



ENTRE**COMP**EDU

Module 2: Go Deeper 2.1

Entrepreneurial goals, learning objectives and outcomes



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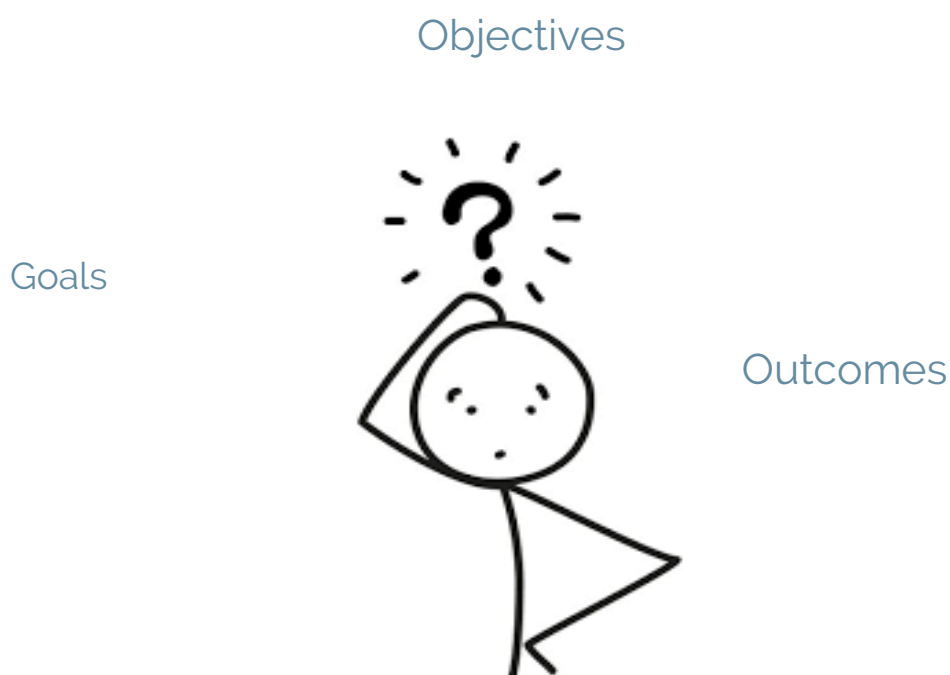
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Introducing entrepreneurial goals, learning objectives and outcomes



There are many terms that relate to the 'why' element of planning. These often reflect different degrees of specificity, from broad learning programme or curriculum aims which might span long-term plans (for example a whole year of schooling) to narrower, more focused learning objectives which typically appear in specific lesson plans.

Learning goals are broad statements of intent and typically begin with phrases such as 'to develop...', 'to introduce...'

Learning objectives are more specific descriptions of the teacher's intentions and typically include how the goals will be met.

Learning outcomes focus more on what students have actually produced i.e. in terms of knowledge, conceptual understanding and skills. For example, in



EntreComp there is a dictionary of learning outcomes expressed as 'I can...' statements for each of the EntreComp competences.

Figure 2.1.1 below is a quick summary of the differences between these three key terms. They also reveal different learning theories. For example, an objectives-led approach sees learning mainly in terms of observable, measurable behaviours. Even among academics and educators there are different definitions and uses of these terms.

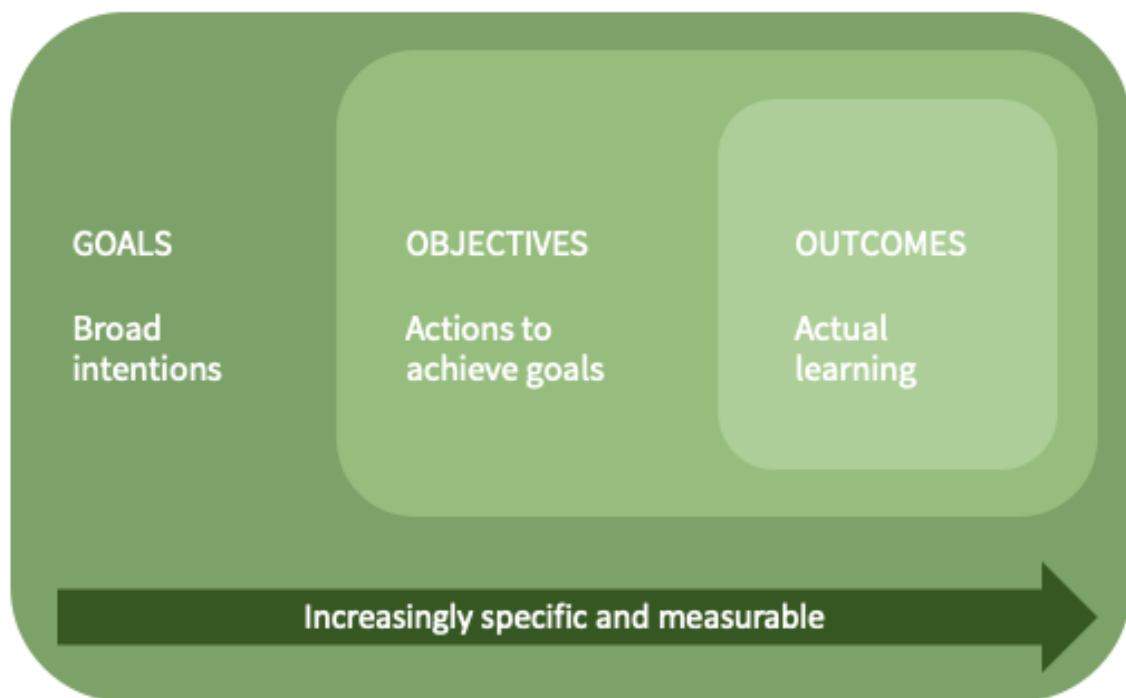


Figure 2.1.1 Goals, objectives, and outcomes

Activity - Watch a video

Watch this video explaining the difference between goals, objectives, and learning outcomes (automatic translation available via YouTube): https://www.youtube.com/watch?v=g_Xm5lljYKQ

	GOAL	OBJECTIVE	LEARNING OUTCOME
GEOLOGY	To develop knowledge, understanding and skills related to the recognition and interpretation of igneous and metamorphic rocks.	To explain the different magma geochemistries derived from partial melting of the mantle in different tectonic regimes.	Students will demonstrate how magma geochemistry relates to partial melting of the mantle by contrasting the outcomes of this process in different tectonic regimes through the critical analysis of specific case studies.
ENGLISH	To introduce students to modes of satirical writing in the eighteenth century.	To familiarize students with a number of substantive eighteenth century texts. Students will be trained in the close reading of language and its relation to literary form.	Students will analyze the relationship between the language of satire in literary form by the close examination of a selected number of eighteenth-century texts in a written essay.
ENGINEERING	To introduce senior engineering students to design of concrete components of structure and foundation and the integration of them into overall design structures.	The student is able to function in teams.	Functioning as members of a team, students will design and present a concrete structure which complies with engineering standards.

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Has this video inspired you with new ideas (what?), or did it just bring up things that are already obvious to you as a teacher when planning your teaching?

How do these work in practice?

Let's take a simple analogy of travelling to a new building for an appraisal meeting might help clarify how these terms are used in these modules.

In this instance, relevant **goals** should include:

- arriving safely for the meeting
- completing a review of your annual performance

Your **priorities** will include:

- being punctual and communicating clearly what you have to say.

Depending upon what you want to get from the meeting, your **objectives** might be to:



- highlight three key achievements during the year
- suggest improvements for next year's induction arrangements
- complete a training needs' summary

Your **intended learning outcomes** at the end of the meeting might be to:

- list your achievements (knowledge)
- explain how to improve induction (skills)
- summarize your training requirements (understanding)

To achieve whatever goals or objectives you set yourself, you will need to demonstrate various behaviours or meet certain **success criteria**. For example:

- to arrive on time, you will need to:
 - plan the route, keep the speed limit and leave yourself enough time
- to communicate your achievements and suggestions, you will need to:
 - speak clearly, keep to the relevant points and be succinct.

If you do these things well, the likelihood is that you will achieve your broad goal and objectives.

Exploring these elements in more detail

Goals

It is important to reflect upon who sets learning goals and their nature.

As mentioned in the main module, there are implications here for planning entrepreneurial learning. You should think about:

- engaging students in setting their own goals
- providing challenging, open-ended tasks
- creating a climate in which **brilliant failures** are seen in a positive light



- rewarding students' efforts as well as their outcomes
- developing routines in which students regularly review their own progress

Learning objectives

These are pre-specified statements which seek to improve students' learning in measurable ways. Best practice recommends that they should be:

Specific – precise and not vague

Measurable – observable by the end of the time stated

Achievable – attainable for these learners in the context they are learning

Relevant – to the needs of learners and the subject content

Time-related - a specific time is identified e.g. end of the lesson or unit

The theoretical basis for learning objectives draws heavily on the work of Benjamin Bloom, who drew up a hierarchy of educational goals more than sixty years ago. Although his work has been criticized, it remains popular. See the footnotes for a link to his seminal academic work¹.

Learning outcomes

Technically speaking, these should be referred to as *intended* learning outcomes or learning *intentions*, because ahead of any learning experience you cannot

¹ Bloom, Benjamin S. *Taxonomy of Educational Objectives: The Classification of Educational Goals*. New York: Longmans, Green, 1956. Print. For online link see here: <https://www.uky.edu/~rsand1/china2018/texts/Bloom%20et%20al%20-Taxonomy%20of%20Educational%20Objectives.pdf>



predict what you will learn. The actual learning outcomes are what you take away from the learning experience – a lesson, a workshop or a meeting as suggested above.

It is important to remember about unexpected learning outcomes, meaning that the learning outcomes achieved may be different to what you intended. For example, perhaps something was said in the meeting that you thought was unfair and which triggered an immediate retort from you, which you afterwards regretted. This causes unexpected learning outcomes (e.g. feeling of dejection) which are not in line with the intended learning objectives.

Figure 2.1.2 (on next page) illustrates the goals, objectives, success criteria and outcomes as a project roadmap.



Project roadmap:

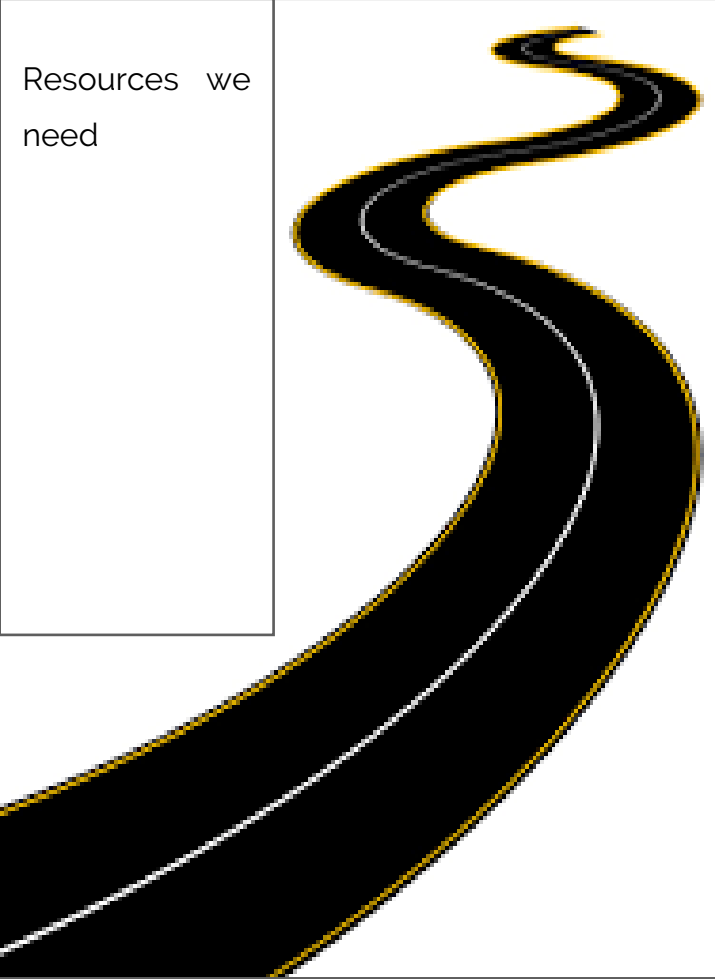
Entrepreneurial learning goal:		
Resources we need		Objectives
		Milestone (success criteria) 1: Date:
		Milestone (success criteria) 2: Date:
		Milestone (success criteria) 3: Date:
Learning outcomes – expected and unexpected (what students achieved):		

Figure 2.1.2. A Project roadmap featuring a learning goal, objectives, and outcomes

Writing learning objectives

One way to write clear entrepreneurial learning objectives is to follow three basic steps:

STEP 1...

WHEN: Decide on the time frame and complete the gap:

'By the end of the —————[lesson, project, unit], students will be able to...'

STEP 2...

ACTIONS: Add an appropriate action verb to the phrase ending, which can be shared with the students. The action must be measurable within the timeframe e.g.

'By the end of the project students will be able to design a new board game...'

STEP 3...

VALUE CONTEXT: Conclude with a specific context, condition or criteria within which students can demonstrate adding value e.g.

By the end of the project students will be able to design a new board game for blind or visually impaired children aged 10-15 years

Figure 2.1.2. Process of writing learning objectives

There are certain verbs which are generally avoided when writing learning objectives because they are either vague or difficult to measure. Examples include:

Appreciate.

Believe.

Feel.

Improve.

Know.

Learn.

Understand.



Terms such as 'think', 'know' and 'understand' are not measurable unless they are described or applied. Some educators have developed online tools, which allow users to create their own learning objectives. See the objectives builder developed by Arizona State University: <https://teachonline.asu.edu/objectives-builder/>

Activity - Writing learning objectives

Use the three-steps guidance to write entrepreneurial learning objectives for your next lesson or teaching theme. Remember to focus on entrepreneurial competences and use EntreComp as inspiration.

Activity - Use the Toolbox

Visit the [Toolbox for Innovation and Entrepreneurship in Education](#) (link below) and review the guidance on writing learning objectives for innovation and entrepreneurship education. Choose a verb and skill to formulate a learning objective for value creation relevant to your teaching context.

Link: <https://innovationenglish.sites.ku.dk/how-to-use-the-toolbox/>

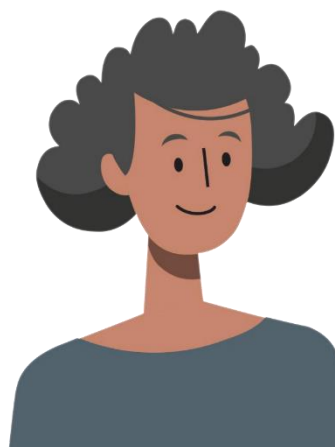
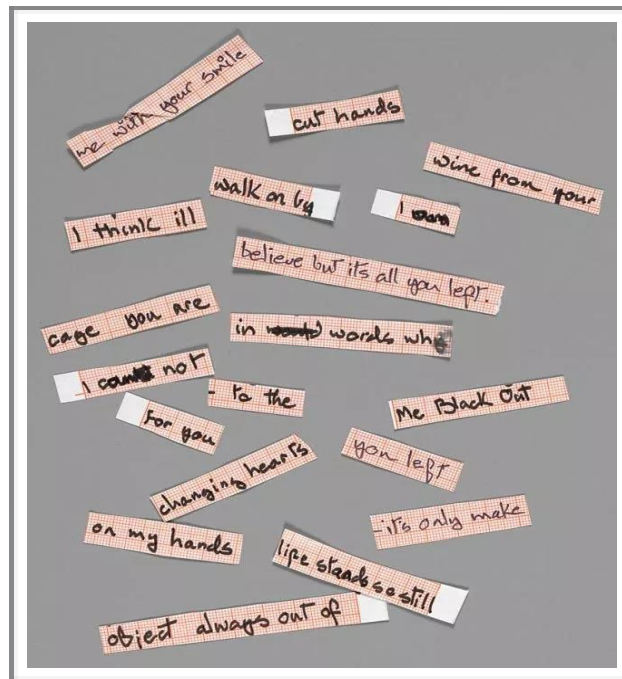
(site in English - access via chrome for auto-translate if needed)

In entrepreneurial education, there is a tension between prescribed learning objectives based on a behaviourist theory of learning and more open-ended outcomes based on a social constructivist theory. Indeed, Rod Judkins (2015: 96), author of *The Art of Creative Thinking*, suggests:

The search for an objective becomes a barrier to real creativity and exploration. Go out looking for one thing, and that's all you'll ever find. A moth has a goal, the flame, but it is burned up by it.



Judkins cites the story of William Burroughs (1914-1997), an American writer and visual artist. One of the things that made Burroughs successful was that he didn't set out with a clear goal in mind when writing. Rather, he used a cut-out technique to create an alternative to traditional stories. Sentences from newspapers, books or pieces of writing were sliced up and pasted back together, often in random. Burroughs was pleasantly surprised at the unusual combinations he created.



Activity - Discuss with your students

You can watch Burroughs explaining his technique in this creative [video](#).



Discuss with your students how they might adapt the idea using image, music or sound clips to create something new. You can take inspiration on how to lead the discussion by reading this article:

<https://zli.umich.edu/success-story/entrepreneur-residence-uses-flipped-classroom-strategy-promote-action-based-learning>

