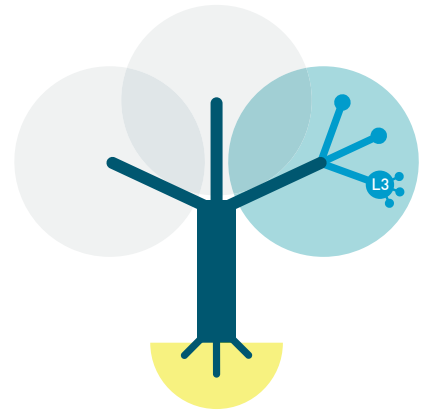


L3 Managing Learning



The planning, organising, monitoring and reviewing of one's own learning

Managing learning entails the motivation to foster both metacognitive knowledge and metacognitive regulation of learning¹⁶⁵. Metacognitive knowledge refers to: **knowledge about cognition** in general, of one's **personal knowledge** state, and of one's strengths and weaknesses as a learner; **knowledge about the task** e.g. its level of difficulty, which kind of strategies are better suited to solve it, when and why use them; and **strategic knowledge** of general strategies for learning, thinking and solving problems. **Metacognitive procedural regulation** applies the metacognitive knowledge to planning, monitor and evaluating one's own learning^{166; 167}.

Motivation, i.e., the energy, direction and persistence that move individuals towards action⁵⁵, is a powerful driver of learning and of Learning to Learn. Intrinsic motivation drives individuals towards engaging in a learning activity because it is personally rewarding. Extrinsic motivation refers to an activity performed to achieve some external reward, e.g. praises, grades, money, or fame. After childhood, the possibility to engage in intrinsically motivated activities is challenged by the social pressure towards activities that are not interesting for the

individual. When engaged in extrinsically motivated actions, the integration and internalisation of the values that justify those actions (e.g. *"I study this subject that I don't like because I am conscious of its relevance for my future career"*) is associated with more engagement, better performance, and a higher quality of learning. Different learning settings can promote or hinder individuals' capacity for integrating social values and responsibilities of extrinsically motivated behaviours. Learning contexts that take into account the basic psychological needs of autonomy, relatedness and competence are more likely to promote positive motivation for better learning outcomes⁵⁵.

The awareness of our own learning dispositions, motivations and reflection on learning, play also a relevant role in managing the learning¹⁶⁸, enabling learners to achieve **meaningful learning**. Meaningful learning is the one in which learners are able to consciously integrate the new knowledge and relate it to relevant concepts that they previously mastered¹⁶⁹. Meaningful learning is, therefore, the long-lasting result of the learner's disposition towards an **active and constructive**

effort to understand the new information bridging it through non-arbitrary connections to the previous knowledge¹⁷⁰. The knowledge acquired through meaningful learning is well understood, transferable to new situations and disciplinary fields and enables a deeper understanding of reality¹⁴⁵.

The **awareness of oneself as a learner** with specific interests, motivation, desires and goals, of the emotions triggered by the learning setting and the self-regulation under threat or pressure, as well as putting in place metacognitive strategies to monitor learning, are seen as boosters of the overall “resilient agency in learning”^{34;171}. Applying metacognitive knowledge and regulation facilitates an active attitude in learners, who are able to adapt their learning strategies to the content and their specific goals.

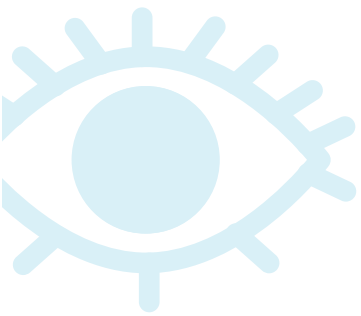
Adopting a lifelong attitude towards learning requires developing self-regulatory skills¹⁷². Self-regulated learning involves metacognitive, motivational, and behavioural processes that are personally initiated to acquire knowledge and skill, such as goal setting, planning, learning strategies, self-reinforcement, self-recording, and self-instruction¹⁷². Learners who can manage their own learning are actively involved in their learning process by designing their own learning cycles, i.e. defining goals and a strategies to achieve them, planning and managing activities to implement such strategies, evaluating processes and results based on evidence for achievement, and reflecting on their learning process¹⁷³. This, in turn, facilitates the adoption of a growth mindset and increases intrinsic motivation.



L3.1

Awareness of one's own learning interests, processes and preferred strategies, including learning needs and required support

Learners need to be aware of their learning dispositions and preferred learning strategies but also of their attitudes and values



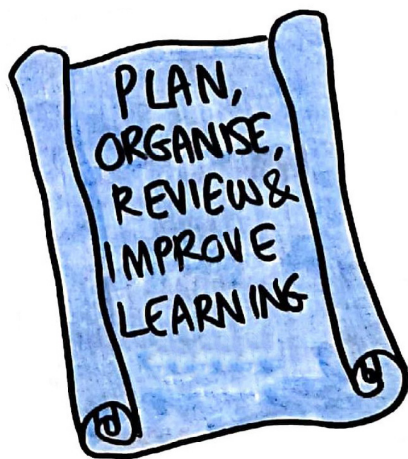
This descriptor stresses the relevance of self-awareness and self-knowledge, the ability to **think about the own thinking**, and the awareness and understanding of own thought processes, particularly of those related to the self as a learner. It includes the judgment of the ability to perform a task, i.e. self-efficacy, the motivation to complete it, and the level of interest in the learning task¹⁷⁴. To be effective, self-awareness and self-knowledge need to be **accurate** and provide an **honest** portrait of the situations that enable the learner to take effective actions. At the same time, individuals' belief in their self-efficacy as learners mediates the **persistence** in the face of difficulties, as well as the effort and interest that they mobilise in learning. The higher the self-efficacy is, the higher the challenge of the goals that individuals are keen to assume, and the greatest the resources that they are willing to spend to achieve them⁴³. Learners need to be aware of their learning dispositions and preferred learning strategies but also of their attitudes and values. Moreover, especially in informal and non-formal settings, it is critical that learners be aware of their interest and purpose in learning.

Learning is a relational process of co-construction that entails interdependence¹⁷⁵. Therefore an attitude of openness towards learning with and from others, as well as a sense of belonging to a learning community that can scaffold the learning effort, are desirable learning dispositions, particularly in formal settings of education³⁴. In particular, **cooperative learning**, which builds on positive social interdependence, i.e. a situation in which the group's success depend on the collaborative participation of all the members, produce more interest in the learning task, better learning outcomes, improved relationships among group members, and higher self-esteem, when compared to the outcomes of competitive or individualistic learning settings¹¹⁷.

L3.2

Planning and implementing learning goals, strategies, resources and processes

To monitor a learning activity, learners need to be aware of their comprehension and performance while executing the learning task, to persevere in a successful learning strategy or to modify one that is not working



This descriptor stresses the importance of self-regulation for learning. Self-regulated learners can direct their learning, set goals, motivate themselves and apply appropriate strategies to achieve their goals^{43,144}. It entails planning, implementing and monitoring a learning activity. To **plan** a learning activity, the learner needs to understand the learning goal to be achieved, determine which of the known learning strategies would best suit the goal, and allocate the appropriate resources to achieve it. The planning of a learning activity also builds on self-knowledge, since based on their strengths, weaknesses and level of motivation, learners will be in the position of using the most appropriate strategies to achieve their goals.

To **monitor** a learning activity, the learners needs to be aware of their comprehension and performance while executing the learning task, to persevere in a successful learning strategy or to modify one that is not working. The ability to generate questions to monitor one's level of understanding of a learning task and the completeness of the information required for the comprehension of a task are important aspects of metacognitive regulation¹⁷⁶. Self-efficacy and self-regulation have a positive impact on each other: training the self-regulative skills has a positive influence on self-efficacy¹⁷⁷, and higher self-efficacy increase the use of self-regulation strategies¹⁷⁸.

L3.3

Reflecting on and assessing purposes, processes and outcomes of learning and knowledge construction, establishing relationships across domains

As learners improve in their comprehension of the learning processes, they will be able to recognise that learning activities in different domains are similar, and therefore the same strategy can be transferred and applied across different areas

Reflection leads to improvement in the cognitive and emotional self-awareness that is necessary to guide learning. This descriptor stresses the importance of **reflection on** and evaluation of the **learning outcomes**. It allows us to identify possible errors in the learning process and to self-correct them. Continuous formative assessment, which is specifically intended to provide feedback on performance to improve and accelerate learning, allows the learners to adjust their learning strategies and tasks for better learning outcomes, as well as plan and redesign new ones¹⁷⁹.

As learners improve in their comprehension of the learning processes, they will be able to recognise that learning activities in different domains are similar, and therefore the same strategy can be transferred and applied across different areas. The use of learning strategies boost learning, the knowledge of the strategies in itself does not ensure their use. An effective learner needs to have a reflective attitude in order to select the most appropriate approach to achieve a learning goal. Eventually, the assessment of the implemented process and strategies helps learners identify the factors that prevent them from reaching a satisfactory result and from address them¹⁷⁶.





JRC SCIENCE FOR POLICY REPORT

LifeComp

The European Framework for
Personal, Social and **Learning
to Learn** Key Competence

Arianna Sala
Yves Punie
Vladimir Garkov
Marcelino Cabrera

