

# Teacher training in higher education. The case of teachers of medicine

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**ABSTRACT:**

This paper addresses the subject of teacher training in higher education, and more specifically the training of teachers of medicine. It starts by establishing a theoretical articulation between the fields of medical education and teacher training at the higher education level.

Reference is made to the teaching component of academic activity, and to the importance which should be attached to this component, in terms both of progression in teaching careers and of training. The author examines the characteristics of the teaching activity of medical teachers and describes the training programme of the teaching staff at the Faculdade de Ciências Médicas da Universidade Nova de Lisboa.

From the conclusions drawn by the author, there emerge issues of leadership, involvement and participation by teachers in their own training, creation of programmes for professional development, and the existence in institutions of structures specifically designed for purposes of training, with an emphasis on the contribution of educational science specialists working within these structures.

**KEY WORDS:**

Teachers of medicine, Medical education, Higher education, Teacher training.

## TEACHING AS PROFESSIONAL ACTIVITY

Social, economic, political and cultural changes in contemporary society are forcing higher education to rethink the teaching and learning processes it employs, if we accept that teaching strategies should respond to the needs of a recipient population which is ever larger and more diversified (Pedrosa, 2001).

Meanwhile, also undergoing rapid change is the professional profile of teachers in higher education — a profile hitherto with a major scientific component but which, owing to the increasing challenges posed by a student population with highly diversified socio-cultural and age characteristics, has been forced to incorporate other skills of a more social and interventional import, both within and outwith the place of education (Biggs, 2003).

It should be noted that conditioning factors specific to university culture and environment are operating here, and that although this culture and environment have retained the characteristics necessary for the production and transmission of knowledge (Lerbet, 1993) they are now strongly influenced by a series of contextual factors including funding, autonomy, quality of service and relations with the employment market. On this subject Cachapuz (2001) asserts that although universities continue essentially to act in three domains — teaching, research and extension, i.e. the provision of services to the community — what is at stake in today's global context is the redefinition of the mission of the university as

institution, in such a way that, as Candeias (2005) observes, it can be “credible and economically viable” at the same time (p. 11).

All these factors have the effect of exerting on the university different stresses which pull it in opposite directions (Zabalza, 2002). In the first place, there is the concern with maintaining the quality of education it offers, despite the democratization and diversity of its student population: a dilemma which is conventionally called the quality versus quantity debate (Veiga Simão *et al.*, 2002). Another source of stress lies in the esprit de corps which binds the different faculties of the same university versus the autonomy of these same faculties — a factor which also operates within faculties in terms of the autonomy of their component departments. These conflicts can be conceptualized as a question of collective identity (of an institution) against individual identity (of e.g. a department) (Hargreaves & Fullan, 2000), or more broadly as openness versus self-absorption. A third source of stress lies in the tendency towards specialization and the atomization/compartmentalization of knowledge, with the consequence that each discipline tends to over-estimate its own value. On this topic, Shulman (1993) observed that although they are active members of scientific communities which are organized by speciality and among which they exchange findings, methods and knowledge, teaching professionals seem not to have the same desire to share within the immediate scope of the subjects they teach. The “mission” of the university is a further source of

tension, in that (at least) two different rationales co-exist in universities — one centred on research, the other on teaching. From this co-existence one strain — research — emerges as the prevalent one, and this creates a new form of stress which inevitably affects progress in the teaching profession. By implication, the attribution of different “weightings” to the two principal functions of teachers in higher education (researching and teaching) means the professional prestige of teaching staff derives almost exclusively from their research activity and scientific output; it is their dedication to research which secures them stability in their profession, often to the detriment of teaching (Dill, 2003). Finally, and closely linked to the teaching side of things, is the tension which obtains in the teaching/learning dichotomy and the growing concern, in higher education, with the promotion of “significant” and “useful” knowledge. Cross (2001) draws our attention to the paradigm shift in this “new” higher education, in which the objective of the university is now a question of producing knowledge rather than giving instruction. This change of focus from teaching to learning requires a whole new array of teaching skills on the part of the teacher (Bireaud, 1990; Leclercq, 2001).

We should add that, as a consequence of the scientific and teaching autonomy at this level of teaching, teachers are expected to be capable of taking decisions on what they teach. This brings up the need to examine the didactic side of higher education, which in the French academic context is designated “university pedagogy” (Zabalza, 2006). In the first place there emerge questions relative to didactic transposition (Chevallard, 1991), i.e. the transformation of the knowledge of the teacher into content taught to the student [“savoir savant” and “savoir enseigné” (Charlot, 1997)]. Cachapuz (2001) distinguishes between didactic transposition of the first order (how to transpose knowledge into a teaching object) and of the 2nd order (how to transpose teaching objects into learning objects). Nóvoa (2002, p. 69) opts for the designation of “deliberative transposition”, which reinforces the idea that the mobilization of skills always involves an ethical dimension and the individual taking of decisions.

Then again, higher education teachers are also expected to take decisions — based on their own knowledge of education — on the form of education

they intend to opt for, the way the content of their subject relates with content from other domains, the learning situations they wish to construct, the teaching materials best suited to the objectives pursued. As a consequence they are also expected to be capable of applying their educating skills to the content they wish to teach (Hadji, 1997), transforming it into a skill internal to education [in the words of Roldão (2005), the “educational skills” and “educating skills” levels]. But this tension between educational knowledge and a practical, action-based skill is rarely consciously perceived by higher education teachers, who base their teaching decisions on the know-how accumulated over the course of their teaching career — acquired, in many cases, by imitating those with more experience.

On the application of theoretical knowledge in practical contexts, Shulman (1986) introduces the concept of “didactic knowledge of content” which links the domain of content with the ability to understand it and transmit it in an accessible form to others. In the words of Nóvoa (1988, p. 127), this concept moves us on from the old Shavian maxim of “those who can, do; those who can’t, teach”, to “those who can, do; those who can’t, but have mastered the teaching procedures, teach” (the phrase, according to Nóvoa, of valorization of the educational sciences to the detriment of the academic and scientific content of the subject) before leading us finally to a new maxim: “those who can, do; those who understand, teach” (Shulman, 1986, p. 14).

Therefore it’s essential that we approach the concept of “scholarship of teaching” in terms of the specific nature of higher education and the particularities of teaching intervention deriving from this specific nature. Boyer (1990, cited in Braxton *et al.*, 2002), first applied this concept to the domain of education, observing that one way of resolving the apparent contradiction between the need for investment in research (as a means of career progression) and the need to expand the remit of higher education institutions in an attempt to respond to the demands of society would be to eliminate the barriers between the different scientific domains and the teaching of their respective contents, given that both entities should be objects of research.

It’s in this context that the university undertakes specific objectives of research, teaching, learning

and, above all, the taking of decisions with regard to education; it is now accepted that higher education has its own status in terms of professional competencies (Zabalza, 2003), i.e. “professionalism in teaching” (involving the mastery of a series of skills and techniques and a practice underscored by a framework of guidelines and values, professionalism which, since it is not a static entity, can express itself via different ways of operating in the profession) (Nóvoa, 1992).

Bucklow and Clark (2000), writing on higher education in the United Kingdom, stress the importance of the promotion of the professional identity of teachers in higher education, and present an inventory of the obstacles to be overcome. In the first place is the lack of consensus in the sector, and the concerns felt by some teachers that attempts to “professionalize” education may end up interfering with the way they administer their teaching content, in this way diminishing the importance attached to the autonomy of the university. Then there is the argument that teaching is only one aspect of academic activity and that the professionalization of teaching will lead to the impoverishment of research activity. Finally there is the conviction of university teachers that they already *are* professionals in their field of knowledge, and that there is no need to further professionalize them.

At the heart of this conception of professionalism, and despite the apparent absence of consensus, it seems beyond doubt that a certain specific nature is progressively being attributed to higher education teaching, in domains closely linked to the characteristics of the target audience and the needs of the social context.

## THE IMPORTANCE OF TEACHER TRAINING

One of the fundamentals in the development of responses to the new challenges facing higher education is unquestionably teaching staff and their “teacher/professional training”. Kogan (2001) prefers this designation to “teacher training” tout court, insofar as the longer designation underlines the application of teaching skills in the broad sense, i.e. the specific ability of the university teacher to encourage and support his or her students in their

learning. Ambrósio (2001, p. 93), writing in defence of a form of teacher training which goes beyond the mere improvement of the teacher’s organizational and managerial abilities in the act of teaching, opposes to the concept of the training of higher education teachers the concept of “construction of teaching abilities and the teaching skills of university teachers/researchers”, stressing the dual function (teaching and research) of these professionals.

The current approach to teacher training in higher education therefore extends beyond its purely technical and utilitarian characteristics to embrace discussion on contextual issues related with the specific situation of teachers and with curricular issues, going well beyond strictly subject related issues.

In the words of Garcia (1999, p. 253), the education administered by higher education teachers can only be effective if it: is based on the current and future needs of the organization and its members; is centred on professional practice and based on critical reflection on teaching; aims to construct specific, scientifically-founded knowledge; emanates from the teacher him/herself, and occurs in a collaborative manner, in a group context and with colleagues, attaching importance to training in the different departments, on a first level, and in the institution as a whole, on a second.

Defining the relevant areas and crucial moments in the training of higher education teachers has been no easy task. In the first place, the importance of the supervised social integration of teaching professionals at the start of their teaching career seems unquestionable. However, training during the exercise of the profession is also essential, with contact with other professionals and respect for professional growth cycles also of importance (Alarcão & Sá-Chaves, 1994; Zeichner, 1993).

As for the formats used, the focus of professional development of teachers shifts from supporting teachers in the acquisition of new skills or new knowledge to the provision of opportunity for teachers to critically reflect on their teaching practices and to adapt new knowledge and new forms of intervention to the context (Chickering & Gamson, 1987; Darling-Hammond & MacLaughlin, 1995).

We might say that, with new needs being identified, different global training strategies are beginning to emerge:

- Joint work involving several teachers (Jesus, 2000), based on a model of “participative or integrated self-training”, i.e. the “valorization of the idea that all training is a process of individual appropriation which occurs during permanent interaction and confrontation with others” (Nóvoa, 1988, p. 127);
- Discussion forums with teachers as part of a process based on the teachers’ own convictions and values, with the emphasis on the development of personal and professional career projects (Esteves & Rodrigues, 2003);
- Opportunities for experimentation, with training centred on the resolution of concrete problems, whereby teachers develop their skills in a professional context and training acquires new, utilitarian characteristics (Canário, 1999; Zeichner, 1983);
- Application of practices of reflection on and about action (Schön, 1983), allowing teachers to reinterpret their experiences in the light of the interaction between the professional and his/her context (Leite & Silva, 2002);
- Time for training and time for teachers to incorporate new practices into their teaching routines (Garcia, 1999), in an attempt to prevent training from becoming a mere accumulation of facts with no connection to the exercise of the profession (Paquay *et al.*, 2001);
- Integration of training programmes in the missions of institutions, recognizing training as a factor in institutional change which cannot be detached from the institution in which it occurs (Nóvoa, 1988);
- Incentives, in terms of career progression, and professional rewards (Cross, 2001);
- Training based on current knowledge of learning and the process of change (Sparks & Loucks-Horsley, 1989);
- The possibility of further examination of the fundamentals of teaching, based on reliable frameworks of reference and going beyond the imitation/empiricist model of practice (Alfana, 1994).

Of the different characteristics involved in the professional development of higher education teachers which simultaneously responds to their own needs

and to the needs of the institutions in which they work, a number of training models place emphasis on one or more of these characteristics. At present, the preference is clearly for flexible and creative solutions which mobilize different reservoirs of potential behind the training process. Sparks and Loucks-Horsley (1989) identify five models for professional development in higher education:

The first model, oriented towards the personal and the individual, is based on the needs and the individual efforts of teachers. This model allows teachers to find solutions to the problems they themselves identify, using their preferred methods of teaching (Good & Brophy, 1994). The second model is based on the observation and assessment of the teacher in the classroom (though not limited to the classroom), with feedback as a valuable tool for critical detachment, reflection and analysis (Estrela & Estrela, 1977). It is also based on the premise that observation is a growth factor both for the observer and the observed, who both develop negotiating skills, mutual respect and the ability to critically reflect (Estrela, 1984). A third model is oriented towards professional development and is based on the solving of problems, generally curricular, where the teacher becomes involved in institutional development projects (Tom, 1985). The training model, the fourth model, is closely connected to institutional needs and based on objective-oriented training. It involves the replication of conduct and the acquisition of a repertory of teaching skills (Allen & Ryan, 1969). Finally, there is the research-based model, which emphasizes the training potential in the formulation of valid questions on teachers’ own practices and the application of a research methodology for discovering causes and solutions (Little, 1993).

In addition to the characterization of training models, some work has been carried out on the conditions necessary for adequate professional development regardless of the model selected. Chief among these conditions are certain characteristics of the institution, such as the climate of collegiate solidarity and experimentation (Little, 1982), leadership which validates training and integrates it in the teaching institution (Sparks & Loucks-Horsley, 1989), the articulation between a clearly-defined “top-down” orientation and respect for the proposals and needs of the different institutional structures



(“bottom-up”) (Fullan, 1982), and the existence — and diligent management of — resources allocated to training (Garcia, 1999).

In addition to the characteristics of the institutions in which training programmes take place, other questions merit discussion and analysis. Zabalza (2002) identifies different vectors of analysis and decision-making: the clear definition of the purpose of training, and clarification in regard to the training initiative (responsibility of trainees or leaders) and its compulsory/voluntary nature; the choice of training characteristics, whereby it is crucial to define whether the option falls on a generalist training — which according to Zabalza, has the advantage of creating a common arena of reflection — or on a specific type of training associated with the teaching of the various subjects; the choice of areas of training (exclusively “teacher” training or training covering several different areas, such as management and research), the selection of recipients (only for teachers or for all personnel in the institution, only for younger staff or for everyone) and the skills and backgrounds of the trainers (internal or external). Finally, the author underlines the importance of the existence in institutions of structures specifically created for teacher training, with qualified staff. These structures are designated by Kogan (2001) as “teaching development centres”.

Finally, we should mention that research on these training models in higher education is still limited, and little reflection has taken place on the way higher education teachers learn and construct their professional abilities, regardless of which model they follow (Wilson & Berne, 1999).

## THE TRAINING OF MEDICAL TEACHERS

The situation in schools of medicine does not differ greatly from that of other institutions of higher education, although the situation of teachers of medicine does have its specificities, insofar as we cannot forget the healthcare services which, in coexistence with other activities, constitute an essential part of the work of a teacher of medicine and a source of his/her social status. We should also bear in mind the fact that the career dynamic of these teachers

follows objectives which are not always compatible among themselves, since the healthcare institutions and teaching institutions in which they work operate under the aegis of different government ministries (Schormair *et al.*, 1992).

The specific nature of medical teaching is conditioned by a number of circumstantial factors. In the first place, and as a result of the changes in the funding systems for healthcare units, is the fact that many of these units find themselves undergoing a process of adaptation to new requirements, such as management objectives and cost-effectiveness, which leave less and less space for medical training. Secondly, and also due to a number of conditioning factors, is the fact that teachers work across an increasingly wide range of activities: the full-time teacher in the school of medicine is increasingly a rarity (Bland & Wersal, 2002).

Another question is identified by Weatherall (2006), writing on medical training and its history. It involves the discussion of the tensions between the teaching of science(s) and the teaching of clinical practice, which the author designates “the tensions between science and clinical practice in medical education” (p. 195). These tensions, according to Weatherall, cause many doctors to be trained with a notion that their profession is learned by practising it, and that the theoretical side is of little use.

With specific regard to the training of teachers of medicine, Irby (1996) argues that training must accommodate four different aspects: the development of teaching skills on the individual level (centred on teaching practice); the development of academic skills (centred on the collection, analysis and processing of data and the summarization and communication of findings); the development of leadership and group dynamics skills (centred on the management of services and resources); and the development of institutional dynamics skills (centred on the interaction between departments and the institution’s organizational and management structures). In this domain, and although the training of medical teachers is not yet globally acknowledged, various solutions have been emerging in the attempt to attribute meaning to teaching. As an example, we can cite the experiment of the Faculty of Medicine of Wake, North Carolina. Taking on board the four domains in which teachers of medicine exer-

cise their profession (teaching, research, clinical practice and academic/administrative work), Wake decided to offer four different avenues of progress in the career of trainees, using differently-weighted combinations of the four spheres of professional activity (Sherertz, 2000). Another example comes from the Faculty of Medicine of Harvard University, which in 2001 created, on the initiative of its director, an “Academia” constituted by teachers from the faculty who were recognized for their teaching skills and their involvement in the educational side of medicine, both in basic areas and in hospitals. The objectives of the Academy are fourfold: to promote the conditions for innovation and excellence in education, to promote the selection of the academic path among young teachers (with predominance of the educational component), the creation of teaching discussion forums linking the basic, social and clinical areas, and the creation of resources for supporting education (Thibault *et al.*, 2003).

The role of the training of teachers of medicine has recently been the subject of articles in medical education reviews (Guilbert, 1969; Irby, 1986; GMC, 1999). More recently still, the evaluation of training has been the subject of papers by Dennick (2003) and Godfrey *et al.* (2004). Using self-assessment questionnaires, Dennick (2003) evaluated perceptions of improvement in the practice of teachers at Nottingham University’s Faculty of Medicine. The findings indicated that teachers on the one hand affirmed that they felt confident in their teaching, and were able to put into practice the techniques they had learned as trainees, while on the other hand they stated that their students had benefited from the improvements in the teaching skills of their teachers. In similar fashion, Godfrey *et al.* (2004) used questionnaires to gather the opinions of training course participants on the advantages of their training in terms of teaching practice. The respondents felt they had improved in four main areas: the planning and development of learning activities based around small groups; “negotiation” with students on the objectives of learning; ways of underlining key points in classes by conducting partial summaries; and strategies for giving feedback to students.

Of all the conditions considered essential for the success of a teacher training programme, the most important is the recognition of training by the insti-

tution, or what Harden and Crosby (2000, p. 343) designate “the culture of good teaching practice”.

## FROM TEACHER TRAINING TO PROFESSIONAL DEVELOPMENT PROGRAMMES

Based on research from the 1990s which pointed to the need for a more global approach by teachers of medicine, the frames of reference adopted in the new millennium have been wider, extending beyond the “teaching to teach” formula. Coles (2000), for example, suggests that training programmes could include discussion forums on professional practice. More than merely teaching practices, teachers should be made aware of the importance of discussing with their students the characteristics of a profession in which decision-making is crucial, where the rules may not be applicable to every individual case and where a bad decision can be a matter of life and death. Chism (2002) recommends, however, that teaching practice should provide the framework for training, mobilizing it in a practical, “on the job” situation.

On this topic, an observation by Mårtenson (Buckley *et al.*, 2001), published after the author’s death, points towards some of the characteristics of the training of teachers of medicine, and calls for an articulation between two paradigms normally considered antagonistic — a skills-based training based on explicit educational objectives, and training centred on experience and reflection on this experience.

Resource materials for the formulation of training programmes have evolved recently, with texts on educating skills (Harden & Stamper, 1999; Newble & Cannon, 1995) now accompanied by other, more global texts designed to provide guidelines for the creation of training programmes. An example of this kind of text is the Guide by Harden and Crosby (2000) on the new roles required of teachers of medicine in their endeavours to provide a response to changes in the curriculum and the new learning environment in schools. According to the authors, although they are still seen as a source of information (for purposes both theoretical and practical, as in demonstration), teachers are also expected to be a model for their students, to be able to foment

learning in a small group as well as individual context (“personal advisor and mentor”), and also to act as evaluator (of students and curriculum), planner (of curriculum and courses), author (of educational resources such as guides and IT material). While this guide provides fuel for discussion on the various roles of the teacher and the best way to perform them, its most important contribution is in its closing recommendations. Since these recommendations and especially pertinent to, and in harmony with, the training philosophy which has recently been cultivated in the Faculty of Medical Sciences, they are worth enumerating individually: the importance of equipping the teacher with the necessary skills for accomplishing the tasks expected of them; the existence of programmes designed for large groups of teachers and of others whose objective is to provide a response to the specific needs of small groups or even individuals; the availability of training programmes designed to develop and improve skills already acquired and of programmes for the acquisition of skills not yet mastered by teachers. Finally, there is the promotion of what is designated “the culture of good teaching practice” (Harden & Crosby, 2000, p. 343).

#### THE TEACHER TRAINING PROJECT FOR TEACHERS AT THE FACULDADE DE CIÊNCIAS MÉDICAS (FCM)

The teacher training project for the teachers of the FCM was closely linked to the creation of a support structure for the teaching of medicine and the use of the problem-based learning methodology in the physiopathology department of the FCM, which we were asked to monitor (Rendas *et al.*, 1993, 1995, 1997 a,b,c).

The introduction of this methodology in the teaching of other course subjects was accompanied by a series of actions devised in response to specific needs voiced by the teachers, since the use of problem-based learning involved profound changes in the roles traditionally played by teachers. One of the first of these actions was specific training in stimulating group dynamics and performing tutorial functions (Rosado Pinto, 1993, 2002). Our role, at the outset, was to give support as required

to teacher training processes; the need for a more systematic, institutional support arose later. Thus, at the proposal of the Directive Council of the Faculdade de Ciências Médicas, in 1994 a support bureau for medical teaching (GAEM) was created, later to become the Department of Medical Education (DEM), which led to the invitation for us to work full time with the FCM.

The new institutional status of this bureau arose as part of a specific strategy which started with a process of exchange with the various departments and units, the aim of which was to characterize the FCM, make contact with department directors and the chairpersons of the various councils and, finally, to gather proposals and suggestions for suitable action based on the needs manifested by teachers and students. After the consultation process a programme of activities was drawn up around the four major vectors of action identified from the conciliation of interview material with the requirements of the Directive Council:

Collaboration in processes of evaluation (internal and external evaluations by medical faculties); teacher training; teaching practice advisors (openness to requests for assistance from departments which, individually, and on the basis of specific needs, approached the DEM); supervision of curricular innovation projects (especially the APP project of the department of physiopathology).

The actions of the DEM embrace the whole institution, including collaboration in the evaluation processes of which the FCM has been the object, and advisory services, in the domain of teaching, for Directive and Teaching Councils. On the departmental level, action included basic teacher training courses for young teaching assistants and monitors of the FCM, attended on a modular basis throughout the academic year; the organization of “Teaching Encounters” and Journal Clubs for the discussion of wide-ranging and cross-disciplinary topics; and workshops directed at specific methodologies, for instance “Computer-Assisted Learning” and “Study Techniques”. Finally, there was assistance for the preparation and evaluation of the practices of teacher trainers, with the DEM working on the planning and observation of classes and the formulation, application and processing of the respective teaching evaluation questionnaires; and assistance



in lesson planning for teaching aptitude examinations and for pooling of teaching staff from different departments.

## PRINCIPLES FOLLOWED IN TEACHER TRAINING IN THE FCM

In addition to the characteristics already mentioned (where assistance and validation of the role of the DEM in the Faculty of Medical Sciences are major factors), the aspect most valued by teachers at the faculty were the following:

### THE IMPORTANCE ATTRIBUTED TO CONTENT AND THE PRODUCTION OF “EVIDENCE”

From the many interviews we conducted with teaching staff, two concerns emerged as fundamental. On the one hand was the necessity that there should be demonstrable advantages in the partnership with the DEM, especially from the point of view of the students' learning. Teaching staff consistently revealed themselves averse to innovations which do not translate into better results in the acquisition of skills by students. On the other hand, and directly connected to the question of students' learning, was the question of scientific evidence and the priority given to evaluation. Thus one of the major investments of the Department of Medical Education was the creation and application of tools for evaluation and presentation of results that provide timely — and therefore useful — feedback (Rosado Pinto, 1993).

### CREATION OF SUPPORT MATERIALS FOR TEACHING PROJECTS

Teachers and students alike attached great importance to investment in the production of classroom support materials. This aspect was of importance for the strategy delineated by the whole institution. Requests for training invariably came accompanied by requests for texts and articles that students could read as part of their training. One of the key roles taken up by the DEM was therefore that of compiling and providing bibliographical references in the domain of teaching and the creation of summary materials for different teaching subjects.

## PHASING OF PROJECTS AND TEACHER TRAINING

The different stages in a given project, with the training which underpins the project, was another of the characteristics of the teaching projects we monitored. With regard to training, this involved assessment of the progressive and negotiated acquisition of teaching skills.

It was also clear that for a given project to be successful it had to have as its basis a problem/need identified by the teachers or in articulation with the teachers.

It was also noted that the resolution of the problems identified should always occur in a context of reflection and in-depth theoretical examination, transposing to the domain of teaching a practice which is widespread in clinics and among teachers of medicine, and which combines research with reflection and action.

Finally, and again with regard to training, respondents appreciated the fact that the objectives of training were the development and enrichment of skills, with no evaluatory component.

## DISSEMINATION

One of the essential characteristics of the teaching projects we monitored was the joint publication (DEM/other departments) of articles in national and international reviews. Since publication is a key component of both academic and medical activity, it had an extremely important role in the projection of the Department of Medical Education and the validation of the scientific tenor of its activity (Barahona *et al.*, 2003; Rendas *et al.*, 1998, 1999; Rosado Pinto *et al.*, 2001).

Finally, and more than any results per se, what we should really emphasize is the total integration, in the FCM, of the partnership between Medical Sciences and Educational Sciences. The opinions we systematically gathered on this topic stressed the importance of our presence in the institution as specialists in teacher training. In addition to underlining our supportive role in the institution's teaching project, teachers at the FCM also acknowledged the importance of the contribution of the DEM to their educational research.

The role of educational specialists in higher education institutions has not yet received the recognition it deserves. This lack of recognition stems, in

our opinion, from an absence of awareness of what is being done in this area and, above all, from the fact that positive experiences in overcoming obstacles tend to go unnoticed. We hope to contribute to

a change in this situation with the presentation of the work of the Department of Medical Education of the Faculty of Medical Sciences of Universidade Nova de Lisboa.

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