Professional development of the university teacher: a contribution for its analysis

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Abstract:

In the background of university education and the challenges that today face university teachers in particular, the object of this study is the development of dentistry teachers analysed by looking at their professional careers.

To gain access to the teachers' representations about their teaching career, the methodological approach chosen was a qualitative and exploratory study, of a biographical nature, based on semi-structured interviews given to a group of 13 teachers. Analysis of the content enabled the professional development stages throughout the career of the group of teachers studied to be characterised.

The results show that the teachers interviewed represent their career on the whole in a positive light, and despite the multiple constraints felt, they remain motivated and satisfied. The stages identified correspond to the start of teaching, preparation for their PhD and post PhD.

The aim behind the characterisation of these stages is to help in the development of dentistry teachers and the creation of institutional strategies that encourage this development.

Key words:

University education, Dentistry teacher, University career, Professional development.

INTRODUCTION

Higher education is today going through very turbulent times following the changes that have been made, especially in the last decade, when the pedagogy of learning, as Nóvoa states (2000), has come to the fore preparing individuals to be able to adapt throughout their lives. The shift of emphasis from teaching to learning changes the conception of the university teacher, who moves from being the teacher to the bridge between the knowledge available and the cognitive, cultural and affective structures of the students (Fernandes, 2001).

In this background the teacher has become above all an educator: critical, reflexive and open to change, working in a collaborative climate contributing to institutional projects and missions, with a sense of responsibility and commitment in the different roles he takes on (March, 2003; Patrício, 2001; Rodríguez Rojo, 1999). Zabalza (2002) argues that today's university teacher is linked to the three major ideals: professionalism, in being a complex professional activity that requires specific training; life-long learning, which conceives the development of an activity that requires constant updating; and the importance of the quality of teaching in the improvement of learning.

The fact that the teaching task is a complex, difficult and challenging reality leads to the need to develop pedagogical, social and institutional competencies which harmoniously relate all the tasks involved in the profession of university teaching

(Cruz Tomé, 2003). The development of the teacher is dependent on personal, professional and institutional development which cannot be separated (Bell & Gilbert, 1994) and which corresponds to an ongoing process of learning that arises from the daily practice, seeking synergies among the personal and professional development needs and the needs of the institution to bring about an improvement in professional competence, a deepening of the teacher's self-knowledge, his role in the institution, the context and his career (Benedito, 1991, cited by March, 2003). Therefore development seems to be linked to the concepts of change and learning, in which the teacher is in a process of change by becoming aware of "weaknesses or faults in components of his subjective theory" and in the process learning occurs (Marcelo García, 1999, p. 51).

Several authors have tried to identify the characteristics of the professional development of teachers. Soto's contribution (1994, cited by Simões, 1998, p.36) systematised this concept as dynamic, constant and progressive, with implications for the teaching practice that cannot be separated from the social context and the teacher taking on a unifying and integrating character. These characteristics make it a complex and multifaceted concept (Nichols, 2001). Professional development for higher education teachers takes on many forms. Rarely does it follow a constant, predictable and credible form during a whole career. It may move forward extremely quickly at times or more slowly at other times (Ferman, 2002). Indeed, empirical data reveals that there is considerable variation in the actual and ongoing endeavour put into the development process by teachers throughout their careers (Wilkerson & Irby, 1998), owing to the circumstances, constraints and challenges of different orders, which limit or empower their professional development (Cafarella & Zinn, 1999).

Teacher development should occur throughout a series of stages, each corresponding to different ways of qualitative thinking.

Research carried out with non-university teachers (Cavaco, 1991; Gonçalves, 1992; Huberman, 1989; Loureiro, 1997; Sikes, 1985; Steffy et al., 2000) suggested that different experiences, attitudes, perceptions, expectations, motivations, satisfactions, frustrations and concerns seem to be related to different phases of the professional career. At the start of one's career there is ambivalence between feelings of survival and discovery. In the stabilisation phase the teacher consolidates his space. The diversification phase can be marked by endeavour/enthusiasm or by lack of belief and routine. In the serenity phase the teacher shows personal satisfaction or conservative attitudes. In the last phase the teacher close to retirement age may show signs of bitterness or serenity. Other researchers (Feixas, 2003; Kugel, 1993; Robertson, 1999), attempting to assess the professional development of university teachers, propose an initial phase focused on the teacher marked by insecurity and the need to gain the confidence of the students. In the following phase the teacher tries to improve the teaching and motivate the students. Finally, in the last phase, the teacher focuses on the autonomous learning of the student.

These development models, despite being linear in nature, are not necessarily hierarchical. An individual may show aspects of two or more phases at the same time, and it may not be clear when one phase transits into the next.

Although the professional development of university teachers has been recently looked at by several researchers, the way it is constructed is still an unstudied field. This study focuses on the professional development of the dentistry teacher, built and grounded on two complementary dimensions: as a university teacher and as a professional dentist.

Historically, dentistry schools have recruited their teachers from among the best students or those

who have obtained the best academic grades, assuming that this fact is enough to exercise the teaching activity, but the gap between effective practice and effective teaching can be big (Masella & Thompson, 2004). To teach, teachers fall back on their practical experience, imitate the models that were subject to as students to implement passive learning (Livingston *et al.*, 2004).

Another aspect that should be highlighted is that in dentistry teaching there is another factor that interferes in the teaching-learning process: the patient. The teacher-student-patient triangulation in dentistry teaching requires that the teacher has a twofold commitment: with the patient to implement the technical and scientific resources as well as abiding by ethical and humanistic guidelines, while with the student the pedagogical competencies come into play in carrying out the teaching-learning process (Behar-Horenstein *et al.*, 2000).

Furthermore, most teachers are involved in the provision of oral healthcare in the private sector, which does not leave much time to dedicate to the educational tasks (Howell & Karimbux, 2004). This leads one to conclude that the dentistry teacher's job has not earned the full status of a profession, but is rather a complementary activity of the dentistry practice. This identifying fact is of critical importance in the curriculum and in the instruction (Masella & Thompson, 2004). Adding to these aspects are a difficult economic climate that leads to cut-backs in the organisational structure, increased volatility linked to technological advances, the growing demands of the consumers and the reduction in funds for research (Murray, 2002).

Dentistry teachers thus face the pressure of being effective and reflexive educators, productive dentists, promoters of innovation in oral healthcare, high-quality researchers, and are also asked to contribute to the leadership and management of faculty and university services. Striking a balance among these activities may be difficult, if not impossible, and is influenced by the environment of the educational environment and by the interactions among colleagues (Schrubbe, 2004).

It is therefore of interest to analyse how the professional development of the dentistry teachers is constructed and how the two dimensions are articulated throughout their professional career.

METHOD

This study is guided by the overriding goal of researching, through the teachers' discourse, how their professional development is constructed throughout their career. An effort is also made to understand the factors that affect this development, attempting to reconstruct the trajectory of development constructed *in the* and *by the* profession, in the different phases of the career.

The problem was analysed with the following aims:

- To ascertain if, in the teachers' description of their professional lives, one can distinguish phases;
- To characterise the interests and concerns that define each phase identified;
- To identify what factors hold back the professional development of the university teacher;
- To compare the data obtained with other research on the careers of university and non--university teachers.

The methodological approach chosen to answer the problem and the issues that guide the research, which lead us to the teachers' representations concerning their teaching career, was a qualitative and exploratory study, of a biographical nature, based on semi-structured interviews (Fontana & Frey, 2003; Gubrium & Holstein, 1998).

RESULTS AND DISCUSSION

Analysing the content of the interviews enabled the stages that marked the career to be identified as well as how the professional development occurred over this time.

PROFESSIONAL DEVELOPMENT AND PEDAGOGICAL TRAINING

The data collected seem to suggest that the professional development model followed by the teachers interviewed is predominantly within the model of striving to perfect the individual as defended by Villar Angulo (1993) and in the same line of thinking within the autonomous development model proposed by Sparks and Loucks-Horsley (1990), emphasising the personal and isolated nature of professional development (Cranton, 1994). From this viewpoint, the teachers learn independently what they perceive to be important for their development, seeking to respond to the individual needs, which suggests a personal orientation to professional development proposed by Benedito *et al.* (1995, cited by Núñez, 2001).

The pedagogical practice was gradually constructed throughout the career by most of the teachers interviewed based on their experience and intuition, which fits in with the "from novice to expert" development model presented by Pill (2005), through an independent quest to solve the problems that arise, but also through imitation of positive teaching models and also learning from older teachers. These aspects are in accordance with those pointed out by Feixas (2003) and Tavares (1999).

As for the professional development stages as teachers, most of the teachers seem to focus on the teaching as argued by Feixas (2003), tending to concentrate on making sure the transmission of knowledge is effective and using the master's lesson as the main teaching strategy. However, some teachers seem to highlight a development stage centred on the student (Feixas, 2003) attempting to engender a more autonomous learning. According to Robertson (1999), the teachers' dominant positioning is aliocentrism, with no explicit indications of systemocentrism, given that the importance of the relationship between the teacher and the student in the interaction is never pointed out.

The need for other knowledge beyond the content is constantly mentioned by the teachers, with references made to keeping track of new information technology, new teaching methods, new assessment methods, in an attempt to improve the teaching and the learning of the students, which fits into the new profile that is required of the university teacher (Gonçalves *et al.*, 2001; Zabalza, 2002).

One point of widespread agreement is the teachers' concern with the content of the lessons and the drawing up of a scheme so as to make the content able to be assimilated and appropriate for the students, approaching what Shulman (1986) calls pedagogical knowledge of the content and Perrenoud (1993) calls didactic transposition. One of the aspects to highlight regarding what is missing from the teachers' discourse are group and institutional initiatives as regards professional development (Bell *et al.*, 1991, cited by Núñez, 2001), which seems to confirm the culture of individualism in the university environment (Carlson-Dakes & Sanders, 1998). In this study none of the teachers mentioned sharing colleagues' experiences or the discussion of pedagogical aspects with peers and those who spoke about teamwork did so in relation to the work carried out among the members of their subject group, which reinforces the idea of a lack of an inter-disciplinary conception (Conceição *et al.*, 1999).

The field of dentistry, marked by startling technological evolution in recent years which is increasing, usually places its trust in specialists within the field to teach, in being a professional area. The teachers start their activity as university teachers without having been previously prepared for this: they were either experts in their area of knowledge, or they showed, as students, good performance which enabled them to get into university. Perhaps for this reason these teachers feel more attached to their field of knowledge rather than as belonging to the class of teachers.

When questioned what their profession was, one of the teachers from the more experienced group of teachers and seven from the younger group of teachers answered a dentist, which can be justified by the importance attached to the career of a dentist which in most cases was the main professional activity.

All the teachers interviewed stressed a strong relationship between their dentist's career and their teaching career, and their discourses showed that this mutual influence brings changes in the activities in the two directions: practising dentistry enriches the teaching activity by experiencing real-life examples, hence the teaching is not merely a question of reproducing the knowledge produced by others, and the teaching practice influences the dentistry activity as the former calls for the need to be constantly up to date, which benefits the clinical activity. However, this clinical activity, in being carried out in parallel with the teaching activity, may contribute to the non-professionalisation of the teaching and conflicts of identity (Howell & Karimbux, 2004; Masella & Thompson, 2004).

When asked to opt between an academic or clinical career, seven teachers answered that they would choose teaching as their single activity but in the right conditions, especially financial and the possibility to continue practising dentistry in the university. Poor working conditions, low salary compared to the private sector and family issues are pointed out as reasons that may lead teachers to ponder abandoning their career.

Most of the teachers currently channel most of their efforts towards the teaching activity, while a smaller group state their main activity is as part of the management bodies. They all wish they had more time to do research, although none mentioned the teaching practice as a possible source of research.

The activities that provide the least satisfaction for the teachers are bureaucratic issues, the time these tasks take up and the management activities which they feel they are not prepared for.

Despite stating they have had little or even no training for the teaching activity (only three teachers had received pedagogical preparation but after having started their teaching careers), during their discourse the teachers stated some differences between their first teaching experiences and their current practice, all of them perceiving the teaching practice as a producer of knowledge, and most of them (9 teachers) believing that they are a better teacher today than when they started their activity. All the teachers acknowledge the need for specific training to exercise teaching, and imagine training of this kind in the institution that is structured, and in the opinion of most, brief but compulsory, theoretical/practical or administered by a mentor, of didactic and pedagogical content, given to all the teachers of the institution, in line with the specificity of the institution.

In this study we also tried to identify in the teachers interviewed what contributed towards the commitment to professional development and what hindered it. It seemed that the biggest constraints derived from extrinsic factors outside the control of the teachers, namely the excessive umber of students, lack of material and human resources and funding problems. The difficulty in articulating the activities and the excessive amount of management tasks also seemed to hold back the development of the teachers. As for the factors that induced professional development there was a desire to improve oneself and one's performance and the pleasure and satisfaction obtained from the teaching activity.

Stages of the Career

Analysis of the individual careers of each of the interviewees, in attempting to reconstruct them through the different moments and situations evoked during the interview, enabled the identification of three major stages: the start of teaching; preparation for PhD and post PhD.

Starting the teaching profession (Table 1) is generally viewed as easy. In the group of teachers studied we can conclude that the beginning of their teaching career was considered a period of "discovery" and to a lesser extent of "survival", as described by Huberman (1989), which may contribute to a positive process of professional socialisation.

The fact that 12 of the teachers considered the start of their teaching careers as an easy phase may be justified by the security in their sense of mastering the curricular content and also because they were going to teach aspects related to their profession. The lack of difficulties may also be related to the fact that eight teachers started their careers giving practical lessons, some with the aid of more experienced teachers and the other five had already acquired some professional experience. Another revealing aspect of a relatively smooth beginning has to do with the conception of a positive image of the students, as they were highly motivated due to the recent completion of their degree and their enthusiasm in starting work, but also another factor could be the maturity they showed. The teachers, despite experiencing a positive start, mentioned that the lack of pedagogical training and lack of knowledge and preparation for the demands of an academic career were constraints holding back professional development. However, these aspects were surpassed owing to their liking of the teaching profession and the desire to better themselves which motivated them to come up with strategies to get over the difficulties.

It is common to find feelings of lack of preparation mentioned by some teachers at the start of their careers in the literature (Feixas, 2003; Huberman, 1989; Loureiro, 1997). This is linked to the insecurity of the first years of activity, generated by the difficulties in communication, feeling of unease when facing the students, lack of knowledge about the career and their need to affirm themselves in the working world.

In the PhD preparation stage we can demarcate two different career paths (Table 2): those who opt to prepare their PhD while they are assistants and those who do so as teachers. The former do not experience so many difficulties as the latter as they have fewer teaching responsibilities and have better conditions to carry out research. Training abroad was pointed out as essential to prepare for the PhD. Some teachers also considered the support of their supervisor and department positive in preparing their PhD. Among the negative aspects were the fact that doing a PhD was compulsory if they did not want their contract to be ended by the university, the solitary nature of preparing the PhD and lack of support from the supervisor.

		TABLE 1	
START	OF	TEACHING	CAREER

EASY (N=12)		DIFFICULT (N=1)	
POSITIVE ASPECTS	NEGATIVE ASPECTS	POSITIVE ASPECTS	NEGATIVE ASPECTS
 Knowledge of environment Mastery of curricular content Support from older teachers Starting with practical lessons Few responsibilities Possibility to deepen knowledge Possibility to build career Liking for teaching Positive image of the student Work experience 	Lack of knowledge of de- mands of academic career Lack of preparation for demands of career Lack of pedagogical prepa- ration	Liking for teaching Contact with the students Work experience	Difficulties in communicat- ing Lack of support Lack of training opportuni- ties in Portugal Family reasons Lack of pedagogical prepa- ration

In the group of teachers who obtained their PhD when they were already practising teachers, they usually did so for their own reasons, with this preparation viewed as a challenge and a goal to achieve. On the negative side were extrinsic reasons, on the whole linked to the background in which this preparation was carried out. These teachers were pioneers in obtaining the PhD in this area, as at the time there were not suitable conditions to carry out the research. Furthermore, as they had many teaching and administrative responsibilities, they also did not have much time for this preparation. We cannot forget that only very recently was the Dentistry Faculty integrated into the University, around fifteen years ago, only from that date onwards subordinated to the legislation in force. Hence, the creation of a body of teaching staff only took place from this date onwards, which provided greater fluidity in career progression for most of the teachers who meanwhile took PhDs, either because vacancies became available, or through the retirement of older teachers. As such, most of the teachers interviewed stated that immediately after their PhD, they took charge of the management of one or more subjects, which translated into significantly more responsibilities.

Preparation of the PhD coincides, for most teachers, with aspects linked to the previous stage, and can be considered a transitional stage (Sikes, 1985). Ten of the thirteen teachers refer to obtaining the PhD as the most salient event of their academic career, and consider it a turning point. As became evident, the PhD constituted a change in the professional career of the teachers interviewed. At this stage, as Table 3 shows, we find several phases.

The post-PhD stage is the period that merits the strongest views of the discourse of the most experience teachers. It is also in this stage that we can see both common and divergent traits. The first phase, affirmation, was felt by ten of the teachers interviewed who prepared their PhD when they were still assistants. Taking on new responsibilities also brings with it enthusiasm in wanting to do new things, in trying out new pedagogical strategies, more security with the students, which seems to fit into the perspective of the teacher focussed on the teaching (Feixas, 2003) and seeking affirmation within the group he belongs to, the stabilisation phase of Huberman (1989). The negative aspects are not widely perceived by most, perhaps because of lack of knowledge about the constraints that the new responsibilities can bring. Three of the teachers interviewed are currently in this phase and have started teaching relatively recently

The characteristics of the next phase, diversification (Huberman, 1989), or stabilisation and maturity (Sikes, 1985), in which the teacher becomes a valuable member in the institution he works for, showing confidence in his actions and responding and/or seeking new challenges, was highlighted in the discourse of ten teachers. Currently five teachers seem to be in this phase, continuing to show much endeavour in their teaching activities, seeking

AS ASSISTANTS/INVITED ASSISTANTS EASIER (N=9)		AS TEACHERS LESS EASY (N=3)*	
POSITIVE ASPECTS	NEGATIVE ASPECTS	POSITIVE ASPECTS	NEGATIVE ASPECTS
Few teaching responsibi- lities Time for research Training obtained abroad Departmental support Goals to be achieved Supervisor's support Good conditions to do re- search	Compulsory nature Loneliness lack of supervisor's support	Challenge Desired goal Personal project Liking	Lack of conditions to do research Lack of support Many teaching and adminis- trative responsibilities Lack of time Need to pave the way

TABLE 2 PHD PREPARATION

* one of the teachers had a PhD awarded through equivalence because of training abroad.

TABLE 3 POST PHD

	POSITIVE ASPECTS	NEGATIVE ASPECTS
AFFIRMATION (N=3)	Greater investment in teaching Able to take part in the institutional decisions Security Try out new methodologies	Less investment in research Excessive number of students Lack of physical and material conditions
DIVERSIFICATION (N= 5)	More attention given to curricular aspects More concern about the students' learning Less monitoring of younger teachers Security Possibility to continue clinical activity	Less investment in research More management responsibilities Less contact with the students Excessive number of students Lack of physical and material conditions Difficulty in staying up to date Lack of administrative support Part-time teaching
QUESTIONS RAISED (N= 2)	See people interested in learning More monitoring of younger teachers Liking for teaching	Lack of time for family Lack of time for other activities Difficulty in articulating the activities
	SERENE (N=1)	BITTER (N=2)
disinvestment (n=3)	See projects completed Obtain recognition by the professional class Start new projects	Tiredness Saturation Lack of conditions to prepare the students well

to develop more active teaching methods, focusing on their concerns about the students' learning. They also carry out management tasks, which they view as using up time that could be spent on more productive tasks, especially research. They believe they have evolved positively as teachers through the accumulation of experience and by trying to better themselves through self-training. They consider the experience gained in dentistry as an important contribution to their evolution as a teacher, as well as the influence of the teaching activity on their dentistry work. Despite these positive aspects it is obvious that they feel constraints, which derive essentially from external origins.

Obstacles to the teachers' development pointed out include the increase in administrative and management responsibilities and the great difficulty in articulating these tasks with other functions, namely because the teaching is being carried out as a complementary activity of the dentistry profession. Also considered negative is the fact that no time is available for research and they do not have more time for student contact, and they regret the fact that research is the facet that has the greatest weight as regards career progression. The biggest constraints are linked to the education system and the lack of funding, as well as the sharp rise in the number of students which prevents the development of teaching methods that are more in line with active learning by the students. Another aspect brought to the fore is the students' lack of motivation towards the degree nowadays, with some teachers going so far as to suggest the students should be selected depending on their vocation for the profession.

Although on the whole all the teachers were satisfied with their career and were able to manage the day-to-day frustrations and problems appropriately, two teachers raised doubts about the profession (Huberman, 1989). These teachers, due to the major difficulties felt in articulating an academic career, a clinical career and their family life, were considering leaving the profession. However, they admit they had not already done so because they enjoyed and gained satisfaction from their academic career.

Some traits of the disinvestment phase (Huberman, 1989) were found in three teachers who were nearing retirement age. Two of the teachers showed signs of a more bitter disinvestment, marked by negative aspects of tiredness or saturation, once again caused by excessive responsibilities in one case, and discontent with the working conditions for teachers in the other. One teacher was in the serene disinvestment phase, and was extremely happy with the recognition attained and the projects that had been carried out, and was enthusiastically looking forward to starting new projects.

CONCLUSION

Clearly the evolution process of higher education has affected the way teachers exercise their activity, leading to reformulations of their professional identity. The way teachers articulate their different professional roles as dentists, teachers, researchers or managers, entailing different demands and values, gives rise to conflicts of roles that may generate different identity configurations.

Despite the fact that most of the teachers studied, on the whole, represented their career in a positive light without major obstacles, they pointed out moments of conflict, either linked to motivation or their satisfaction levels with the academic activity. This bears out the dialectic process experienced by individuals undergoing development, which is a process marked by ongoing tensions and disputes between personal values, feelings and the roles and responsibilities to be fulfilled teaching the degree and in the institution they work for.

It is pointed out that the younger teachers seem to have had a generally easier career path, especially at the start of their career, possibly justified by the background of development that marked an era of expansion of the Faculty up until the mid 1990s, the support they received from foreign institutions and the experience acquired from the older teachers of the institution in their academic preparation and setting up of senior staff that, to a certain extent, may have contributed to aiding their career progress. The "pioneering" teachers who began their teaching activity when the Faculty was created experienced greater difficulties, perhaps because they had to pave the way along roads that hitherto had not existed.

The group of teachers studied present different career paths marked by circumstantial events that made progress easier or more difficult. The results obtained in this group of teachers lead us to agree with Lawrence and Blackburn (1985, cited by Villar Angulo, 1993, p. 141) when they state "there is no single theoretical model that can represent the diversity of interests and professional activities that characterise university teachers, or a segment of them."

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