

# PRECIOUS EXPERIENCES

INTO ACTION

LEARNING THROUGH EXPERIENCE

LEARNING GOALS

REFLECT

LEARN TO LEARN

LEARN FROM EXPERIENCE

OTHER RELEVANT COMPETENCES

TAKING THE INITIATIVE

COPING WITH AMBIGUITY,  
UNCERTAINTY & RISK

SPOTTING OPPORTUNITIES

SELF AWARENESS & SELF EFFICACY

# 1. Precious Experiences

## 1.1. Overview

This module focusses on supporting students by learning through experience. Over the past few years, educational institutions are trying to integrate new learning techniques to make lessons more interesting and involve students more actively as well as to support students in their personal development and to prepare them for the working world. To achieve this aim, more and more educators are trying to integrate further active learning techniques in the classroom. One of these practices is learning through experiences.

A pioneer in the field of learning through experience is David A. Kolb (“David A. Kolb,” 2019), an American educational theorist and founder and chairman of Experience Based Learning Systems, Inc. (EBLS). He is also an Emeritus Professor of Organizational Behavior in the Weatherhead School of Management, Case Western Reserve University, Cleveland, Ohio. Kolb developed the experiential learning theory, stating the principle that a person learns through discovery and experience. His ‘Experiential Learning Theory (ELT)’ offers a holistic model of the learning process, emphasizing the central role of experience in the process of learning.

Experiential Learning Theory (ELT) provides a holistic model of the learning process and is a multi-linear model of adult development, both of which are consistent with what we know about how we naturally learn, grow, and develop. The theory is called ‘Experiential Learning’ to emphasize the central role that experience plays in the learning process (David Kolb, n.d.).

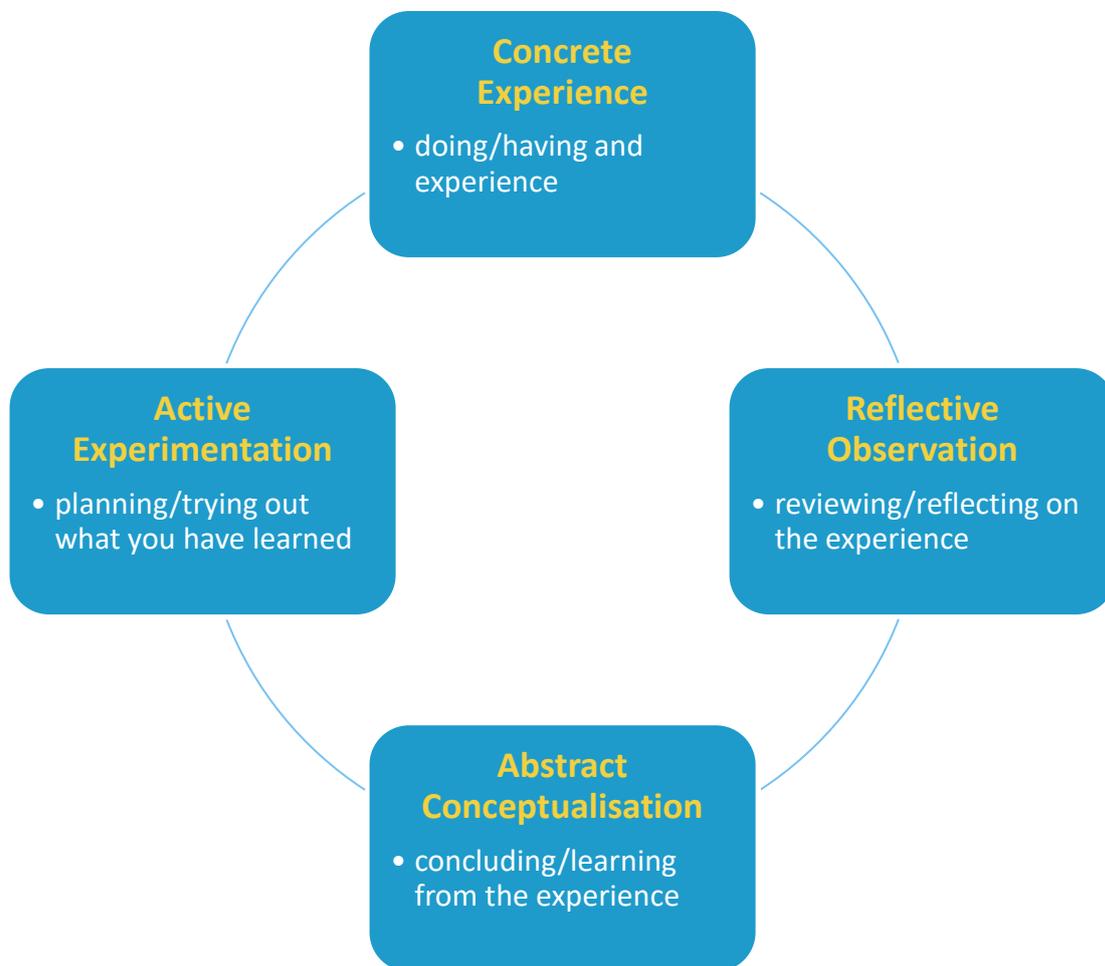


Figure 1: Experiential Learning Cycle by David Kolb. Source: illustration taken from Kolb's Learning Styles and Experiential Learning Cycle. Retrieved September 1, 2020, from <https://www.simplypsychology.org/learning-kolb.html>

Kolb's experiential learning cycle consists of four stages:

Stage	Description	Activities to help
Concrete Experience	Kolb's cycle starts with a concrete experience. In other words, it begins with doing something in which the individual, team or organization are assigned a task. Key to learning therefore is active involvement. In Kolb's model one cannot learn by simply watching or reading about it, to learn effectively the individual, team or organization must actually do.	<ul style="list-style-type: none"> <li>• ice breakers &amp; energizers</li> <li>• team games</li> <li>• problem solving</li> <li>• discussion</li> <li>• practical exercises, e.g. making a presentation</li> <li>• debates</li> </ul>
Reflective Observation	The second stage in the cycle is that of reflective observation. This means taking time-out from "doing" and stepping back from the task and reviewing what has been done and experienced. At this stage lots of questions are asked and communication channels are opened to other members of the team. Vocabulary is very important and is needed to verbalize and discuss with others.	<ul style="list-style-type: none"> <li>• ask for observation</li> <li>• write a short report on what took place</li> <li>• give feedback to other participants</li> <li>• quiet thinking time</li> <li>• tea &amp; coffee breaks</li> <li>• completing learning logs or diaries</li> </ul>
Abstract Conceptualization	Abstract conceptualization is the process of making sense of what has happened and involves interpreting the events and understanding the relationships between them. At this stage the learner makes comparisons between what they have done, reflect upon and what they already know. They may draw upon theory from textbooks for framing and explaining events, models they are familiar with, ideas from colleagues, previous observations, or any other knowledge that they have developed.	<ul style="list-style-type: none"> <li>• present models</li> <li>• give theories</li> <li>• give facts</li> </ul>
Active Experimentation	The final stage of the learning cycle is when the learner considers how they are going to put what they have learnt into practice. Planning enables taking the new understanding and translates it into predictions as to what will happen next or what actions should be taken to refine or revise the way a task is to be handled. For learning to be useful most people need to place it in a	<ul style="list-style-type: none"> <li>• give learners time to plan</li> <li>• use case studies</li> <li>• use role play</li> <li>• ask learners to use real problems</li> </ul>

	context that is relevant to them. If one cannot see how the learning is useful to one's life then it is likely to be forgotten very quickly.	
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Figure 2: The four stages of the learning cycle. Source: table taken from David Kolb, n.d. Retrieved September 1, 2020, from <https://www2.le.ac.uk/departments/doctorscollege/training/eresources/teaching/theories/kolb>.

Concrete Experience	Reflective Observation	Abstract Conceptualization	Active Experimentation
<ul style="list-style-type: none"> <li>• readings</li> <li>• examples</li> <li>• fieldwork</li> <li>• laboratories</li> <li>• problem sets</li> <li>• trigger films</li> <li>• observations</li> <li>• simulations/games</li> <li>• text reading</li> </ul>	<ul style="list-style-type: none"> <li>• logs</li> <li>• journals</li> <li>• discussions</li> <li>• brainstorming</li> <li>• thought questions</li> <li>• rhetorical questions</li> </ul>	<ul style="list-style-type: none"> <li>• lectures</li> <li>• papers</li> <li>• projects</li> <li>• analogies</li> <li>• model building</li> </ul>	<ul style="list-style-type: none"> <li>• projects</li> <li>• fieldwork</li> <li>• homework</li> <li>• laboratory</li> <li>• case study</li> <li>• simulations</li> </ul>

Figure 3: Teaching activities that support different aspects of the learning cycle. Source: table taken from David Kolb, n.d. Retrieved September 1, 2020, from <https://www2.le.ac.uk/departments/doctorscollege/training/eresources/teaching/theories/kolb>

Kolb defines experiential learning as “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combinations of grasping and transforming the experience.” (“Why is experiential learning important?”, n.d.).

The experiential learning cycle developed by David Kolb describes four stages:

- **Concrete experience:** In the first stage, the learners conduct an activity from the lesson taught.
- **Reflection:** The second stage encourages the learners to reflect on their experience, allowing them to adjust their approach to a problem and make critical decisions.
- **Abstract conceptualization:** The third stage leads students to develop a new concept or theory based on their previous experience and reflection.
- **Active experimentation:** In the fourth stage, the learners use the newly developed concept to test it in an experiential setting.

The learning through experience module based on *EntreComp* offers tools, methods and concrete examples that can be implemented and used in the classroom, ready to support the educators to integrate more active learning techniques in their teaching. Learning through experience includes active participation and reflection of the students that help them to combine lessons learned with real life experiences. It is not just about learning a skill or topic through practice, it is also about thinking of new ways and ideas that can be improved through observation.

Students should be encouraged and supported to learn through experience, not only in relation to the subject, but also to strengthen their personalities. Learning through experience is an important skill that affects all areas of life and is essential for the whole life.

## 1.2. EntreComp Competence – Learning Through Experience

According to *EntreComp* the competence '**Learning through Experience**' is about using any initiative for value creation as a learning opportunity, learning with others, including peers and mentors. Furthermore, it is also about reflecting and learning from both success and failure, including your own and other people's success and failure.

The overall learning goal is learning by doing.

Other relevant competences include '**Taking the initiative**', '**Spotting opportunities**', '**Self-awareness and self-efficacy**', and '**Copying with ambiguity, uncertainty and risk**'.

## 1.3. Learning Goals

1. **Reflect:** The students should be able to find examples of great failures that have created value. They can provide examples of temporary failures that have led to valuable achievements. They are able to reflect on failures (theirs and other people's), identify their causes and learn from them. The students can judge if and how they have achieved their goals, so that they can evaluate their performance and learn from it. They can reflect on their (or on their team's) achievements and temporary failures as things develop to learn and improve their ability to create value. The students can help others reflect on their achievements and temporary failures by providing honest and constructive feedback. They can take their team or the organization to a higher level of performance, based on the feedback collected and by learning lessons from achievements and failures.
2. **Learn to learn:** The students should be able to provide examples that show that their abilities and competence have increased with experience. They can anticipate that their abilities and competence will grow with experience, through both success and failures. They are able to reflect on the relevance of their learning pathways for their

future opportunities and choices. The students should always be looking for opportunities to improve their strengths and reduce or compensate for their weaknesses. They are able to find and choose opportunities to overcome their (or their team's) weaknesses and to develop their (or their team's) strengths. The students can help others develop their strengths and reduce or compensate for their weaknesses. They can identify opportunities for self-improvement in their organization and beyond. The students can design and put in place a strategy for their venture to continue to generate value.

3. **Learn from experience:** The students should be able to recognize what they have learnt from taking part in value-creating activities. They are able to reflect on their experience in taking part in value-creating activities and learn from it. The students can reflect on their interaction with others (including peers and mentors) and learn from it. They are able to filter the feedback provided by others and keep the good from it. They can integrate lifelong learning into their personal development strategy and career progress. The students can help others reflect on their interaction with other people and help them learn from this interaction. They should be able to learn from the impact-monitoring and evaluation activities that they designed to track the progress of their value-creating activity. The students are capable to learn lessons from monitoring and evaluation processes and establish them into their organization's learning processes.

#### 1.4. Teaching / Learning Methods

Over the years, learning through experience has proven to be invaluable to students and their learning achievements.

- *Why is learning through experience important? (see "Why is experiential learning important?", n.d.)*
  - **Students can better understand concepts, theories and models.**

Often students struggle to understand concepts, theories and models that do not relate to the 'real world'. By applying learning through experience, students are able to implement abstract data and concepts in a real-life situation where the students play an active role. As the students are actively interacting with a topic, it becomes real to them.

- **Students have the opportunity to be more creative.**

Learning through experience has shown to be one of the best ways to teach creative problem solving. Students learn that there is more than one solution to challenges and problems, and are encouraged to look for solutions to practical tasks.

- **Students have the opportunity to reflect.**

Various studies have shown that by incorporating concrete experiences with abstract concepts and then reflecting on the outcome, people involve more regions of the brain and make stronger connections with the subject. Learning through experience encourage students to analyse how their actions affect the issue, and how their outcome vary from other students. Through this analysis the students understand better how the concepts learned can be applied to other and diverse situations and environments.

- **Students' mistakes become valuable experiences.**

By completing practical tasks, students will find out that some approaches work better than others, discarding those methods that do not work. Trying something and then abandoning is an important part of the learning process, as students learn not to fear mistakes but rather to appreciate them as an important contribution to success.

- **Learning through experience improves the students' attitudes toward learning.**

The concept of learning through experience is designed to involve the students' emotions as well as to boost and improve their knowledge and skills. Integrating the students actively in the learning process and creating a learning environment in which the students can actively participate may lead to a greater pleasure and satisfaction in learning.

- ***How do students learn in learning through experience?***

The students are instantly able to see and feel the results of their actions and the difference that changing thinking and behaviour makes in the real-life application. Learning through should become a continuous process of learning and development in schools, implementing the basic steps of 'doing', 'reflecting' and 'applying'.

- ***How can educators incorporate learning through experience in their teaching?***

Learning through experience makes learning applicable to students, increases the effectiveness of learning, combines theory and practice, increases the students' engagement, supports students' capacity to learn successfully when the information is associated with values and feelings, and boosts the development of skills for lifelong learning.

Therefore, elements of learning through experience should be implemented more often in the classroom by adding practical learning elements such as:

- simulations
- role plays
- team building activities
- outdoor learning activities
- workshops
- non-traditional learning environments (e.g. real-life situations, out of classroom)

- project-based learning
- off-site school trips
- invite guest speakers
- making a film
- organizing business internships
- community service opportunities
- scientific experiments or open-ended inquiries to determine cause and effect
- case studies (develop skills such as problem solving, decision making, coping with ambiguities, speaking skills analytical skills, etc.)
- study tours to other institutions, companies, organizations etc.
- interactive classroom games (e.g. [Kahoot](#), a game-based learning platform used by teachers to motivate students to study the subject matter, creating a playful competition among the students; or [Socrative](#), a learning platform providing a tool for creating digital quizzes, tests and exercises to review the learning objectives).

### 1.5. Activity

This module on learning through experience emphasizes the importance of actively involving students and integrating them into the classroom. Learning through experience involves students in interactive activities that support them to gain practical experience and give them the opportunity to reflect, analyze and reconstruct concepts, theories, models and new information.

Within this module students should get the possibility to try interactive activities that help them to facilitate learning through experience in the classroom. Therefore, as already mentioned, practical learning elements such as simulations, role plays, team building activities, outdoor learning activities, workshops, non-traditional learning environments, project based learning, off-site school trips, inviting quest speakers, interviews, making a film, organizing business internships, community service opportunities, scientific experiments or open-ended inquiries to determine cause and effect, case studies, study tours to other institutions, companies, organizations etc. as well as interactive classroom games should definitely be integrated into the lectures.

The duration and scope of this module depend very much on the respective curriculum and the topic to be dealt with. The module can extend over a whole semester or just a week. Regardless of the extent to which the module is carried out, it is important that the students are actively involved and that their experiences and learning progress are then collected and evaluated.

At the end of the module, the students present their results in front of the class. The way of presentation is left to the students. This might be a PowerPoint presentation, a short video, a role play etc. The lecturer will ask some questions and give feedback on the presentations.

The results are then discussed with the whole class. Furthermore, the students compile a report of their tasks and related activities, including also their own insights of learning through experience.

## 1.6. Role of the Educator

The educator will have the role of a mentor and supporter. Educators conducting this module should be able to inspire students to actively participate in class.

Learning through experience can be used for almost all subjects. Nevertheless, there are a few challenges that need to be considered (see “Challenges”, n.d.).

- **Limited class time:** It is important to give students enough time to familiarize themselves with the activity. Furthermore, lecturer must be aware that learning through experience needs sufficient time for reflection, conceptualization and experimentation.
- **Limited access to resources:** Access to all needed learning and information resources should be made available to support the students optimally when learning through experience.
- **Constraints by the demands of the curriculum:** Lecturers should plan and prepare the learning through experience module well so that the module fits into the curriculum and addresses the corresponding learning outcomes.
- **Restricted guidelines:** Students should not be restricted in how they will engage in learning through experience. They should feel comfortable in using their judgment and applying their knowledge from former experiences to address the issues.
- **Inadequate group work skills:** Participating successfully in experiential activities requires that students develop good group work skills to contribute to the task. Lecturers “should provide appropriate guidelines regarding to the roles and expectations of the group members and encourage the students to monitor and reflect on the progress of their task” (“Challenges”, n.d.).
- **No clear expectations and evaluation criteria:** Experiential activities require a lot of time and effort from the lecture as well as from the students. It is crucial that there are measurable learning objectives, as well as clear assessment criteria and expectations that are communicated to students through rubrics or assessment schemes.
- **Not enough time and opportunities for reflection:** Experiential activities may not

lead to profound learning if students do not reflect on the experience. “Reflection is an essential component of learning and the students should be provided with opportunities to reflect, evaluate the experience, make links to prior experiences and knowledge, share perspectives with others, and make links to theoretical concepts and course content” (“Challenges”, n.d.).

- **Overwhelming commitment requirements for the lecturer:** The lecturer must be aware that organizing, mentoring and facilitating learning through experience activities for students can be challenging asking personal time, space and engagement. Additionally, the lecturer must take into consideration the time needed for feedback loops, reviews on the students’ reflections, evaluations etc.
- **Ethics/privacy and anonymity issues:** The lecturer should take into account that – depending on the type of the students’ experiential learning activity – ethical issues may play a role. In cases where students need to conduct interviews, appropriate consent forms approved the Ethics Committee of the school or university should be provided and have to be signed by the participants and the interviewees. The anonymity of the participants as well as the confidentiality must be ensured. Relevant ethical concerns have to be addressed appropriately.

## 1.7. Contents

To make the module learning through experience more concrete, we designed some practical examples for use in the classroom.

### Example 1:

Students take on the role of a substitute teacher: During this practical example, students will get familiar with the role of a teacher and learn to deal with the role and tasks of the teacher and thus get a better understanding of a teacher’s work. A useful tool in this context is that the students in their role as substitute teachers write a teaching diary about the learning objective ‘learn to learn’.

### Example 2:

Switching from classroom teaching to distance learning due to external circumstances such as for instance the COVID-19 situation:

The students should redesign a teaching unit that was previously designed for face-to-face teaching so that the lesson can now be conducted in online format.

### Example 3:

Developing a teaching unit as flipped classroom:

Students should work out the didactic and digital implementation. Furthermore, the own approach should be presented. The following questions should be included: what do I do and when. Furthermore, a teaching portfolio should be developed by the students.

#### **Example 4:**

Going into business:

The preparation for a company tour/company visit is done by students.

#### **Example 5:**

Simulation game – dealing with a virtual enterprise: Students form teams and develop virtual enterprises, each on a different industrial sector and with different scales (small or medium size company, large company, multinational company, social company, etc.). The students learn how their concepts work and can virtually compete online with one another on a local or even at national level. Such a simulation game can take place as a standalone enterprise project or it can be part of a longer project that is integrated in the fixed timetabled lessons and includes several teaching subjects (e.g. mathematics, accounting and financing, language, communication, creativity, etc.). The simulation game could also be conducted as an extra-curricular activity.

Role play: A role play enables students to be creative in developing ways of behaving in different situations. The students have the opportunity to get immediate reaction and feedback by their teammates and can reflect on the outcome of one's actions. Role plays support the handling with emotions and feelings and help students to explore their behaviors and reactions in different contexts. Students get an understanding of others' viewpoints, learn to interpret situations as well as search for solutions. Furthermore, role plays support the development of skills of teamwork and leadership, communication, improvisation, negotiation etc.

#### **Example 6:**

Teachers in business –teachers' training days or training week in an enterprise:

As some curricula outlines a need for schools to foster the relationship with enterprises, this example can help to bridge teachers with the business world. The example could be particularly useful for teachers of core subjects, but could also be interesting for teachers of any subject.

In this example teachers have the possibility to visit an enterprise to gain an insight into the skills needed for running a business. The teachers learn what it means to be an entrepreneur and how a company works. They can see how their subject is applied

in the workplace and get ideas how to develop entrepreneurial learning activities, materials, resources and opportunities for their students. The teachers' training days or training week could be run as an extra-curricular activity.

#### **Example 7:**

Inviting guest speakers from the business world: Students identify and invite an entrepreneur who is interviewed by them. In the best case scenario, the students themselves have developed a business idea, which they then discuss with the entrepreneur, getting feedback and helpful input from the entrepreneur. Students get a real understanding of what it means to be an entrepreneur as they have an insight into different aspects of the topic entrepreneurship, such as self-employment, business creation, taking risks, coping with ambiguity and uncertainty, etc. After the meeting with the entrepreneur, the students should prepare a paper reflecting on what they have learnt. The papers will be discussed in class. Students will learn to take action for themselves, can practice their capacity to generate and test business ideas, have the possibility to develop their writing skills and their ability to present an argument, build, strengthen and expand their entrepreneurial skills such as teamwork, communication and presentation skills, critical and analytical thinking, problem-solving and decision making.

#### **Example 8:**

Analyzing prominent stories of failure and what can be learnt from: Students search for prominent stories of failure and analyze how the protagonists dealt with failure, how they managed to overcome the issue and what they learned from it. By doing this, students should learn that problems should be seen as challenges that can be solved.

#### **Example 9:**

Inviting a HR consultant for a simulation of a job interview: By inviting a HR consultant, the students' fear of job interviews and difficult questions should be reduced. Students will get helpful tips and input how to prepare appropriately for a job interview. This includes how to deal with difficult questions and how to answer and react on unexpected questions. In preparation for the meeting with the HR consultant the students will elaborate their own CVs and prepare themselves for answering questions. The HR consultant will then conduct job interviews with the students, so the students get an immediate feedback on their performance and suggestions for improvement. After the visit of the HR consultant, the students will write a paper on their experiences and learnings.

More practical examples and exercises on how to implement learning through experience modules can be found at <https://www.tesguide.eu/>.

## 1.8. Implementation/Integration, Extent, ECTS

The format of this module is ideal for teaching in class, as it requires interactivity, and is also well suited for group works. Nevertheless, the module on learning through experience can also be adapted for online teaching. When implementing the module as an online teaching module, it requires interactivity and direct exchange between the teacher and the students. For this module, a maximum of 3 ECTS can be accredited.

## 1.9. Relevance and transferability to school context

The competences and skills developed in this module are also relevant to almost all subjects and help to ensure that learning content is better understood, absorbed and implemented by the students. Students are encouraged to be creative, curious, and learn through experience. They realize that learning is not something static, but that they can learn a lot from experiences made and apply the knowledge gained in the real life.

### Helpful links for teachers:

- [Innovation Cluster for Entrepreneurship Education \(ICEE\)](#) was a 3 year project (February 1, 2014 – January 31, 2018) co-funded by the European Commission under the Erasmus+ program. During the ICEE project a document for educators ‘How to Manual for Teachers’ has been developed that can be used to better understand how to implement entrepreneurship education programs in the classroom and how educators become more entrepreneurial themselves. The manual can be downloaded and used for free.
- [OctoSkills](#) is an evaluation app for teachers and practitioners to assess the influence of their educational initiatives on pupils and students on all levels of education – from ABC to PhD. The app includes a student questionnaire & a teacher questionnaire.
- [Enterprise and Entrepreneurship Education Toolkit](#): The ETC Toolkit (Enhancing the Curriculum Toolkit) is a new online resource developed by educators and delivered by the University of South Wales, to share approaches that build skills and confidence in learners, providing both teaching guides and subject-specific case examples.
- [Virtual Guide to Entrepreneurial Learning](#). The Virtual Guide is a practical and useful tool for teachers in primary, secondary and vocational schools that want to integrate entrepreneurial education in teaching methods and learning processes in their classroom. The guide contains more than 100 tools and methods to support entrepreneurial teaching and learning, good practices and helpful framework documents.

## 1.10. Evaluation

Possible evaluation criteria for the module on learning through experience, based on “Rubric on integrative experiential learning engagements”, <https://carleton.ca/experientialeducation/grading-and-evaluation/>:

Evaluation Criteria	Weight in %
Meaningful connections between concepts and application which allows a deeper understanding of the study topic and the development of a broader perspective	20
Understanding of similarities and differences and of the viewpoints of others	20
Reflection and self-evaluation includes the students’ ability to articulate their own strengths and weaknesses in their work and the ability to describe their own performances on tasks regarding success and failure	20
Integrative communication of knowledge and skills include the ability to present knowledge, skills and information in an appropriate form	20
Application of knowledge, skills, theories and methodologies to new experiential context. This includes the ability to use knowledge, skills, theoretical concepts and methodologies in specific situations	20

Figure 4: Criteria for the evaluation of students completing the "Precious Experiences" module.

## 1.11. References

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