

## SELF-DIRECTED LEARNING PROCESSES, MOTIVATION TOWARDS LEARNING AND DIGITAL TECHNOLOGIES

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*The conference "Efficacité des dispositifs de formation ouverte et à distance", which was held at Le Mirail University, Tolose (15th -16th January 2009) focusing on the technologies needed to support self-directed learning processes and practices, officially opened a new horizon in the educational research concerning self-training. Anyway it doesn't coincide neither with digital literacy nor with the acquisition of digital skills. Self-directed learning activities achieved thanks to the use of technologies have to be distinguished from the consciousness of each subject involved as main actor in the learning process and in the different training contexts, activating this way deep motivation processes.*

Far from being interpreted from a self-referential perspective or through the application of metacognitive strategies, self-directed learning focuses on the individual autonomous capacity of starting a personal and retroactive process of research and maintenance of one's own "good form" (Biasin, 2009). This process is characterized by a autoreferential path mediated by the others and by the external experiential context in an open self prospective (Quaglino, 2004).

As opposed to the well consolidated branch of studies about self-directed and self-regulated learning, new attention is paid to the link between personality traits (Lounsbury et al., 2009) and the properties of multimedia and network technologies.

A crucial aspect is the adaptation of the devices to the specific individual profiles and learning modalities through the identification of research paths and contents addressing each single learning objective and personal training goals.

In this framework, Ricard's research interests (2007), are focused on the learning dynamics of the individual who makes use of the technologies, by giving a central role to the student who learns, considered as the starting point to develop and implement self-directed learning.

The device has to be developed taking into account the background knowledge and the personal abilities and competences of the individual who makes use of it as an instrument to get new knowledge, to learn how to learn and to learn how to better know him/herself.

In the Self-directed Learning Wheel (Fig. 1), this basic unit is depicted

as central in relation to three other components: the facilitators, the necessary learning resources and the learning setting. The SDL process is originated by this basic unit and is implemented by the technologies.

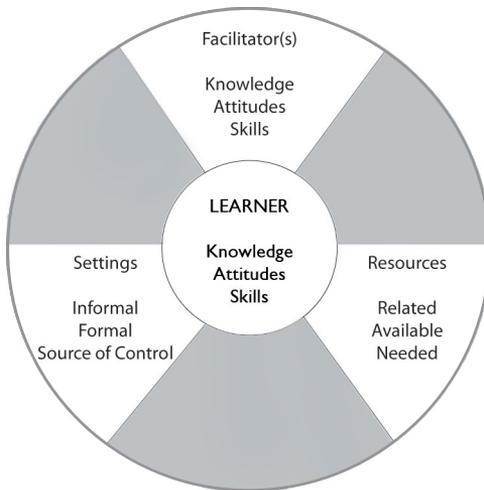


Figure 1. The Self-directed Learning Wheel (Ricard, 2007, 62)

Glikman psycho pedagogical oriented research (2002) analyzes the main characteristics of online learners in order to identify the distinctive elements necessary to construct multimedia and functional devices for self-directed learning. Empiric studies results show that individual socio-demographic characteristics or his/her previous knowledge of the device do not significantly affect his/her personal self-learning capacity, which is rather influenced by two other factors: the personal need to self-learn and the capacity to adapt to different self-directed learning modalities. The first one stresses the importance of individual motivation for being self-directed through different devices.

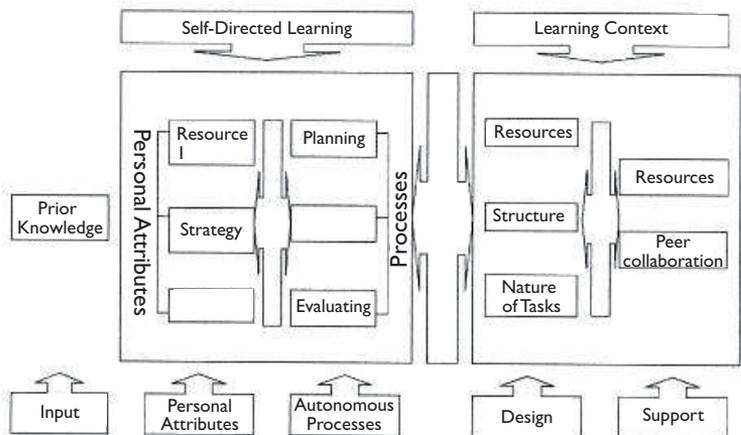
In this framework we are not considering the classic category of motivation divided into intrinsic and extrinsic, but the intensity category; the clearer the objectives and goals are to the individual, the strongest is the need to be self-directed through different devices. The second factor, the capacity to learn in an autonomous way, becomes real only if the learner decide to be responsible of his/her learning process, to organize it and to take advantage of the resources at his/her disposal, offered by the device.

In this light, autonomy is not the ability to use the digital technologies but is rather the capacity to adapt to a self-learning process supported by technologies.

By crossing the motivation intensity with the characteristics of certain self-learning devices, Glikman research outlines four main profiles (les déterminés, désarmés, marginaux, hésitants), which in turn are further divided into subcategories, offering a complex vision of the self-learner, different from the standard or ideal image of the user. In order to be effective, those devices should be flexible and opened to the specific user's profile and they should allow to plan strategies according to each individual needs, motivations and self-learning objectives.

The development of online environments for self-directed learning has been described by Song and Hill (2007). Their study, focusing on the reassessment of the traditional models of self-directed learning, stresses the importance of asynchronicity in digital and multimedial devices in order to develop the learner self-managing and self-monitoring over his/her learning process, as well as a more active and global sense of responsibility. Within an online environment, the ability to manage learning processes is not necessarily linked to accessible data sources, on the contrary is closely related to two main factors: personal motivations and a context able to give feed-back about the individual self-directed and self-collaborative strategies (Kicken, 2009). In particular, learning motivation is only partially linked to the personality traits and on the contrary, is developed through the learning meaning (cognitive, personal, social) search interaction, in a reflection work based on the different levels of depth provided by the device. In order to support a self-directed learning process, not only from a cognitive point of view, the device design must be oriented towards the implementation of a flexible and personalizable learning environment (Fig 2)

Figure 2. A conceptual model for understanding Self-directed Learning (Song e Hill, 2007, 31)



From this perspective, self-directed learning appears to be a complex and deep process, characterized by a multilevel synthesis work and a subjective recomposition in a self-oriented project, where studies and researches dedicated to the development of the individual can creatively cross, generating innovation within the open and distance learning sector (Lane, 2009).

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