From the transmission of knowledge to the dialogical model in the teaching-learning process

María José Latorre-Medina

Associate Professor
University of Granada, Spain

Francisco Javier Blanco-Encomienda

Associate Professor
University of Granada, Spain

María José Fernández-Maqueira

Secondary School Teacher
Luis de Camoens Secondary Education Institute, Ceuta, Spain

Abstract

In the society of communication and information, the relationships between individuals have changed substantially. The school, as a reflection of the society and that the students are going to inherit, cannot be left out. Previous educational conceptions focused on the individual in isolation, now subjects must be considered in relation to their cultural and social contexts. Societies have taken a dialogical turn of such a magnitude that the educational sciences cannot and should not be overlooked. This article intends to expose the firm idea that a new conception of learning should be promoted that leads to higher levels of understanding of reality and allows students to have an active control in their own learning process. Dialogic learning emerges from the evidence of how people learn dialogically. This being so, the role of the teacher acquires a new dimension¹.

Keywords: dialogue, learning, teaching practice, teacher knowledge.

1. Introduction

The 21st century has put us to the challenge of making us more valid and more capable to develop the skills of our young people. For such a decisive launch, all resources must be put to revision; the managers, politics, social, organizational and individual. Darling-Hammond (2001) considers a new paradigm that focuses on

¹ This work is part of a larger research project developed at the University of Granada (Spain) for the completion of a Doctoral Thesis, entitled *Attitudes of teachers towards the implementation of innovative projects in educational centers in Ceuta*.

educational policy in the application of methods that develop the capacities of schools and teachers to take responsibility, not only for learning and new needs of the students, but the concerns of the community. One of the greatest aims of education is to teach students to become autonomous, independent and self-regulated learners capable of learning to learn. However, contrary to what researchers have advised for several decades, resumes continue to promote highly dependent students of the instructional situation, with little interdisciplinary conceptual knowledge and few tools or cognitive tools to deal with new situations of learning. Likewise, it remains a pending subject for teachers to offer students useful knowledge and to be able to apply in real situations.

By means of training, the reflection on the current paradigm, renewal and research in the classrooms teachers will take a giant step towards improving their teaching practice and, therefore, towards school success. Students need to be involved in more metacognitive methods, involving them in a higher level of questioning and reflection of the world around them and which they are willing to understand. To do this they need methods that give them active control of knowledge mastering (Plugina, Sokolova, Gorbunkov, Znamenskaya, & Goman, 2016). Activities such as planning the steps to achieve the success of a proposed task, seeking learning through problems, projects or questions, the joint evaluation of a work process, are activities that promote autonomy and critical thinking (Cargas, Williams, & Rosenberg, 2017; Kools, 2020). Students should be taught to apply better their cognitive resources to achieve a more global and interdisciplinary learning. To achieve this goal, it is imperative to cross the barrier of transmissive teaching.

Learning based on personal interaction has aroused interest in the research community (Aubert, García, & Racionero, 2009; Hutchings, 2006; Wells & Mejía, 2005). This is what has been called the new dialogic model of learning. For Ferrada and Flecha (2008), this model translates into a new conception of education, which breaks with the old pedagogical conceptions of traditional learning. The function of education is no longer the reproduction of knowledge in which the student is the product, but that educating means teaching to know through the questions, it is an interest to take control of the environment in which the student is the protagonist.

2. Teaching by Means of Silence

When Socrates walked through the markets and gardens of Athens with his students, he was already leaving behind him the trail of an innovative teacher. Socrates' genuine pedagogy, his basic idea of teaching consisted of the personal search for knowledge conducted by the teacher. The teacher is not to inculcate the student knowledge, because he understands that his mind is not an empty receptacle or drawer in which different truths and knowledge can be introduced. It is from the recognition that nothing is certain about an issue, when Socrates guides the disciples with their questions, with a creative sense, always seeking the truth amongst all, thus constituting dialogue. This process of common search Socrates called it maieutic in honor of his mother's profession, for through the question and the answer, the truth is brought to light. Consecutively, and naturally, arises the discussion on the subject, which provoked in the disciples the *aporia*, what he believed to know perfectly before the dialogue is no longer clear. This state of confusion is a necessary condition for learning. Socrates identifies it with the pains that the woman experiences before

giving birth. Philosopher and educator are the same thing, midwives who bring to light the child.

We imagine that Socrates did not see then what education would give out of itself, the almost infinite processes of learning that would arise, the innumerable pedagogical currents that would succeed to these dialectical walks with his disciples nor the rivers of ink that would be used writing about education throughout the centuries to come. Nevertheless, this image of the educating philosopher, today more than ever, seems to us sublime. No other thinker has been so generous in defining our work. The educator, like the philosopher, loves knowledge, is not isolated from his context, lives the world that surrounds him, experiences, reflects and has a critical spirit, the educator, like the philosopher, feels the need to transmit his knowledge, he becomes restless. However, unfortunately, we found the difference; the philosopher thinks of something that troubles him and proposes the debate of ideas, while educators have moved away more from dialogue. Is it the passion of philosophy for the confrontation of ideas, for the dialectical debate, for the normalized use of dialogue and conflict, what separates educators from being philosophers, as Socrates longed for?

When seeking knowledge through dialogue, learning is organized from the outside, but is realized and manifested from within. From this idea arises the latin concept from which the word educate emerges from: *educire*: to draw out what is inside. Socrates, leaving the disciple the responsibility of his own search, helped him to achieve knowledge by himself.

Freire (2001) claims the great value of the word and considers dialogue a transcendental and indispensable element in the teaching-learning process. Only dialogue implies a critical thinking and it is the only instrument that generates the capacity for transcendence and creativity, because with dialogue, it is possible to educate in a context of freedom and not of imposition. Freire (2001) affirms that the educator does not possess the absolute truth and he laments of some attitudes of the teachers when striving to exert of transmitters of the knowledge, giving answers to questions that the students do not ask. Only through dialogue teachers can create a more educated and non-domesticated society, and only then can they break with stereotypes and bring about a total transformation of society. The real education for Freire is the dialogue considered as an epistemological relation.

Dialogic learning is the only real alternative of education in the twenty-first century. Dialogue-based learning occurs when interpersonal relationships are promoted in which people contribute to their own knowledge through experiences and sustains themselves in relationships of equality and aims to achieve learning through relationships of solidarity. The final product is the result of consensus; the learning that emanates from this form of work has a deeper instrumental dimension as it is the product of interrelation.

In the society of communication and information, the relationships between individuals have changed substantially. The school, as a reflection of the society we share and that students are going to inherit, cannot be left out since the growth of Information and Communication Technology has also altered the way teachers teach and students learn (Yap, Neo, & Neo, 2016). In today's society, communicative skills have acquired a universal value. Previous educational conceptions placed the focus of attention on the individual in isolation (Hongboontri & Jantayasakorn, 2016), now we must look at the subjects in relation to their cultural and social contexts (Tomazetti &

Schlickmann, 2016). Aubert et al. (2009) argue that, in line with the dialogical twist of societies, in the last years, education sciences and learning conceptions are emphasizing the idea that learning leading to higher levels of understanding and meaning is that which occurs in social interaction with diversity of people. It is an evidence that dialogic learning emerges from the evidence of how people learn dialogically. Learning, through communicative interaction, creates more and better knowledge.

To take the step and place the dialogue and not the transmission as the center of the learning process, teachers must be prepared and also the organizational elements that accompany them in this process of change. Prieto and Duque (2009) focus on the role of the teacher, the most important element under the wing of the educational community. The transmission of knowledge in the society of information is no longer owned by the teacher, the information is, literally, in the hands of students, knowledge has found different conduits to reach teachers. This being so, the role of the teacher acquires a new and fascinating dimension, as it will be responsible for promoting the best way to access knowledge and coordinate relationships by creating situations to learn by means of dialogue. The teacher thus becomes not only a mediator of knowledge but also a promoter of critical questioning.

Knowing how to do it is not an easy task, especially in crowded classrooms that have been educated in silence. The students have internalized throughout their passage through the educational system that silence is the atmosphere for learning. The teacher, as an orchestra conductor, indicates when and who can break the silence, giving the floor or removing it according to our criteria as an authority. All this is educational culture that teachers have been injecting their students. Promoting a culture of dialogue now will not be easy and will create conflicts. Fernández and Osorio (2004) analyze this culture of silence. These researchers claim that silence acquires imponderable value for students, as it allows them not to evidence their lack of knowledge about the subject matter treated and to be safe from negative evaluations. Promoting dialogue between students could cause a lot of noise and this would undermine the silence that must prevail in an area where it is taught. "Do not talk", "Can you keep silent?", "If we all talk we cannot listen to each other" are some of the scenes that repeat themselves most in classrooms.

In this transformation of what it means to learn and teach, one must understand the classroom as a space eminently governed by a dialogical-discursive character (Costa & Lyra, 2016) and the dialogue, the debate, the question and the mistake as fellows of this so exciting as disturbing journey. The process is not easy and requires a great adaptation and organization by the teacher, but it is an inescapable transformation of what the school should be. Hutchings (2006) defends the Enquiry-Based Learning (EBL) model and denies that in our society another model of learning can be offered that is not based on the question and search of the answer, however, these models, which should be predominant, do not abound in education systems. Traditional teaching is still very present in the classrooms and represents a totally passive learning model. Teachers need to move on to models that ensure that students acquire their own knowledge in an active process, making their own decisions about which paths to follow or which sources to approach to discover.

This dialogical model is the one found at the base of the learning communities. These centers share a new model of pedagogy which, according to Flecha (2010), translates into a new conception of education, curriculum, learning, didactics and

evaluation. The value of learning communities lies in dialogue and deliberation. Learning through dialogue transforms relationships between people and their environment into a new pattern of teaching work, a new concept of leadership and a true institutional culture that emerges from the common feeling of all those who make up the educational community. Burbules (1999) points out that dialogue represents a communicative exchange that is not only continuous but also evolutionary and it is through this exchange that teachers achieve a fuller apprehension of the world, of their subjectivity and of others.

The main objective is to place the focus on the work of the teacher in the classroom and on the daily actions of the work of teachers to find the best contribution to the educational quality that wants to be offered to the students. For this, it is obligatory to answer three questions. What kind of learning processes should the students develop that provokes an authentic disposition in them to learn to think and solve problems skillfully? What learning environment should be favored that are interesting and attractive enough to achieve in students a taste for learning? And finally, what kind of teacher should be prepared to generate dynamic and active work environments in which students feel they are directors of their own learning?

3. The Transformative Force of Dialogue

Establishing a new routine in teaching practice is always difficult, especially difficult if this change entails a radical break in the most etymological sense of the term. The decision to begin to base the teaching practice on the autonomous search for knowledge, on the debate and the cooperative work will assume to move through a shaky, unstable ground that will put in check the meaning of knowledge, work methodology, the traditional vision of education and, most threatening of all, the role that teachers play in the learning process. Burbules (1999), one of the most eminent researchers in dialogic methods, puts the focus on the need to change the structures conceived so far in the development of teaching. The limitations imposed by tradition are extremely strong.

As Nuttavuthisit (2016) notes, an insufficient and incompatible quality of education becomes a significant impediment. And if teachers are determined to change old practices to improve the quality of the education to be offered and to participate in the true meaning which the 21st century education has acquired, teachers have only to equip themselves for the new times.

Fullan (1993) fervently encourages the need for a change in pedagogy and says that teachers must assume a situation of chaos. The change will only take place in a teacher when he really changes from being a user of the innovations proposed externally to personal motivation and to the understanding that he wants to improve as a teacher. In that moment of acceptance teachers will be willing to risk and walk the stony path that awaits for them. Tyack (1990) notes two of the great obstacles that teachers face when entering into a dialogical practice, the first is structural and refers to the decentralization of authority and the other pedagogical, which is to find the way to make more alive and interesting education for both students and educators. To give solution to the second obstacle necessarily passes for accepting the first. According to Flecha (2010), embracing a communicative methodology radically changes the environment because the teaching-learning process is mobilized in both directions,

and teachers must assume that they are a model of teacher who not only teaches but also learns.

After the decision comes the reflection. Silence has been presented as the dictatorial work environment in which the educational process has been developing, it is possible to ask if teachers will be prepared to manage the dialogue. Many of them can argue that in their classes they promote situations of dialogue because they allow students to participate, asking and responding in class. Burbules (1999) warns that when classroom exchange is narrowed to asking questions unidirectionally by the teacher for the student to respond, the ability to pay attention, think and present alternatives is atrophied. Similarly, in the belief that they are giving voice to students when they participate in the classroom, the author insists on the difference between a pedagogical communicative relationship and a real form of conversation. It seems clear that, in order to reinforce the true meaning of dialogue in the classroom, it is necessary to move away from established structures and give students a voice.

The teacher-student personal interaction that occurs most of the time in classrooms responds to the question-and-answer pattern, always directed by the teacher, in order to find out if the student knows the answer and not to provoke another question or to continue delving. Álvarez (2012) analyzes the interesting and curious data that are extracted from an investigation carried out in England by professor Hastings in 2003; one of the results is that a teacher conducts an average of 400 questions a day leaving his students less than a second to offer a response before passing the question to another or answering it himself. It shows that many questions are asked, but very few good answers are obtained. Another study carried out in England in 1989 showed that only 4% of the questions asked by teachers were highlevel, that is, they were a cognitive challenge to the student, and a third study on higher-order questions shows that, in these cases, the student's attitude improves in 50% of the cases.

Do teachers know how to ask their students? Asking questions is not an easy task. Fernández and Osorio (2004) affirm that many knowledge and skills that asking good questions to students require: the skills inherent to the profession, the content being treated, the didactics of the subject and, of course, linguistic skills. With regard to the purpose a question pursues, there is that to guide learning, focus the attention of the students or value the assimilation of knowledge. However, such questions produce very limited responses and therefore do not promote dialogue.

According to Cazden (1981), there are two types of questions that can be generated in the classroom, the closed and the open ones, and these are the ones that should be promoted. The type of question that promotes dialogue and research is the one that poses a challenge, through which, the need of asking more questions arises. According to this author, there are three languages in the classroom: the language of the curriculum, through which teaching is done and what is learned shown, the language of control, maintained by the teacher, and the language of personal identity. Two of these languages are monopolized by the teachers, not leaving, in most cases, space or time for the third to be generated.

When teachers become involved in a communicative pedagogy, it is necessary not only to learn to manage the absence of silence, but to learn to ask questions in order to create situations that generate a true dialogue that enlightens learning.

It would be totally unfair to blame exclusively the teacher for developing antidialectical behaviors, since various pressures of the system itself not only provoke, but also stimulate this kind of closed behavior towards dialogue. In the first place, note the academic pressure to which the teachers are subjected due to a conception of the curriculum focused on the contents, pressure that increases considerably as they rise in the educational levels. Álvarez (2012) also emphasizes the conception of evidence-based educational goals, normally written, in which actions that cannot be measured in this way are relegated or rejected.

The main thrust of this work is to move teachers to take their own initiatives in the search for the transformation of classrooms into communicative, active, participatory and future spaces, assuming substantial and risky changes in the conception of knowledge, on the role of the students and of the teacher, in the organization and the evaluation. It is necessary to be convinced that daily and personal attitudes do contain transforming elements of the macro educational reality, about which we apparently seem to have no influence in. Fullan (1998) already encourages action in this direction when he states that he places all the emphasis on individual capacity for strategic and fundamental reasons. All the individual capacities to learn and to continue to learn without letting the vicissitudes of change collapse.

4. The Noise Challenge

"Silence, teacher comes" is the phrase that has summarized the model on which the teaching-learning process has been sustained for too many decades. The teachers have felt comfortable being the knowledge manager, distributing the times of action and monopolizing the noise management. Silence has been considered by teachers as an indispensable tool for their work, an alibi for an orderly and efficient pedagogical performance. When teachers assume and assimilate that education is a shared process of research and search in an environment of equality, silence loses all its value, becoming synonymous with individual learning and little impact both individually and collectively. Fielding (2011) argues that real education emerges when it is understood as an activity of shared responsibility between the teacher and the students through the dialogue in the classroom as a core strategy of learning. The challenge is as complicated as it is attractive, not lacking in uncertainties and prone to error. The problems posed by today's society call for the expansion of a type of autonomous teaching and learning, organized in a cooperative way, based on the presentation of projects, problems or questions, using dialogue as a pedagogical tool and necessarily supported by new technologies.

Project-based learning consists of raising a real issue or problem to a group of students, who will have to work together to find the solution, the final product will be a project that they will have to design following the initial guidelines set by the teacher. Jonassen (2000) establishes an interesting division within this type of learning:

• Question-based learning: It starts with a question with indefinite or controversial answers, for example: should the economic development of an area be prioritized to environmental protection? Or should policy or ethics regulate the advancement of genetics, or should we allow genetics to continue to advance its research as a science?

- In example-based learning, students acquire indispensable knowledge and reasoning skills through the study of these models. This knowledge is very suitable for training in health, legal or business areas. Students have to prepare their own reports, summaries or diagnoses. Learning through examples directly connects with real contexts and its goal is to get students to act as real professionals.
- Project-based learning is directed to didactic units integrated into the curriculum where students focus on complex assignments for which ideas are debated, planning and conducting experiments, organizing research and reporting results.

All these learning share the same characteristics and are related to what the author calls constructivist learning environments. Based on the theories of Piaget and Vygotsky, the constructivist conception of learning establishes that knowledge is elaborated individually and socially by students based on the interpretations of their experiences in the world. Since knowledge cannot be transmitted, teaching should consist of experiences that facilitate the development of knowledge. From this constructivist point of view, the learning is centered on the pupil and not on the teacher; it is the student who learns through experiences that, according to Díaz-Barriga and Hernández (2002), must be contextualized and placed, that is, link them to real problems that interest students, and only in this way it will translate into meaningful learning. It is considered, therefore, that knowledge is intimately bounded to the situation in which learning takes place, that is, learning emanates from the experiences in which teachers see themselves involved in. Constructivist learning seems to be in a situation of opposition to objectivism that postulates that knowledge can be transmitted or transferred to students, however, Jonassen (2000), with an eclectic and very correct view from our point of view, does not discard objectivist learning as a punctual practice within a constructivist method. Objectivism and constructivism offer different perspectives of the educational process from which inferences can be made on how to develop learning. There is no reason to reject objectivism, nor should it be an ultimate goal if more constructivist and dialogical methodologies are adopted. Moreover, the imposition of a single belief or perspective is, without a doubt, anticonstructivist. Therefore, success will be considered as complementary design tools that can be applied in different contexts. Some of the best learning environments combine different methods.

Project-based learning emerged in the 1960s at Mc Master University (Canada) and has been successfully implemented and proliferated in education. This type of learning has been imposed in American and European universities in the field of medicine, law, economics and the business world. From there he found his space in the field of social sciences and other disciplines. In the 1980s in the United States and more advanced in the 90's in Europe this methodology gives the jump to the elementary and secondary levels as a new mode of performance in the classroom. However, the real situation is far from being the ideal one in the application of methodologies that have been proving to be successful from a pedagogical point of view for years. Oliva (2011) shows the reluctance that still exists today among teachers in the implementation of project learning. There is, according to this researcher, a lack of interest of teachers for these practices, lack of interest that in turn can come from the lack of training, lack of confidence and the lack of collaborative work culture that requires noise management and not the silence one. Wells and Mejía (2005) are combative proponents of the benefits of dialogue as the basis of the learning process and assert that the nature of classroom interaction is one of the most important influences on the quality of student learning. However, as research continues to show, interaction in most classrooms continues to be teacher-dominated, with a dash of student participation based on reading and reciting information. A group of researchers led by Nystrand (2003) carried out a study of the interaction patterns that occurred in a fairly large sample of US high school classes in English and social studies. The results of this study evidenced a strong presence of the teaching-learning style model based on the memory recitation of knowledge. This research supports the idea that dialogue continues not to be viewed as an exploratory method towards learning and acquiring knowledge. Much of the teaching staff continues to show rejection of action and movement in the classroom and with it to noise.

The school must be a replica of the society that awaits the small developing citizens, which is why they must find in schools the model of society that we all aspire to have. The school cannot be outside the democratic life, the confrontation of ideas, the debate and even the conflict. However, as the number of international voices that advocate for the development of democratic participation in classrooms grows, the fear of professionals grows in light of what is meant by a new management of the established teaching model based on "pedagogical silence". The level of democratization with which they manage the activity of the teaching-learning process is closely related to the educational quality offered. On the other hand, if one assumes that the basis of the development as advanced societies is based on the defense and maintenance of democratic values, but students face daily paradigms that do not contemplate their participation in equal conditions in their own learning and acquisition of knowledge, it may happen that these students necessarily enter into conflict with the real meaning of collective dialogue and democracy. The learning of democracy should not be composed of isolated attitudes, it cannot be sustained in this way, but must have the implication from schools and classrooms and also must be real and not fictitious or forced. Consider Rodríguez (2006), when he notes that democracy must go hand in hand with behaviors in everyday life, and if this is assumed then the school must not abandon essential moral principles. Notwithstanding, for many educators the direct participation of students in the management of their own learning brings discomfort and more than a positive issue, is a decrease of what has been understood as scope of action. Does this new paradigm based on dialogue represent a threat to the professionalism of teachers? It can be said that in any way. Knowledge and professional experience do not lose validity or usefulness. Rather, the fact that knowledge is multiplied, since they will interact with each other and situations will be created to combine them with other so-called "authorized" knowledge, that is, those emanating directly from the teacher, as they have been doing so far.

In order to arrive at truly dialogic models of learning, initiatives should be taken that contemplate methods aimed at an active engagement between the teacher and his students and that definitively leave behind, the teacher model as the center of the action. A model of teacher as a curricular agent is required, following the classification of Tejada (2000), that is, a professional who builds innovation, who has a high level of autonomy and believes in the possibilities of his group and himself, that is, a teacher researcher of his teaching practice. However, dialogic practice will not succeed without the commitment of students as co-investigators of their own learning, as Wells and Mejía (2005) point out.

Supporting the teaching practice in dialogue through methods such as project-based learning, questions or examples, has as a direct consequence: the inclusion of all students in the classroom. The teaching that directs its efforts to promote inclusive classrooms bases its practices on democracy and autonomy. It may seem an exaggerated statement but there is no greater democratic manifestation than working together, with equal opportunities for all and attending to and understanding the circumstances of each. There is no greater exercise for tolerance than daily education in an environment that represents it by fostering dialogue in the joint pursuit of learning. Teachers committed to this way of working assume as main objective the development of an inclusive society, through a participatory democracy that benefits everyone. To educate through dialogue is to create inclusive and truly democratic schools where the search for knowledge becomes a shared goal between teachers and students.

Fielding (2011) states that these schools offer a full range of daily opportunities in which young people can listen and be heard, make decisions and take responsibility for both, day to day and of the creation of a better future. Inclusion understood with a perspective centered on the individual, is one that entails valuing the students as people, not as units of performance. Only in this way teachers can set themselves the goal of developing learning based on the notion of shared responsibility and participatory democracy. Students must learn together, accepting the differences and the advantages and inconveniences that may arise from that diversity, in preparation for what they will find in life. The classroom is a life in miniature.

5. Checkmate the Traditional Teaching Practice

To carry out a learning practice based on constant dialogue, not only the procedure must be emphasized, teachers cannot forget that it is a holistic change in their teaching practice. This type of method involves a partial transformation, it is a practice that must begin with an evolution of their global mentality as teachers, the objectives they want to achieve with their performance and the educational imprint they want to leave their students. Kolmos (2004) expresses it clearly when he states that during this process of change it is important for teachers to be aware that it is not just a change in teaching methods. The model changes also imply a change of the whole culture and of the organization and must be assumed.

Of all the changes that teachers have to be ready to carry out, the priority is the new role that they must play as teachers. When teachers turn the classrooms into real spaces of coexistence and research, they act as facilitators, offering students resources and advice as they conduct their research. This methodology does not minimize the importance and the role that the teacher plays, but rather, he achieves to obtain, to recover, its true meaning. They are no longer the main source of knowledge, on the contrary, they learn at the same time as the students, thus transmitting that the acquisition and the search for knowledge is an attitude that develops throughout life. The main function will be to facilitate and guide. The teacher will move among his students not solving problems but giving clues on the way forward. The teacher learns together with his students, giving an example of what learning should be throughout life. Teachers become researchers in their own classrooms, teachers who create knowledge in the classroom in the company of students. The landscape of the classroom is transformed thus, to work with a classroom organized in rows of students, fixed in their workstations, teachers will have to become accustomed to a

dynamic landscape where students rotate, move, organize other groupings according to the situation, a classroom in permanent dynamism, and this process is produced with the intervention of technological tools, made available to students as a source of information. In the words of Ferrada and Flecha (2008), teachers move from working in a classroom that promotes educational actions of a teleological nature, to a classroom that develops in contexts of communicative actions. From a pedagogical work that uses language only to reach an objective, to use a language that allows to update and renew consensuses, to transmit and share emotions and feelings, as well as to reach a rationally motivated understanding. According to what Blumenfeld et al. (1991) affirmed, the teacher should not only favor a learning environment, but also has a responsibility to encourage students to use metacognitive learning processes. Although research has shown that these methods achieve a more comprehensive and useful learning, they are not as widespread as it would be desirable. Many teachers find it difficult because of their established patterns of learning and teaching. The teacher must acquire a role for which he is not prepared.

The teacher, in his new profile, has still responsibility for curriculum and assessment. The latter is, if possible, a major challenge for the teacher, because he must face the idea that each student is building his own knowledge and not learning the same content as the others. Teachers must design a whole set of tools that allow them to evaluate, not only the final product, but the students' work throughout the whole process.

Jonassen (2000) states that evaluation should be real and comprehensive and should include evaluation of curriculum content and higher order skills: information searching, analysis, synthesis, conceptualization, critical use of information, systemic thinking, critical thinking, research and metacognition. There is no doubt that this new concept of evaluation requires teachers to radically change their mental structure and an enormous amount of capacity to cope with uncertainty. To stop being the source from where the knowledge to transmit emanates to students has emotional consequences on teachers who will have to learn to manage them.

There are other problems inherent in the shift from an individualist and traditional practice to a dialogic and constructivist one. Valero (2012) makes a very interesting breakdown of the problems generated by the academic culture and that must be overcome.

- *The agenda*: teachers come from a culture in which the contents are sacred, but they must not forget that one thing is the contents, objectives and evaluation criteria established by the curriculum and another the sequencing of topics that they find in the textbooks which they are still subjected to.
- *Emotional instability*: according to Felder and Brent (2001), moving to teaching based on dialogic methods is an emotionally unstable process, not only for the teacher but for the student. Students are asked questions, challenges or projects that they do not know how to do in principle, and the teacher does not move on solid ground because he puts himself in the forefront of a situation that is not under control. The key is to raise the project as something common and to emphasize the fact that teachers are coordinators of a process in which they are also willing to learn in order to improve.
- The examination: one of the most important difficulties of these new communicative practices is the stumbling block of the final exam. This type of

test does not have to disappear, but it should not occupy a place of privilege as it has been happening until now. The exam has had a primacy in the academic world which is a challenge for the new role of the teacher to be able to evaluate without resorting to the exam. It can happen that some teachers may lose their sleep if they do not base their assessment on a final exam. In this same sense, according to Chomsky (2012), the exams have a very concrete use both for the person who passes them; check how much he or she knows about a subject, as for the person who applies it; realize what has to change or improve. Apart from this function, the test does not say anything. It is not necessarily that teachers have to do without them because they can be a further instrument in the teaching and a useful tool if they contribute to the constructivist aims of education. But of course, if they are only a series of obstacles to be overcome, not only are they meaningless, but they can even distract teachers from what they really want to do.

6. Conclusions

It is necessary to approach the school to life and to look for happiness always, this search has to continue equally in the learning. In this new landscape of classes based on research, dialogue and the search for new experiences, a new pupil teacher relationship must be established. The pedagogue, in the search for efficiency, must multiply situations of communication in the school environment. The teacher must prepare himself to develop his educational function based on some renewed basic principles; the division of work, the distribution of tasks and cooperation. Class work must be based on the free expression of children in a collaborative framework. For this, the teachers' profile must be renewed and equipped with a new form of courage and confidence in their functions.

Education has an obligation to moderate the mood in the convulsion, but also to enmity them when indoctrination threatens our critical judgment. That is the greatness of education, discovering talents, training them and making them available to all for the common good. Education is not doctrine, but communication, not content but skills to acquire them. Project learning is not the answer to the agonizing educational system, but teachers will be helping to teach their students through the art of the word, respecting the values of collaboration and putting their talents at the service of a common project.

References

- Álvarez, C. (2012). Las dificultades del diálogo en el aula de primaria. *Didáctica*. *Lengua y Literatura*, 24, 65–88.
- Aubert, A., García, C., & Racionero, S. (2009). El aprendizaje dialógico. *Cultura y Educación*, 21(2), 129–139.
- Blumenfeld, P., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: sustaining the doing, supporting the learning. *Educational Psychologist*, 26(3), 369–398.
- Burbules, N. (1999). *El diálogo en la enseñanza. Teoría y práctica*. Buenos Aires: Amorrortu Editores.

- Cargas, S., Williams, S., & Rosenberg, M. (2017). An approach to teaching critical thinking across disciplines using performance tasks with a common rubric. *Thinking Skills and Creativity*, 26, 24–37.
- Cazden, C. (1991). El discurso en el aula: el lenguaje de la enseñanza y del aprendizaje. Barcelona: Paidós.
- Chomsky, N. (2012). Objetivo de la educación: la deseducación. Retrieved from http://www.dailymotion.com
- Costa, E. V., & Lyra, M. (2016). A emergência da singularidade em uma cena didática de uma aula de geometría. *Educação e Pesquisa*, 42(4), 1109–1124.
- Darling-Hammond, L. (2001). El derecho de aprender. Crear buenas escuelas para todos. Barcelona: Ariel.
- Díaz-Barriga, F., & Hernández, G. (2002). Estrategias docentes para un aprendizaje significativo. Una interpretación constructivista. México: McGraw-Hill.
- Felder, R., & Brent, R. (2001). Effective strategies for cooperative learning. *Journal of Cooperation & Collaboration in College Teaching*, 10(2), 69–75.
- Fernández, M., & Osorio, O. (2004, March). El diálogo en la enseñanza como proceso de indagación compartida. Paper presented at I Congreso Internacional de Educación, Lenguaje y Sociedad, Buenos Aires.
- Ferrada, D., & Flecha, R. (2008). El modelo dialógico de la pedagogía: un aporte desde las experiencias de comunidades de aprendizaje. *Estudios Pedagógicos*, 34(1), 41–61.
- Fielding, M. (2011). La voz del alumnado y la inclusión educativa: una aproximación democrática radical para el aprendizaje intergeneracional. *Revista Interuniversitaria de Formación del Profesorado*, 25(1), 31–61.
- Flecha, J. R. (2010). Las escuelas democráticas de Michael W. Apple y James A. Beane en nuestros contextos. *Revista de la Asociación de Sociología de la Educación*, 3(1), 176–178.
- Freire, P. (2001). The pedagogy of the oppressed. New York: Continuum.
- Fullan, M. (1993). *Change forces. Probing the depths of educational reform.* London: Falmer Press.
- Fullan, M. (1998). The meaning of educational change: a quarter of a century of learning. In A. Hargreaves, A. Lieberman, M. Fullan, & D. Hopkins (Eds.), *International Handbook of Educational Change* (pp. 214–228). London: Kluwer.
- Hongboontri, C., & Jantayasakorn, M. (2016). Cultures of teaching: mapping the teacher professional development terrain. *Pertanika Journal of Social Sciences & Humanities*, 24(3), 1139–1163.
- Hutchings, B. (2006). *Principles of Enquiry-Based Learning*. Manchester: University of Manchester.
- Jonassen, D. (2000). El diseño de entornos constructivistas de aprendizaje. In C. Reigeluth (Ed.), *Diseño de la instrucción. Teorías y modelos* (pp. 225–249). Madrid: Aula XXI Santillana.
- Kolmos, A. (2004). Estrategias para desarrollar currículos basados en la formulación de problemas y organizados en base a proyectos. *Educar*, *33*, 77–96.

- Kools, M., Stoll, L., George, B., Steijn, B., Bekkers, V., & Gouëdard, P. (2020). The school as a learning organisation: The concept and its measurement. *European Journal of Education*, 55(1), 24–42.
- Nuttavuthisit, K. (2016). Vocational education for sustainable community development: building collaborative efforts in Myanmar and Vietnam. *Community Development Journal*, 52(1), 125–143.
- Nystrand, M. (2003). Questions in time: investigating the structure and dynamics of unfolding classroom discourse. *Discourse Processes*, 35(2), 135–198.
- Oliva, J. M. (2011). Dificultades para la implicación del profesorado de educación secundaria en la lectura, innovación e investigación en didáctica de las ciencias: el problema de la inmersión. *Revista Eureka sobre Enseñanza y Divulgación de las Ciencias*, 8(1), 41–53.
- Plugina, M. I., Sokolova, I. Y., Gorbunkov, V. Y., Znamenskaya, S. V., & Goman, M. V. (2016). Development of students' learning motivation by means of innovative educational technologies. *The Social Sciences*, 11(4), 523–528.
- Prieto, O., & Duque, E. (2009). El aprendizaje dialógico y sus aportaciones a la teoría de la educación. *Revista Teoría de la Educación. Educación y Cultura en la Sociedad de la Información*, 10(3), 7–30.
- Rodríguez, E. (2006). ¿Es la escuela una institución pública democrática? *Aposta. Revista de Ciencias Sociales*, 24, 1–27.
- Tejada, J. (2000). El docente innovador. In S. De la Torre, & O. Barrios (Eds.), *Estrategias didácticas innovadoras* (pp. 47–61). Barcelona: Octaedro.
- Tomazetti, E., & Schlickmann, V. (2016). School, secondary education and youth: the massification of a system and the pursuit of meaning. *Educação e Pesquisa*, 42(2), 331–342.
- Tyack, D. (1990). 'Restructuring' in historical perspective: tinkering toward utopia. *Teachers College Record*, 92(2), 170–191.
- Valero, M. (2012). PBL (Piénsatelo Bien antes de Liarte). ReVisión, 5(2), 11–16.
- Wells, G., & Mejía, R. (2005). Hacia el diálogo en el salón de clases: enseñanza y aprendizaje por medio de la indagación. *Sinéctica*, 26, 1–19.
- Yap, W. L., Neo, M., & Neo, K. (2016). The impact of the role of teacher and balance of power in transforming conventional teaching to learner-centered teaching in Malaysian institution of higher education. *Pertanika Journal of Social Sciences & Humanities*, 24(4), 1849–1868.