COACHING AND EDUCATION: BACKGROUND, TRENDS AND RESEARCH PROPOSAL AT UNIVERSITY LEVEL

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Abstract

This article seeks to establish a brief balance regarding the coaching applied to the education field. It is based on a research made in the United States where an important activity of research has taken place, as well as, reflection and coaching balance related to the education. The issues addressed in this work are:

- 1-Research into the effect of the teacher in teaching ("teacher effect"), conducted by researchers Harold Wenglinsky (2000), William Sanders and June Rivers (1996), which provides that the teaching exercise increases the efficiency income levels of students. This research served as the basis for the first attempts to apply the principles of coaching in the area of education.
- 2-Statement of common approaches applied to teaching coaching developed in the United States: Literacy coaching (Moran, 2007 & Toll, 2005), and cognitive coaching (Costa & Garmston, 2002). At this point are presented the tools developed for implementing literacy coaching: a-"Road planning a demonstration lesson" instrument proposed by Cathy Toll; b-"Lesson planning guide" developed by Judith White c-"Contact form teacher" by Kristin Rainville. Then, we illustrate the technique of "cognitive coaching" developed by Donna Diddly and the tools to apply pre and post-test.
- 3-Considerations on the various roles of the coach in the process of educational interaction, based on the proposals of the American researcher Jollen Killion, ending with the concepts of "culture of the school" (healthy culture and unhealthy culture), and the two models of coaching that can develop in the process of intervention: light and heavy coaching.

Keywords: Coaching, education, teacher, educational interaction, teaching.

1 RESEARCH ON THE APPLICATION OF COACHING TO THE FIELD OF EDUCATION

The introduction of coaching at the school system has one of its pillars in the United States, a fact that has responded, among other things, to a series of investigations in which provisionally found that if teachers had a high quality training, this could improve performance of the students. This hypothesis, which stimulated the use of coaching in education, was activated by the results of several studies that assessed the relationship between the level of performance of professors and students, highlighting the contributions of Harold Wenglinsky (2000) William Sanders and June Rivers (1996).

1.1 Studies on the relationship between the education of the teacher and the academic achievement of the students.

Wenglinsky in 2000 published the results of a study entitled "How Teaching Matters: Bringing the Classroom Back Into Discussions of Teacher Quality", in which gives evidence of the importance of the education of the teacher to improve the performance of the students. For this purpose analyzed data from more than 15,000 eighth graders in mathematics and science , by applying a structural equation model of multilevel , which allowed him to isolate any particular factor and consider the potential influence of other factors.

In the analysis of the results, Wenglinsky detected that professional development of teachers was a factor of substantive importance to predict a better outcome for students. For example, students whose math classes were taught by teachers who had had a more professional development, exceeded by 107% the rest of the students [1].

Based on the research results, among other things Wenglinsky highlights that "... teachers with greater mastery of his subject and a richer and sustained professional development, are better able to teach skills of higher order thinking "[1].

Sanders and Rivers found other evidence in the investigation of 1996 entitled "Cumulative and residual effects of teachers on future student academic achievement" [2]. Based on these studies, begins systematically, the application of coaching to teaching.

2 COACHING: APPROACHES ADAPTED TO THE TEACHING.

According to Jim Knight, who has done a study on the application of coaching in the United States, there are several approaches:

Peer coaching (Showers, 1984), classroom management coaching (Sprick, Caballero, Reinke & McKale, 2006), blended coaching (Bloom, Castagna, Moir, & Warren, 2005) [3]. In any case, the most common approaches in American schools are: Literacy coaching (Moran, 2007 & Toll, 2005), Cognitive coaching (Costa & Garmston, 2002), and Instructional coaching (Knight, 2007) [3]. The term literacy coaching, focuses on the use of tools to enhance the practices of the teacher, and student learning on literacy; cognitive coaching is that the coach engages in conversations with teachers, and observes them while working, formulates effective questions, and implements communication skills in order to empower teachers to reflect deeply on their teaching practice, and finally the instructional coaching, approach in which the coach is associated with teachers to incorporate instructional practices presented based on research, and a more effective student learning. Having regard to the general aspects of coaching and educational approaches, it will be discussed about two of the currents that apparently are more widespread as it relates to methods and tools.

2.1 Literacy coaching

In the text entitled "The Literacy Coach's Survival Guide: Essential Questions and Practical Answers" the researcher Cathy Toll provides a definition that includes the essential elements of a coach who works in education: A literacy coach is someone who helps the teacher to know what you know and what you can do and supports the teacher to strengthen their capacity to make effective use of their knowledge and their teaching [4].

According to the "Literacy Coaching Clearinghouse" the coach's work can become more efficient by the use of helpful tools. In addition to the assistance provided to the coach to make his work easier, the instruments and tools help the coach to reflect and develop new strategies to improve the quality of their effort [5]. Next, we will examine some tools proposed by some researchers of literacy coaching:

A-Demonstration Lesson Planning Sheet: This instrument proposed by Cathy Toll consists of a template to plan the demonstration lessons, and aims that the literacy coach directs teachers in the use of procedures for coaching. In this regard, using a planning sheet (See Fig. 1) the coach and the classroom teacher can focus the lesson objectives, background information of the class, and have a space to reflect on the results of the same [6].

Demonstration Lesson Planning Sheet Teacher(s) goal: Date of demonstration lesson: Location of demonstration lesson: Objectives of Lesson: Background information: Students: Curriculum: Class rituals/rules: Role of classroom teacher during lesson: Post-lesson reflections: Date and time for follow-up discussion with teacher(s):

Fig. 1 Demonstration Lesson Planning Sheet

At the top of the blade there is a space to outline the purpose of the teacher, and the date and place where the lesson is taught, and goals. The classroom teacher and coach fill this sheet together, so that both parties are aware of all aspects. A space for the teacher to include information about students, curriculum, and routines / classroom rules is also included. It is important for the coach to be fully aware of the knowledge and expectations of the classroom in order to achieve good reception. This tool also provides a section to record the role of the teacher in the classroom in order to get the best experience of a demonstration lesson. In the final section, a space is provided to record the lesson further reflections and a place to record date and time for follow-up meetings with the teacher.

B- Lesson planning guide: The following tool has been developed by the expert coaching literacy Judith White and the essential purpose is allow to go beyond superficial knowledge to reach a deeper understanding by the student [7].

To implement this strategy, a form of orientation is used (see Fig. 2)

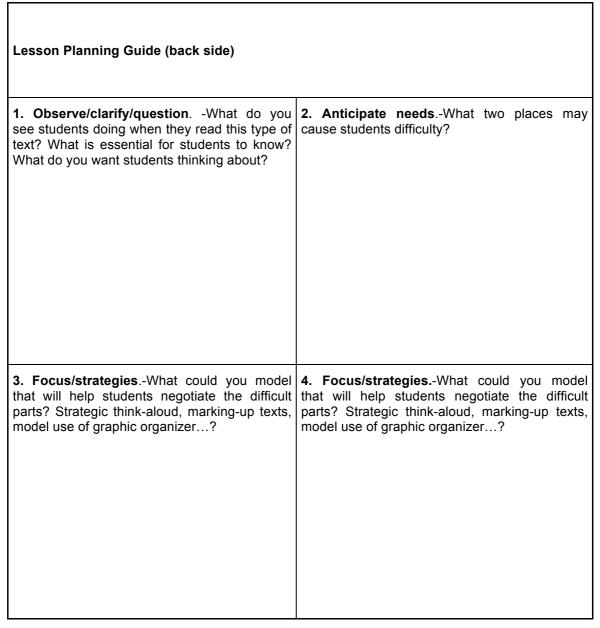


Fig. 2 Lesson Planning Guide

As a starting point, the coach makes a fundamental question that arises in the planning meeting: What is the "big idea" that students should extract from the text they are reading? What are the key questions? Then the coach suggests to the teachers that link the main idea of the lesson with the

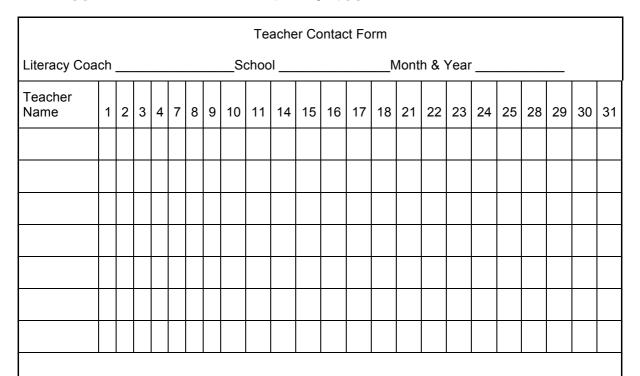
experiences they have had students and prepare them to respond to questions freely, or to make comments to each other [7]. These two general issues can be targeted more specifically using the lesson planning guide, which provides two options:

The first option which is part of the points raised in paragraphs # 1 and # 3. In paragraph # 1 which seeks "Observe / clarify / question", the teacher and the coach should clarify the following points: What do students do when they read this type of text? What is the essential that students should know? What do you think students want? [7]. Based on these answers in paragraph # 3 directed to specify the "Focus / Strategies", the teacher in dialogue with the coach must define the actions to take based on the following questions: What kind of strategy is used to help students solve the most difficult parts? Is the strategy of thinking aloud, highlight parts of the text, using graphical models or schemas organization [7]. The second option-paragraphs # 2 (Anticipate needs) and # 4 (Focus / Strategies) is part of the question: "What parts of the text may find it difficult the students." For the resolution of this point (point # 4) the same contents of paragraph # 3 is used.

Finally, in the process of applying class-pre-planned by teacher-coach, must get the students to synthesize and reflect on new knowledge, generate new questions, and link the content with prior knowledge to apply it in new situations [7].

C- Teacher contact form: This tool developed by Kristin Rainville enables the coach to track monthly the methods used by teachers and reflect on them, plus keep track of the time distribution. The information helps us understand what coaching methods have been used and show work patterns. According Rainville:

A coach can debate with colleagues using a Teacher contact form and look at the type of work they are doing and plan how both teachers and the coach can incorporate practices that meet the needs of teachers [8]. Then a model of contact form (See Fig. 3) [9]:



Methods of Coaching: CE=Classroom Environment; CL=Collaborative Lesson; D=Demonstration Lesson; ED=Educational Discussion; GR=Gathering Resources; PR=Pre-conference; CO=Coaching Observation; PO=Post-conference; SC=School Closed; SG=Study Group; WS=Workshop

Fig. 3 Teacher Contact Form

In a brief description, this tool provides a section for the names of the teachers (left side of the form), while the days of the month shown on the top. At the bottom there is a box in which are abbreviations of various coaching methods to be used by teachers. In principle, as the literacy coach must conduct

evaluation with teachers meetings, the form allows to quantify the procedures used weekly by teachers and analyzing the abbreviations listed in the boxes.

2.2 Cognitive Coaching

This approach provides a way to reduce the isolation of the teacher and improve its effectiveness, helping to increase teaching strategies, as well as explore those resources that owns and that doesn't use. His (nonjudgmental) procedure is summarized in the following steps: A- Planning conversation; B- Observation (data collection); C- Reflecting conversation. The purpose of each coaching session is in "to convey to valued colleague from where he is she is to where he or she wants to be" [10]. The three objectives of the cognitive coaching are: establish trust, facilitate mutual learning and improve growth toward the holonomy. Work of the coach, is also mediating in the thinking of teachers with open-ended questions, paraphrases, probes, and positive presuppositions.

Through conversations, the coach diagnoses five mental States of teachers to lead them to the level of holonomy; these states are the efficacy, flexibility, craftsmanship, consciousness, and interdependence [10].

2.2.1 Procedures

A- Planning conversation: is to clarify the goals, the teacher expresses its potential difficulties in the classroom and establishes the aspects to be observed by the coach at the time that the teacher dictates a class:

- (1) The teacher behavior
- (2) Performance of the students when they are not performing a task
- (3) Behavior of the students when they are performing an activity.

As guidance for the planning conversation, the following questions are suggested:

- 1- What is the objective of the lesson?
- 2- How to know that their students have reached the objectives?
- 3- How will help students to achieve the goals? What strategies could be used?
- 4- How has helped you this conversation? [10].

It is also suggested to apply a pre-test after performed the initial conversation (see Fig. 4). The proposed model is as follows:

Pre- and Post- Surveys

States of Mind Pre-Survey - September 20, 2001

_This survey is intended to be a diagnostic instrument to assist individuals in examining their development. It is designed to provide data for analysis, reflection, and goal setting.

_In considering the statements it is important to remember that you are responding in a way which best describes your thinking about your teaching right now, not how you'd like to be.

SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree

1	I pay little attention to team building in my classes.	SA	Α	D	SD
2	I am good at predicting and managing time.	SA	Α	D	SD
3	I find it difficult to work when I don't have complete information.	SA	Α	D	SD
4	I get my work done as quickly as I can.	SA	Α	D	SD
5	I am quick to find answers and solutions.	SA	Α	D	SD
6	I strive to improve ways to do things.	SA	Α	D	SD
7	My classes are productive and effective.	SA	Α	D	SD
8	I consider the impact of my lessons before I teach.	SA	Α	D	SD

9	I adjust my norms and change my procedures in order to be more effective	SA	Α	D	SD
10	I am aware of where I am in my development as a teacher and where I want to be.	SA	Α	D	SD
11	I draw on my experiences and use the knowledge and skills I have to be an effective teacher.	SA	Α	D	SD
12	Others control most of what happens to me.	SA	Α	D	SD
13	My goals have little importance to me.	SA	Α	D	SD
14	My work has less effect than I would like it to have.	SA	Α	D	SD
15	I often feel uncertain and fearful in my teaching.	SA	Α	D	SD
16	I am often uncertain about how to manage student behaviors.	SA	Α	D	SD
17	I am aware of where I am in my work and where I want to be.	SA	Α	D	SD
18	As I think about specific issues, I expand my thinking to encompass a larger view.	SA	Α	D	SD
19	I view situations through my own eyes and the eyes of others.	SA	Α	D	SD
20	I have control over what happens in my classroom.	SA	Α	D	SD
21	My communication with my students often needs clarification.	SA	Α	D	SD
22	I am not always clear about why I'm using a particular process to get something done.	SA	Α	D	SD
23	I accomplish less than I hope to in my classes and often feel frustrated by lack of closure.	SA	Α	D	SD
24	I stop during class to monitor and adjust my teaching to be more effective.	SA	Α	D	SD
25	I am often unsure about the progress I am making with my classes.	SA	Α	D	SD
26	I examine the positive intentions of my students.	SA	Α	D	SD
27	The way I work on things stays pretty much the same.	SA	Α	D	SD
28	I usually don't get through my lesson plan.	SA	Α	D	SD
29	I know why I am a teacher.	SA	Α	D	SD
30	I calibrate my progress against established criteria for excellence.	SA	Α	D	SD
31	I adjust my lesson during class in order to be more effective with my students.	SA	Α	D	SD
32	I consider several ways of doing things before deciding what might work best.	SA	Α	D	SD
33	My work impacts my students' lives.	SA	Α	D	SD
34	I tend to overlook what I have learned and don't use it to help me become more effective.	SA	Α	D	SD
35	I don't usually think about what will happen to my students as a result of my work.	SA	Α	D	SD
36	The goals of my teaching have real meaning for me.	SA	Α	D	SD
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Fig. 4 Pre- and Post- Surveys

Finally, the coach suggests that teacher take note also of his performance in classes to establish a comparative analysis between prints obtained by own coach and teacher.

B- Data collection: Once certain the data that the teacher wants to be collected by the coach, with questions of some of the items in the form of PRE and POST survey, begins the process of data collection that will be obtained in each session class, where the presence of the coach is necessary to collecting information during the lesson [10] As noted in the procedure "A", the teacher also should to

compile data on their performance. Finally, it is recommended that both data collection and analysis be carried out weekly.

C- Reflecting conversation: in this third phase of the process it is done a dialogue in order to analyze the information provided by the teacher and the coach, comparing prints, points of view, and where ultimately the coach seeks to record the development of the mental States of the teacher during all the working sessions. As a guide to carry out the "reflecting conversation" Donna Dildy proposes the following questions: How do you feel about the lesson?; What do you remember about the lesson that supports this feeling?; Would you like to look at the data I collected?; How does the data compare to your impressions?; What possible relationships exist between teacher decisions/behaviors and student performance?; What new learning can you take away from this?; How did you benefit from this conversation? [10].

The process ends with the application of the questionnaire used in the first phase and a final reflection to establish a balance. According to Dildy: "cognitive coaching could benefit any Professor regardless of their years of experience [...] Research has shown that cognitive coaching can reduce the isolation of the master, increase teacher collegiality and improve the effectiveness of teacher [...] Train teachers to be autonomous and "self-reflective" has a positive impact on self-esteem and effectiveness"[10].

3 THE ROLES OF THE COACH AT THE EDUCATIONAL INTERACTION.

One of the most significant aspects of coaching applied to teaching is related to the different roles that the coach can play in the field of education, highlighting the contributions of the researcher Joellen Killion. This point is important because some coach have conditions to perform many roles, while others may take fewer roles. On the other hand, without a well-designed framework of organization for the daily activity, possible that the coach takes too many roles and as a result, the impact of his work is diluted. Then, we will exhibit the ten basic roles raised by Killion: **Data Coach**: In this role, the coach helps the teacher or teams of teachers to the examination of data relating to the student's progress and the subsequent design of strategy instruction. The analysis of the data focuses on facilitating the understanding of teachers with respect to the level of the degree, equipment and data from the classroom, helping the decision making about curriculum and teaching [11].

Resource Provider: The coach must satisfy the request for resources such as providing books of leveling and additional inputs to be used by the students and their needs with different levels of learning, academic ability or interest. This role, according to many coaches, means to invest a good part of his time [11]. Mentor: Unlike the other roles of the coach, in this case the professor who receives the action of the coach Professor is a subject unique and differentiated, which requires specific knowledge about the development of the educational level (a rookie teacher or a teacher with experience but that starts in a new teaching Center classes). The role is to provide tools and help the teachers to adapt to the professional standards of the Centre, their practices and educational policies [11]. Curriculum Specialist: This role is more focused on "the what" than on "the how", and helps the teacher understand how to turn concepts into attributes as well as the scope of these; Therefore, the coach should find the deep sense of concepts that the teacher teaches. On the other hand, on the basis of the knowledge that the teacher has on the curriculum, the coach helps planning units of instruction and organizing concepts, taking into account their relevance and accuracy [11]. Instructional Specialist: Once the teachers know what to teach, and what is a successful learning, focus on how to teach. The coach helps teachers to choose the appropriate methodologies to meet different learning preferences and different levels of academic preparation of students. [11]. Classroom Supporter: This type of role is characterized by being the only role in which the coach works directly with the teacher in the space of the classroom, as opposed to the other roles which are developed outside of the classes. In this sense, J. Killion says literally that the coach takes part in effective teaching practices, "participating in the direct teaching with the teacher, observing and giving feedback" [11 Learning Facilitator: In this role the coach organizes, coordinates, supports, designs or facilitates learning among adults within the school. For this purpose, you can suggest the teacher to read a text, coordinate research topics, conduct a workshop or raise a new learning strategy and participate in a group for the study of a lesson [11]. School Leader: It consists in that the coach should boost the processes of change in the conduct of the school community, as well as defend in school reform initiatives, both in meetings internal as in the meetings of the district. For this purpose, it is important that the leadership is based on the attitude and the integrity of the coach [11]. Catalyst for Change: The coach through observations, exposition of their views and inquiries into traditional educational practices, aims to generate analysis, reflection and change appropriate in the middle of teaching [11]. Learner: The coach as an apprentice attends conferences and workshops on topics

related to school reform and the coaching tools, addressing issues with both the school and the social environment.

Seen the roles of coach, may be produced a tendency to develop some social roles more than others, so it is important to take into account that one of the most substantive factors in the performance of roles - from the sociological point of view-, is the context. In this sense, Killion reads as follows:

The time of the school year: influences the distribution of time and the role that it can play the coach. For example, at the beginning of the school year the coach tend to distribute their time in the roles of data coaching, learning facilitator and resource provider. In the middle of the course or when the routine has already been established in the development of the school year, the coach pays attention to the curriculum and instruction [11]. Finally, when the school year is under way the coach focuses on general initiatives aimed at the school as a whole, seeking the general transformation of the status quo and considering changes, and assumes the role of leader and catalyst for change.

The level of experience of teachers: can impinge on the variability of the role of the coach; when teachers have little experience, the coach plays the role of mentor to bring the novel professor some security. However, when teachers are more veterans, they can resist some resistance to the presence of the coach. However, "... the teachers with more experience are open to any type of support available to improve their practice of instruction" [11]. In these circumstances, the coach tends to develop the role of resource provider.

The School Culture: is perhaps one of the factors of greatest relevance for the definition of the role of the coach. For Killion, school culture comprises several elements ranging from its historical evolution, the interaction between teachers and the relationship with the director, to the level of transparency or opacity existing among the social actors of such Center. According to this assessment, Killion poses two types of culture according to the educational area: the healthy culture, and the unhealthy culture. Both modalities are defined by the positive or negative way in the staff of teachers and administration to solve problems, allocate resources, and manage conflicts. Taking into account the cultural factor, as the author puts it, the coach will have greater ability to influence improvements aimed at teaching and student learning. In this sense, the coach should "...evaluate culture, check the perceptions and adjust their work depending on the culture of the school" [11].

These factors related to the context, Joellen Killion, from studies conducted in different educational centres, highlighted two models of behavior and inclusion, which depend on the allocation of time for the coach to each of the different roles, giving rise to what she calls the coaching model light and heavy coaching. "I affirm that there are two types of coaching - the coaching light and heavy coaching. The essential difference is in the perspective, beliefs, decisions of role and goals of the coach, rather than in what the coach makes [11]. When coach pursues the aim of acceptance and appreciation of teachers, to offer services that allow you to integrate with the members of the staff of teachers (particularly with those educators who can exhibit a reluctance to work with a coach), it is said that we have the coaching light model. Accordingly, in this model the coach can be more valued, although his presence might not be essential. In this context, the coach which operates on the model of the coaching light becomes a kind of assistant teacher, circumstance that determines the performance of certain roles which, although they serve as support for the teacher, do not imply an intervention that could generate conflicts with a view to change and to an improvement of the teaching and learning [11].

In contrast to the previous model, heavy coaching is characterized first of all by the construction of a series of interactions between the coach and teacher based on a high level of expectations from the first, which joins the curriculum analysis, analysis of the information, a strong emphasis on instruction and the results and finally, the existence of a strong belief in that it can exercise an important influence on the teaching practice. The coach who exerted a heavy coaching establishes dialogues with the teacher in order to clarify their beliefs and goals rather than inquire about their tools of teaching and the knowledge that handles. According to Killion, an example of heavy coaching occurs when more than talk about what the teacher chooses to do in a lesson, the coach asks Professor to describe their conception of teaching, student learning and the ability of the teacher to learn [11].

4 CONCLUSIONS

According to the exposed information, you can set a brief balance about the potential advantages of coaching applied to education, which we summarize the following points:

Coaching is a form of organization and guidance of academic practice, which in principle would make it possible to improve the performance of the student, from changes to be experienced in the teaching. A substantive contribution refers to the sociological considerations, related to the application of theory of the role and status to the micro-social space of the classroom and the different variations in the roles. This contribution is key, since it may allow a greater precision of the performance of the coach in the educational area.

To this first assessment is added a valuable reflection with respect to the potential impact of the cultural variable (school culture), and the temporary variable (changes in the roles according to the time of the school year).

A third aspect to take into account refers to the concepts of light coaching and coaching heavy, whose utility lies in the adaptation that must carry out the coach (taken into account the specific situation of the field of cultural education), for a more effective integration in the socio-educational tissue in which go to perform their activity. Finally, it's important to highlight the effort made to respond to various problems in the area of education, through a series of derivatives which, although they take as a basis the general approaches of coaching, seem to fit spaces and very limited problems. This is why are observed different modalities or approaches such as literacy coaching, the cognitive coaching, etc.

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