

Online Education - Friend or Foe of Self-Regulated Learning?!

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Abstract

Nowadays, education is challenged to change its paradigms and to adapt to new online environments and tools. In this context, the role of teachers remains essential in finding relevant contents for developing strong competences, monitoring and evaluating the learning process. Furthermore, it is vital for online education to meet students' basic psychological needs, such as connecting to others or having the feeling of competence in mastering their learning and becoming self-regulated learners.

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In the context of the current dynamics in the space of knowledge communication and the increasingly complex needs of (self-)knowledge and competence, the teaching-learning-evaluation process is redefining itself at an increasingly fast pace. Incorporating established theories and applications, but also new and flexible practices, online education is presented as a complex and dynamic process, which seeks to respond as effectively as possible to the learning needs of current and future generations of pupils and students (Sanna, 2013). Thus, education is forced to adapt to a framework in which electronic spaces and environments are reinvented and changing rapidly, constantly bringing new challenges. Current generations seem to prefer digital media, pursuing attractive, accessible and systematized content (Gruzd, Staves and Wilk, 2012).

However, the role of the teacher in the educational process remains vital in selecting the most appropriate contents, meant to build strong competences, as well as in providing the right emotional climate for learning and the moral support, in setting learning goals and monitoring the process, etc. Consequently, building psycho-emotional and behavioural codes that facilitate self-regulated learning becomes a real challenge, both in face-to-face contexts and in virtual educational contexts.

Teachers who manage to be effective in online environments are those who engage in an active pedagogy, based on increased attention to learning needs and also to the emotional needs of pupils (Shin, Shin, Choo and Beom, 2011). It is true: the efforts they have to make to maintain the motivation and commitment of learners are greater, because, in conditions of virtual interaction, the teacher cannot control the learning environment and factors that distract the attention and concentration of the pupil or student. Therefore, the performance of the educational process in the online environment comes with a major challenge, namely that of finding new methods through which the pupil or student to benefit from the constant orientation offered by the teacher in learning. In the mentioned context, **the self-regulated learning construct becomes essential for streamlining the teaching-learning-evaluation process.**

The facilitation of the achievement of educational goals and self-regulation in learning can be achieved by using *user-friendly* platforms that allow the teacher to monitor the involvement and progress of learners. Therefore, the effectiveness of different online tools depends to a large extent on the teacher's ability to also guide the pupil in the digital environment, but also to teach him/her to self-regulate in learning, by clearly setting study objectives, reflecting on study materials, monitoring progress, managing emotions related to academic tasks, etc. In the case of older pupils or students, one way that proved effective in achieving learning objectives, as well as in activating self-regulated learning strategies was to conduct group reflection exercises on various issues in the themes covered (Nilson and Zimmerman, 2013).

At the same time, it is already known that learning is motivated by meaningful relationships, the positive academic emotions associated with learning influencing self-regulation and academic performance (Ahmed et al., 2013). Therefore, one of the major challenges of teaching in the virtual environment is directly related to educational attachment and climate. The teacher's ability to build a positive climate and pupils' acceptance has a major impact on the motivation

and effort that pupils or students make for learning (Um, Plass, Hayward, and Homer, 2012). A study by Yazzie-Mintz (2010) showed that, under typical teaching conditions, a third of students get bored during class due to the absence of direct interaction with the teacher. It is worth noting that, in this chapter, including the adult student presents the same problem, with changes in attention given by motivation and material compensation (Demetrio, 2003). It thus seems very likely that the specified aspect will intensify in the virtual environment where, in many cases, *streaming* teaching limits the interactions and the range of emotions that can be transposed online. The teacher's enthusiasm, humour, examples and analogies are more difficult to go beyond the screen, which is why the teacher must develop skills to convey connection and emotion, in order to optimally support the learning process (Macklem, 2015).

At the same time, certain negative emotions associated with learning may be more pronounced in the context of online education than in face-to-face contexts. Of course, they can be identified relatively easily by the educational communicator through a careful analysis of the feedback, including the personal one. For example, pupils/students may feel *discourage* caused by the difficulty of understanding the material or concentrating in the home environment, *loneliness* due to lack of direct interaction with teachers and colleagues, and even *frustration* generated by the challenges related to the limitation of online communication, the operation of learning platforms, etc. In fact, several studies argue that online learning is more often associated with feelings of uncertainty, frustration, isolation, with pupils seeking less support from colleagues or teachers (Azevedo and Hadwin, 2005). Consequently, these attitudes can lead, in the medium and long term, to the abandonment of some courses, as well as to the increase of insecurities, the fear of failure, the feeling of helplessness and the inability to recover individually the contents that they did not understand (Hew and Cheung, 2014). Thus, it becomes even more challenging for pupils and students to set self-taught and self-regulated learning goals. Therefore the teacher should provide additional help in the motivational and emotional regulation of learners. Of course, in the online teaching-learning process, the very specifics of this environment create difficulties in the effective monitoring by the teacher, being more difficult to implement the feedback or immediate help provided to the pupil/student. Basically, the teacher's ability to directly observe mistakes and elements where the pupil/student needs guidance is much reduced.

It follows from the above, that the facilitation of self-regulated learning requires additional help from the teacher, maybe sometimes even the school psychologist, especially where addictions reopen that give rise to *cyber* effects (Aiken, 2018). In the scholarly literature, one of the best-founded methods of support for self-regulated learning is the provision of additional instructions and specific prompts. These can be done by asking clarification questions, tasks that encourage synthesis and critical thinking, or suggesting activities that stimulate metacognition (e.g., reflecting on issues, monitoring understanding). In a study conducted by Lehmann et al., in 2014, it was shown that pupils who received directive and specific instructions in the phase of reflection on an issue performed better than those who received general instructions.

A second effective method to support the activation of self-regulated learning strategies is to provide feedback in conjunction with additional instructions. It is repeatedly proven that immediate and specific feedback contributes significantly to increasing learning engagement and academic performance in the face-to-face educational process. In the online environment, where the implicit (non-verbal and paraverbal) forms of feedback are greatly diminished, providing verbal, specific and constructive feedback from the teacher can help increase pupils' confidence in their own learning and academic satisfaction needed to maintain motivation. The effectiveness of combining feedback with offering prompts was demonstrated in a study, which looked at the effects of additional instructions and feedback in the asynchronous educational process. The results showed that pupils who received concrete guidance, specific instructions and feedback from teachers and colleagues, used more frequently different self-regulated learning strategies. They also reported increased performance anxiety control skills, emphasizing the importance of teacher involvement in these online learning contexts. Another study, conducted by Lee, Lim and Grabowski (2010), concluded that pupils who received feedback related to the metacognitive dimension (understanding how they learn or relate to academic tasks, etc.) demonstrated a greater ability to internalize and process learning outcomes constructively, while acquiring optimal self-monitoring and self-evaluation skills. Most educational platforms allow individualized feedback, either in writing, for each of the exercises performed, or verbally, one by one - a pleasing aspect in the context of applying the method presented.

Among the best known and tested tools to support self-regulation in learning is the use of electronic learning journals, tools that help set effective goals (Lin and Chang, 2014). An

extensive analysis, conducted in 2019 by Wong, Baars, Davis, Van DerZee, Houben and Paas, argues that they are associated with superior academic performance for those who use them. It should also be noted that the effectiveness of these methods for the development of self-regulated learning has different effects, depending on various individual factors, such as prior knowledge, self-efficacy, cognitive development and emotional control (Wong et al., 2019). One of the visible and major risks of online education is the possibility for pupils and students to get demotivated and give up academic tasks if they are perceived as too difficult, while simultaneously complaining that constant support is lacking. This is especially true for pupils who do not have good self-regulation in learning or have a lower tolerance for frustration. Thus, if they are not accustomed to the discipline of consistent learning and do not feel comfortable with their own learning process, the online environment can accentuate their sense of insecurity and uselessness in education (Spitzer, 2020). In addition, data from the scholarly literature on online education suggest that different forms of online teaching-learning-evaluation have a varied influence on both pupils' ability to learn and self-regulated learning strategies. It seems that online learning claims to the maximum the skills of efficient management of resources and cognitive strategies. The abilities of self-motivation and planning of the whole learning process are also highly demanding (Ally, 2004). Therefore, it is considered that pupils and students can develop effective self-regulated learning strategies, provided that they receive support and guidance from teachers. A meta-analysis, conducted in 2015 by Broadbent and Poon, which included 12 empirical studies, concluded that metacognition, time management, effort regulation, and critical thinking were positively related to academic success in the online environment.

On the other hand, despite the shortcomings and risks specified, there are some obvious advantages of online education. Firstly, for example, a benefit could be the use of extremely well-structured videos, which allow the learner to assimilate the relevant information and apply it as concretely as possible. These materials have the advantage that they can be stopped and resumed at any time, so that the pupil/student can adjust their reading according to the ability to understand, emotional state, etc., without having to go through the average rhythm of the class/group. Also, online education can encourage the development of self-regulated learning through the fact that pupils and students are put to monitor their learning, to plan and self-

evaluate in relation to personal requirements and goals (Dembo, 2004). All of these can help pupils and students acquire self-regulatory skills in learning.

Secondly, the multiple possibilities to support the educational process, offered by online tools, can develop learning autonomy, creativity and cognitive flexibility. Of course, an essential condition for these skills to develop is for the teacher to incorporate in the didactic design the most effective tools in relation to the didactic objectives and, at the same time, to encourage collaboration, seeking support from the teacher or colleagues, setting goals, effort and time management (Dabbagh and Kitsantas, 2012). This approach can increase pupils and students' confidence in their ability to manage their own learning process, thus contributing to a higher commitment to academic tasks. However, for some students, autonomy can be interpreted as a way to escape from academic tasks (Barnard et al., 2009).

Another positive aspect of online teaching and learning is that access to learning resources is made easier and gives the pupil/student high control over the content they want to go through, as well as the time or place where they study (Cunningham and Billingsley, 2003). However, an important challenge that arises here is that in the absence of systematic guidance in selecting relevant and valid information provided by the teacher, the pupil/student may find it difficult to select content and be emotionally charged with frustration that often leads to disengagement from the learning process. Therefore, the attention of the teacher remains essential in guiding the educational process.

Analysing a series of empirical studies and meta-analyses on the specifics of online education, it can be stated that its effectiveness depends to a significant extent on the ability of the teacher to adapt and control the educational process. In this regard, some of the recommendations that can successfully contribute to the development of the repertoire of self-regulated learning strategies among pupils and students should be mentioned: a. encouraging pupils/students to set their daily, weekly, monthly, semestrial learning objectives (they will help increase the commitment in learning); b. encouraging pupils/students to take notes during online meetings and then to make their own synthesis of information; c. using different applications or platforms for self-monitoring and self-evaluating learning; d. incorporating in the didactic design some elements for the development of the self-regulated learning capacity that favour the use of metacognitive strategies (e.g. learning diary, feedback); e. using different platforms or applications for pre- and

post-teaching evaluation, in order to have a clear picture of the level of achievement of learning objectives (it can help to set objectives, identify barriers etc.); f. building moments for sharing emotions and practicing self-acceptance and others' acceptance; g. maintaining constancy in activity and offering the feeling of control over the learning process through consultative planning.

These recommendations are just some of the general mechanisms that can increase the chances that educational goals will be met. Of course, they cannot be recipes, but only tools to guide each teaching-learning-evaluation process, differently, depending on the human, school and community peculiarities. As long as the teacher's enthusiasm is not lost and the sense of joy of learning is preserved, education continues. Even online.

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