

TEACHING CAPACITY FOR THE CONSTRUCTION OF COGNITIVE SCAFFOLDS IN ELEMENTARY SCHOOL

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ABSTRACT

The Competencies Model in Mexico has not been satisfactory, nor has the State been able to document or evaluate the role of teachers, which in the end allows it to define the training mechanisms necessary for teachers to develop a teaching-learning process in a well-founded and effective manner in accordance with this new model. The objective of our research was to identify, through moderate observation and a semi-structured interview, the use and implementation of a cognitive scaffolding in six teachers and 180 students of 1st, 2nd and 3rd grade of a public primary school. As a result, the teachers showed basic knowledge about support strategies that favor learning (scaffolding). However, we discussed their lack of knowledge in passing it on to their students and the extent to which this affects the process of meaning.

Keywords: teacher; elementary school; cognition

Capacidad docente para la construcción de andamios cognitivos en educación primaria

RESUMEN

El Modelo por Competencias en México no ha sido satisfactorio, tampoco el Estado ha logrado documentar ni valorar la función del docente que a la postre le permitan definir los mecanismos necesarios de capacitación para que el enseñante desarrolle un proceso de enseñanza-aprendizaje de manera fundamentada y efectiva según este nuevo modelo. El objetivo de nuestra investigación fue identificar mediante la observación moderada y una entrevista semiestructurada en seis profesores y 180 aprendices de 1°, 2° y 3° grado de una escuela primaria pública el uso e implementación de *andamios cognitivos*. Como resultado, los docentes mostraron tener conocimientos básicos sobre las estrategias de apoyo que favorecen el aprendizaje (*andamios*). No obstante, discutimos sobre el desconocimiento de ellos al momento de transmitirlo a sus aprendices y el grado de afectación que este provoca en el proceso de significación de los mismos.

Palabras clave: profesor; enseñanza de primer grado; cognición

Capacidade docente para a construção de alicerces cognitivos na educação fundamental

RESUMO

O Modelo por Competências no México não foi satisfatório, também o Estado conseguiu documentar nem valorizar a função do docente que, a posterior, lhe permita definir os mecanismos necessários de capacitação para que o aprendiz desenvolva um processo de ensino-aprendizagem de maneira fundamentada e efetiva segundo este novo modelo. O objetivo de nossa pesquisa foi identificar mediante a observação moderada e uma entrevista semiestructurada com seis professores e 180 aprendizes de 1°, 2° e 3° ano de uma escola fundamental pública o uso e implementação de *alicerces cognitivos*. Como resultado, os docentes mostraram ter conhecimentos básicos sobre as estratégias de apoio que favoreçam a aprendizagem (*alicerces*). Não obstante, discutimos sobre o desconhecimento deles ao momento de transmiti-lo a seus aprendizes e o grau de afetação que este provoca no processo de significação deles.

Palavras-chave: professor; ensino fundamental; cognição

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INTRODUCTION

One of the most important sectors for the development of a country is education (Chong & Castañeda, 2013; Márquez, 2017). In Mexico in the late 1970s, when the economic model of import substitution failed (Vázquez, 2017), the State sought the solution by abandoning a progressive and nationalist policy, giving way to a neoliberal economy (Sacristán, 2006). Derived from the above and gradually, the economic interests of the country were intertwined with the educational sector, finally establishing in the Sistema Educativo Mexicano (SEM)¹ an approach by *competences*, the essential purpose of this new scheme was to link the productive sector with school, initially with professional levels and preparation for employment (Andrade & Hernández, 2010).

The establishment of this “New Model” implied a substantial change in the teaching-learning process within the classroom, teachers and learners would have to progressively modify their mechanisms for generating and applying knowledge. In accordance with the guidelines established for this purpose, the Secretaría de Educación Pública (SEP, 2016)² stipulated that all teachers belonging to the SEM had the commitment to know, study and master the Modelo Educativo Basado en Competencias (MEBC)³, in addition to this responsibility, the new education scheme also confronted the teacher with the demand to enrich the ways of “learning” of their students through various strategies, which in the end it would constitute the *cognitive matrix* to make their own learning processes a constant evolution to what throughout his/her life (Lozano, Castillo, & Cerecedo, 2012). In this context, some specialists on the subject refer that, from the perspective of the Sistema Educativo Mexicano, the successful implementation of the new model by competencies would be a reality when:

Teachers will help students to solve real problems, to distinguish the superficial from the significant, to know more about themselves, as well as their capacities, qualities and limitations, since for the development of competencies, the learner not only must know how to manage their knowledge, but he/she must also have their social interactions, emotions and feelings, as well as their activities under control and, in addition, must be able to recognize, interpret and accept the emotions and feelings of others. (García, 2011, p. 7).

Faced with such a requirement, since the beginning of the 21st century the State, in order to achieve the

proposed results, made adjustments in initial education (Díaz, 2016), one of them called Reforma Integral de Educación Básica (RIEB)⁴, within the objectives of we can highlight this: building social consensus about the adjustments to the curriculum in basic education (Martínez & de la Cruz, 2019); seek to modify the *teaching task* by acquiring new knowledge and improving their teaching skills, thereby contributing to transform *pedagogical practice* in correspondence with the MEBC. In congruence with these guidelines and with the purpose of identifying the achievements in educational *quality* as a result of the implementation of the New Model in basic education, the SEM established in 2002 the Instituto Nacional para la Evaluación de la Educación [INEE]⁵ (Horbath & Gracia, 2014). For this purpose, a great variety of diagnostic instruments were administered in the different educational actors, in principle the students being the central axis of such actions, with an emphasis on key, common and standardized learning, considered fundamental within the curriculum (Madero, 2016).

With regard to the evaluation of teachers, it was not until the period between 2008-2010 that a characterization of the educational situation in Mexico was developed, the foregoing derived from the agreement with the Organization for Economic Cooperation and Development [OECD] (Cordero, Luna, & Patiño, 2013). The result of this analysis brought with it eight recommendations to consolidate a quality teaching profession, “the last of them, in their order of presentation, was to implement a rigorous teacher evaluation system focused on improvement” (Cordero, Luna, & Patiño, 2013, p. 4).

However, the recommendation issued by the OECD has been taken into account by the government of Mexico in order to improve the quality of education derived from the implementation of MEBC at the basic level, Horbath and Gracia (2014) point out that no satisfactory results have been obtained, that is, until now it has not been possible to efficiently document or assess the *teacher’s role*, much less has it been possible to estimate their place in the classroom as a *knowledge generator*, this being a core condition within this new approach (Torres, Badillo, Valentín, & Ramírez, 2014). In this regard, Guzmán (2017) adds that, the SEM has not managed to generate a break with the old self-reference schemes that determine the didactic-pedagogical management processes within the classroom in basic education teachers.

Finally, after a review of those educational systems with the greatest academic success, Guzmán (2018) concludes that the emphasis that has been given to

¹ Mexican Educational System.

² Secretary of Public Education.

³ Competency-Based Educational Model.

⁴ Comprehensive Basic Education Reform.

⁵ National Institute for the Evaluation of Education.

“teacher evaluation” in order to improve the educational quality in Mexico of the new system by competencies, will not offer results if the processes of training and professional development of teachers are neglected.

Teaching role in the competency model

After the above we have that, in a study carried out by Ramón, Aquino and Alejandro (2017) about the teaching function within MEBC in the Mexican southeast, the authors concluded that, the successful implementation of this educational model depends largely on device that firstly carries out the constant updating of teachers as a result of the *real needs* of disciplinary or pedagogical training and secondly, a system that evaluates the relevance, validity and above all, the impact of this training on the teacher’s practice. In this same sense, Mercado (2016) adds that the role of the teacher as a mediator of knowledge within any model also responds to social progress and historical moment in which it occurs, as well as the pedagogical, psychological and technical currents that the teacher uses for its application in the school space, since it is he/she who daily experiences the dilemmas about which activities allow him/her to advance in the course and, above all, according to his experience, which ones favor the best way of learning in his schoolchildren (López, 2014).

On the other hand, Barraza (2016) states that the neglect that the SEM has maintained with respect to a series of essential elements that in any case would favorably support the results regarding the implementation of the MEBC in basic education is unfortunate, among them it stands out forgetting about the training of competent human resources to face the new demands of the model in the classroom. In this same sense, he emphasizes that the State still maintains elementary accounts to be resolved in basic education, namely,

It is still necessary to generate sufficiently clear information that those in charge of inspecting that this approach is carried out in basic education achieve mastery and can thus provide the tools to teachers so that they know it and develop skills to work on it in their practice. The updating of teachers to use the new assessment instruments, teaching materials and especially the use of ICTs is unavoidable, remembering that some teachers who have a good path in teaching do not master technological tools. (Barraza, 2016, p. 45).

Another pending attributed to the Mexican State is the fact that, despite the substantial financial resources allocated to resolve the problem of updating teachers for the proper implementation of their role within the new model, this investment is not expressed in the reality of the classroom, we need empirical evidence

that allows us to know where the system should begin to work and thus specify the clear teachers’ needs of (Diaz, 2014).

Context for the elaboration of our study

Taking into account what has been expressed by various authors, namely, that in Mexico the Modelo Educativo Basado en Competencia in basic education has not yet shown the expected results (Horbath & Gracia, 2014; Barraza, 2016). The Mexican state needs to make a change in the implementation process of this new model, in order to build, together with teachers, tools that allow improving the teaching-learning process within the classroom (Diaz, 2014; Mercado, 2016). It also requires taking into account that education is a public process that consists of exchanging, sharing and negotiating meanings. Based on this, they will be able to identify the teaching processes applied in the institutions, thereby generating a framework of reference based on the teacher’s capacities as a generator of learning, which will ultimately allow them to design the strategies of a relevant training.

According to what has been said, the present research aims to provide basic information about the mechanisms used by the primary education teacher for the generation of help systems in the teaching-learning process in the classroom. For this we propose not only the recognition of scaffolding (Bruner, 1978/1985) as a thought process, but also the importance of scaffolding as a cognitive enabler to create meanings. That said, we conceive *scaffolding* in two senses, on the one hand, as those tools that the teacher will use to transmit something to the apprentice and, on the other, the cognitive scheme that will predominate in the latter to give meaning to the new thing that he will build.

Based on the Piagetian contributions of thought schemes Bruner (1978/1985) establishes mainly three types of *scaffoldings* for understanding the world; representations in active, which refer to Piagetian practical intelligence, present in the first sensorimotor stage of his theory; iconic representations, typical of visual *scaffolding* that coincide with Piaget’s pre-operational and concrete operational period, and finally, symbolic schemes, related to Piagetian abstract thought, which for Bruner obeys the so-called verbal or oral *scaffolding*.

It is important to note that the ideas held by Bruner about cognitive development were also inspired by the notion of Zone of Proximate Development (ZPD), a fundamental piece in Vigotsky’s socio-cultural theory (1977/2018). Even leading him to propose an explanation about the transmission process between the teacher and the apprentice (Camargo & Hederich, 2010). For Bruner (1983) the teaching-learning process must be mediated by *scaffoldings* if cognitive development is to be desired in the learner,

for this to happen the aid systems (*scaffoldings*) given in the process must mobilize the learner towards appropriation of a certain cultural tool, for example; reading, writing or mathematical notation (Guilar, 2009). This proposal is respectful with the level of cognitive development of each child, at the time of formulating that under favorable conditions, through the teacher's guidance, he gets to build his own knowledge through the recovery and transformation of information applying it to the resolution problems (Reibelo, 1998; Gallegos & Huerta, 2014). In other words, the ability of each teacher to build and transmit cognitive *scaffoldings* within the classroom is preponderant so that the learner gradually takes control of the situation, until he reaches the necessary level of *competence* and thus manages to carry out the task. by himself (Díaz & Hernández, 1998; Grabinger & Dunlap 1995; Dodge, 2001).

Finally, and coinciding with Diaz and Rigo (2000), a key piece for the adequate implementation of the MEBC in the Sistema Educativo Mexicano is teacher training, which should be, according to the authors, aimed at training the teacher so that this person develops the pertinent competencies in order to undertake their work in a well-founded, effective, responsible and integral manner in their apprentices. In this context, it is intended that our research contributes to generating empirical evidence that can be taken into account when planning teacher training. Considering a training vision that jointly includes the analysis of teaching processes of teaching-learning as they occur in the classroom, far from the mere acquisition of procedural competences, for this a critical review of the practical experience is required as it is carried out (Diaz & Rigo, 2000).

METHOD

Type of Study: Qualitative, observational, descriptive, cross-sectional

Participants

The study population was made up of 6 teachers and 180 lower primary learners from a federal public school, located in the urban sector of Ciudad del Carmen,

Campeche, Mexico.

The participating teachers (3) men and (3) women whose ages range between 24 and 36 years, five of them graduated from "Normal Schools" dedicated exclusively to the training of primary education teachers and one of them graduated from a university in disciplinary training. They have a full-time position and a permanent contract (Table 1). The school where the study was carried out has in its entirety a population of 360 registered learners, of which each participating teacher attends an average of 30 students corresponding to the group and grade assigned by the directors of the institution each beginning of the school year. It is worth mentioning that this school is one of the few that has the assistance of a Unidad de Servicio y Apoyo a la Educación Regular (USAER)⁶ to meet the Special Educational Needs of children who require it.

The 180 apprentices considered in the research correspond to groups A and B of 1st, 2nd and 3rd grade, of them 108 are boys and 72 girls, all of them belonging to an area with a low to very low socioeconomic profile (Consejo Nacional de Población, 2010).

Instruments

Before obtaining any information to carry out our research, the necessary procedures were carried out with the corresponding institution for the approval of the activities to be carried out during the study. Each of the processes carried out with the purpose of obtaining the data of the participants was carried out in compliance with the standards of voluntariness, anonymity and independence.

Three instruments were used to obtain the information of the participants, the first was an *Informed Consent*, which was delivered to each students' teacher and the parents or guardians, this in order to: i) communicate about the objective and the study procedure, ii) ensure the privacy and confidentiality of the participant's data and iii) warn about the possible scope derived from their participation. The second

⁶ Service and Support Unit for Regular Education.

Table 1. Description of the Participants that Formed Part of the Study.

| Participant | Genre | Years of experience | Terminal Profile |
|-------------|-------|---------------------|-------------------|
| Teacher 1 | F | 3 | Special Education |
| Teacher 2 | F | 10 | General First |
| Teacher 3 | F | 8 | General Education |
| Teacher 4 | M | 10 | General First |
| Teacher 5 | M | 11 | General First |
| Teacher 6 | M | 3 | General First |

instrument was a *Field Diary*, used to record what was observed in each of the classrooms of the six groups of children. As there is no specific guide for a Field Diary that includes the units of analysis considered in this research, “Categories of analysis” were designed to focus the observation and subsequent analysis (Table 2). The third instrument corresponds to a *Semi-structured interview*, which was carried out taking into account the four categories of analysis contemplated in the research (Table 2). There was a total of 12 guiding questions, three for each category to be investigated.

It should be noted that the categorical system used for both the Field Diary and the semi-structured Interview was designed by the research team based on a review of the scaffolding theory developed by Wood, Bruner and Ross (1976).

Procedure

The information collection process was carried out during the February-December 2018 period. The foregoing within the framework of non-probabilistic and intentional sampling (Patton, 2002), which implies the “deliberate and initial selection of the subjects in the judgment of the researcher, based on practical convenience and on the information needs detected.

The first stage of the study consisted of moderate *observation* in the classroom, which, when carried out with a sense of scientificity, allowed to focus the participation in an intentional way (Bonilla & Rodríguez,

1997), the above in correspondence to each of the four variables considered. within the investigation (Table 2). This work was carried out by the three members of the research team within the classroom. There was a total of 12 sessions with each group, congruent with the number of weeks in the months of February, March and April of the year 2018. Each researcher was responsible for observing the same grade (groups A and B). The sessions were 120 minutes each, on Tuesdays (Groups A) and Thursdays (Groups B) from 10:00 to 12:00 hours, time dedicated to teaching the subjects of Spanish, natural sciences and mathematics regularly.

As a result of this intervention, a “Field Diary” was prepared, allowing us to subsequently analyze and describe the *scaffoldings* present in the teacher’s practice (Martínez, 2000).

During the second period corresponding to the months of May, June and July 2018, with the help of the categories of analysis considered for our research and taking into account the analysis of the information from the field diary, the structure of the *interview* was carried out according to with Sautu, Boniolo, Dalle and Elbert (2005) is a research technique that offers the possibility of maintaining a *systematized conversation* in order to rescue and record life experiences of teachers with reference to the investigated topic. The interview was conducted within an institutional space set up for it, it was individually in a single session of 120 min with each teacher, semi-structured type and consisting of 12

Table 2. Categories Analysis Description.

| Variable | Definition | Scaffolding Identification |
|---|--|--|
| School environment | The medium is a resource that complements and relates socioculturally to the individual who provides him with knowledge in his daily life. | Teaching-group interaction. Promotion and use of school spaces efficiently (respect spaces and times). Connection of the physical and social environment. Consolidation of discipline habits. Promote a climate of trust |
| Planning of tasks and development of activities | They are the tools and techniques that the teacher designs in his teaching practice as a mediation between the content and the learners. | Creative thinking. Development of collaborative and individual work habits. Development of curricula and preparation of work material. Design of dynamic and didactic strategies, recreational |
| Clear and explicit language | It refers not only to oral language but also to gestural and written language that allows communication and interaction processes between the teacher and the group. | Teach to think, without issuing immediate responses. Provide clear instructions. Issues reports. Encourage participation. Feedback progress processes towards parents and the class. Encourages interest in reading and stimulates oral or written language. |
| Active role of the teacher | It is the way in which the teacher is present to enhance the development of the learner. | Promotes socio-educational development. Shows perception sensitivity by identifying the group’s needs and difficulties. It fosters empathy and trust in the group through the identification of diverse cultures, levels of learning, possibilities and interests. |

open questions, the main purpose of these was to obtain information about its function in the generation and application of the *scaffoldings* used in their daily practice in the classroom. Audio recording using a standard voice recorder was necessary. For the subsequent content analysis, a computerized transcription was carried out in a Microsoft Word processor.

ANALYSIS OF THE INFORMATION

For the analysis of the information derived from what was recorded in the classroom through the field diary and the communication expressed by the teachers during the individualized interview, the concept of *scaffolding* proposed by Bruner (1978/1985) was considered of four qualitative variables (Table 2) where, according to various researchers, the role of the teacher as a mediator of knowledge is developed through the generation of scaffoldings, these are: school environment; planning of tasks and development of activities; clear and explicit language and the active role of the teacher (Castro & Morales, 2015; Coll, 2001; Villarruel, 2009).

RESULTS AND DISCUSSION

According to the direct observation carried out inside the classrooms and recorded in the Field Diary from the analyzed variables, we can specify the following:

School environment: Teachers and learners are required to be aware of the environment (physical, cultural and social) to which they belong, to be subjectively involved in the different tasks and activities. A limited development of *socio-cultural links* was identified by the teacher, with respect to the apprentices. It was a permanent element in all classrooms, it is likely that this situation is part of the difficulties of having such large groups, causing with them the lack of a relational climate with the learner so individualized at the time of transmitting the dynamics in time and form of work for each *scaffold*. This lack of relationship can be argued in the context of some "spontaneous confessions" made by teachers throughout the observation process, for example:

RD-1 (Teaching response): *"It has been difficult for us to attend to a large number of apprentices and activities ... personalized attention is lost with each one of them ..."*

RD-2: *"We have so many activities that the possibility of sitting down with each one of us to carry out individualized activities is lost ..., which will be one of those who already have 'behavior and learning problems' ..."*

RD-6: *"In private schools it is possible to work better because of the reduced number of students ... here because of the number of children it is impossible, in addition, it will be necessary to add their 'educational barriers' ..."*

Planning of tasks and development of activities: authors such as Pérez, Ferrer and García, 2015, argue that the activities carried out aimed at the generation of knowledge require on the part of teachers the production of dynamic spaces, new areas of exploration and a structured order that allows learners to mean the contents of the subjects and give meaning to their academic experiences. In this sense, it was observed that one of the teachers eliminated the section of an activity that required it to be carried out in other areas outside the classroom. On this occasion, it was about making representations about what characterizes a kangaroo and with this the apprentices could express their experience with the didelphys and thus describe with their words their experiences and anecdotes of life, as an integral part of multicultural activities. However, this fact was not carried out, preventing this activity from fostering new areas of exploration and a structured order, giving the trainees the opportunity to give another meaning to their activities.

On the other hand, in the observation period it was identified that one of the recurring sanctions on those learners who did not complete the dictation of Spanish or mathematical operations, consisted of prohibiting them access to the playground, coinciding with Applebee (1986), we argue that this position taken by the teacher undermines the learning process, since it is useful and necessary to respect recreational spaces outside the classroom since these places constitute a broader space for interaction, however it is common for them to dissociate themselves from the curriculum, passing from a symbolic function within the learning process to a normalizing activity for undesirable behaviors.

Clear and explicit language: as part of the teaching-learning process, a clear and explicit language allows learners to enrich their experience and promote the dialogue of experiences as part of the classroom context, in the same way it offers the possibility of maintaining a stimulating group participation to the time to promote the acquisition of vocabulary, improvements in concentration, memorization, emotional development, language and communication with others. These last two elements are the basis for the cognitive development of the child and the incorporation of later scaffoldings (Mota & Villalobos, 2007). In our case, it was perceived that, for a proper role of the teacher as a mediator of learning, the knowledge that he has regarding scaffoldings is as important as the clarity with which he transmits the instructions at the time of implementation. In other words, even when the scaffoldings are implicitly incorporated in the teaching-learning of teachers, they are not properly systematized, neither conceptually nor operationally, which considerably reduces the potentialities of learning

since they are technical-pedagogical skills those that favor the satisfactory assimilation of what has been learned. The above coincides with what was stated by Ramón et al. (2017), to say that the teaching function required by the MEBC at the basic level in Mexico cannot yet be qualified as satisfactory in terms of training competencies, which is reflected in the majority of primary education learners throughout the country.

Active role of the teacher: The environment is important above all for the teacher mediation process since it is the teacher who will carry out the adjustment actions of the pedagogical aid (scaffolding) in such a way that it encourages the learner to adapt to a current state of knowledge and mobilize previous experiential schemes (Vielma & Salas, 2000).

From the above we can point out that the accumulation of activities carried out by the teacher, their perceptions and judgments about their learners accompanied by their overpopulation, emphatically permeates the possibility of social interaction, so essential during the incorporation of scaffolding supported by this, through learning significant (Ausubel, 1968/78). According to the above, we observed in some teachers indifference to trying to establish empathic ties with their learners. The interest lies mainly in covering the contents of the course and not in stopping to work with the alternative problems that these present. The classes were regularly based on giving explanations on the topics and on requesting work or assignments of the above. These observations can be supported by some answers obtained through the applied interview.

In reference to the information obtained through the interviews, we can specify the following:

School environment: it is a basic element in the motivation of the apprentice to favor their sociocultural apprehension and thus facilitate responses and take alternatives to real situations, it is important to promote in the child the internal and external conditions for learning: context, environment, resources and materials (Castro & Morales, 2015) for the above, for the *scaffolding* to be effective, it is convenient to respect the hours of recreation, trips to the bathroom, physical education or sports and thus enable the child to appropriate his environment and not move only in the concreteness of the classroom (Applebee, 1986). In our case, we consider it necessary for the teacher to be aware that with the number of students and the increase in time to carry out daily learning activities, it is convenient to provide the child with various alternatives of spaces and scaffolding that promote the comparison and contrast processes in other circumstances within the classroom (Zepeda, 2011), in this sense in our studied population we obtained two types of responses:

RD-1: *“As teachers we must design strategies that allow the child to develop and achieve their*

learning.”

RD-2 *“There is no need to carry out additional strategies for each activity contained in the book since it is easier for me to work with the previous plan”.*

The foregoing allows us to observe that not all the teaching body has the same knowledge regarding the importance of the implementation of strategies in the acquisition of learning; when the second teacher had to carry out an exploration activity about *oviparous animals* in conjunction with the Spanish book, the slogan that came at the end of the text was not carried out “represent a work where each of the children characterizes an oviparous bird” the activity rejected it was intended for learners to show what they have learned in real situations, while a learner who has acquired this skill with the teacher’s participation will later be able to use and retain information. Meanwhile, for the effectiveness of a *scaffolding* within the school environment it is necessary for the teacher to establish and develop dynamic spaces, as well as recreational spaces to motivate the interest in learning and the significance of prior knowledge, contrary to one of the teachers, when carrying out the activities excluded those in which scaffolds could offer greater learning opportunities. As Missiacos and Bonil (2011) point out, the teacher has to know that leaving the usual environment substantially favors the realization of new learning, since it contributes the construction of *scaffolding* through the passage of a static and fragmented vision of the environments to a dynamic and systemic.

For some teachers, the incorporation of new school environments is determined by the lack of parental support and the purchasing power of families and not by the cognitive and creative capacity that they could use, we quote:

RD-4: *Lack of extracurricular support from parents, in some cases due to lack of interest, in others due to necessity. Disinterest because sometimes the father focuses on other activities and takes for granted many things about the child’s learning, it burdens the teacher that he is in charge of educating him ... in regard to the economic aspect there are people who do not have a computer at home, they don’t have internet, they don’t have access to those electronic word processors ... if that were the case, it would be something very different because, for example, sometimes we leave little investigations and the children come and say ‘I couldn’t do it because I don’t have internet because I don’t I was able to go rent a computer ... because my father has no money’ so, that is an aspect that is relevant in education, so*

we choose to limit research and activities outside the home, the information is brought to them and it is read to them in the classroom.

The teacher's reference to disinterest in extracurricular activities, coupled with the perception of the parents' economic deprivation, has limited their implementation, forgetting that performing tasks and achieving learning necessarily requires spaces and activities that would be beyond the classroom and school framework, that is, there are different scenarios in the child's daily life (community, nature, home) and in their interaction with others (family, neighbors, friends) which can be favored and within which they are able to participate actively and effectively in problem solving. In this regard, Blachowicz, Fisher, Ogle and Watts (2006) point out that, in order to effectively implement scaffolding, the teacher, in addition to being able to explicitly describe the strategies, including when and how to use them, is necessary to structure opportunities for learners to use skills in collaboration with others, at the time of guiding the experiences tending to the progressive increase of the independence of the students.

In short, by reducing the tasks outside the classroom, the teacher "does not know" that avoiding other scenarios prevents the child from addressing in a pertinent and contextualized way the diversity of types of content and development of different ways of relating to the environment (Missiacos & Bonil, 2011).

Planning of different tasks and learning activities: regarding this we can refer that it is within the framework of the activities carried out by the teacher inside and outside the classroom, if we consider that three are involved in the structure of a unit moments: planning, realization and evaluation (Missiacos & Bonil, 2011) in such a way that the "planning" aspect is combined in a dynamic of constant transformation where structural actions to solve problems are carried out, it is intended that, with the as time goes by, the *apprentice* no longer requires help to advance but rather solutions by himself. Planning implies the organization of a set of ideas and activities that together allow to develop an educational process with sense, meaning and continuity, to this are added the necessary *scaffolding* for the learner to build knowledge by appropriation of the contents, the practice to apply and use them in various situations (Ascencio, 2016). That said, the teacher's work as a mediator would be reflected in each of the actions implemented in a variety of contexts, but particularly through the planning of their subject.

If we assume that beyond the educational intentions, the planning of the activities of the teachers must be oriented to produce scaffolding that ultimately generates learning in the student, this planning would have to derive from the contextualized analysis of

the cultural, cognitive conditions and socioeconomic environment, where students use their skills and knowledge previously acquired at other school levels. However, at least one of the teachers interviewed referred to agreeing to work with the same scheme of activities, RD-3: *"This year I did not have the need to redesign the activities. Thanks to the fact that I had a similar grade last year, I managed to work with the same plan implemented the previous cycle ..."*

Coinciding with Ascencio (2016) we can point out that the lack of an "activity planning" that adjusts to the educational needs of each group, undermines the opportunity to generate the appropriate strategies for the teacher that allow them to differentiate what their learners can do for yes alone or with the help of others.

In another similar situation, and when referring to the daily work carried out in his classroom, a teacher said:

RD-5: *"Today the textbooks each bring their activity to work in the classroom, without having to take time to grade notebooks..., the math books already contain the problems and activities to leave at home These go hand in hand with the activities to be carried out ... A good apprentice is characterized 'for doing his part, for wanting to learn', for being guided to advance in his studies and little by little during the school year he corrects his deficit. I believe that he is the one who must advance and allow himself to guide."*

In the words of the teacher we can identify that the strategies implemented for this group have adhered to those contained in the textbooks determined by the State, it has not been chosen to implement new ways to improve group learning, with the understanding that, This group being third grade presented various difficulties in basic aspects of reading, writing and mathematics.

In another context, expressions such as that "the good learner is one who has the ability to correct his deficit by proposing from his own means to want to learn" places the learners in two poles, to say, good-bad, at the same time their function as a learning mediator it is reduced to the following expression: RD-6: *"I explained the subject and therefore they must know how to solve the activities contained in the book ..."*

At this point, it remains for us to point out that the modification of curricula are *scaffoldings* by which the teaching processes present in teacher mediation are planned, that is, a teacher who is able to identify the needs of the group and also create various *scaffoldings* with the clear objective of promoting new content with the help of previous knowledge, this would be what we call a learning mediator.

On the other hand, a precarious institutional

infrastructure was observed regarding the implementation of technological tools, however, there is *traditional didactic material* for the development of class dynamics, however, when they are used by the teacher these are not they are found within the class schedule and therefore they come to be outside the times considered within each subject, disarticulating in the student the resource of meaning their learning.

Clear and explicit language: this variable refers to the way to give instructions for tasks in classes or an explanation of how the learner should carry out a text or mathematical problem, we have to:

In the communicative processes that allow teachers and learners to co-construct activities and tasks as well as the meanings and meaning they attribute to school content, the roles of both are clearly asymmetric, since the teacher is ultimately responsible for what happens in the classroom. (Coll, 2001, p. 5).

This communicative process necessary for the incorporation of *scaffolding* into the classroom is linked in turn with other competences by being manifested in aspects such as expressing the abilities to mentally represent, interpret, understand reality, organize and self-regulate knowledge and action in coherence. Transforming information requires reasoning skills, understanding and integrating it into previous knowledge schemes, thus in teaching practice it is taken from the different levels of complexity to understand the information.

In this regard, during the interview one of the teachers expressed:

RD-2: *"I am clear that to achieve a performance in the apprentice, their participation is necessary, as long as everyone already knows how to read and write, or at least respect the orthographic signs, however, at the beginning of the cycle, when they made me delivery of the group, some did not know how to read yet, this caused them not to comply with the tasks, neither in the classroom nor at home ... at the moment I detect this type of problem, I do not see greater difficulty in 'getting them forward', however, in proportion to the number of activities to qualify and the number of apprentices to attend, I could not stop for one or five of them and lose 30. "*

This exclusionary position proposed by the teacher not only has considerable effects on the learners who have not yet acquired the ability to read, consequently it also permeates the possibility of using other *scaffoldings* and therefore developing learning based on the rest of the knowledge. basic, in other words "Learning spoken and written language is not just another kind

of learning; it is also the learning of the bases of learning" (Halliday, 1979/2013, p. 32). In this sense, the argument of "not stopping" in those learners who require more pedagogical support than others, robs this minority of the possibility of incorporating the process of construction of meaning proper to human learning. For Vygotsky (1977/2018) a teaching cannot be effective if it is not based on the advantage that language offers. It is necessary, according to the author, that the teacher learns to negotiate the meaning and concepts that children have, considering language as the matrix of all teaching-learning situations.

Regarding those learners who presented reading-writing problems, it was observed that the teacher requested the support of the parents on several occasions, however, within the classroom, support strategies (*scaffoldings*) were not implemented with them, nor was the participation in a mode of motivation.

Derived from the above, we can point out as Tuñón and Pérez (2009) point out that the teacher-learner relationship in the classroom is fundamentally mediated by the basic structure of language and it is through it that school activities are produced and organized, we have then that it is extremely necessary to provoke with profusion in the records of all classes the minimum *scaffolding* in order to enable the basic communicative exchanges for the production of knowledge. This structure is made up of three movements (Sinclair & Coulthard, 1975). "The teacher initiates the exchange (I), which provokes a response [R] from the learner, which is followed by feedback [F]" (Villaruel, 2011, p. 36). That said, this function that the teacher would have to provoke in those learners who have not yet acquired literacy is excluded, on the grounds that it cannot be "stopped" in specific cases, on condition of greater benefit.

Active teaching role: around this variable it is known from various pedagogical lines that the teacher has been defined by their various roles, among them Villaruel (2009) proposes: "the teacher cannot reduce his work to the strict transmission of information, rather, he has to *mediate* the meeting of his students, assuming a constructive and reflective teacher role" (p. 1). In other words, the essential purpose of the teacher within the group is to establish links that favor problematization with the necessary adjustments and scaffolding without inhibiting processes and use of tools contextualized to a current society. For this, the teacher requires sufficient autonomy that allows him to function, on the one hand, as the mediator of learning and on the other, to know the effect that their practice causes on their learners. For Charbonier (2010), this condition is made up of sociocultural elements that translate into a moderate detachment from textbooks and the design of their own ways of teaching, making learners

participate in mediation processes and thus produce new learning from independently, within the framework of progressive training.

Regarding the *teaching role* present in our population, it contains a series of nuances that we will try to describe below, first of all, one of the responses that were registered during the interview by some teachers was the following, RD-1, 5, 6: "*the error is in the new educational model, due to the amount of curricular demands that are imposed on us today*", this objection is reaffirmed with what is observed in the classroom, to know what, teachers are extremely attached to the contents of the books and leave out the possibility of diversifying the contexts of the *school environment* for learning, that is, with respect to the possibility of exploring new support strategies (*scaffolding*), teachers maintain an otherwise disinterested position, arguing that the excess of assigned activities and learners does not allow them to implement other strategies.

Another relevant aspect that permeates the "teaching role" can be seen in the following expression,

RD-6: "*We are only facilitators of knowledge, the learner has to put into practice and demonstrate what they have learned in the classroom in its context, it depends on the support of their parents that a child can develop their abilities, knowledge and skills in situations of everyday life.*"

For some teachers, their work as mediator is not conceived as a function that transcends the classroom, much less are they aware of guiding their students to autonomous actions that give the possibility of a progressive and independent increase in the acquisition of knowledge (Blachowicz, Fisher, Ogle, & Watts, 2006), we have for example the following expression:

RD-2: "*Inside the classroom we can support the apprentice, but how does he rectify what he did at school if he does not practice it at home...? How does the father commit if the school official does not support his involvement as a parent? or he doesn't give the necessary tools for the father to commit.*"

The responsibility of parents in the process of acquiring knowledge of their children cannot be denied, however, this idea is left out if the *idealized* discourse of the teacher transcends to give way to the real possibilities that each learner has in the middle in the which unfolds, in any case, the responsibility of each agent immersed in the context of the school system is far from suppressing the role and opportunities that each teacher has every day to provoke in their apprentices the *scaffoldings* that stimulate the learning processes within and out of the classroom.

The teacher, when declaring RD-3: "*we are only*

facilitators of knowledge, we are not here to solve behaviors, or children's problems" hints at his position in the face of the difficulties that arise in his practice. We can identify that this perspective does nothing more than deprive the child of the various contexts that make possible and explain his/her "problem" although, the teacher in his professional competence would not have to respond to a situation of this nature, if it is his own professional competence to make a call to the appropriate authorities and not only to demarcate oneself from the reality that it observes. It should be remembered that this school is one of the few that has a Servicio y Apoyo a la Educación Regular.

In another context, within the teaching role one of the substantive functions has to do with avoiding interrupting processes that prevent the child from being *scaffoldings* for autonomy in the acquisition of knowledge. In this sense and with respect to the punishments imposed on the apprentices that implied not going out to the playground, we have:

The playground, in addition to being scenarios arranged for leisure and entertainment, must be thought from an integrative dynamic, which conspires the pedagogical interest of teachers towards social interaction and learning, from educational experiences that are strengthened inside and outside of the classroom (Pavía, 2000).

Finally, the playground could be of benefit to the teaching population to provoke the significance of *scaffolding*, however, as we can identify, this space only achieves a sense of punishment.

FINAL CONSIDERATIONS

The implementation of the Modelo Educativo Basado en Competencia en Mexico at a basic level, which is still far from offering the expected results. The strategy that the State has taken to improve the quality indices of education after the establishment of the competence model has focused almost exclusively on *teacher evaluation*, almost completely forgetting about the implementation of a *training* device product of a characterization of the situation that the teacher experiences on a daily basis in the context of their work. In no way have the mechanisms used by the teacher been identified or systematized to enrich the teaching-learning process as required by the new model, therefore, efforts aimed at enabling a profile appropriate to the requirements of this have not been significant.

Our analysis allows us to assert that, on the one hand, the teacher has knowledge about the *scaffoldings* that favor learning, however, they do not know how to transmit it to their learners, while rejecting opportunities for help systems from which they can draw on and outside the classroom and thereby provoke in their students the interest and mobilization of prior

knowledge that allows them to ultimately signify new learning.

It is pertinent to state that our study reveals what happens in the intimacy of the teaching practice and that it is seldom accessible, thus allowing to identify in the teacher's practice those mechanisms used to carry out its function of it within the classroom.

The information obtained, although it could not be generalized to all personnel assigned to the Sistema Educativo Mexicano, in its due dimension, must be taken into account when establishing the teacher training processes. We appeal that this process transcends the restricted training and didactic instrumentation, giving way to a formative scheme that considers the dispositions and capacities of the teacher.

Finally, our research puts on the table a problem that is currently little addressed by the State, to say the need to invest efforts in training and relevant teacher updating, before carrying out any type of evaluation of their functions within the new model by competencies.

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