Coll, C. (2018). Learning processes that generate meaning and strategies for personalizing school learning

Summary

This work explores three aspects of personalizing learning, understood as a set of educational strategies aimed at promoting and reinforcing the meaning that students give to school learning. First, we highlight the characteristics of the learning processes that usually lead to learning that has a high personal meaning and value for the student. Second, some pedagogical, curricular, organizational and operational strategies are outlined that can initiate learning processes of this kind. Finally, the progress that has been achieved in the personalization of school learning is discussed and some obstacles that make it difficult for these advances to be applied in general are highlighted. We finish by suggesting some urgent actions to overcome these difficulties.

Keywords

School learning, new learning ecology, personalization strategies, personalization experiences, learning processes, meaningful learning.

In accordance with the vision of personalization of school learning presented in the introductory article to this dossier, it is convenient to distinguish clearly between learning that has personal meaning and value for students, and the personalization of learning. The first expression refers to a purpose: that students attribute the greatest possible meaning to school learning. The second, however, defines a means for achieving this purpose, that is, a set of actions aimed at promoting and reinforcing the personal meaning and value that students attribute to what they learn in schools and high schools. Likewise, we argue that the proposals for personalizing school learning arise from the need to adapt the education system to the characteristics and demands of the new learning ecology that is part of the Information Society. However, the vision of learning and teaching that currently underpins school education is so far removed from the one that the new learning ecology proposes that this adaptation would require a profound transformation of the education system. Consequently, moving towards the personalization of learning is an unavoidable task; however, it is also an extremely complex task, since it involves changes in the different levels of organization and functioning of the education system and the participation of multiple actors.

Taking these ideas as a starting point, in this article we continue to explore the approaches and proposals for personalizing school learning from a triple perspective. First, we outline some characteristics of the learning processes that, according to the results of psychological and educational research, usually lead to learning that has a high personal meaning and value for the learner. Next, we identify some pedagogical, curricular, organizational and operational actions and strategies that can generate

learning processes of this kind in education centres and classrooms. Finally, we make some comments on the progress that has been made so far in many schools and high schools in personalizing student learning as well as the obstacles and difficulties involved in making these advances sustainable and scalable. We then suggest some actions for continuing to progress.

Learning processes that generate meaningful learning

The advances made by the learning sciences over the last decades, and more generally the results of psychological and educational research, now provide contrasted and precise information on some characteristics of the learning processes that favour learning that has a high personal meaning and value for students[1]. However, before outlining these characteristics it is worthwhile recalling what we mean by meaningful learning with personal value for the learner and what are the factors involved in whether a learner attributes greater or lesser meaning to their learning. These two aspects have a clear reflection in the characteristics of learning processes capable of generating meaningful learning.

The key idea of the first aspect is that learning is meaningful for the learner when it helps them to know and understand themselves better; to know, better understand and to act in and on the reality in which they are immersed; and to project themselves towards the future, constructing action plans and developing scenarios that involve themselves personally. The essential idea of the second aspect is that meaningful learning is closely associated with how the learner feels and perceives themselves while they learn, that is, their subjective experience of learning. In this experience they inseparably intertwine their personal characteristics – needs, expectations, emotions, motives, capacities, etc. – the characteristics of the learning content – nature, complexity, structure, etc. – and the characteristics of the context in which the learning process takes place – agents , activities, materials, etc. These two considerations make it possible to understand why some of the characteristics of learning processes that generate learning with a high personal meaning and value for the learner are concerned with the learner's personal characteristics, while others relate more to the characteristics of the content, and still others with the context of learning. Likewise, it is easy to understand, in light of these two considerations, that none of these characteristics alone can guarantee that the resulting learning will have a high personal meaning and value for the learner. However, the more characteristics involved in a learning process the more probable it is that the learner will give a high personal meaning and value to what they have learned.

According to the knowledge we currently have about learning processes, we can say that their effectiveness in promoting meaningful learning is increased when the learning processes have one or some of the following characteristics:

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[1]See, for example, the summaries published by APA (2015), Dumont, Instance & Benavides (2010) and OECD (2017). Beyond the terminological differences and the disciplinary and theoretical orientations of the authors and the institutions that support the publication of these works, it is easy to identify the characteristics mentioned in this section in these summaries.

➢ They are based on experience, that is, they are based on acting, doing and experiencing. There are two aspects of this characteristic: on one hand, the importance of action, including physical, manipulative and mental action, and on the other hand, the fact that the action is aimed at elaborating a product or obtaining a result.

➢ They have a strong experiential component, so that the cognitive and emotional aspects are intertwined, merging into an inseparable whole. The learning processes that have this characteristic can be distinguished by the emphasis on the positive emotions associated with the activity of learning.

➢ They connect learning experiences that have taken place at different times and in different activity contexts, focussing on the learner as a link between them.

➢ They correspond to the learner's interests and objectives, that is, they are governed and guided by a personal purpose or motive.

➢ They recognize and respect the learner's ability to decide on and control their learning process.

➢ They are culturally sensitive and are linked or related to activities carried out, or in which the learner participates, in the contexts in which they usually develop.

➢ They favour the learner reflecting on their own learning process, on the difficulties encountered, the materials and aids that have enabled them to overcome these difficulties, the progress achieved and the objectives to be fulfilled.

➢ They allow the student to learn something about themselves as a learner, about the way they face learning situations and activities, the circumstances and conditions that are more or less conducive to learning, their ability to create the most propitious circumstances and face the least favourable conditions, as well as request help and take advantage of it.

Strategies for personalizing school learning

Some of these characteristics find a clear reflection in personalization strategies that are already being used in many classrooms and schools in our country. In fact, it is in this area, that of education centres and classrooms, that the progress made in recent years towards greater personalization of school learning is perceived most clearly, as evidenced by the experiences and personalization practices included in this monograph. The accumulated experience of the teaching teams and the processes of reflection carried out by the teaching staff in and about the teaching practice have led to the identification of a series of pedagogical, curricular, organizational and operational strategies – although it is not always easy to distinguish between these components – that are particularly appropriate for triggering learning processes in the student body with one or more of the characteristics indicated above. Among these it is worth mentioning, due to their relevance and capacity to reinforce and promote meaningful school learning, the following strategies:

➢ Taking into consideration the students' interests, objectives and options in the design, planning and development of teaching and learning activities.

➤ Recognizing, accepting and allowing students to exercise their decision-making capacity over some or all of the components of the teaching and learning activities (objectives, contents, materials, supports, tasks, sequence, evaluation, etc.).

➤ Identifying meaningful learning experiences for students that originate outside the school and connecting them with teaching and learning activities in the school.

➤ Incorporating specific times and spaces for review, reflection and assessment, both individually and collectively, of learning experiences that are meaningful for students regardless of the context, school or non-school, in which the activity has taken place.

➤ Incorporating specific times and spaces for students to reflect on their approach to learning activities and tasks, school and non-school, and the view they have of themselves as learners.

➤ Placing emphasis on socially and culturally relevant learning contents through participation in community activities and initiatives.

➤ Incorporating and taking advantage of the learning resources and opportunities available in the community environment and in the different activity contexts that students can access.

➤ Incorporating and taking advantage of the learning resources and opportunities available and accessible on the Internet.

➤ Using methodologies of inquiry (project-based learning, cases and problems).

➤ Organizing the curriculum and teaching, learning and evaluation activities around the acquisition and development of transversal and specific competences.

➤ Using ICT and mobile devices to connect learning experiences arising in different activity contexts.

➤ Organizing educational action based on establishing Personal Learning Plans.

➤ Promoting the construction of Personal Learning Environments through the integration of face-to-face and digital activity contexts that offer students resources and opportunities to learn.

None of these strategies alone is capable of ensuring that students give a high personal meaning and value to school learning. The confluence of several of them, however, significantly increases the likelihood that this will happen. In fact, as can be seen in the experiences presented in this monograph, often several of these strategies are used in combination. None of them is in itself better or more effective than the others in absolute terms. The strategies' capacity to promote and reinforce meaningful school learning depends on several factors, including the training, working conditions and pedagogical options of the teachers; the resources and learning opportunities in and outside the centre that are available to teachers and students; the support and specialized assistance available to the centre; and the students' profiles.

Obstacles and challenges to continue moving forward towards personalization

The fact that there are examples of the successful implementation of many of the aforementioned strategies shows that it is possible to move towards greater personalization of school learning even within the framework of an education system such as ours, which is not very conducive to it. Do not forget, however, that most of these experiences have been designed and successfully implemented thanks to the exceptional dedication of teachers, who have voluntarily made a special effort, which poses serious doubts about the possibility of generalizing these experiences.

As we pointed out at the beginning of this work, the most important difficulties faced by personalization proposals originate in the fact that the changes they propose find their justification in a vision of learning far removed from the one that currently supports the organization and functioning of the education system. We are talking, therefore, of a systemic change, with all the complexity that this entails. This has important implications, among which we would like to highlight two. First, this is a transformation process that should be carried out progressively without accelerations or thoughtless stops, and especially with a clear and sustained orientation in time. Second, it is a transformation that requires acting simultaneously in different areas and levels of the education system, basically in the educational practices in schools and classrooms, the educational policies and management of the education system, and the social and citizen co-responsibility for education. It is illusory to think that a transformation like that of moving from a homogeneous and homogenizing educational system like the current one to a personalized system can be the result of actions that are undertaken exclusively in one or another of these three areas. The progress must occur simultaneously and consistently in the three areas for the changes to be effective, sustainable and scalable at the system level; otherwise, they will be limited to experiences.

In this line of argument, we will end by pointing out some particularly important obstacles that, in our opinion, urgently need to be faced and overcome in each of these three areas. In the field of educational practices it is urgent, in our view, to raise the issue of teacher training. Teachers are initially trained and continue to update their training based on, to a large extent, a vision of learning that does not incorporate personalization as the axis of educational action. On the other hand, although it is true, as we have pointed out repeatedly, that in our country very interesting and clearly successful personalization experiences in early childhood, primary and secondary education centres are being carried out, it is no less true that these experiences are, in general, poorly documented, formalized and analysed. Progressing in these two directions – training teachers in the design, planning and implementation of strategies for personalizing school learning, and also studying, documenting and analysing the most relevant experiences in order to identify their strengths, points for improvement and, especially, the conditions that make their success possible – are undoubtedly two priority actions at this time.

For the *scope of the definition of educational policies and the organization of the education system*, the most urgent actions, and probably also the ones that pose the greatest difficulties in the short term, are related to the need to definitively leave

behind a culture and principles based on the homogeneous functioning of the education system as a guarantee of efficiency and quality. It is an unquestionable fact that this culture and these principles currently impregnate our entire educational system, from the laws and regulations that regulate its organization and operation to decisions and instructions on timetables and templates, including of course the current curriculum model and the measures and ways for providing attention to diversity. While this culture and these principles are in force, the innovation experiences and the change and transformation processes oriented towards the personalization of learning currently being carried out in many educational centres will be destined to continue developing mainly thanks to the voluntarism of the professionals involved. This makes it difficult for these experiences and processes to be extended to the whole system.

Finally, as we have seen in many of the personalization strategies mentioned, the students' learning experiences that originate in non-school contexts occupy a prominent place, as well as those that use and take advantage of resources and learning opportunities that are available in activity contexts, physical or online, outside education centres. Linking and connecting the students' learning experiences regardless of the activity contexts, school or non-school, in which they arise is not something that can be done only from schools and high schools. Often, it is necessary that *other social and community agents* become involved, collaborate and are *co-responsible* for the education and training of students. It is urgent, therefore, to launch actions aimed at making society in general, and the main social and community actors in particular, aware of this need. The greater or lesser degree of success of an education centre in offering its students quality personalized education in conditions of equity cannot be attributed solely to the centre. It is also, to a large extent, a consequence of the involvement of the community of which the school is a part and of the social and community agents present in it. Maybe it has always been like this, but undoubtedly today this is true more than ever.

References

American Psychological Association (2015). *Top 20 principles from psychology for preK-12 teaching and learning*. http://www.apa.org/ed/schools/teaching-learning/top-twenty-principles.pdf

Dumont, H. D., Instance, D. & Benavide, F. (Eds.) (2010). *The Nature of Learning. Using Research to Inspire Practice*. Paris: OECD Publishing.

OECD (2017). OECD Handbook for Innovative Learning Environments. Paris: OECD Publishing http://dx.doi.org/9789264277274-en