

Self-management of work by the student

Luis A. Branda

MARIA MONTESSORI was the first woman in Italy to graduate with a degree in medicine and this year marks 110 years since she founded a special education school in Rome. Maria Montessori developed the *New and Active School* where the main idea is respect for natural growth during childhood.

FRANCESC FERRER I GUARDIA, also 110 years ago, returned from exile to Barcelona, and established special schools with social commitment based on trust and solidarity. He also published the influential *Boletín de la Escuela Moderna* (Bulletin of the Modern School).

JOHN DEWEY, the philosopher and human rights activist, promoted the concept that children and adults are active beings whose learning comes from everyday situations. This can be considered as a precursor of problem-based learning.

PAULO FREIRE, author of two ideas that are highly relevant to this conference: "Education must begin with the solution of the teacher-student contradiction" and this should be based on "reconciling the poles of the contradiction so that both are simultaneously teachers *and* students."

ALEXANDER SUTHERLAND NEILL founded the Summerhill School nearly 90 years ago, based on his concept that education should be a task of understanding that seeks to meet the learning needs of students without the authoritarianism of a teacher.

ANTON SEMENOVYCH MAKARENKO, was a teacher who masterfully recounted in his book, *The Pedagogical Poem*, the principles he believed pedagogy should be based upon: the community, socially productive work and the charismatic figure of the educator.

JEAN PIAGET, whose concept of constructivism is based on the idea that knowledge cannot be implanted from outside, but rebuilt by students through the interaction between their previous ideas and their environment-transforming activities.

CÉLESTIN FREINET was a teacher who made a fundamental contribution to the concept of cooperative work which went beyond the scope of the classroom. He also promoted the idea of learning to read based on free texts by children. These were made by the children themselves without having a theme or a time limit decided by the teacher.

One element that unites all of these pioneers in education and many others, regardless of the pedagogical theory they developed, is that their ideas are rooted in the belief in and practice of student-centred learning. The literature aiming to explain what is meant by *student-centred learning* is abundant and various terms have been coined.



The theme of the UNIVEST2011 congress is the *self-regulation of learning* which is one of many student-centred learning strategies which include: *Assisted Self-Managed Learning; Directed Self-Learning; Self-Directed Self-Learning; Self-Regulated Learning* and *Mediated Learning*.

Proponents of each of these strategies assert that what they have developed is based on the concept of student autonomy in learning, although in certain cases they appear to be insignificant variations of similar concepts and in other cases the emphasis on autonomy is sometimes highly debatable, as in the case of *Directed Self-Learning* and *Mediated Learning*.

In any case it appears that self-managed learning – with all its variations – no matter where we are in our pedagogy, is the north to which our educational compass always points.

Gerald Grow, in his work on self-directed learning, such as *Teaching Learners to Be Self-directed* (1991, revised and available during this conference at <http://www.longleaf.net/ggrow/>) indicates that the concept of self-directed study will enable the person to do the following: to identify what to learn; to develop plans to carry out learning; to identify learning resources (people as well as materials); to develop strategies for achieving the learning goals (which includes setting these goals, monitoring them, and time management); to assess the learning outcomes; to evaluate the learning process; and, in addition, to enjoy the learning process.

With a certain sense of humour Gerald Grow, on his website, offers a visual aid in the form of a cut-out-and-paste label to be put on a spray canister in order to make a *self-direction spray*. Perhaps what he wants to do with this is convey the message that self-directed learning, or its variants, is not, in fact, something that actually comes in a bottle and it is not so easily applied or so easily available as an air-freshener or deodorant.

Joking aside, the experience most of us have is that developing self-regulated learning skills is highly complex and is not transmitted by osmosis and the fact that it is multifactorial makes it more difficult.

I have relied in part on what has been said by Gerald Grow and also by Philip Candy in his book *Self-Direction for Lifelong Learning* – a book which, despite having been published 20 years ago, can still be considered a benchmark for many basic concepts of self-regulated learning. In the reflections that I want to share with you, I have integrated my experience as a teacher in order to present certain relationships between the student and the teacher in the continuum that goes from dependent learning to self-directed learning.

When the student is dependent on the teacher, the teacher's role is to be an authority as well as a trainer; he or she is also the fundamental – or even unique – source of knowledge and his or her contributions to the educational process consist of lectures or instructional classes.

At the stage of the interested student, the teacher is a motivator and guide whose contribution to student learning consists of master classes – not lectures – which integrate his or her knowledge and experience in the area. The teacher still sets the goals the student must reach as well as the strategies for making this possible.

When the student is involved in his or her learning, the teacher acts as a facilitator and organizes discussions and group projects.

In self-directed learning, the teacher acts as a consultant during the practical activities and the individual and group work.

I think it is important to distinguish between self-directed or self-managed learning and being an autodidact. Examples of autodidacts are to be found in many publications, including the magnificent book by G. L. Craik, *The Pursuit of Knowledge Under Difficulties*. In this book, published over a century and a half ago (my own copy was published in 1844), Craik describes how quite a high number of luminaries in humanities, philosophy and science were able to acquire and to generate knowledge despite being entirely self-taught.

Of course a discussion of the different varieties of self-managed learning requires a consideration of how the behaviour of the various protagonists involved and their environment help to shape the panorama. If these aspects are not controlled, then self-managed learning would be merely a painted veil.

Let us begin by agreeing that the main protagonist should be the student.

Although it is by no means new to ask ourselves about the quality of education that students receive, up-to-date results of recent surveys should provide food for thought that can be used to encourage change.

The *Universidad Politécnica de Valencia*, through its *Centre for Management of Quality and Change* in conjunction with the *National Agency for Quality Assessment and Accreditation* (ANECA) and Spain's Ministry of Education and Science, published a report in 2007 which was the result of surveys of thousands of Spanish university graduates. In this report, questions were raised regarding learning methods and the main emphasis in courses that students were taking. These questions included what emphasis was placed on participation in research projects, on project-based or problem-based learning, on practical and methodological knowledge, on theories, concepts and paradigms, and whether or not the teacher was the main source of knowledge.

The results of this study – together with a report comparing European universities known as the Teichler Report – show where Spanish graduates perceive education in Spain to be.

The comparative results show that Spanish universities place a stronger-than-average emphasis on knowledge, on class attendance and on teachers as the main source of knowledge.

Compared with other European universities, Spanish universities are below average in project-based learning, problem-based learning, independent learning and emphasis on teamwork skills, the main focus of which is self-directed or self-managed learning.

It is quite common to hear teachers say that students are not motivated and, therefore, introducing programmes in which they would be primarily responsible for their own learning will not work. However, the programmes that have been shown to motivate students are those that include strategies that enable students to see the relevance of their learning. One such strategy is problem-based learning and, developed from this, project-based learning. There is a great deal of literature comparing conventional curricula (based primarily on lectures) and problem-based learning, and it is, at times, confusing. But if there is one thing on which there is agreement, it is that problem-based learning increases student motivation. The use of situations in which the student can see the application of knowledge and can understand the need to learn principles and concepts applicable in other situations or to other problems seems to be the key element in increasing motivation. The literature also consistently shows that problem-based learning is more challenging and more enjoyable. We must also bear in mind that the mainstay of problem-based learning is self-directed learning, and not guided self-learning which, unsurprisingly, does not increase motivation.

The role that extrinsic factors may play in student motivation has been widely discussed, including the possible role of evaluation and of providing incentives, such as prizes. The role played by incentives remains debatable and, in this regard, there is still a great deal of relevance in the questions raised several years ago in the excellent article by Lepper, Green and Nisbett published in the *Journal of Personality and Social Psychology*, *Undermining children's intrinsic interest with extrinsic reward*.

The attitude of teachers in higher education has undergone changes, but it is still, of course, a major factor in student learning.

We seem to have gone from a severity that recalls how God was illustrated in many Renaissance paintings, to the image of a stern but benevolent God, and finally to an image that is simply benevolent.

While this might sound a little exaggerated, teachers can easily be found with each of the above attitudes and it is fundamental to ask which one is best suited to promote self-managed learning. Even the attitude of benevolence, which many would consider the most suitable, may manifest itself while still retaining the authority of the teacher in the process of student learning.

A series of questions can be drawn up related to certain aspects concerning the attitude and behaviour of teachers that will certainly have an impact on the development of self-managed learning.

Are we, as teachers, tolerant of non-conformity in our students?

Robert Frost challenges conformism in his poem, *The Road Not Taken*:

Two roads diverged in a wood, and I,

I took the one less traveled by,

And that has made all the difference.

Are we, as teachers, able to develop a rational tolerance to the fact that the student does not follow the more travelled path, particularly that path we ourselves established as the most suitable? We must ask ourselves exactly who it is most suitable for.

When the ideas expressed by students do not conform to our own, to what degree do we accept those ideas and how far do we accompany our students in their process of critical analysis?

While there are no simple answers to such questions, they must be taken into consideration when looking for appropriate responses. They can serve as the basis for reflection on how our teaching attitude impacts on self-managed learning and self-management of work by the student.

As parents, we are familiar with everyday routines with our offspring, such as taking them to the bus stop to go to school. Generally, we set off with plenty of time but, on the way, our kids stop to pick up a pebble that they have found so attractive, or some pretty leaves off the trees. But our goal is over-riding and clear and, even though we have enough time, including time for our kids to satisfy their curiosity, we still urge them to hurry, hurry or they'll miss the bus! Hassin, in his article, *Being open minded without knowing why: evidence from nonconscious goal pursuit*, published in *Social Cognition*, points out that this *nonconscious goal pursuit* "ties us to past experiences and hence stands in the way of quick adaptation to novel circumstances". Hassin also indicates that the environment in which we live is complex and dynamic and therefore, to move from present to future, we must go beyond our experiences and be able to adapt in order to make quick changes and adjustments to new circumstances. We should bear these thoughts in mind when considering our approach to how our students must meet certain objectives within certain time constraints, but with an open mind and a high degree of flexibility that may or may not be consistent with our teaching plans.

Should we, as teachers, consider that, not only is self-managed learning one possible route to excellence, but it is, in fact, the route to excellence? The following dialogue between a student and a teacher at a local university, which claims to encourage self-managed learning, illustrates how students who want to learn something that interests them _ regardless of whether or not they will be part of an exam _ may be disappointed.

Student: "Professor, what we read in the textbook and the information in the Moodle of the unit seems to be contradictory. Could you clarify it for us?"

Teacher: "You don't need to know this yet."

Student: "But ... we would like to know."

Teacher: "No! You're going beyond what I expect you to know. "

Perhaps he may have added "what you need for the exam".

Some universities that have implemented programmes based on self-managed learning expect the students themselves to search for information that is relevant to their studies, that is to say, they do not provide bibliographic references, and so leave it to the students to develop their skills of finding and critically analysing information independently. However, in the same institutions, the students have found that they can persuade some teachers to provide them with lecture notes or copies of their presentations to ensure good results in the exams. This collusion means that learning is not only restricted, but also dependant.

We also hear of teachers saying that when students begin their university degree courses, they know nothing about certain topics in a particular subject. This ignores the existence of both prior knowledge and prior experiences. They appear to believe that the heads of the students are like empty bottles, some more attractive than others, but all empty and that the teacher's role is to fill them with knowledge.

But prior knowledge does exist. The knowledge they have is probably disorganized, probably incomplete and possibly flawed, but their heads are not empty bottles. The teacher's role should be to facilitate the growth, the organization and the correction of this knowledge.

Several programmes that use self-managed learning strategies, such as problem-based learning, have shown that interventions by teachers as facilitators work along two axes. Along the horizontal axis, tutor intervention ranges from the authoritarian to the facilitative. Between these two extremes, the tutor directs, informs, confronts, challenges, educates and shares. Along the vertical axis, tutor intervention ranges from student-centred activities, to activities centred on the tutors themselves. Applying this model to a self-evaluation of the tutor has provided the basis for a reflective analysis of the degree to which their behaviour is coherent with self-managed learning.

In this model, we can identify areas corresponding to what might be called hierarchical interventions or those related to student autonomy in learning.

Clearly there are many other factors that play important roles in the development of self-managed learning skills, such as other students on the same course and the evaluation process. I would like, briefly, to mention another factor – which I consider to be crucial – that can facilitate or hinder the development of student autonomy, and that is the environment. The social and cultural environment within which the student is learning is often inappropriate in terms of making the student the protagonist and making the student primarily responsible for his or her own learning.

Perhaps there are some final questions to be asked:

What is the message that young people receive upon entering the university? What is the role of the parents? Do they consider their children to be responsible? Do they think they are capable of performing certain tasks relating to their course – even such tasks as matriculation? This should provide food for thought since, in a medical school in such an environment, the parental involvement in student enrolment, i.e. filling in the enrolment form, is about seventy percent.



In order to make it possible for students to develop skills that will enable them to carry out self-managed learning, there are several factors which, in practice, not in theory, must be controlled. Given that there is a general consensus that we need to encourage self-management of work by the student, are we all prepared to carry it out?