

Teacher Education for the prevention of indiscipline in the classroom

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ABSTRACT:

This article provides a re-appraisal of two sets of studies in an attempt to rethink the issue of teacher education for the prevention of indiscipline, in the light of the experience acquired by the author as a facilitator in initial and ongoing training courses for teachers in higher education. Despite the differences in terms of the theoretical orientations and methodological strategies that informed and structured these studies, the author attempts through them to outline strategies, based on his training work with teachers, for the creation of a culture of pro-active discipline in the classroom. In both cases the role of the teacher is a vital element in the accomplishment of this *desideratum*. In the first case, the teacher acts as an agent in the organization of the class, using the skills perfected in his/her classroom management training. In the second, the teacher is viewed as a professional who includes in his/her array of teaching skills and competencies certain practices capable of promoting among pupils a participatory and motivated involvement in the creation of discipline in the classroom. Based on the elements which characterize training action, and the key results obtained from these studies, the author adds his own reflections for the organization and structuring of teacher education for the prevention of indiscipline.

KEYWORDS:

Indiscipline, Teacher Education, Overcoming conventional dichotomies, Time and assistance.

INTRODUCTION

Indiscipline in the classroom is a phenomenon which, owing to its extent and its social resonance, requires the attention of all those who are directly or indirectly involved in teaching, and especially those who perhaps suffer most from its effects: the teachers themselves. My experience of research in this area has shown that, contrary to the accepted wisdom of the reference literature, in many cases it is the teachers who have *more* experience who run the greater risk of suffering from classroom indiscipline in the personal and professional spheres, since they are culturally — and in some cases technically and emotionally — more vulnerable than their colleagues who have recently entered the profession and are less capable of preventing situations in which breaches of discipline occur.

Disciplinary intervention of a preventive nature, conceived as the ability to understand and neutralize the causes of misbehaviour in the classroom, is a complex issue and one of the most demanding parts of teaching. Research in Portugal and other countries has shown that this ability is not always present in the cognitive and procedural repertory of many teachers, which means training, as a fundamental part of the professional development of teachers, can contribute towards a positive change in their practice and the representations which underpin it.

In view of the importance of training in this aspect of teaching, this paper presents an overview of the training model adopted in two sets of studies,

submitted as part of doctoral theses completed in 2003, which sought to outline strategies for promoting better discipline. Drawing on some of the most relevant characteristics and outcomes of the aforementioned training/research and his subsequent experience in teacher education, the author then seeks to identify elements for the articulation and organization of teacher education for the prevention of indiscipline.

FIRST SET OF STUDIES

METHODOLOGICAL BRIEFING

The first set of studies we have selected for presentation in this paper involved 6 teachers and 21 students in their sixth, seventh and eighth years of schooling. They combine a case study methodology proper to a qualitative research strategy with a more positivistic and experimental perspective, via the use of mitigated single-case ABA experimental design.

The aim of this research was, in the first place, to analyse the effects of a process of training/supervision (designed to instil in trainees a preventive discipline style centred on classroom management strategies) on the conceptualizations of teachers, on teaching practice and on the behaviour of students. In the second place, and with regard to two-teacher classes involved in the experiment, the objective was to determine whether or not the effects of intervention were transferred (in terms of changes in

the conduct of students) to other subjects/classes whose teachers had not taken part in the training initiative.

The methodological instruments used were: a checklist for observation of classroom management and teachers' discipline strategies (IOEGAD), a checklist for the systematic observation of the indisciplinary conduct of students, observations of an informal character and semi-direct interviews with teachers and students.

THE TRAINING PROGRAMME

Basic premises

The training programme was based on the recognition that adequate disciplinary conduct by teachers depends essentially on the use of the classroom management strategies identified in the theoretical foundations associated with the classroom management model.

Our aim was to introduce this model to teachers and trainers, so that they could acquire, to paraphrase Brophy (1988), not only propositional knowledge (description of the management strategies), but also procedural knowledge (how to implement the strategies) and conditional knowledge (when to implement them, and why). In our pursuit of the latter two objectives, we recognized — and this was one of the most important assumptions in the training administered — that the practice of the teacher, within greater or lesser limitations, has epistemological status; and therefore it was not merely a question of applying the classroom management model in the classroom but rather of acquiring context-based skills which permit teachers, as Alarcão (1991, p. 16) notes, to take what is most relevant from the model, what is most suited to each situation, without being a prisoner of the model's strictures.

Training was therefore organized on the basis of collaborative supervision and research-action, via a process which leads trainees to reflect on how to solve specific classroom situations which arise in the course of teaching-learning practice, so that they can appropriate and reconstruct, in a context-based fashion, the strategies arising from the theoretical and empirical framework of the classroom management model. We also sought, from a constructivist perspective, to encourage work leading to an aware-

ness and possible transformation of the (possibly inadequate) beliefs of teachers on the subject of indiscipline.

The training model was therefore broadly similar to the “constructivist model for teacher education” proposed by Thomaz (1990)¹. This model, which we will describe in more detail presently, has been implemented by the author in various training situations, such as those involving the six teachers participating in the set of studies now under review.

Description of the training model

To help the teachers adopt the classroom management method, a training model consisting of the following stages was used:

- *Pre-observation meeting*: a session designed on the one hand to brief participants on the training programme and to cement a relationship of trust among those involved, and on the other to elicit, via responses to a set of open questions, information on the various meanings attached by teachers to the phenomenon of indiscipline, the idea being to make the teachers more aware of their own views in this regard.
- *Pre-experimentation observation*: systematic and informal observation, by the trainer, of the disciplinary skills of teachers and the indisciplinary conduct of students.
- *Meetings to promote the comparison of teachers' ideas with the key aspects of the classroom management model*: this stage comprised two phases. In the first phase, which lasted a single session (deliberately organized to cultivate awareness among the trainees of their own perspectives on theories on the indiscipline phenomenon), the opinions voiced earlier were summarized (in the answers to the questions posed by the trainer at the first stage) and the findings of observation released, elements which formed the basis for a group discussion allowing each trainee to express his/her ideas on the concept and causes of indiscipline, on the disciplinary strategies implemented (or which the teacher wishes s/he could implement), the reasons for their use, their educational implications, and the reasons for the

difficulties they feel. In the sessions held in the second phase, we encouraged trainees to compare their own conceptions and practices with the key features of the classroom management model.

- *Experimentation*: the longest stage in the training process, with a duration ranging, for the six teachers in the study, from 8 to 18 weeks. For each trainee, this stage involved a series of research-action cycles. Each cycle comprised three phases — *planning/testing*, *action/observation* and *reflection/evaluation*.

First step in the *planning/testing* phase was to identify which disciplinary behaviour on the part of the teacher should be promoted and reinforced, and which should be discouraged and, if possible, eliminated.

The next step was to create conditions for the transfer of these skills to the classroom, using (where they entailed some degree of complexity) two of the strategies recommended by Joyce & Showers (1988): *modelling and demonstration*, via practical situations giving teachers an opportunity to appreciate how alternative teaching skills work in practice; and *practice of skills in simulated conditions*².

In the *action/observation* phase the idea was for each teacher to accomplish the objectives set earlier, in terms both of the implementation of desirable skills and the reduction or elimination of inadequate classroom management conducts.

Intervention was also oriented towards an “assertive discipline” approach, in an attempt to help the less assertive, up-front teachers deal with the phenomenon of indiscipline and impose their own rights without infringing on those of their students. This approach principally addressed, to a greater or lesser degree (depending on the needs of each teacher), the non-verbal elements³ of communication.

The performance of each trainee during this phase of the research-action cycle was monitored by the trainer, who for each new set of skills introduced, made observations on the conduct of students and on the disciplinary conduct of the teachers.

Each cycle in the research-action cycle was

complemented by *analysis/evaluation* of the observations made in the previous phase, and the reports and impressions of each teacher on the events in his/her classroom.

Before moving on to the next stage we imposed a three-week “moratorium” during which trainees were permitted to seek the advice of their trainers if they wished to. The idea behind this moratorium was to allow for a smoother transition from a situation of frequent supervision and support to one in which the trainees acted with greater autonomy, thus avoiding regressive conduct on the part of the teachers.

- *Embracing change*: In this final stage the disciplinary conducts and classroom management methods introduced in the previous stage are autonomously practised by the teachers, with no further supervision from trainers. To observe whether or not the innovative practices have been adopted, a series of observations directed at teachers’ disciplinary strategies and the conduct of their pupils is carried out 2 months after the final supervised training.

RESULTS

In view of the objectives of the training programme as stated above, we shall now examine some of the more significant results.

Teachers’ conceptualizations of indiscipline

Their experience of the training process led some participants to change their discourse on the phenomenon of indiscipline with regard to the two dimensions under analysis: the causes of indiscipline and the disciplinary strategies considered most adequate in combating them.

The data collected shows that teachers did generally take on board the new conceptions deriving from the empirical-theoretical classroom management model which informed their training, but not to the extent that they displaced the more deeply-rooted conceptions already held by the teachers. In other words, despite the lacunas that this type of research entails, we can affirm that the impact of this initiative did not take the form (contrary to what the author sees as the over-idealistic visions of certain proponents of conceptual change) of a sudden

qualitative leap, a rupture manifested by alterations to previous content, but consisted rather in a reconciliation of new conceptions with those already existing, via a process of cross-fertilization and restructuring.

Disciplinary strategies of teachers

Generally speaking, between the pre-test and intervention periods all teachers exhibited an improvement in the use of the different strategies they learned during training. This improvement was expressed in the significant increase (or decrease, depending on whether the measured factor was positive or negative) in recorded values.

Between the intervention period and the follow-up (2 months after training finished), three teachers remained faithful to the new strategies, but without any significant statistical impact on strategy as a whole. Two teachers actually exhibited regressive behaviour with regard to most of the strategies they had been trained in, while one teacher exhibited the same regressive behaviour but across a more restricted range of strategies. It should be noted that regressive behaviour was observed in those teachers who received supervision for a shorter period of time, which suggests a relationship between the temporal dimension of the training actions and their benefits for trainees.

There were some important collateral effects in terms of the strategies included in the observation checklist. These collateral effects were not intentionally an object of observation, something which the author believes can be explained either by the “principle of implication of skills” formulated by Albano Estrela *et al.* (1991) or by the fact that over the course of the experimentation period the teachers paid more attention to these strategies than they would have had they not been alerted to them by their participation in the training initiative.

Conduct of the students

For all 6 teachers taken as a whole, a reduction in student misconduct occurred between the pre-test and post-test phases. This reduction was statistically significant in the distribution of conduct in the two observation periods in the classes of 5 teachers. This trend was however countered by an increase in indiscipline in the classes of 3 teachers in the *Social*

Conventions category and with all teachers in the *Student-Student Relations* category.

Analysis of the data also revealed an increase in the frequency of conducts whose significance teachers tend to play down, because their disruptive effect is lesser, or which lie outwith their control (e. g., *throwing paper and other waste to the floor*). Students seem to have found in these “low-level” disruptive conducts an outlet for the frustration and instability caused by classroom management methods which were more restrictive than they were faced with prior to the training initiative.

The aforementioned changes in teachers’ classroom management and organization strategies occurred between the post-test and follow-up stages: on the one hand we observed a reduction in indiscipline in the classes of teachers who deployed the new strategies in a sustained fashion, while on the other, indiscipline increased in classes where regression had occurred in the deployment of the strategies.

With regard to identifying signs of the cross-institutional transference of the positive changes observed in the conduct of two participants in the training initiative, the data obtained on the basis of the notes made in the classrooms of 6 teachers (3 per class) suggests that the effects of training did not transfer to the wider context.

Data obtained from qualitative analysis

Qualitative analysis of the information collated on the opinions of those involved in the teaching process confirmed the quantitative findings on the positive effects of training on student conduct, and the development of disciplinary skills by the teachers.

The “off-the-cuff” opinions expressed by teachers revealed that the training they had received enabled them to become aware of changes in the conduct of their students; it probably also contributed to the development of more adequate disciplinary practices, generated positive effects in the emotional and affective spheres of some teachers and, curiously, seems to have led to increased metacognition (knowledge, awareness and control of their practices) among some teachers.

The qualitative analysis⁴ of the reasons for non-regression in the follow-up phase (2 months after

the completion of training) in the classes of three teachers yielded the following conclusions: ease of appropriation of the disciplinary strategies addressed by training, the characteristics of the supervision provided (extended over time, frequency and quality of support, gradual attenuation of the supervisory process), the motivational input provided by the observation of the efficacy of the strategies put into practice, and the habit of self-vigilance were all factors which, with due allowance made for the conclusions yielded by this type of data, created conditions for greater expectations among trainees with regard to greater controllability⁵ and (consequent upon the latter) sustained change in their disciplinary strategies.

Extension of qualitative analysis to the reasons for regression, in the follow-up stage, of the results observed in the classes of two teachers strongly suggested — in the light of the reinterpretation of quantitative data — that the time factor (the two teachers concerned received considerably less training than the others) was mainly to blame for the failure of the disciplinary strategies of these two teachers to exhibit any sustained change.

SECOND SET OF DATA

THEORETICAL AND METHODOLOGICAL FRAMEWORK OF THE RESEARCH

Since the findings of the set of studies we presented above do not contain signs of the transference of behavioural change to other educational contexts, we subsequently devised another intervention programme based on psychological models, more particularly the Vygotskian socio-cultural model and the self-determination model formulated by Decy and Ryan in the sphere of theories on intrinsic motivation.

The objective of this new initiative was to cultivate among participants a style of disciplinary conduct capable of developing greater behavioural self-regulation by students, working on the assumption that trans-temporal and trans-situational changes could be accomplished in the conduct of students.

This intervention programme involved 5 teachers of Portuguese Language and 3 samples of students from sixth-, seventh- and eight-year classes.

For sample 1 (comprising 29 students) we used a quasi-experimental pre-test-post-test design with a control group, while for samples 2 (with 11 students) and 3 (10 students) we used a hybrid design combining quasi-experimental pre-test-post-test with control group characteristics and single-case ABA experimental design characteristics.

The duration of the initiative was one academic year for teachers working with sample 1 and four months for teachers working with samples 2 and 3.

The training model followed as part of this research was designed (like the model used in the studies described above) to effect a reconciliation of opposing perspectives: socio-constructivist epistemology and practical rationality on one side, and acquisition / technical rationality on the other.

The instrument used to bring these two perspectives together was teaching supervision, the idea being to ensure that the skills to be developed should not lead to absolutist precepts based on the theoretical-empirical knowledge provided in presence-based training sessions, but instead contribute to a personalized disciplinary practice which incorporates this knowledge in a reflective and critical sense.

Structurally, the training process was identical to the one we followed in the studies examined earlier. The differences lay in the content (designed to promote the self-regulation of students) and in the greater volume of practical work, which primarily involved the construction of instruments for recording and observing (which each teacher then adapted in accordance with the particular characteristics of his/her class). The objectives and content of the training initiative are presented in the table on the next page.

RESULTS

For the subject in which the initiative took place, results both quantitative (based on observations in the classroom) and qualitative (based on the opinions of teachers and students) showed a significant reduction in student indiscipline in all three samples. This reduction was found in all behavioural categories, contrary to the findings of our research within the theoretical-empirical framework of the classroom management model.

As for the evaluation of the external impact and the stability over time of the effects of the initiative

TABLE 1
OBJECTIVES AND CONTENT OF THE TRAINING INITIATIVE

| OBJECTIVES | CONTENT |
|---|--|
| <ul style="list-style-type: none"> • Addressing the issue of discipline within a framework of student self-regulation. • Understanding the factors which contribute to indiscipline in the classroom. • Analysing and questioning the strategies habitually used by trainees for resolving situations of indiscipline. • Developing preventive discipline management skills. • Identifying the essential values to be didactically cultivated in the promotion of regulations associated with disciplined conduct. • Developing debating / moderating skills. • Promoting self-regulation in the conduct of students (assuming that some of the skills to be cultivated in teachers via conceptual, procedural and attitude-related content are conducive to a disciplinary style which promotes self-regulation in students). | <ol style="list-style-type: none"> 1. (In)discipline as concept. 2. Preventing indiscipline — delimiting the concept from a perspective of behavioural self-regulation: <ol style="list-style-type: none"> 2.1 The importance of first impressions. <ol style="list-style-type: none"> 2.1.1 Adapting rules in the classroom. <ol style="list-style-type: none"> 2.1.1.1 “Rules on rules”. 2.1.1.2. Procedures for establishing rules with students. 2.2. Logical consequences. <ol style="list-style-type: none"> 2.2.1. Concept. 2.2.2. Procedures for identifying logical consequences with students. 2.2.3. Procedures for the administration of the above. 2.3. Contracts with students. 2.4. Observation and evaluation of infringements by students: techniques and instruments. 3. “I” messages and impact messages. 4. Peaceful resolution of problems. 5. Techniques for the conceptual construction of values. 6. Application of techniques for the conceptual construction of values and the resolution of problems within the context of the analysis and interpretation of texts in Portuguese Language classes. 7. Debate moderating techniques. |

on student conduct, only sample 1 yielded any statistical evidence pointing in this direction. With regard to the evaluation of the effect of the initiative on the discourse of students, on the level of the motivational orientation of their conduct again only sample 1 (and even here only relative to older students) yielded statistical evidence of an increase in internal orientation and a decrease in external orientation.

We should also point out the differentiating effects of the time variable on the outcome of the initiative: students (sample 1) who benefited from the initiative over the course of a whole academic year presented better results, from the point of view of behavioural self-regulation, than those (samples 2 and 3) who participated in the initiative for only a 4-month term. This confirmed one of the basic (albeit non-explicit) assumptions of the research: that only longer-term initiatives are capable of causing changes in complex processes which are embedded in the socio-cognitive and emotional development processes of students.

Exploratory evaluation, via the case-by-case and global analysis of data on the strategies and practices we intended to cultivate via the supervision/training programme, shows that the programme had positive effects, for all teachers, in terms of the general skills addressed by the programme, such as the use of “I” messages and *impact-messages*, techniques for the conceptual construction of values and the resolution of problems in the analysis and interpretation of texts, moderating debates, and mediating in the development in students not only of their ability to take note of indisciplinary conduct in the classroom but also in the *administration of the logical consequences*.

This evaluation confirmed what was already suggested by the quantitative and qualitative data on the impact of the initiative on students — and as Albano Estrela (1991, p. 28), paraphrasing Arturo de la Orden, notes, impact is the most important parameter in the evaluation of the effects of training programmes for the development of professional skills among teachers.

A recognition that the training initiative contributed to the development of practical skills was also present in the discourse of the trainees themselves. Their testimonies revealed that the training initiative helped enrich them professionally, with the acquisition of disciplinary skills, a greater degree of preparation to confront and prevent indiscipline and, in two cases, the development of practice favourable to student self-regulation. Analysis of the discourse of the teachers revealed that most also gained skills in coordinating the analysis and interpretation of texts.

In parallel with and closely related to these acquisitions, analysis of the discourse revealed that the training programme probably contributed to the acquisition of professional knowledge which can be used in professional practice and create leverage in bringing about changes in attitudes towards the issue of (in)discipline in the classroom. With regard to this latter aspect, and according to the discourse of some participants, the training programme seems to have contributed towards a change in the way the roles of both teacher and students are envisaged when discussing discipline.

FINAL CONSIDERATIONS

At this point we must stress that the positive results achieved with the training initiative are to some extent the outcome of the actual training process followed in the two sets of studies discussed here. From the point of view of their conceptual framing in the issue of continuous teacher education, this outcome reflects the national and international objectives voiced for this issue, and which are underpinned both by orientations of a *socio-constructivist* and *cognitive-mediatory* character and by *school-centred perspectives on the professional development of teachers*. In other words, this type of training was based on premises centred on analysis, as noted by Ferry (1987), or oriented towards research — “inquiry oriented”, in the words of Zeichner (1983). It also revealed that, owing both to the specific characteristics of the training process itself (especially those deriving from the need to acquire and develop skills not included in the procedural repertory of teachers) and to its immense potential from the point of view of its contribution to the creation of a teaching profession

with a sound scientific basis, while it is part of the so-called technical rationality model it also transcends it via its socio-constructivist dimension.

This was, then, a broad-spectrum training process which reconciled, in a reciprocally beneficial fashion, theoretical and epistemological perspectives previously considered mutually antagonistic in terms of the theoretical framework in which teacher education is conceived. This, we might affirm, goes a long way towards explaining the results obtained.

The above showed, for the two sets of studies, that successful training initiatives require, as the literature suggests (Day, 1999; Eraut, 2000; Hargreaves, 1998) *time* and *assistance*. Both variables are decisive for the acquisition of disciplinary skills by teachers, and also for positive changes in the conduct of students. And both must always be borne in mind when devising any training plan or programme designed to influence the acquisition of, or changes to, practices designed to prevent indiscipline.

Meanwhile, the data collected from our research shows that in terms of relational and disciplinary conduct teachers need to learn “specialist skills” (Dreyfus & Dreyfus, 1986). More than at any other period, teaching is a highly complex and intention-fraught activity which requires some extremely refined relational and disciplinary skills, in combination with a solid knowledge of the subject being taught. Unlike in the past, today’s teaching scenarios require the acquisition of an articulated repertory of knowledge, know-how and attitudes.

In training teachers to develop their own solutions it’s important (in the light of the processes followed in this research) to recognize that all teachers are different and to understand that *individualization* is a principle which must be taken into account. According to this principle, “imposing” skills (whatever these may be) in a uniform fashion is harmful. We have to remember (as constructivist theory shows) that knowledge and skills always involve a process of reconstruction by the learner, and that one of the characteristics of systems, even the personal, is self-organization, according to which only that which makes sense as part of the system is taken on board.

Collaborative supervision, with a critically-minded friend or supervisor, is a valuable tool in

the promotion of this individualization. The person performing the collaborative supervision has the job of establishing complementary interaction which is flexible (dialogue and negotiation), not rigid (dependence/passivity), with the teachers.

Knowledge of how adults, and more specifically teachers, learn suggests that the most decisive element is practice. Consequently, the most appropriate content for lending significance to the various theoretical offerings which the supervisor may bring is the educational practice of the teacher, his/her accomplishments, and the difficulties and problems s/he faces. The supervisor works with the teacher, helping him/her develop as a professional by establishing a nexus between the theory and the teacher's practice, framing it within a scientific context of observation, analysis and reflection.

However, such interaction/partnerships are rarely to be found in schools. The culture of the school leads teachers to work in isolation, and isolated teachers rarely have the opportunity to receive help via modelling and feedback, two of the fundamental tools for acquiring any skill.

One basic operational premise emerging from the two sets of studies is that all those involved in the schooling process, teachers and students alike, should receive assistance in their performance. For newer teachers this assistance is fundamental, for the attrition caused by problems in the management of (in)discipline can lead to the emergence of a survival mentality, a limited range of teaching methods and resistance to curricular and educational change which may persist throughout the teacher's career (Huling-Austin, 1986; Romatowski *et al.*, 1989; cited in Gordon, 2000, p. 11).

But assistance for teachers should also extend to those who are setting out on their training. Indiscipline is a phenomenon which has to be confronted, and therefore teacher education must take it into account. We have to address the problem of indiscipline right from the early stages of training — the crucial period in the personal and professional development of future teachers.

The initial training curriculum should therefore equip the future teacher with a knowledge of disciplinary processes in their theoretical dimension (causes of and circumstances which favour indiscipline, indicators for detecting problems, establish-

ing and maintaining discipline, getting students involved). But initial training cannot be reduced, as so much research in Portugal and other countries has shown, to the merely academic dimension: it must also include a practical and reflective dimension, and one of the fundamental objectives of initial teacher education should be to provide the trainee with a learning environment which offers ample scope (in the form of real or simulated situations in teaching placements) for resolving various problems by mobilizing various strategies — namely, those included in the training programmes adopted in the two sets of studies examined here.

In the relational and disciplinary spheres, initial training (just like continuous training) requires development of a very specific kind of professional skill, a complex ability which combines knowledge with know-how. Theory is combined with practice, and technique with art. Therefore, there is no place for exclusivist positions in relational and disciplinary training, as these invariably lead to a narrowing of the scope of options on which training is based.

We can summarize the above with a series of proposals for promoting the professional development of teachers in the relational and disciplinary sphere, in the light of what we have examined over the course of this paper. These proposals are:

- Training should be continuous, for changing practice and the representations which sustain this practice is a long, slow and complex process;
- Training should address the specific needs experienced by teachers in their educational practice and should help teachers reflect upon and clarify educational situations and find solutions to the problems they are confronted with;
- Training should be based on interactive dialogue with a partner who observes the teacher's classes, the objective being to induce the teacher to think retrospectively about what has gone on in his/her class and to reconstruct the events from a different point of view;
- Training should involve collaboration among teachers, and between teachers and train-

ers, in such a way that trainees can voice the doubts and anxieties they feel with regard to the problems they face, and receive from their colleagues and peers practical and theoretical information, comparative analyses, and suggestions for the resolution of problems. In this way trainees feel they are no longer isolated and can count on the experience of their colleagues and the knowledge and the support of their trainers;

- Training should be centred on reflection and research into teachers' practices, with the objective of increasing teachers' awareness with regard both to their form of conduct and the premises on which their practices are based;
- Training should challenge tacit assumptions, and should therefore provide opportunities (in the form of debate, theoretical and technical information, demonstrations based on realistic examples) for teachers to appreciate why the new practices are preferable to those they habitually employ;
- Training should be rooted in the school and in the specific context in which teachers work, avoiding the problems of relevance, transfer and use of knowledge encountered in traditional training models;
- Training should be oriented towards the acquisition and development of skills related to and springing from action, with the objective of perfecting the professional performance of each and every teacher;
- Recourse to theoretical frameworks of reference should occur in close connection with

an analysis of practice, in this way transcending the dichotomy of technical and practical reason which has traditionally dominated debate on the training and professional development of teachers.

We shall close with a brief recapitulation of the ideas with which we opened this final section. If it is to be effective, relational and disciplinary training has to transcend conventional dichotomies. One of the basic principles of this perspective on training concerns the development by the teacher of the ability to understand problems in a situational light, and to reconstruct his/her own experience and teaching skills via the appropriate assistance and partnerships. But since the training in question addresses an area in which the procedural repertory of teachers is usually not very diversified, as several authors have noted (Domingues, 1995; Estrela, 1986), some theoretical and technical training is also necessary. To close the rift between (necessary) theoretical training and (essential) practical training, we have to effect an approximation of the socio-constructivist, practical rationality epistemological model with the so-called acquisition / technical rationality model, using strategies and methodologies such as class supervision and research-action, with observation and analysis of situations allowing the teacher (as a professional who ideally is responsive in all domains of his/her activity) to build "in an idiosyncratic manner, his/her own professional skills, which incorporate and transcend the skills deriving from technical rationality" (Gomez, 1995, p. 110).

ENDNOTES

1. The model proposed by this author is based on the framework devised by the American sociologist Everett Rogers (1967, cited in Thomaz, 1990), comprising five stages through which individuals pass on their way to embracing change. These stages are, as cited in Thomaz (p. 169): “(1) Gaining of awareness: at this stage the individual is exposed to change but lacks detailed information on it; (2) Interest: at this stage the individual, favourably impressed, seeks additional information; (3) Experimentation: at this stage, the change is applied on a small scale, allowing the individual to appraise its utility; (4) Evaluation: this stage consists of a kind of mental experimentation in which the individual considers the possible consequences of applying the change to past, present and future events; (5) Embracing: at this final stage the decision to embrace the change is made”.

2. Where more than one trainee was involved and in cases where one exhibited, in the opinion of the trainee, reasonable proficiency in a given skill, the development of this skill by the other trainee, who exhibited more difficulty in its application, also included — wherever possible — classroom observation by the latter of the way the more proficient trainee applied the skill, with subsequent discussion of the observation.

3. The elements of non-verbal language addressed were: *eyes* (looking at students in the eyes, not lowering them), *facial expression* (eliminating gestures of insecurity, such as trembling lips when speaking), *posture* (keeping shoulders straight and back erect), *volume of voice* (increasing the volume), *tone of voice* (seeking to convey, where appropriate, a tone that is less harsh and more friendly). To effect the desired changes conduct practice took place in trainer-trainee encounters, while trainees also practised at home — in front of the mirror and using audio recordings for subsequent feedback on how well the trainees performed.

4. Based on the discourse of participants, the researcher and the reinterpretation of quantitative data.

5. Manifest in the changes (albeit limited) in the beliefs of teachers, as revealed in post-initiative interviews, with regard to the causes of indiscipline and the ways to combat it.

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