at least B2).

Type of Business Cooperation

The collaboration is based on the agreement between the Complutense University of Madrid (UCM) and the companies. Besides, this includes an annex signed by the student, the company and the academic coordinator for the internship program.

Strengths:

▲ The master's degree has been approved by the ICAC (Institute of Accounting and Audit of Accounts, responsible for creating the account regulations). Passing the master's degree is equivalent to the first examination of the ROAC (Official Register of Auditors), that is, students are exempted from having to complete the first exam. For this reason, this master's degree has to and does incorporate external quality practices.

▲ Employability: students usually find work before finishing the exam. The job placement rate is very high, due to the high rotation rate of the sector.

▲ Companies provide students with an aid for their internships (remuneration). This has been a commitment of this master since its inception, something that is uncommon for other master's degree. In large part, it was achieved thanks to the prominent role in accounting studies of some of the professors that launched the master, who ensured the contacts with important professionals in this business sector.

Weaknesses:

▲ The program is only suitable for small groups of students.

▲ Auditors carry out a qualified, tailored selection of students. This is one of the reasons for the limited number of students selected. It is also the reason why students are exclusively young. It is not possible to choose students with a lot of experience, since it is only possible to give 12 credits for the internship. Therefore, last year, only 22 have entered the master's degree and 19 have remained, in the face of a 308% demand, according to the coordinator. The requirements are very specific and dependent on the needs of the companies.

▲ For the coordinator of the internship programme, the more difficult task is to look for companies offering opportunities to all of the Master's students.

▲ The stipend or financial aid that companies ensure to the students varies according to the company (from € 300 to € 800); this clearly influences the student's satisfaction.

▲ Students join in the peak period of the audits and work on very specific aspects of that period, thus not having the chance to experience other periods that may be also interesting for their overall training (e.g. tax months)

▲ Despite its added value, the Master provides training for a very specific sector: students do audits and many remain in consultancy.

▲ It is difficult to establish cooperation and ensure the participation of some companies. Primarily, they want to present themselves to the students; however, some are willing to take part in the teaching aspect of the collaboration.

Feedback from users:

The Master enriches the more generic's theories and specific knowledge obtained during the bachelor's degree. Students are very satisfied with the Master's job placement rate.

The interns' work can be very intense, there are many demands, and sometimes tutoring time is not enough: "from tutoring to tutoring, it is as if one year passes", says a student. Sometimes, students are assigned job roles and tasks inappropriate for an internship.

Some students complain about not covering some important working aspects, such as tax procedures. According to the coordinator this is due to the client-company relationship based on confidentiality and decision-making.

Throughout the auditing processes carried out for the client company, student interns relate to the clients as auditors, thus improving their know-how, their relationship skills, etc.)

Relevance and Transferability:

Although this case study refers to an HE experience, it is necessary to take into account that it is a very specific sector and profession, which require a particular profile. Despite its short history, the Master's evolution has been very satisfactory. For the people interviewed, the master has a perfect combination of theory and practice. However, thanks to the modifications suggested by the Quality Commission, it will gain in quality.

In the next academic year, a change will be made in the placement of the internships, because they will move from the second semester to the third one (the master's degree is one and a half years). The renewal of the accreditation has paralyzed the change requested by the companies in the Evaluation Commission. The internships in the second semester were good because after the internships in the companies, they improved their theoretical knowledge. However, students were more burdened because for their third semester they had extended the period of curricular internships by signing an extracurricular internship agreement with the University Office in charge. The fact that they continue their internships while having to attend face-to-face classes in some cases even led them to fail a subject.

The change will help the students to be more theoretically prepared and to feel a sense of belonging towards the University, especially before their incorporation to the company.

All the interviewees believe that the master's degree is transferable to other sectors whenever professionals and companies are available and a selection of students is made, where the student's profile is the one he or she wants from the company. Within professional sector presenting fewer opportunities, it may be unfeasible. In this regard, it is evident how the Master's degree impacts its students' job placement rate and their overall employability by companies.

The sector to which it is addressed is important for the employability of the student and the success of the Master's. The university-company relationship is important, and for the university is crucial to be considered the first option for companies when it comes to hiring students.

CASE STUDY P01.4 | Universidad de Deusto (ES)

Authors: Janire GORDON-ISASI, Isabel FERNANDEZ RODRIGUEZ, Irene CUESTA GOROSTIDI

Suitability of this case to the AipprEnt definition of HEA: 100%

Workplace/ training	Mentoring	Remuneration	Formal programme	Certification	Contract/ Agreement
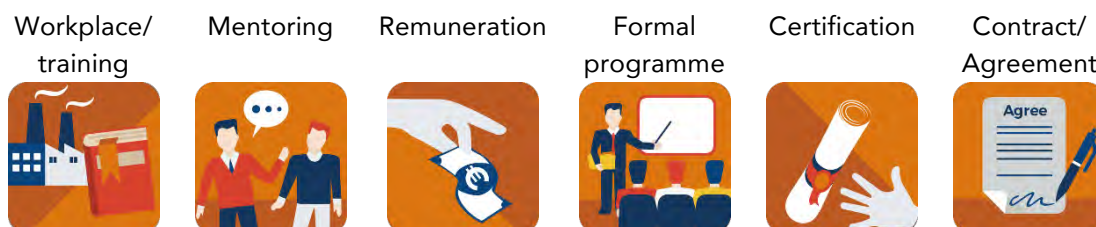
Description of the model:
The learning model of the University of Deusto encourages the personal development of the learners, enabling a significant increase of their knowledge, skills, attitudes, values and competences. Learning cannot be based only on a merely passive and receptive attitude, but, contrarily, must encourage search, initiative, reflection and action (University of Deusto, 2001).

Learning at the University of Deusto is based on a Pedagogical Framework developed by the University itself together with the University of Gröningen (Holland) within the framework of the Tuning Project, an initiative led since its inception by these Universities and which has had a long history and not only has it spread throughout the European university sphere, in which more than two hundred universities were involved, but it has also spread to other continents (Teaching Innovation Unit, 2016).

The mentioned pedagogical framework includes two strategic objectives of the University:

- On the one hand, the development of a pedagogical innovation process involving teachers.
- On the other hand, the training of students is considered the central pedagogical activity of the departments. The students from the University of Deusto are socially appreciated as excellently trained individuals in a double dimension: their integral development of skills and the development of values in their personal and professional life (Teaching Innovation Unit, 2016).

In this sense, the present Success Case is consistent with this strategic commitment of the university. The students work their personal development with their advisors, learn about the professional environment visiting the companies and working in them while they receive the necessary knowledge from the facilitator staff to develop their learning and abilities.

The two key elements of the pedagogical framework of the University of Deusto are the Teaching Model (MFUD) and the Learning Model (MAUD).

The MFUD is composed of four essential characteristics: Values, Attitudes, Competences, and the Learning Model that supports the development of the autonomy and significance of learning. The MFUD combines the different ways of learning so the different types of skills and abilities come into play. A competent person has the necessary knowledge, knows how to put the knowledge into practice and, when doing so, obtains adequate results.

The MAUD aims to facilitate learning to think and enhances research and development work, key aspects of study and university work. It develops around five cycles of learning taking as inspiration the model of Kolb and others (1976) and the 'Ignatian pedagogy' (Gil Coria, 1999): experiential context, reflexive observation, conceptualization, active experimentation and evaluation.

Good Practice:

Strengths and areas of improvement of the system:
The strengths of the present pedagogical framework are the work that the University of Deusto carries out promoting the integral development of the students' abilities and values, which help them to locate themselves in their personal and professional lives.

Regarding the areas of improvement, we could highlight the need to continue training teachers in their new role as facilitators, also incorporating people from organisations that do these essential functions in dual programs.

Objectives:
The Dual Master in Entrepreneurship in Action (MDEA) of the University of Deusto aims to train professionals capable of conceiving and leading innovative projects that contribute to the development and competitiveness of our economic and social fabric through the promotion of a single system of shared and experiential learning based on learning contexts in cooperation between the University, companies and organizations of the local ecosystem of entrepreneurship and innovation.

Methodology:
The master is structured in three modules:
Module 1 - participants face 9 real challenges at 9 different collaborating companies (alternating learning spaces between the company and the University) through a design thinking methodology.
Modules 2 and 3 - the second stage involves the developing of a new real entrepreneurship project in one of the collaborating companies, with support in technical development (technical skills) and personal development (voluntary socio-emotional competences) by both facilitators (from the University and from the company) that put together their best knowledge to help the participant in the master. This period is complemented with twelve thematic sessions of deepening on the development of projects and managerial skills.

Level and type of cooperation between companies:
The companies and institutions are part of the program and participate through the development of real challenges, intrapreneurship projects and incorporating people in their company to develop these projects. This improves the entrepreneurial capacity of their organization.

Challenges, strengths and weaknesses:
In the future, we have to face how to manage the level of intensity that teachers-facilitators require to make it sustainable. On the other hand, networking is considered a great strength, collaboration between entities, collaborating companies and the large number of relationships that are created, especially as an opportunity for the participants to master their learning and

career. As a strategic area of project evolution, it is worth mentioning that it is essential to carry out a cultural change both in universities and in companies to make it sustainable and have the greatest possible social impact.

<u>Feedback from users:</u>
Participants have evaluated Module 1 qualitatively and quantitatively. In the process the participants rate their own performance (Self-evaluation), the performance of their teammates and general aspects of the master's degree (e.g. support of facilitators, structure and organization, methodology, feed-back, delivered information and innovation).

After observing and analysing the data, we can confirm that the objectives of the master's degree are being fulfilled since the participants feel more capable and learn by doing, being responsible for their own learning. The coordinators on the part of the companies also show their satisfaction and their commitment to continue developing and taking part in the master's degree in the future.

According to the participants, the team of facilitators is a fundamental part of the process and highlights the importance of the facilitator of the University and the company working together from the beginning. The methodology used, Design Thinking, seems useful to solve innovation challenges, valuing very positively that they are given a prior training even before the start of the master to get more out of it. Regarding module 2, it is emphasised that the more participants see the direct applicability with their projects, the more value they can get. Also that the personalised tutorials help them integrate the concepts in their entrepreneurship project.

In general, the participants affirm that they have awakened and expanded their interest in innovation through the challenges. Currently the first edition is being finalised and therefore, within a few months we will also be able to provide information on how it has impacted his professional life.

<u>Relevance and Transferability:</u>
Dual education involves a new way of doing things, a new relationship with all the involved parts, new duties. This is why some training is highly advisable before, during and even after the implementation of the programme (we see it as a philosophy of continuing improvement).

In the case of dual programmes at the University of Deusto, a training plan has been proposed both for the tutors at the university and the companies, with the main objective to learn how to mentor and

The training is focused on making tutors understand the new programmes and their acquisition of basic skills needed in HEA, as well as their role and functions.
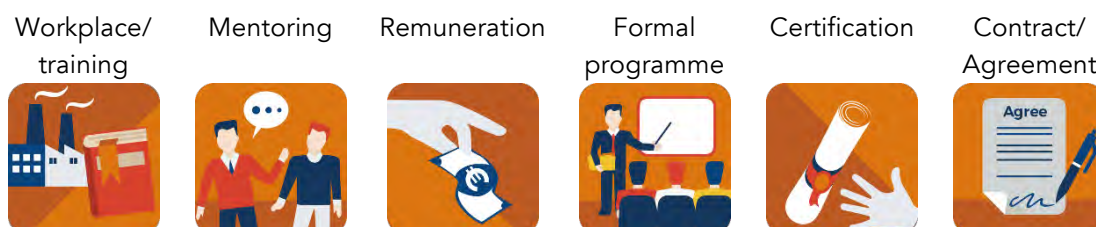
The continuous and personalised feedback is a key point as well as the leadership, the communications and the team work.

Further details of the course are available at www.emprendimientoenaccion.deusto.es
Module 1 video is available at: https://www.youtube.com/watch?v=4Y65FDn1zew

CASE STUDY P06.2 | Turun Yliopisto (FI)

<u>Authors:</u> Miia TAMMISTO-LEHTINEN

<u>Suitability of this case to the ApprEnt definition of HEA: 100%</u>

Workplace/ training	Mentoring	Remuneration	Formal programme	Certification	Contract/ Agreement

<u>Good practice</u>:

The Business Talent Academy (BTA) is a development programme for **potential future key personnel**, focusing on improving and strengthening their business competence.

- The programme is executed in cooperation between 5-7 organizations, e.g. 1-3 persons from each company (selected by companies' management/HR), max. 22 participants.
- The organisations involved form a steering group which sets, assures and follows the given objectives of the programme.
- The programme starts with preliminary interviews and group discussions per organisation

The programme aims **to increase capabilities to strategic thinking, future thinking and innovativeness and to further develop managerial skills** – all these according to each participant company's own goals.

Thus, the programme **supports the overall business development and renewal capabilities** in each participant company.

One of the key methods used in the BTA programme is the **peer mentoring** process:

- Participant pairs act as **sparring partners for each other** during the BTA-programme;
- **Peer mentoring** is a method in which the aim is to share knowledge, skills, information and perspective to foster the personal and professional growth of another, equal partner;
- Using your pair as a **mirror** when reflecting on your own development.

The programme includes both a development project which is conducted in the course of the participant's work and a personal development plan to secure continuous personal growth possibilities.

The programme gives ECTS credits. The credits can partly be utilized while taking part in TSE exe's EMBA and JOKO programmes (planning and pricing are done separately and on an annual basis).

The programme includes e.g. 11 classroom days, peer mentoring, individual development reports, networking and learning from each other, both within each company and among all group participants. Detailed contents will be planned together with participant companies.

Challenges:
Gathering the companies to participate.

Strengths:
The multidisciplinary network (=participants), good practice sharing, personal growth path, as there are few participants per company –> buy-in for new ideas and implementation is smoother, wide University network of professionals, experts and external trainers.

Weaknesses:
Continuous development to further deepen the content and thus to make sure the accurate phenomena and current business topics are addressed.

Feedback given by BTA2017 participants

Comments on the overall evaluation:
- ▲ "Varying methods supported the learning. Company visits provided a view on how other organizations work and ideas for development [...]
- ▲ "Discussion with other participants and their insights were as important as much as the instructors' contents. Diverse groups of professionals made the discussions lively and beneficial for personal development. The programme was good and it helped think maybe from a bit different angle [...] I'm glad that I had a chance to participate in this training. A good and compact training package overall. [...]"
- ▲ "I think that I learned multiple things and the structure was good. [...]"
- ▲ "The training was brilliant and there are no words that can praise it enough."

Comments on the peer mentoring process:
- ▲ "Interesting and useful concept. It would have required more effort to work properly. The discussions improved towards the end of the program and the last was perhaps the most mentoring one. [...]"
- ▲ "A new, but interesting mentoring method. Similar reflections are too seldom done within one's own organization while the value of them is obvious. [...]"
- ▲ "The peer mentoring process was an efficient tool to reflect your ideas and thoughts with someone who is coming from the outside of your own organization. I'm convinced that we try to continue this process in the future too."

Comments on the highlights and the most useful learnings of the programme
- ▲ "Leadership: Great leaders are authentic and trustworthy. Their words and actions are not conflicting. It's important to find an existential purpose (everyone should figure it out individually). [...]
- ▲ "I think that each module included useful learnings and I wouldn't highlight any in particular, since all of them are applicable in different situations. [...]"
- ▲ "Getting to know people from other companies and sharing thoughts and ideas with them. Ideas on how to measure things, balance scorecard; ideas for managing work (leading people) etc. [...]"

- ▲ "Difficult to point out the most useful learnings because there were so many good topics. [...] It was plenty of useful learnings in the programme. In my opinion, the highlights were Strategy Discussions and Balanced Score Card. [...]"
- ▲ "'Leading high performance' was a very inspiring and good session. But 'Creating value through solutions' was probably the most useful one to me as it gave me a new perspective on our own business and actually influenced the setup and conclusions of my development report significantly. [...]"
- ▲ "Business visits and all the learning I got along the way."

Further details can be found from www.utu.fi/exe

CASE STUDY P07.1 | Università di Catania (IT)

<u>Authors</u>: Roberta PIAZZA

<u>Suitability of this case to the ApprEnt definition of HEA: 100%</u>

Workplace/ training	Mentoring	Remuneration	Formal programme	Certification	Contract/ Agreement
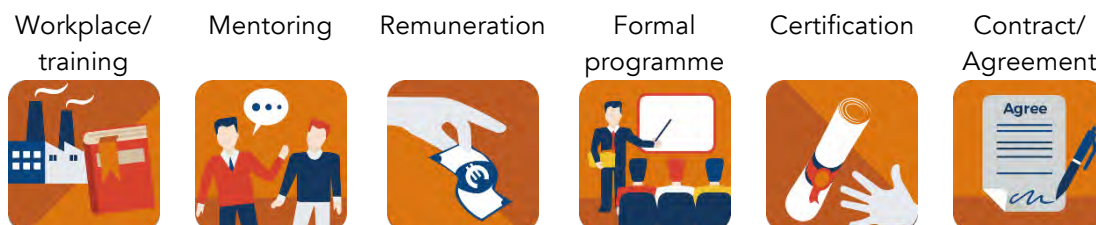
<u>Description of the model:</u>
Type 1 apprenticeship: 'Apprenticeship for vocational qualifications and diplomas, upper secondary education diplomas and high technical specialisation certificates'.

This is for those aged 15 to 25 and may be applied to vocational education and training (VET) programmes at upper- and post-secondary levels.

The minimum duration of a Type 1 contract is six months, while the maximum duration is three to four years (depending on the maximum duration of the VET programme leading to the desired diploma, qualification, or certificate). It may be activated at any moment during the VET programme (which is otherwise delivered entirely as school-based) and its duration may be different from that of the VET programme.

During Type 1, learners receive formal training in an education and training institution (external formal training) as well as in the company (internal formal training) while working. The external formal training cannot exceed the hourly limits defined in accordance to different certificates, qualification or diplomas. Besides undertaking the full amount of training hours in a study year (about 1 000 to 1 050 hours), the apprentice has to work a number of hours that are much less than those foreseen by the employment contract for a full-time worker. Up to 50-70% of the total number of training hours of a study year can be delivered in education and training institutions ('external training'). The remaining number of hours (the difference between the total number of training hours of a study year and the number of external training hours) should be spent in the company receiving 'internal training'. Apprentices also carry out ordinary work activities: the hours of this component are equal to the difference between the annual working hours (as they would be for a full-time job and are specified in the individual Type 1 contract) and the total training hours of a study year.

Like the other two types of apprenticeship, Type 1 is defined by law as an open-ended standard employment contract, targeting learners aged between 15 and 25. It is linked to the achievement of a formal VET diploma, qualification or certificate. Those who sign a Type 1 contract are considered as employees and receive a salary for the time spent in the company. The company also signs a protocol and the individual training plan with the education and training institution.

References: CEDEFOP (2017), Apprenticeship review Italy. Building education and training opportunities through apprenticeships. THEMATIC COUNTRY REVIEWS, Luxembourg: Publications Office of the European Union.

Good practice:
In 2014-2015 ENEL was the first company in Italy to stipulate around 150 contracts for high-level training apprenticeships with students in their second last year, with the aim of ensuring training periods in companies recognised in the school curriculum. After the Jobs Act was approved by the Government, senior secondary education was open exclusively to first-level apprenticeships.

In September 2014, 145 apprentices were recruited from all over Italy. This followed an agreement signed with trade unions on 13 February that year. The working hours, tasks, and remuneration were clearly set out in line with the national contract for the electricity industry. The curricula were shared with authorities and technical institutes. This enabled the young people involved to obtain a double result: a technical diploma and their first real working experience.

The process of corporate professionalization thus becomes faster by optimising the turnover of skills. Youngsters, school teachers and company tutors are all involved in co-planning activities. This encourages everyone to think about managing the experience and evaluating the results. At the same time, it allows for a comparison of the methods of observation and an evaluation of skills and soft skills (teamwork, problem solving, proactive behaviour and responsibility).

The 2016/2018 programme lasts 36 months. In addition to the Senior Secondary School Galilei-Sani students of Latina, it also involves 140 apprentices from seven technical institutes of seven regions, while for the two-year period 2017-2019, 30 additional apprentices from two technical institutes in Abruzzo have been included. Over the course of these two years, students will participate in a paid apprenticeship in the company lasting 1,400 hours (including 280 hours of lessons with exercises in the laboratory). The project was divided into two phases:

1) During the first 24 months, fourth and fifth-year students from technical and industrial vocational schools took part in a school-work alternation programme. This consisted of 800 school hours and the same number (280 of which were in workshops) at Enel's facilities. Students spent one day a week during the school year at the company, with a full-time commitment during the summer.
2) The second phase, over the following 12 months, involved recent school leavers with a level of qualification considered appropriate by Enel in a technical and practical vocational apprenticeship. In 2016 they were joined by another 140 young people who would take the State exam in June 2018. A further 30 youngsters joined them in September 2017.

This new relationship between education and practical work experience has already become something of a model. The OECD involved Enel in a workshop aimed at charting out strategies for improving skills. It recognises this experience as one of the most effective ways to bridge the gap between the skills provided by schools and those required by employers.

Most companies tend to consider Type 1 primarily as a standard open-ended employment contract and so as a contractual option for recruitment, rather than a training investment. As a contractual option, it may be less attractive compared to others. The lack of knowledge about

Type 1 may also lead to compare Type 1 with Type 2 as alternative instruments if hiring a person from the same target group (age 18 to 25), and find Type 1 less attractive than Type 2, which requires – on the employer's side – less engagement, a lower degree of responsibility and less bureaucracy.

Although Type 1 clearly distinguishes itself from the other dual system instruments and school-to- work transition schemes (such as extracurricular traineeships), some interviewees claimed that the fact that more than one instrument covers the same target population (under 25 years old) might orient companies towards training or employment instruments other than Type 1. Companies used the other instruments (for example traineeships) as a way to test young people before offering them a Type 1 contract.

The allocation of hours between external and internal training and work may not be straightforward. The presence of apprentices at the workplace should be combined with the firm's work organisation and production processes. In this respect, the minimum share of about 50% of 'formal training' outside the company can be challenging for the company organisation, especially SMEs (58). As a result, employers' representatives highlighted the problem for companies in striking a balance between the number of external training hours and the number of hours spent in the company for internal training and work, and how to organise and combine them.

There are no guidelines to manage – in practice – the double status of Type 1 apprentices, of students and employees: to distinguish the internal training from the work component, and human resource management aspects linked to the absence of the apprentice-worker from the workplace (to attend external training). Consistent with its nature of being a dual system instrument that may be applied to virtually all VET programmes and learners and for different purposes, there are no specific coherent and consistent strategies or guidelines on access, class organisation, guidance and counselling. It is extremely challenging and burdensome for education and training institutions to organise and manage the external training of apprentices when each institution has a limited number of apprentices, divided among several classes and at work in different places, with different lengths of contracts and starting dates.

The partial offer of counselling guidance services in Italian education and training reflects on the lack of guidance and counselling for apprentices, not only before becoming an apprentice but also during the contract. In the past, the combination of poor individual motivation and of weak accompanying services caused the interruption of many contracts before final qualification was achieved.

Social partner regional involvement needs to be strengthened, with a view to engaging and supporting companies but also to selecting the VET qualifications that may be more relevant for Type 1 based on local labour market characteristics.

<u>Feedback from users:</u>
The results of Enel's first experience in 2014 show the students' complete satisfaction with the organisational aspects of the programme, the tools and equipment with which they are provided, as well as the quality of the relationship formed with the company tutors. This satisfaction is also evident in the 263 research questionnaires promoted by the Sodalitas Foundation in collaboration with the JPMorgan Foundation.

More than anything else, the questionnaires revealed the work environments' effectiveness in conveying respect for the organisation's rules, as well as the consolidation of relationships with colleagues and managers, in addition to developing a sense of responsibility and a willingness to work as a team.

Amongst the most relevant outcomes of the experimentation we can point out not only the high number of students-apprentices who have passed the first year of apprenticeship with better average results than national ones in the same type of schools, but also the positive influence that experimentation has had on participants. The experience of apprenticeship in alternation has, in fact, increased the students' awareness of the importance of a sound basic and technical-professional preparation for entering the labour world, and it has also influenced positively on their motivation, reinforcing the sense of responsibility and seriousness, especially in taking on the academic path.
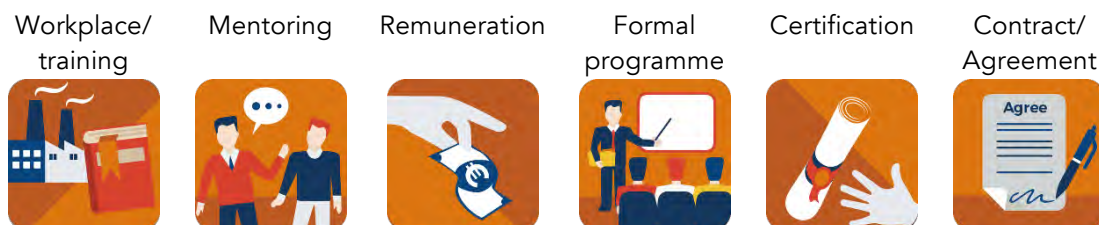
Relevance and Transferability:

It could be useful for HE apprenticeship to have a cooperation model between students, school teachers and company tutors, who are all involved in co-planning activities. This would encourage everyone to think about managing the experience and evaluating the results.

CASE STUDY P01.1 | University of Chester (UK)

<u>Authors</u>: Jon TALBOT

<u>Suitability of this case to the ApprEnt definition of HEA: 100%</u>

Workplace/ training	Mentoring	Remuneration	Formal programme	Certification	Contract/ Agreement

<u>Description of the model</u>:

In the UK the apprenticeship programmes are funded by an Apprenticeship levy, payable by all companies with a turnover of over £3m. They pay 0.5% of their annual salary bill. The system began in 2017. The University of Chester was one of the earliest institutions to implement these programmes. Companies are entitled to draw down funds to pay for apprenticeship training and education. If they do not do so, they still pay the levy. SMEs who do not pay the levy can still draw down funds from it although they have to make a contribution (10%).

The strength of the system is that it is compulsory and universal. For many years there has been chronic under-investment in vocational education and training. The other strength is that there are no restrictions on sector, occupation or level of learning.

The weakness is that it is very bureaucratic from the point of view of companies and providers. There are still too few providers, many institutions preferring to wait to see how early adaptors progress. In its first years of operation the number of people entering apprenticeships has actually fallen. There seems to be consensus that the system must be simplified. There is still snobbery in relation to the word 'Apprentice', which is not seen as having the same status as an academic qualification. However, the announcement by the University of Cambridge that they plan to introduce apprenticeships in February 2018 gave hope that attitudes was changing. There is also a question about the ability of some educational institutions to facilitate apprenticeships, especially in higher education where established delivery practices are ill-suited to the requirements of experiential learning.

This refers not just to pedagogic practices but also to the difficulties of dealing with employers as clients. Most universities are used to regular large intakes in predictable numbers. Working with employers who send students is altogether less predictable and riskier, requiring cultural adjustment on the part of educational institutions. There is also emerging evidence that 'closed' programmes (for a single employer), a model thought to be easier to deliver, often fail to generate sufficient numbers to make delivery cost effective.

The levy has been introduced because the UK has a major productivity problem - output per worker is on average about two thirds of that in France, for example. No one is quite sure why this is so. Some of it might reflect the different structure of the economy (more service based and therefore difficult to measure output) but there is a consensus that at least part of the problem reflects historic under-investment in vocational education and training. This includes a range of technical skills but also management. Traditional approaches to management

education, conducted in classrooms using didactic instruction do not appear to produce managers with the ability to manage effectively. The *University of Chester Chartered Manager Degree Apprenticeship* programme uses the apprenticeship model of learning so that formal and informal learning occur simultaneously, the one informing the other. Practice based learning is further enhanced by mentors within participating companies and peer learning from students in other organisations. Initial feedback from students and employers is very favourable.

<u>Good practice</u>:
The Degree Apprenticeship offers students the opportunity to complete a Bachelor degree in Management which is accredited by the Institute of Leadership and Management. Students spend most of their time in the workplace and attend formal workshop sessions in the university 12 times a year (twice a month) to prepare them for the completion of modules. The programme is open to employers in all sectors. It is unusual in that it is not validated as a freestanding programme but is part of a pre-validated work-based learning framework (the Work Based and Integrative Studies -WBIS- programme) which is designed to enable flexible delivery and learning directly relevant to the workplace. There is also facility to incorporate past learning (Recognition of Past Learning) as part of the curriculum. WBIS has been in existence for twenty years and provides a reservoir of pedagogic experience in the field of work-based learning which underpins programme delivery. WBIS offers a combination of experiential and subject discipline-based learning so that each informs the other. Students completing subject discipline based modules, for example on Finance, are encouraged to learn reflectively either from direct experience or from workplace mentors. They can also complete modules based around trans-disciplinary workplace projects, integrating formal knowledge to interrogate experience and create practical solutions to workplace problems. All students have a Personal Academic Tutor to guide them throughout the programme, subject discipline specialists and workplace mentors. Students complete formal assignments whilst in the workplace using e- learning tools and materials to supplement more traditional resources.

Those qualifying for the programme are admitted following nomination by an employer. Where students do not meet normal, formal entry requirements there is flexibility to assess suitability on the basis of merit. The programme fulfils the requirements for a Bachelor degree in terms of credits and levels of learning. There is also a Master's programme available at Level 7. Students who do not wish to undertake a full award can undertake interim awards such as a Certificate Higher Education (Level 4 only).

The strengths of the programme are numerous. It is well resourced and companies have a strong incentive to participate since they are already paying a national levy for apprenticeships which is payable whether they nominate apprentices or not. Unlike a traditional degree, the Apprenticeship degree does not require the student to pay tuition fees, which the employer pays for from the levy. Students are also salaried whilst completing their studies so from a financial perspective alone, there is a considerable incentive for students to undertake the programme. This combined with professional recognition upon completion and work experience makes the programme very attractive indeed and this is reflected in the ability of students undertaking the programme. The integration of theory and practice in a situated context created a powerful learning experience. In contrast to traditional management degrees where didactic instruction in a context-free environment is held to somehow prepare students for real world learning after the fact, learning on the programme is real and applicable at the point of delivery. Employers have been involved in the design of the programme, as well as the

professional body and the fact that students are mostly in the workplace ensures the relevance of learning from their perspective. Employers and students have been surveyed and their responses are very positive indeed.

There are two types of drawbacks to the programme:

- Those that have to do with the programme itself. Its first two years of operation employers often choose to put existing employees on the programme rather than new employees so that some students are considerably older than might be expected on an Apprenticeship. It is also difficult to enforce the rule regarding time spent in the workplace learning (20%). Dealing with employers is always complex from the university's point of view and there have been serious delays accessing funds from the levy. Demand from employers can vary significantly from year so that the university tries to avoid committing resources until it is reasonably confident the expenditure can be justified. So in the short term there is pressure on academic staff.
- Those that are in relation to transferability.

Despite these difficulties the programme works well, mainly because there is an established culture and practice for dealing with flexible vocational learning and dealing with employers. This expertise has been developed over many years and is not easily replicated in the short term in institutions where there is no history of flexible, work-based learning. Other than placements, few academic institutions have experience of integrating experiential learning into formal academic credit. Many institutions lack experience in dealing with employer-driven programmes and lack policies, processes and procedures for doing so.

<u>Feedback from users:</u>
There are formal processes for recording the student experience as with all programmes at the University. These include mandatory end-of-module evaluation (via questionnaires), regular staff- student meetings (three a year) and participation in the annual National Student Survey (results are disaggregated to programme level). Student issues are also discussed at regular (monthly) tutor team meetings. There is also an annual formal review, peer assessed.

The University has a procedure for student complaints which in the final instance are decided by the highest decision making body, the Senate. External to the university the national Office for Students provides the regulatory framework for higher education. A separate Office of the Independent Adjudicator deals with complaints.

Academic standards are maintained via an internal system of second marking with oversight provided by an independent External Examiner. The External Examiners report covers all aspects of the programme including the student experience. It is reported to the tutor team (who formally responds) and ultimately Senate. The Quality Assurance Agency is the national body with responsibility for overall standards conducted via institutional audit.

Separate from these formal processes a member of academic staff has conducted independent research on the student (and employer) experience during the first two years of the programme. **The results are overwhelmingly positive: students appreciate the opportunity to integrate work and study and apply learning into practice.**

Annex 3: Useful tools for dual mentoring

Mentoring is all about supporting the apprentices' learning and development process during the HEA experience. The apprentice's performance at the HEI and at the working place will determine the successful or unsuccessful achievement of the competences and skills marked in the HEA programme.

Both mentors need to have access to the development of the learning process of the apprentice and focus on how to help him/her to achieve his/her objectives from a theoretical/academic point of view (at the HEI) and from a more practical/hands on perspective (at the enterprise or industry).

Sharing information about how the student is performing at one end would help you to adapt the original setting of learning at the other end. Communication between mentors, thus, would be of great help for everyone involved.

USEFUL TOOLS

- ▲ Google drive for sharing notes, reports, assignment scores or tables
- ▲ Virtual meetings platform such as Skype, GoToMeeting or Adobe Connect, to communicate between mentors but maybe also to include discussions with both mentors and the student
- ▲ Shared Moodle platform to upload materials
- ▲ Emails for general communication
- ▲ Shared templates for marking or reporting

Annex 4: Debriefing methods

NOTES FROM THE WORKSHOP BY THE BREST CHAMBER OF COMMERCE (FR)

Presenter: Philippe Le Coz.

For each skill the learner needs to acquire, the mentor needs to identify a set of corresponding abilities. The challenge for the mentor will be to obtain information from the learner on his/her skills that allows the mentor to pinpoint the gaps and plan the learning objectives to be achieve in the work place. This process is done in "debriefing" sessions and mentors need training to learn this technique. But debriefing is not the only competence that is needed - a number of key competences are mandatory for mentors to:

▲ The first competence the mentor needs is to be able to **recognise the learning process and identify the skills required at every stage**. It is necessary to allow for time of assimilation of learning and time of adaptation of learning. Metacognition is important for the learner: awareness of what is learning and why is learning it for.

▲ The second competence mentors need to learn is **how to do debriefings** and obtain information from a student. The initial interview(s) when the student tells the mentor what he/she has done and how he/she does it are crucial. The debriefings at intermediate phases are even more important if the learner started very well and gets worse. Mentors need to do these face-to-face debriefings, demystify and de-dramatize them.

The mentor should establish a framework of references that helps the learner to see how he/she can target the abilities to acquire the skills. A number of abilities become a skill. if we have a scale of skills in a framework, it is easy to identify the competences that are not being achieved and train that particular part. Mentors should focus on what the learner learns, rather than what the mentor teaches. Therefore, the pedagogical skills needed by mentors is to focus on how the learner learns.

▲ The third important competence mentors need to acquire is to **know how to remedy** situations when the learner has failed to acquire the targeted learning.

▲ The fourth important competence that mentors need to have is awareness raising.

Training mentors - key points:

▲ The typical training for mentors takes normally two full days. Later on there is one more full day of training to consolidate the knowledge and to answer questions.

▲ The basic and more important points are to consolidate what is "skill", how to identify skills and how to debrief students.

Apprenticeship scheme - key points:

- ▲ There might be two visits between mentors: one at the beginning of the HEA programme (obligatory) and maybe another later on

- ▲ The benefit of having apprenticeships is that you "build" the skills of someone to the specific needs

- ▲ Treating apprenticeships as staff give them a sense of belonging and strengthens their loyalty and interest

- ▲ The contract includes a confidentiality clause

Notes taken during the ApprEnt workshop in Brest, May 2018

Annex 5: Learning portfolio

WHAT IS A LEARNING PORTFOLIO?

A **learning portfolio** is a purposeful collection of student work that exhibits a student's effort, progress, achievements and competencies gained during a course or time in university.

Student should use it every day to record, store and structure a collection of evidence to demonstrate their learning achievements and abilities as well as their questions and thinking processes. This may include a reflective account of a practice placement, presentation, learning experience or group experience. The student will be able to:

- ▲ Accumulate and store evidence of the many transferable skills students develop while studying
- ▲ Self-assess and monitor their own learning development.
- ▲ Develop and present a portfolio of work or reflective account on an aspect of students' learning as part of course assessment.
- ▲ Build a resume for employment applications and as evidence of learning achievements for a professional body.
- ▲ Apply for jobs by showing evidence of relevant work experience and suitable 21st century skills.

KEYS TO CREATING A SUCCESSFUL LEARNING PORTFOLIO

1. Familiarity with the portfolio approach, the process and product of creating a learning portfolio
2. Understanding the value of reflection
3. Having clear framework and guidelines
4. Having a balance of structure with freedom for creativity
5. Opportunity for feedback during the evidence collection process
6. Understanding the value of the portfolio for future use, such as employment
7. Motivation to learn and achieve good marks
8. Student ownership of the learning portfolio
9. Making connections between the portfolio content and the student's extra-curricular and personal life
10. Consideration of the target audience (instructor, peers, employers).

Annex created from an adaptation of the text from McMaster University (Canada)
https://mi.mcmaster.ca/learning-portfolio/

Annex 6: Mentors' key skills and competences

MAIN KEY SKILLS AND COMPETENCES NEEDED FOR SUPERVISORS/MENTORS

- ▲ Coaching
- ▲ Advocate/Ambassador/multiplier
- ▲ Communication skills
- ▲ Education background of some sort is needed
- ▲ Experienced in what is mentoring
- ▲ Good interpersonal skills – able to talk constructively about mistakes
- ▲ Ability to provide feedback and to receive feedback in turn
- ▲ Supportive attitude
- ▲ Ability to find lacks/mistakes and to find also solutions or remedies
- ▲ Basic digital skills
- ▲ Able to understand that both HEI assignments and results at work are important
- ▲ Able to follow what is expected in the curriculum and monitor its achievement
- ▲ Understanding of the process of learning
- ▲ Able to define clear objectives and learning outcomes
- ▲ Familiarity with fundamentals of adult learning
- ▲ Able to plan ahead
- ▲ Flexible to adapt to the company environment and other situations
- ▲ Empathy and capacity to encourage and motivate
- ▲ Self-motivated
- ▲ Self-reflection ability
- ▲ Able to do both summative and formative assessment
- ▲ Able to accompany the learner in his/her learning process
- ▲ Social skills
- ▲ Being aware and respect diversity of learnings
- ▲ Being aware of different cognitive models

List identified by the ApprEnt consortium during the meeting in Castelldefels, 20-21 September 2018.

Annex 7: Mentors needs and credit

HOW TO HELP MENTORS?

- ▲ To define their role clearly
- ▲ To explain/define the profile of the target groups (learners)
- ▲ Time to learn and adapt to mentoring – initial and continuous training
- ▲ Formative assessment (debriefing)
- ▲ Self-reflective sessions
- ▲ Access to tools and resources such as templates and guides
- ▲ Access to informative portal easy to access (e.g. info on strategy, LOs, arrangements…)
- ▲ Exchange with expert mentors internally and externally – creation of a network
- ▲ Changing mentality to find the task important and attractive
- ▲ Quality control tools
- ▲ Incentives to companies to facilitate and select mentors
- ▲ Ensure a system for monitoring the apprentices

HOW TO GIVE MENTORS CREDIT FOR THEIR WORK?

- ▲ Economic reward
- ▲ Recognition
- ▲ Visibility of their work
- ▲ Time reduction of other duties
- ▲ Time to prepare for their mentoring tasks
- ▲ Time for training
- ▲ Access to exchange views and resources with other mentors/supervisors (from enterprises and academia)
- ▲ Formal contract
- ▲ Information
- ▲ Clear set of regulations that specifies benefits and encourages the task
- ▲ Clear internal policy
- ▲ Flexibility
- ▲ Accreditation or badge

List identified by the ApprEnt consortium during the meeting in Castelldefels, 20-21 September 2018.

Annex 8: Austrian prototype course model *MentorMOOC*

ABRIDGED VERSION OF THE MentorMOOC MODEL[5].

Overview

The "MentorMOOC" is a recommendation serving as a framework for HEIs and enterprises for a successful implementation of continuous training for mentors.

The teaching and learning concept for mentors in higher education apprenticeships is designed in modules, which permits an individual adaptation to previous learning experiences. The learners themselves select the modules, which they want to complete. A Self-Assessment Tool will help the learners to make their selection.

The training has the following basic characteristics:

Title	Mentoring in Higher Education Apprenticeship
Type of learning/ teaching	eLearning/ Massive Open Online Course (MOOC)
Nº of Modules	7
Infrastructure	LMS (e.g. Moodle), Internet access, computer, microphone, speakers
Average of Workload by Module	10h

For the preparation of the teaching and learning design, were taken in consideration the results of the ApprEnt workshop held in December 2018 at the Donau-University Krems. Participants coming form economy and higher education attended the workshop and discussed which characteristics should have a successful mentor training.

Structure and learning outcomes

The revision of literature (Ghoneim et al., 2017, Grundschober, Ghoneim, Baumgartner, & Gruber-Mücke, 2018 and Level up! Projekt, 2018), the results of the international ApprEnt meeting held 20-21 September 2018 in Castelldefells and the ApprEnt workshop held in December 2018 in Krems, prompted seven Modules with 4 or 5 respective expected learning outcomes each.

The learning outcomes refers to knowledge, skills and competences, which the learner should be able to demonstrate at the end of the learning process (European Commission, Cedefop, & ICF International, 2014). The learning outcomes should be announced to the learners at the beginning of the training, so that the aims of the training are clearly communicated.

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[5] https://www.donau-uni.ac.at/de/universitaet/fakultaeten/bildung-kunst-architektur/departments/weiterbildungsforschung-bildungstechnologien/forschung/Projekte1/apprent---refining-higher-education-apprenticeships-with-enterprises-in-europe/resultate.html

MentorMOOC proposes the following modular structure and learning outcomes:

MODUL 1: INTRODUCTION TO MENTORSHIP IN DUAL STUDIES

The introductory modules explain the basic terms and concepts, which has its reflection also in the learning outcomes. They are linked to the cognitive processes of "memory" and "comprehension". The following learning outcomes are proposed:

1. The mentors are able to name the general characteristics of higher education apprenticeship.
2. The mentors are able to explain, why mentoring is relevant to link theory and practice.
3. The mentors are able to distinguish between mentoring higher education students and other learners (e.g. Trainees or apprentices).
4. The mentors are able to explain the relevance of the cooperation between mentors in the enterprise and academic tutors.
5. The mentors are able to name the methods of the interchange of information about their students

MODULE 2: UNDERTSTANDING THE LEARNING PROCESS OF THE (DUAL) STUDENTS

Mentors should be able to support the learn processes of their mentees (higher education apprentices). For this reason, it is necessary that the mentors understand the conditions and the context of the competence oriented and learner-centred learn processes of the higher education apprenticeship. The learning outcomes of the Module 2 reflect overall the cognitive process "comprehension". The following learning outcomes are proposed:

1. Mentors are able to describe the learning and teaching.
2. Mentors are able to explain the relevance of ECTS and learning outcomes for the higher education apprenticeship.
3. Mentors are able to describe the portfolio-based and competence oriented learning process of the students.
4. Mentors are able to discuss the advantages and disadvantages of the use of ePortfolio for the higher education apprenticeship.

MODULE 3: PLANNING A LEARNING STRATEGIE IN THE ENTERPRISE

The mayor part of learning at work is informal by nature and depends on the concrete environment of the enterprise. In the frame of higher education apprenticeship, the learning results are explicitly specified creating the set for the learning at work place. Within this setting, secondary, but individually relevant learning outcomes can be defined for each learning stage. Mentor know the enterprise and should learn in this module, to create learning situations so that their mentees could achieve the learning outcomes as prescribed in the curriculum and in additional defined by themselves. The cognitive processes "analysis" and "application" are prioritised in the module. The following learning outcomes are proposed:

1. The mentors are able to identify the learning outcomes for the work environment and define them transparently.
2. The mentors are able to identify the relevance of learning outcomes for the planning of the learning strategy.
3. The mentors are able to help the learners to identify their prior learning experiences.
4. The mentors are able to help the learners to identify learning outcomes for certain learning stages
5. The mentors are able to help the learners to develop a learning strategies in relation to the work environment and the expected learning outcomes.

MODULE 4: SUPPORT THE LEARNING PROCESS

The Module 4 is focused on the application of evaluation technics and the formative and summative feedback. "Application" and "Evaluation" are the priorities of the cognitive process. The following learning outcomes are proposed:

1. The mentors are able to describe methods to observe the labour and social behaviour of the learners.
2. The mentors are able to advise the learners during the learning process.
3. The mentors are able to describe methods to document competences.
4. The mentors are able to make a formative and summative evaluation of students' documentation.

MODULE 5: USING DIGITAL TOOLS FOR MENTORING

This module is focused on the knowledge how to apply the digital learning and teaching tools. These should facilitate the communication between mentors and mentees, but also between the mentors. It also facilitates to support the learning processes for instance through the ePortfolio-approach. This module prioritises the cognitive process "application". The following learning outcomes are proposed:

1. The mentors are able to use digital tools for communication.
2. The mentors are able to use digital tools for formative Feedback.
3. The mentors are able to use digital evaluation grids.

MODULE 6: AWARENESS OF THE ADVANTAGES OF HIGHER EDUCATION APPRENTICESHIP

The sixth module is oriented to the awareness: the mentors are voices of higher education apprenticeship. They are in a strategic position to transmit the relevance and advantages of the higher education apprenticeship for enterprises and students. Often they have close contact to the higher education institution and participate in the (further) development of higher education apprenticeship. The cognitive processes of "application" and "evaluation" are the focus of the module. The following learning outcomes are proposed:

1. The mentors are able to name the advantages and challenges of the higher education apprenticeship for enterprises and higher education institutions.
2. The mentors are able to name the advantages and challenges of the higher education apprenticeship for students.
3. The mentors are able to develop a strategy to promote higher education apprenticeship actively in the enterprise. Mentors should be able to develop a strategy to promote higher education apprenticeship actively in the higher education institution.
4. The mentors are able to describe strategies for a closer cooperation between higher education institutions and enterprises.

MODUL 7: PROFESSIONAL DEVELOPMENT OF MENTORS

The personal development of the mentors is the focus of the seventh module. It prioritises the cognitive processes of "comprehension", "application" and "evaluation". The following learning outcomes are proposed:

1. The mentors are able to self-evaluate their own mentoring performance.
2. The mentors are able to describe the relevance of the Communities of Practice for their own personal development.
3. The mentors are able to identify the Communities of Practice, which are relevant for them.
4. The mentors are able to use "Working-out-Loud"-approach.

MOOC training for mentors

As mentors are living in different geographic places and must conciliate the training with their jobs, e-learning seems to be a practical solution that allows to carry out learning activities disconnected from concrete time schedule and places, and a better conciliation with work and private life. The MentorMOOC concept proposes to create an Open Online Course (MOOC) combining the two types of MOOCs: xMOOCs (focused on the content and lecturer-centred) and cMOOCs (with a learner-centred approach) - Margaryan, Bianco, & Littlejohn, 2015 and Yuan & Powell, 2013.

Evaluation and certification

The proposed evaluation methods are in accordance with the learning outcomes and the teaching and learning activities. Learning outcomes focusing on the cognitive processes of "memory" and "comprehension" will be evaluated through Multiple choice questions. Higher cognitive processes as "application", "analysis" and "evaluation" will be checked by the creation of individual digital artefacts and peer-feedback exercises.

It is recommended to couple the MOOC with an option of certification. At the end of each module, the assessment envisaged in the course can be submitted for a summative evaluation. This might not be compulsory. Usually, the analysis of the Multiple-Choice-Tests could be automatized via learning management systems. Other learning assessment methods created during the MOOCs will be evaluated by the tutor.

The submission of the assessment or the completion of all modules is voluntary. For the successful completion of each module, a (digital) badge could be awarded.

For the recognition of a badge as an indicator of acquired knowledge, skills and competences it is necessary to design it transparently and linked to the learning artefacts. Several artefacts could be integrated in one portfolio. Metadata as information about the issuer, the proved learning outcomes and the respective evaluation criteria, links to the Learning artefacts and their evaluation, should be included in the badge (Gibson et. al. 2015).

Advice for the supervision of MOOC learners

A principle of the MentorMOOCs is that the learner decides by their own, which module they want complete. There is no obligation to complete all modules. A Self-Assessment-Tool could help the learner to take a decision.

Formative, continuous und prompt Feedback could increase the learners' engagement and promote positive learning attitudes in the MentorMOOC. For this reason, it is recommended to use tools and activities which stimulate social interchange (Hew, 2016).

To show the interrelation of learning outcomes, learning & teaching activities with the resulting learning assessment and the evaluation, it is recommended to use the ePortfolio-approach for the MentorMOOCs.

For the promotion of a continuous training of the mentors in Higher education apprenticeship, the interchange of experience among mentors is highly relevant and treated especially in the Module 7. The interaction in a Communities of Practice can reinforce in mid and long terms its professionalization. For the successful set-up of a Community of Practice (Wenger, McDermott, & Snyder, 2002) several aspects must be considered.

Higher Education Apprenticeship (HEA) programmes are a resourceful system to give students both academic and practical experience at higher level. The important distinguishing part of these programmes is that universities and enterprises work together to form the professionals that will be needed in the labour market, making sure that the skills are not only learnt but also practised in real working environments.

However, the mentors (at enterprises) and supervisors (at HEIs) of the students undertaking HEA programmes not always are prepared to do their job. To know a lot about your own profession does not always guarantee the capacity to help others.

This document describes a generic structure of a Continuing Professional Development Course (CPDC) that aims at giving the reader insights and ideas in organising staff training for mentors and supervisors of HEA programmes. The course structure has been thought so it can be adapted to any institutional, regional or national need.