



ENTRE**COMP**EDU

Module 1: Entrepreneurial knowledge and understanding



Co-funded by the
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Module Summary

Entrepreneurial Knowledge and Understanding	
Aims	To highlight the importance of professional knowledge and understanding of entrepreneurial education
Description	This module discusses the knowledge and understanding teachers and trainers need to teach entrepreneurial skills. It explains why entrepreneurial education is important and how teachers can show that they value its relevance in their practice. EntreCompEdu, the professional framework for teaching entrepreneurial competences, is introduced and shown how it links to EntreComp. The module discusses the six principles that support EntreCompEdu and how these can guide pedagogy: facilitating creative thinking through the learning process; promoting active entrepreneurial learning in real-life contexts; fostering purposeful collaboration both in and beyond the school; encouraging learners to create value for others; stimulating reflection, flexible thinking and learning from experience; and making entrepreneurial competences an explicit part of learning and assessment.
Intended learning outcomes	By the end of this module you should: describe what entrepreneurial education involves and why it is important explain how EntreCompEdu links to EntreComp discuss what you can do to show that you value entrepreneurial education relate the six principles behind EntreCompEdu to your practice
Main learning methods	Guided reading Video observations Creative exercises Self-directed activities Reflecting on personal experience
Content	1.1 Knowing entrepreneurial education 1.2 Valuing entrepreneurial education for all 1.3 Understanding how learners develop entrepreneurial competences
Assessment	Self-assessment and reflection
Indicative time	3 hours



Video Introduction to Module 1

Watch this short video introduction to Module 1.



Link <https://www.youtube.com/watch?v=GUXQh4yBAwA>

1.1 Knowing entrepreneurial education

1.1.1 Why is everyone talking about it?

Over recent decades, rapid and deep-seated social, technological, and environmental changes have prompted policymakers and educators to reflect upon the purposes and content of education, as part of the need to adapt and keep pace with such changes. There is a growing consensus that this goes beyond transmitting knowledge, towards preparing students for life: towards fulfilling their potential both as active citizens and within the world of work.

ACTIVITY - WATCH - Skills Development Scotland - The Future of Work

Link: <https://www.youtube.com/watch?v=ITJUQre19Mg>



What are the skills that our young people need for this future? This is where the interest in entrepreneurial competences lies, as the knowledge, skills, and attitudes (or 'mindset') that young people need to thrive in our increasingly complex and uncertain world. In 2015, the World Economic Forum looked at how the skills needed for employment are changing (Figure 1). This is highlighting the rising importance of those skills which the video above calls 'innately human' within the world of work. It is clear that this progression in the skills needed for employment includes skills that are not yet widely recognised nor an explicit part of our education systems.

Top 10 skills

in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

in 2015

1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity



Figure 1: Skills for the Future of Work, Future of Jobs Report 2016, World Economic Forum

1.1.2 What does it mean for education and training?

Children and young people are capable of spotting opportunities and suggesting solutions to real-world problems they experience in life or that they see in the community and world around them. For example, in 2012, Boyan Slat was 16 years old when he came across plastic pollution on his holiday in Greece. He now leads the non-profit Ocean Cleanup dedicated to developing advanced technologies to rid the world's oceans of plastic. From climate change to homelessness, or from encouraging first-time voting to preserving cultural heritage, young people can think creatively and come up with new ideas to tackle different problems. Our young people are the citizens and leaders who have the ideas to create the future, and entrepreneurial education is one opportunity to strengthen their creativity to have the ideas and their initiative to put their ideas into action.

It is within our collective human DNA to try and add value to our lives by exploring, showing curiosity, asking questions, solving problems- the kind of skills and dispositions associated with being entrepreneurial. EntreComp, or the European Entrepreneurship Competence Framework, defines entrepreneurship as being when you act upon opportunities and ideas and turn them into value for others. The value that is created can be financial, cultural, or social. This is about being entrepreneurial across our lives.



Entrepreneurship is when you act upon opportunities and ideas and transform them into value for other. The value that is created can be financial, cultural, or social.

Figure 2: *EntreComp definition - developed by the Danish Foundation for Entrepreneurship / Young Enterprise, 2012*

The creation of value for others is emphasised through the definition, as the process through which all the competences are used to go from creative idea to entrepreneurial action which creates value for others. This value can be financial, cultural, or social.

- **financial value** – creating financial revenue through services or produces for the market, perhaps through fundraising, a social enterprise, a mini-company or practice firm, a real student start-up business or a business run by the school or college
- **cultural value** – ideas which enrich people's cultural experiences such as music, art, heritage e.g. restoring an old building, holding a film festival, a street art exhibition, language learning, celebrating local heritage or arranging a new dance competition
- **social value** – ideas which enhance society and social conditions, such as tackling local or global environment issues, reducing loneliness, supporting employment, tackling racism, health campaigns, setting up community



sports clubs or providing something that people lack e.g. a regular supply of clean water. Activities such as student councils or parliaments also create social value

European policy-makers worked with educators and experts from around the world to develop EntreComp as a way of explaining what the entrepreneurial approach means for education – breaking it down into the specific competences or building blocks that can be taught and practiced to help people develop the different skills that make up 'being entrepreneurial' in different areas of life.

Figure 3: The EntreComp Model



These building blocks represent 15 interlocking competences arranged in three areas of five (see table 1)

Ideas and opportunities	Resources	Into action
Spotting opportunities Use your imagination to Identify opportunities for creating value	Self-awareness and self- efficacy Believe in yourself and keep developing	Taking the initiative Go for it
Creativity Develop creative and purposeful ideas	Motivation and perseverance Stay focused and don't give up	Planning and management Prioritise, organise, and follow up
Vision Work towards your vision of the future	Mobilising resources Gather and manage the resources you need	Coping with uncertainty, ambiguity, and risk Make decisions dealing with uncertainty, ambiguity, and risk
Valuing ideas Make the most of ideas and opportunities	Financial and economic literacy Develop financial and economic know-how	Working with others Team up, collaborate and network
Ethical and sustainable thinking Assess the consequences and impact	Mobilising others Inspire, enthuse, and get others on board	Learning through experience Learn by doing

Table 1: *Entrepreneurial competences in EntreComp*

These competences can be combined in lots of different ways and no single 'block' is more important than the other. It all depends upon the task in hand and what the individual wants to build or create.

To use an analogy, one way to think of entrepreneurial education is supporting students so that they can combine a set of building blocks (the competences) to create something of value for others.

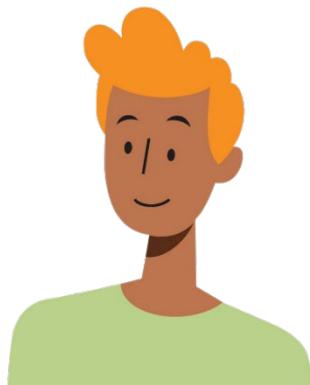
EntreComp then presents entrepreneurship as a broad set of competences which can be seen in all aspects of our lives. Everyone can behave in an entrepreneurial way, including young children who show a sense of adventure and a playful spirit. Most of all, learners of all ages can develop or enhance these competences through their education and training experience.



ACTIVITY – EXPLORE - Discovering the EntreComp Flower

This is an online tool which introduces the EntreComp competences to teachers. You can explore each competence and download the full set of EntreComp Teacher Cards.

Link: <https://s.surveyanyplace.com/flower>



1.1.3 How is EntreComp used in your country?

All Member States have formally agreed to the definition and understanding of the entrepreneurship key competence demonstrated through EntreComp, as one of the eight key competences within the European Key Competence Framework for Lifelong Learning.

However, each country makes reference to, uses, or embeds EntreComp differently through their education and training systems (Table 2):

Belgium (Flanders)	From 2019, the EntreComp framework is explicitly included into the new law on education, to demonstrate the new focus of entrepreneurial learning away from learning business skills and towards the broader competence approach. The entrepreneurship competence, understood using EntreComp, is now being translated into teaching, learning goals and assessment for each subject, as one of the transversal competences relevant to all subject areas.
Finland	Finland has used EntreComp as the basis for a comprehensive review of VET provision for entrepreneurial learning, and it now underpins the teacher self-assessment tool supported by the Ministry of Education and Culture and the Finnish National Agency for Education, 'Measurement Tool for Entrepreneurship Education'.
Macedonia	The National Strategy for Entrepreneurial Learning highlights the importance of this competence, and this is replicated in the 2018 Education Strategy. EntreComp is commonly used as the basis for entrepreneurial teaching and learning in the country. As well as being recognized as a transversal competence relevant to all subjects, entrepreneurial learning is also included as a stand-alone subject within secondary school.
Spain	At national level, the entrepreneurship key competence is within the 2015 law on education and must be closely linked to the learning objectives defined for primary, secondary and baccalaureate education. At the level of Autonomous Communities, there is significant take-up of EntreComp into regional policy and practice. For example, Extremadura offer a suite of materials from primary to VET which are underpinned by EntreComp.

Table 2: *References to EntreComp in different European countries*

LoopMe Individual Task 1.1 - Exploring EntreComp

Using the EntreComp Teachers Cards downloaded in the previous exercise, choose one of the 15 competences in EntreComp and think about what this competence means to you personally.

Discuss your chosen EntreComp competence with an education colleague. Do you have the same perspectives on what this competence means for learners?

Share your reflections with your trainer in your LoopMe report for this task.

In LoopMe, click on 'report' to start your reflection loop



1.2 Valuing entrepreneurial education for all

1.2.1 Valuing entrepreneurial competences in your students

What kind of education do you value or think important? What do you want your students to know, understand and be able to do when they leave your school or college? Does your answer include any of the following: 'good at communication', 'being creative', 'imaginative', 'getting on with others', 'motivated', 'self-aware', 'confident enough to handle setbacks', 'perseverance', 'ethical' and 'acting sustainably'? If so, you are already valuing entrepreneurial education.

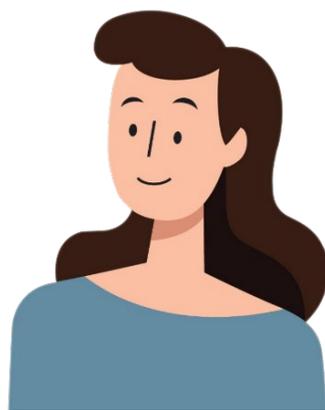
Organisations such as the European Commission and a growing number of governments know that entrepreneurial education is important in a fast-changing world. They want to see this taught more often in school. This is because this approach to learning can:

1. help you **build on learners' natural curiosity and creativity** e.g. by giving them space, time, and resources to explore their immediate environment
2. help you **engage learners** in challenging, real-world problems, enabling them to apply their learning beyond the classroom e.g. through community-based projects
3. help you **equip learners** with the knowledge, skills, and attitudes they need for the future and which are in high demand e.g. problem-solving, flexible thinking and creativity
4. help you **strengthen ties between schools and the outside world**, often enhancing students' employability prospects e.g. connecting community and business to what is learned in the classroom, involving potential employers in formative assessment, through apprenticeships, using entrepreneur-in-residence schemes or visits with entrepreneurial citizens to talk about their lives and work.
5. help you support learners to **contribute towards a more inclusive society** e.g. through sharing positive role models of under-represented groups such



as women, migrants, individuals from ethnic minority backgrounds and individuals with special educational needs.

However, there are challenges to overcome. These include teachers who have a lack of time in the curriculum, inflexible curriculum demands, inadequate knowledge and professional training or limited entrepreneurial contacts with the world outside school. EntreCompEdu and these Continuing Professional Development modules are designed to help you overcome these challenges.



1.2.2 Valuing entrepreneurial education for your teaching

To show that you value entrepreneurial education, there are four things that you can do, all of which are key principles for your participation in this training.

1. Build knowledge and understanding of entrepreneurial education for your teaching

Through these modules we will provide a range of tasks to expand your knowledge. And these tasks will include suggested readings, discussions, observations, and reflections. To get the most from the materials, then you need to engage in these exercises! These two documents are the basic texts to start enhancing your understanding of entrepreneurial education – take a look and get reading!



Your assigned readings...	What they offer...
<u>EntreComp into Action</u> [recommended starting point]	<p>This document focuses on the EU-level EntreComp framework and is a practical guide on how to understand and use EntreComp. It shows you how each EntreComp competence is broken down further into threads of learning, providing a clearer bridge between the competences and learning. This can inform curriculum design, setting learning goals and identifying learning outcomes in entrepreneurial learning.</p> <p>http://publications.jrc.ec.europa.eu/repository/bitstream/JRC109128/jrc109128_entrecomp_into_action_-_final.pdf</p>
<u>EntreCompEdu: Professional Competence Framework for Teachers and Trainers</u>	<p>Provides more detailed commentary on the competences within the EntreCompEdu Framework. Allows you to see the why and how of their inclusion, in a professional competence framework which supports teachers and trainers to deliver EntreComp competences through their teaching</p> <p>https://issuu.com/bantaniedu/docs/entrecompedu_framework_for_educators_en</p>

Table 3: Key references to expand your entrepreneurial knowledge and understanding



2. Role model the entrepreneurial behaviours that you expect from students

When you read through the competences mentioned in EntreComp it should become clear that many of these align with what good teaching is all about e.g. being creative (1.2), motivating students (2.2) and skills in planning and management (3.2).

One of the hallmarks of being entrepreneurial – creating value – should be a close link to what you aspire to do. Your good teaching aims to add value to students' learning.

And so, in some cases you may find that simply refining what you say and do can inspire learners to behave in an entrepreneurial way. For example, if teaching history you could use examples of entrepreneurial behaviour of people in the past. Or in mathematics teaching you might focus on real-world applications of numeracy skills among market street traders. In other cases, you may need to rethink your approach more radically so that the distinctiveness of entrepreneurship shines through. For example, by changing your pedagogy to provide students with greater opportunities to collaborate, ask 'What if...?' questions and engage themselves in community projects beyond the classroom.

3. Use deliberate practice to develop your competences

The concept of deliberate practice underpins and is key to your participation in this teacher training programme, asking you to deliberately practice what you learn within the modules in your teaching (inside and beyond the classroom) and with your learners.

The theory was introduced by Anders Ericsson who explored how people in different walks of life became the most successful in their fields, such as sport,



business and music.¹ One thing people like Ronaldo, Bill Gates and the Beatles have in common is their commitment to improve their performance through practice in a purposeful, focused and systematic way. This is not simply repeated practice (Figure 4). Rather, it has a deliberate focus on the choice of skills to improve. It involves precise feedback from knowledgeable coaches and through trial-and-error refine these skills over a long period of time.

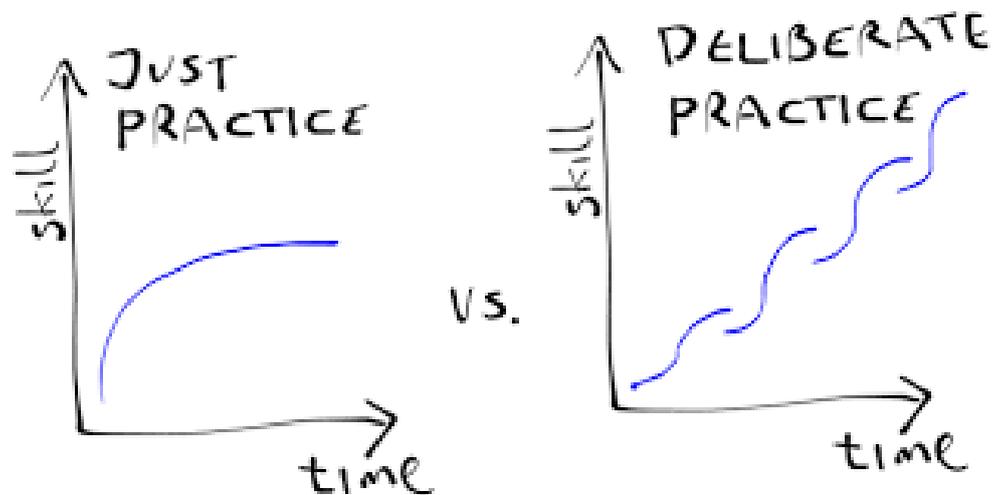


Figure 4: *The difference between regular and deliberate practice*

Through small steps and by acting on feedback, everyone can improve their performance in all walks of life, including you as a teacher exploring new ways of facilitating learning and assessment.

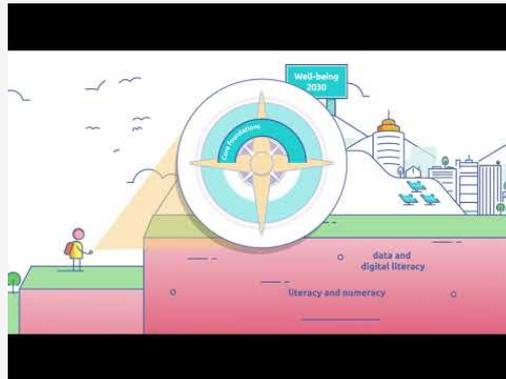
¹ Ericsson, A. (2008) 'Deliberate Practice and Acquisition of Expert Performance: A General Overview' available at: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1553-2712.2008.00227.x>
For a useful summary of deliberate practice, see <https://jamesclear.com/deliberate-practice-theory>



LoopMe Individual Task 1.2 - The Learning Compass 2030

To get a sense of where entrepreneurial learning fits into the bigger educational picture, watch this brief video on the Learning Compass 2030 produced by the Organization for Economic Cooperation and Development.

<http://www.oecd.org/education/2030-project/teaching-and-learning/learning/>



Link: https://youtu.be/M3u1AL_aZjl

Then reflect on the following two questions:

1. What importance is attached to creating value, which is at the heart of entrepreneurial learning?
2. What are the key messages you take from the video that makes you think differently about your practice? (You could think of the impact on your practice from different perspectives such as yourself, your teaching, your students, your subject, your colleagues, your experiences, your working methods).

Share your reflections with your trainer in your LoopMe report for this task.

In LoopMe, click on 'report' to start your reflection loop



1.3 Understanding how students develop entrepreneurial competences

1.3.1 Guiding principles of effective entrepreneurial pedagogy

As a teacher, what you say, think and do in the classroom really matters. Teaching is the single most important school-based factor in improving students' learning.² The nature of entrepreneurial competences (e.g. creativity, risk-taking and working with others) raises the importance of the teachers' role even more through a greater focus on the *process* of learning. This is because the often hard-to-reach competences seen in EntreComp are triggered by going through learning experiences, reacting to these experiences, and learning through that process.

This professional development has identified six guiding principles through which teachers can enhance the opportunity for your students to develop entrepreneurial competences through learning experiences both in and beyond the classroom.

You will probably recognise many or all of these. But the key point to reflect upon is the extent to which your pedagogy is based on these principles each day.

Here we introduce these guiding, and the course will build on these further in the remaining modules

1. Facilitates creative thinking throughout the learning process

More than sixty years ago, it was suggested that the responsibility of educators is to 'identify creative talent, and to provide the kind of total environment which will

² Sutton Trust (2011) Improving the impact of teachers on pupil achievement in the UK – interim findings, Sutton Trust.



facilitate its development and expression.¹³ We now know that such 'talent' is not confined to a few artistic individuals. Everyone has the potential to be creative and in ways that extend far beyond the arts. Historically speaking, fostering creativity has not been a priority for educational systems. As a result, concerns have been expressed that students' creativity is declining and their all-round education is suffering⁴ (see module 4, Go Deeper 4.1). In more recent times, however, there are more promising signs. Policymakers, curriculum designers and practitioners are finding ways of fostering creative thinking across subjects and in a variety of contexts without losing sight of the need to pursue high standards in areas such as literacy and mathematics.

Facilitating creative thinking throughout the learning process means helping students explore and evaluate multiple ideas to create value. It means encouraging students to wonder about possibilities and be adaptable to different ideas and solutions. It allows them to test out ideas, make comparisons and to continually reflect on (and adapt) the usefulness of their proposed solutions to problems. The generating of ideas that have value to oneself and then others is at the core of what it means to be entrepreneurial, creativity is a driving force behind these ideas and how they are designed and implemented.

2. Promotes active entrepreneurial learning through real-world contexts

Active entrepreneurial learning occurs when students are engaged in authentic activities which stimulate creative thinking. In contrast, passive learning is associated with students sitting listening to whole-class teacher 'talk and chalk' or working through in textbook exercises, which demand little thought. This is something of a caricature and the distinction is not always clear-cut. For example, students can listen actively to a lecture delivered by an animated speaker who prompts them to think deeply about issues and reflect on what this means to them.

3 Hahn, M. (1968) Review of Research on Creativity, University of Minnesota, p.1.

4 Kyung Hee Kim (2011) 'The Creativity Crisis: The Decrease in Creative Thinking Scores on the Torrance Tests of Creative Thinking', Creativity Research Journal, 23:4, 285-295.



Equally, individuals can be provided with hands-on practical tasks and opportunities to collaborate with others but make little progress in their learning because the tasks are too superficial.

By and large, however, entrepreneurial learning is best promoted when students have regular opportunities to interact with the world outside the classroom. This includes engaging with real-world problems and issues within the community and further afield. This goes beyond arranging visits where students are largely passive recipients of information, but towards activities such as community projects planned, developed, and evaluated by students in collaboration with others.

This could, for example, include working with students in other schools or colleges, parents, community and civic leaders, or representatives from business or industry. The trigger points for such a project might include a simple question that students ask about their community, an observation about their environment, a topical news story, a problem-based scenario presented by the teacher which has no clear answer, or an evolving problem as a news / public affairs investigation unfolds.

3. Fosters purposeful collaboration both in and beyond the school

An old African proverb suggests that 'if you want to go fast, go alone. If you want to go far, go together.'⁵ One of the key findings arising from brain-based research is that we are wired to connect with others. Neuroscientists have discovered that our brain's very design is sociable.⁶ When people meet each other a feedback loop begins as brains send and receive a stream of signals. Young people also take pleasure from being a member of a peer group and from talking to each other. They have a need for togetherness. As a life skill, students need to learn how to get on with other people. They need to develop social and emotional competence

⁵ Cited by Hemming, H. (2011) Together, John Murray, p.63.

⁶ Goleman, D. (2007) Social Intelligence, Arrow Books.



so that they fit into the workplace, establish lasting relationships, and share interests with others.

The Education Endowment Foundation (EEF, 2018) defines collaborative learning as an 'approach which involves pupils working together on activities and learning tasks in small enough groups that everyone is able to participate in the assigned collective task. Pupils may work on separate tasks contributing to an overall outcome or work together on a shared task.'⁷ The EEF argues that the impact of collaborative learning is consistently positive, although it concedes that group size and poor planning can affect this. The most impactful learning occurs when tasks are well-designed and there is time for students to talk and interact.

4. Encourages students to create value for others through their learning

Value creation pedagogy is when teachers support their students learning by applying their competences (future or existing) to create something of value to at least one external stakeholder. This could be a stakeholder outside their own group, class, or school. The value that the student creates for someone else can be economic, social, or cultural.

EntreComp explicitly recognises the value of learning which creates value for others (see the EntreComp definition in earlier tasks) as a vehicle to develop entrepreneurial competences. It is about students being engaged on a level they did not previously experience with the explicit knowledge that their learning brings value beyond their classroom, and the knowledge of what that value is. The purpose from the educator's perspective of this set-up is deeper learning, and the means is by empowering them to create value for others. This approach can impact on learner engagement, as learners become more motivated by creating value for someone else.

⁷ EEF (2018) Teaching and Learning Toolkit - collaborative learning. The Collaborative Learning project (2018) is a teacher network which shares resources to support effective group work and 'talk for learning,' www.collaborativelearning.org



5. Stimulates reflection, flexible thinking and learning from experience

Reflective practice has been widely endorsed for many years as an important means of supporting teachers' professional development.⁸ One of the goals is to increase awareness about one's own teaching and effectiveness from different viewpoints. So, for example, Brookfield suggests seeing lessons through four lenses: the teacher's, the students', and the views of colleagues and wider expert literature (see Module 5). Comparing and reflecting on these views enables teachers to gain a rounded view of the impact of their teaching on students' learning.

This means teachers need to be open-minded and think flexibly in the way they approach their planning, teaching, and assessment. At times, they may plan lessons along the path of prescribed learning objectives but on other occasions plan in a more open manner in which students set their own goals they hope to achieve in an entrepreneurial project. This calls for a willingness to learn from experience, to embrace mistakes as part of such learning and take risks in teaching and learning. By modelling such behaviours, teachers create the kind of climate that is conducive to entrepreneurial learning. By allowing students to practice these behaviours, they encourage the development of entrepreneurial competences.

6. Makes entrepreneurial competences an explicit part of learning and assessment

In recent times, there has been growing emphasis on making the process of learning visible to students and teachers. Most famously, John Hattie highlights the need for teachers to be clear about their practices and the effect they have on

⁸ Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, N.J., Prentice-Hall; Schön, D. A. (1987). *Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions*. San Francisco, Jossey-Bass; Dewey, J. (1910). *How we Think*. Boston, D.C. Heath & Co.



student learning. Success, for Hattie, is when students become their own teachers.⁹ Researchers at Harvard University have also underlined the importance of making thinking (which is hidden in our heads) visible so that thinking can be improved.¹⁰ They suggest the use of various thinking routines, which are simple structures linked to different types of thinking. For example, to encourage students to reflect on how and why their thinking has changed they use the structure: 'I used to think...now I think...' Many schools use the 'Think-Pair-Share' structure to facilitate reasoning and explanation through paired discussion.

Similarly, to improve the quality of entrepreneurial learning we need to make explicit what is expected of students. In lessons, this means ensuring that they are clear about the entrepreneurial learning objectives and criteria to achieve these. It calls for teachers to align their assessment to the objectives and ensuring that students have sufficient opportunities to demonstrate entrepreneurial competence. Teaching in lessons and the feedback provided (by teachers, students, and others) needs to focus explicitly on entrepreneurial competences and revolve around how well students collaborate and turn their ideas into action. In short, create value for others. This is a pressing need because too often entrepreneurial competences are not being made visible in current learning and assessment processes.¹¹

⁹ Hattie, J. (2013) *Visible Learning for Teachers: Maximizing Impact on Learning*, Routledge.

¹⁰

http://www.visiblethinkingpz.org/VisibleThinking_html_files/01_VisibleThinkingInAction/01b_WhyMake.html

¹¹ Eurydice (2016) *Entrepreneurship Education at School in Europe*, European Commission.



1.3.2 How learning theories connect to entrepreneurial

Learning theories are explanations as to exactly what happens when we learn. And a basic understanding of how learning occurs is essential to teaching entrepreneurial competences.

Why are these useful to know? It shows the relevance of entrepreneurial competences across the spectrum of education and training. Each of these theories exert some influence on entrepreneurial practices and are relevant to the development of some or all EntreComp competences.

Social constructivism sees learning as an active process of constructing meaning through interacting with others using cultural 'tools', such as language, books, social media and symbols. As such, it is best regarded as an 'umbrella' theory under which many approaches are recommended e.g. enquiry-based learning, project-based learning, problem-based learning [these are discussed in module 3].

Behaviourism explains learning as a response to stimulus, for example in students' answers to questions from teachers, or the holding of competitions for young innovators. At the most simplistic level, it reflects a view that learning is responding to teaching by telling. It can also be seen in competency-based programmes where students are observed performing skills, for example in vocational and technical education settings. While behaviourism is not a popular learning theory – especially for the development of entrepreneurial competences, it is one of the learning theories that shapes entrepreneurial education. For instance, if a teacher holds a competition which acts as an incentive to learning then this is an example of behavioural theory in practice.

Cognitivism sees learning as a change in mental processes, such as observing and categorizing. It claims that behaviourism puts too much emphasis on overt behaviour to explain learning. Instead, cognitivist psychologists focus on what happens in the mind and the importance of memory and building on prior



knowledge. An emphasis is placed on developing planning and self-management skills through the use of visual tools, mind maps and flowcharts.

Humanistic theory emphasizes the inherent goodness in people and their learning capacity for growth and self-direction. It sees learning as self-directed, personal fulfilment and suggests cognitivism downplays the role of emotion. Learning to manage setbacks, for example, is a life skill. And highly creative people report that the sense of fulfilment they get from their work matters a great deal to them. This theory can be seen in practice when students contribute to community projects to 'give something back', adding social value.

Social learning theory (later renamed social cognitive theory) draws on both behaviourist and cognitivist views. It sees learning as occurring when individuals interact with others and their environment. This is when individuals learn how they 'fit in' with others and what behaviour is appropriate in particular contexts. Mentoring programmes and participation in entrepreneurial networks are examples of this theory in action.

Connectivism is a recent theory which suggests that in an age of technologies we increasingly learn by forming connections (nodes) within digital networks. These nodes can be people or resources such as social media. Connectivism is behind such developments as open online courses and the importance of entrepreneurial networks (see module 5).

The complexities of entrepreneurial learning mean that no single theory holds true in all contexts. Over time, behaviourist, cognitivist, humanist, social and constructivist theories have all exerted varying degrees of influence in explaining how entrepreneurial learning occurs.¹² However, in recent years there has been a

12 Toutain, O. and Byrne, J. (2012) 'Learning theories in entrepreneurship: new perspectives', Conference Paper, Academy of Management Conference. Available at: https://www.researchgate.net/publication/265087921_Learning_theories_in_entrepreneurship_new_perspectives



shift away from explanations which stress 'learning from explicit instruction and in pre-defined ways' (cognitivist and behaviourist theories) towards those which highlight entrepreneurial learning as a process where concepts are derived from and modified in the light of experience (social and experiential learning).¹³ Robinson et al (2016) suggest that it can be advantageous for educators and researchers to invoke and combine different learning theories in order to promote entrepreneurial awareness.¹⁴ Learning theories are important because they empower educators, as professionals, to make informed decisions and justify their decisions to others.



¹³ For a full discussion, see Harrison, R. and Leitch, C.M. (ed.) (2008) *Entrepreneurial Learning: Conceptual Frameworks and Applications*, Routledge.

¹⁴ Robinson, S., Neergaard, H., Tanggaard, L. and Krueger, N. (2016), 'New horizons in entrepreneurship: from teacher-led to student-centered learning', *Education + Training*, Vol. 58 No. 7/8.



LoopMe Individual Task 1.3 - Discuss the EntreCompEdu guiding principles

Which of the six EntreCompEdu guiding principles do you already include in your teaching (see 1.3.1)?

Share an example.

Based on the principle of deliberate practice (see 1.2), how might you set about improving your professional competence in one of guiding principles you are not so familiar with? Who might be a good coach or source of professional advice? Or where else might you get skilled feedback?

Share your feedback in ENTRECOMPEDU Module 1 Task 1.3 on [LoopMe](#)

LoopMe Group Forum Task - Introduce yourself

The Group Forum in LoopMe is a space to meet and reflect with other participants on the course.

Go there now and introduce yourself by giving your name, your education experience and answer the following question:

What are the skills that I think are the most important for young people to develop for the future?

INSTRUCTIONS: How to get to the group forum - link and instructions are in Module GROUP TASK 1.3. Go to [LoopMe](#)!

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