

Educational Discourse and Educational Practice

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ABSTRACT

This article sets out to systemise a series of reflections on the nature of educational knowledge and the way of producing it, placing special emphasis on the practical sense and regulatory content of this type of knowledge. The reflection is developed in three parts. In the first, certain symptoms are detected and explained that reveal the current situation of educational science. In the second part, a concept of the discipline of Education is explained along with three different ways of creating educational knowledge in line with its relationship to educational practice. Finally, mention is made of a kind of Decalogue on the emphases we consider ought to guide the construction of such knowledge today.

Key words: Educational knowledge, educational practice, practical knowledge.

RESUMEN

La finalidad de este artículo es sistematizar una serie de reflexiones sobre la naturaleza del conocimiento pedagógico y las formas de producirlo, con especial énfasis y su significado práctico y contenido normativo. La reflexión se lleva a cabo en tres partes. En la primera, se detectan y exploran ciertos síntomas que revelan la situación actual de la pedagogía. En la segunda parte, el autor formula un concepto de pedagogía y tres maneras de elaborar conocimiento pedagógico según su relación con la práctica educativa. El artículo finaliza con la propuesta de una suerte de decálogo sobre cómo hacer pedagogía hoy.

Descriptores: Pedagogía, práctica educativa, conocimiento práctico

RÉSUMÉ

Cet article entreprend de systématiser une série de réflexions sur la nature de la connaissance éducative et sur la manière de la produire, en mettant une emphase spéciale sur le sens pratique et le contenu réglementaire de ce type de connaissance. La réflexion est développée en trois parties. Dans la première, certains symptômes sont détectés et expliqués, révélant la situation actuelle de la science éducative. Dans la seconde partie, un concept de la discipline de l'Éducation est expliqué, avec trois différentes manières de créer la connaissance éducative en accord avec sa relation à la pratique éducative. Enfin, on fait mention d'une sorte de Décalogue sur les accents qui, selon l'auteur, devraient guider la construction (l'interprétation) de telles connaissances aujourd'hui.

Mots-clés: vla connaissance éducative, la pratique éducative, les connaissances pratiques

THE ORIGIN AND FIRST VERSION OF THIS WORK was a lecture read at the International Congress on Pedagogy and Education in the 21st Century held in 2004. This congress – together with other events organized by the Complutense University of Madrid – commemorated the centenary of the creation of the first university chair in Pedagogy in Spain. The title I gave that lecture was “Hacer pedagogía hoy” [Doing educational science today] and it reflected upon the sense and construction of educational knowledge today. This work is a rewrite – with various additions and omissions – of the content of that intervention.

I began the lecture with an almost tautological declaration: doing educational science today should consist in limiting and daring oneself to do it. Limiting oneself, because what it is not about is converting educational science into the substitute for other disciplines that also have an interest in education (psychology, sociology and philosophy). I said this absolutely convinced that it is not possible to produce solid knowledge of educational science without being well-equipped with that which each of them contributes. However, doing educational science is not, in any case, doing philosophy, psychology, sociology, anthropology, biology and so on; it is, perhaps, doing something more with what those disciplines offer. (We shall elaborate further on this “something more” later).

I also said that it was necessary to dare to do educational science. Dare, because doing it and doing it well may be more difficult and risky than doing just philosophy or sociology. Doing educational science is committing oneself not only to knowledge but also and above all to action. Action whose results are almost never either certain or immediate; and as if that were not enough, we can never be completely sure that the results we expect are really the most appropriate. In other words, not only do we not know if we are going to hit the target, at times we do not even know whether we have set the target in the right place. Those who aspire to nothing more than knowing can make mistakes; but those who want to know in order to act or guide action can make mistakes two- or three-fold; and error in action is more risky, because it is far more difficult to correct.

The aim of the following pages is thus to systemise a series of reflections on the nature of educational knowledge and the way to produce it. This work must therefore include an epistemological perspective. As will become evident however, we explore epistemology with a certain degree of caution. There was, in Spanish academic teaching approximately two decades ago, a very considerable interest in epistemology. It was healthy in all those debates, seminars and publications for us to wonder about what education was, what kind of knowledge it involved, how it was constructed and if we were a science, a technology or an art. And it is good to continue wondering about this from time to time, but in moderation; with the moderation necessary to avoid stopping the practice of educational science for the sake of remaining in a state of meditation on what it means to do educational science.

In addition to this introduction, the article has three parts. In the first we detect a number of symptoms that evidence certain worrying aspects of the current situation of educational science. In the second part, concept of the discipline of Education is set out together with three ways of producing educational knowledge. Finally, we propose and outline a kind of Decalogue on how to do educational science today.

Some Things that Happen Today with Educational Science

In an article entitled “On the hopes of the educator and the imperfection of Education”, after briefly outlining the history of educational science as the science of teaching since the 18th century and highlighting how, from the very beginning, it had had an essentially practical end in the sense that “it had to be useful to educators for their activity of educating and teaching”, Wolfgang Brezinka (2002), affirmed that today this practical goal is disappearing. Specifically, he formulated three observations: the first was that “in educators, teachers and politicians interested in education, confidence in the practical usefulness of educational science has fallen”; the second maintained that “in educational theorists the will and capability to provide educators with reasonable, practical and applicable knowledge that helps them fulfil their educational function has weakened; and Brezinka’s third observation was that “among teaching experts who are self-critical and cultivators of neighbouring scientific specialities, widespread doubts have arisen as to whether all those intellectual productions that are presented as express contributions to scientific educational science or the science of education really have the value of scientific knowledge” (Brezinka, 2002, p.101).

Brezinka also wondered whether “it could perhaps be said that educational science still continues serving the educational theoreticians, but no longer the practical educationalists” (Brezinka, 2002, p.101) – a rhetorical way of asking if what they (we) are doing at this time as educational theoreticians is serving mainly to self-reproduce ourselves.

We can see from the references he quotes that Brezinka makes these observations based, above all, on the context of the German reality, but we can endorse them just as they are for the case of Spanish educational science and add other affirmations along the same lines.

For example, the one which holds that most of the people who enjoy a truly widespread public audience in educational issues are not those who are precisely members of the education “guild”. This affirmation can be substantiated by simply reviewing the authors of certain books on education published in recent years that have enjoyed considerable market success (some are even best-sellers); or the list of names of those who are called upon most frequently to offer opinions on educational questions in public forums and the communications media. There can be no doubt that the presence of educational topics in the public and media agenda is highly frequent. The communications media are constantly presenting news, comments, opinions, debates and so on, directly related to education: education laws and policies in general, conflicts and events occurring in schools, recurring themes such as underachievement at school, multiculturalism and the impact of the new technologies (videogames, the Internet, etc.) on childhood and adolescence, together with other educational issues relating to everyday life and family (spare time, out of school activities, and so on). Some of these issues (as timely as, for instance, the presence of religious symbols in schools, the Islamic veil, etc.) have occupied (and continue occupying) centre stage in newspapers and other media; and almost the entire intelligentsia has taken part in the debates they arouse. The presence of the education guild in these media forums on subjects that are very

specifically educational however is minimal. Above all if we compare it with the presence of other professionals and experts (doctors, economists, lawyers, and so on) in the forums that explore public questions related to their own respective specialities. In his last book published in life, *El oficio de científico* [The Scientist's Trade], and speaking of the difficulties encountered by the social sciences to be sciences just like the rest, Pierre Bourdieu refers to a reduced right to admission operating in sciences and to the fact that the objective of the social sciences was too important and pressing for them to be granted the same degree of autonomy as the others (Bourdieu, 2003: 150 ff). Well, both things are happening to educational science, but multiplied by ten.

A further example. The most practical and popular educational science being produced today and that which has by far the largest public audience is the teaching contained in so-called self-help books, aimed at parents and addressing the education of their children. The bookshop shelves destined to this type of literature are clearly expanding, perhaps at the same rate as the space dedicated to, let's say, "serious" educational science is shrinking. But furthermore, the presence of authors from our "guild" in this education-related self-help literature is scant compared with that of doctors, psychiatrists and psychologists. It is not of course a question of indiscriminately vindicating this type of literature in which there is something of everything: good books and bad books, useful books and futile books, books of substance and others of trivia, etc. But what surprises is the lack of knowledge that, in general, is held about this type of educational product in the field of academic educational science. It is as if this popular/practical education and academic education constituted two entirely independent worlds.

All of this evidence regarding the relative interest in practice held by educational theoreticians and, as a consequence (or cause), the equally limited practical interest raised by what they produce, together with that already mentioned about their evident absence from public forums must not be interpreted apocalyptically, nor should it serve to plunge the education guild into dejection. Among other reasons, because we have doubtless exaggerated a little: there are many educationalists who strive to build a kind of teaching that is useful to educational practice, and many actually achieve that goal; and there are many with prestige and well-earned public projection. But this should not be an excuse to sidetrack the situation and attribute it to the slander and imperialism of neighbouring guilds. Neither would the solution be to complain about intrusion, establish corporative conflicts with other guilds or attempt to stem the tide and close the supposed borders because, among other reasons, such acts seem more the tasks of policemen than educationalists. If we believe that the foregoing at least resembles reality, what we must do is approach it as a symptom of the fact that perhaps there is something about the education guild that is not being done well enough, and try to remedy it.

And maybe one of the things the academic guild of educationalists fails to do sufficiently well is really believe that the type of educational science that must be cultivated is that which finds no impertinence in the question "And what purpose does it serve?", but can at all times answer without blushing or resorting to vagueness. In other words, an educational science that really serves practice, as requested by the Royal Order that in the early 20th century created the first Chair of Pedagogy in Spain: "It would be

advisable”, said the Royal Order, “for the teaching of Educational Science at the University be organized (...) not with a purely discursive nature, but rather with a more practical one....”

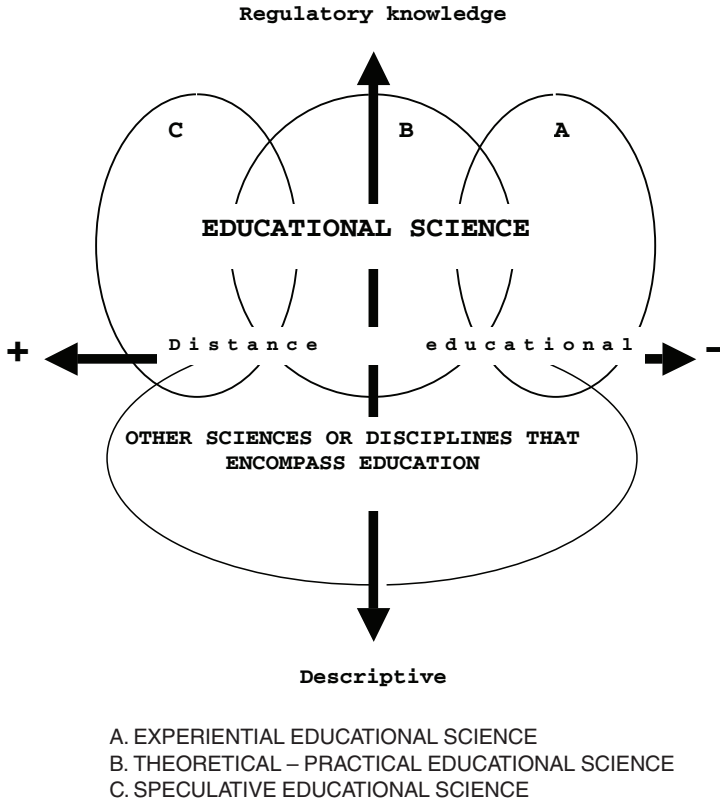
Educational Discourse, Regulation and Reality

Until now we have been speaking of “educational science” taking for granted that it is a term whose meaning is well shared by all. As this is not the case, we find ourselves obliged to introduce certain stipulations regarding what, for our part, we understand by “educational science”. And the first stipulation that must be specified is that we understand regulation is an element that must be considered essential in any discourse that claims to be characteristically educational. What distinguishes educational science discourse from other discourses, sciences or disciplines that also have a hand in education is the regulatory nature of the former. Thus, without regulation there is no education. Of course we refer to regulation in its broadest sense, which includes not only what we generally refer to as “rules”, but also what we call principles, criteria, projects, proposals, guidance, methods, techniques, materials and instruments and so on. Educational science thus proposes and dares to say how to teach, which mediums to use, what the most effective resources are, how an educational environment is designed, how a learning process should be organized and how to draw up a curriculum. Educational science focuses its discourse on how education must be and how to achieve this.

For us, therefore, educational (forming part of education) includes, naturally, educational guidance, social education, school assessment, the didactics of music and mathematics, organization, planning and educational policies and all those disciplines and discourses whose aim is to become involved in educational practice through regulatory proposals. On the other hand, we do not consider that educational discourse which is limited to solely describing or explaining educational facts. This does not mean we consider these non-regulatory discourses are not propedeutic or indispensable for the characteristically educational discourse. Educationalists must, of course, know the social conditioning of education, the enculturation processes, the psychological mechanisms of learning and the biological bases of conduct, but this is not where significant contributions will be made. All of this will always be done better by the sociologists, anthropologists, psychologists, biologists and neurologists. We have previously stated that there is both a descriptive and a regulatory educational science. It should also be said perhaps that educational science has a descriptive dimension and another which is regulatory, but emphasising that the former is, as we said, only preparatory, while the latter is the one that really lends sense to educational science.

We can represent this in the following diagram. Educational science would always be that which is found in the upper part of a regulatory/descriptive axis. In the lower part we would have all those sciences, disciplines and discourses whose aim may also be education but which approach it from perspectives that are fundamentally or solely descriptive, explicative or comprehensive.

If we now cross the previous axis with another that refers to the greater or lesser distance existing between educational discourse and educational practice, we can spec-



ify three ways of doing educational science. We shall call them: Experiential (A), Theoretical-practical (B) and Speculative (C). Before presenting them individually we should advise that, in the first place, what we do not intend to do is establish any strict taxonomy or rigid categories, but rather take a kind of typological approach, leaving the appropriate emphases for later discussion. And in second place we should mention that the three ways of doing educational science overlap, as is logical, and that in the roll call of historical and current educationalists and educational sciences the most usual situation would be not to find absolutely pure varieties.

A. The experiential way of doing educational science is that which consists in building educational knowledge on the basis of educational action. That is, interfering in the practice and assuming responsibilities, either from direct, personal educational action, from the creation of institutions and resources, or from the development of policies and projects. We would dare say that the greatest historical educationalists, those who are known as educationalists and as almost nothing else, belong to this lineage: Pestalozzi, Froebel, Freinet, and many others before and after them. They were remarkable educators who knew how to prepare their experience and explain it very well.

B. The way of doing educational science we call theoretical-practical is that which consists in building educational knowledge not essentially from the basis of the educational exercise but by maintaining really significant contact with the reality of education. We could express the difference between this and the previous method by saying that in A one produces one's own experience, while in B one produces or helps produce the experience of others. This theoretical-practical space encompasses a notable variety of educational methods and styles: from those that can be placed at their intersection with A (some cases of research-action, as we shall see later), to those that are situated at the other extreme, where the speculative discourse is beginning to dominate but its ties to reality have not yet been cut.

C. In the third way of practicing educational science, on the other hand, speculation runs wild. In the speculative method, educational creation is inspired almost entirely by other discourses or is self-inspiring. At the extreme of this educational science any reference to reality either does not exist or is purely rhetorical and anecdotic. It is that thinking which, in Makarenko's sarcastic metaphor, floats on the clouds or on the summit of the "Educational Olympus".

Here ends this succinct presentation of three modes of practicing educational science. And we suppose that, from the connotations existing in our way of presenting them, the reader will by now have realised which one or ones are those we believe should be fostered. A precision should be made about this however. Defence of the emphasis we think should be placed on models A and B implies no previously held value judgement on the intrinsic quality of one model of educational science in particular. Put another way, one form of educational science may be in A (which is one of the types we defend) and, despite this, be completely superfluous; or it could be situated in C (a method of practicing educational science that must be respected but which does not seem to us to be the priority), yet constitute in its own way a discourse which is intellectually rigorous and attractive. In other words, the mere consideration of the generic model to which a form of educational science may belong is not, of course, sufficient guarantee of the resulting product's quality.

Considerations on How to Practice

As we have already mentioned, the last part of this work is dedicated to proposing and discussing certain statements on how to practice educational science along the lines of the emphasis proposed. There are ten statements. And the fact that this makes precisely a Decalogue should immediately and rightly raise suspicion as to the arbitrariness of the number. In the numeration of almost anything (principles, factors, components, conclusions, recommendations and so on), if the number 9, 11 or 14 appears, one could think that this is the number there really are; but with exactly ten it is certain that the author has succumbed to the superstition of round numbers, even if to do so he or she has had to dispense with plausible sections or include some that are less relevant. These ten points are not listed with any real order, though it is true that the first are those that most directly refer to epistemological questions.

1. Mind the paradigms.

Having just stated that the first sections will be of epistemological content, the first thing we should say is be careful with epistemology. As we mentioned at the beginning, at the time of the boom in educational epistemology in Spain around the 1980s, at least one person warned us that the right thing to do would be to talk less about educational epistemology and more about educational gnoseology, given that the first expression takes for granted that education is a science, and that this was yet to be demonstrated (Palop, 1982). He was probably right, and if we had followed his advice perhaps we would have saved a lot of time discussing matters which, in fact, concern us little. One has always suspected that Popper, Kuhn, Lakatos, Feyerabend and so on, were not exactly speaking about us. That is, they were not thinking precisely in educational science (or anything like it) when they drew up their epistemological theories and concepts. Their contributions serve not to elucidate on what education is but rather to make us realise what it is not. Epistemology evidences our limitations.

A couple of examples relate what we have said. The first is the inevitable concept of Kuhn's paradigm. If we try to apply this concept to our discipline what we find is that, in general, there are no real paradigms, no genuine paradigms. (We do find trends, currents, movements and so on, but no paradigms in the strictly Kuhnian sense). It could even be said that in many areas of educational science we are not even in one of the pre-paradigmatic states that Kuhn also mentions (1975). We are simply in another place.

But as we refuse to accept the inexistence of educational paradigms, we set about inventing them. To invent them – and this is the second example – we borrow the distinction Habermas (1988) makes between the three types of knowledge: the positivist, the interpretive, and the critical (diversely retranslated denominations, as we know: technological paradigm, hermeneutic paradigm and dialectic or emancipating paradigm, etc., etc.). The problem is that these Habermasian types of knowledge are not Kuhnian paradigms, nor was Habermas thinking in educational science when he wrote about them. But as, come what may, we must have paradigms and, in addition to being intellectually prestigious, Habermas's seems well thought out, it becomes simply a question of situating the different methods of educational science and educationalists that we have into the Habermasian tripartite mould. What happens is that it then becomes difficult to find examples of systems, conceptions or educational methods that fit in, in their own right, with each of the three supposed paradigms; hardly anyone is comfortable with what is assigned to them by another, and the supposed paradigmatic taxonomy works well only at the formal level, but creaks heavily when attempts are made to fill it with content. Because in educational science the most convenient state is to be at the same time interpretive, critical and technological. And if we look closely we will perhaps see that many of the great educationalists have exercised the three supposed paradigms at the same time, without serious, real consequences.

2. Education is a promiscuous discipline.

We wrote in another work that, "The most sensible educational science is the one that is most epistemologically promiscuous: that which pairs up with no individual educational, sociological or philosophical school, but which alternates with all of them when-

ever it suits best" (Trilla, 1998, p.28). We should not hide the fact that, in its day, we made this declaration with a certain intent to be provocative against a number of epistemological purisms that claim something akin to that any educational conception or practice must be founded in and congruent with a particular psychological, social, philosophical, etc. theory. In other words for instance, if an educational science method opts for Piaget, it must exclude Vygotsky and also reject with even more reason the use of any teaching technique or instrument derived from Skinnerian neo-behaviourism. This kind of principle of epistemological congruence is based on the supposition that one sole psychological theory (or philosophical, or sociological, or whatever) can be all-inclusive of educational phenomena. And if this is the case, it would logically be necessary to avoid any intrusion, mixture or cross-breeding of some theories with others when it comes to drawing up and applying educational methods. The problem is that, on the one hand, that proposal does not yet seem to have been fulfilled: evidence of this lies in the fact that we have no psychological theory (or philosophical, or sociological, etc.) that offers an overall view of the educational process. And on the other hand, if we look closely we see that, in general, there have been prestigious educationalists who have been decidedly eclectic. Freinet for instance, whose school educational science method was of course not at all representative of behaviourist educational methods, had no scruples in using self-correcting files that bring very much to mind the old Skinnerian programmed teaching. And while we are on the subject of the brilliant French educationalist, we should add that Freinet was criticised for the fact that the psychology on which he himself occasionally attempted to base his methods was somewhat inconsistent. Which may be true, but that does not necessarily discredit his contributions to educational science. Freinet has not entered history as a psychologist but rather as an educationalist, and in capital letters. An educational method should be judged on its own merits, on its consistency as such, by its results, its effectiveness and so on, and not by whether it is congruent with certain psychologies or philosophies, or even by the very foundation that it is able to establish for itself at any given moment. It would be like valuing a painting by the explanations the artist is able to give about the chemical composition of the colours employed.

The above is not intended to question the need for educational science to be constructed on the most solid and coherent psychological, sociological, anthropological, biological or philosophical etc. bases possible but, as education cannot cease to be active, while they are being built it must enjoy a certain degree of space. Moreover, relations between educational science and its founding sciences are never linear. As Dewey (1964: 23) said, scientific laws have an indirect value for educational practice and no conclusion of scientific research can become an immediate rule of educational art.

3. Neither is it worthwhile declaring oneself an orthodox follower of any educational method

This is something of a continuation of the previous point: if it is possible to be educationally promiscuous in relation to neighbouring sciences, then it is obviously not essential to decide on one orthodox educational science in particular. Attempting to follow one educational trend to the letter leads to closing opportunities needlessly and, on occasions, even betraying the trend itself.

Naturally, both educationalists and educators can situate their discourse or practice in one specific current or can find inspiration in, or feel influenced by, one educationalist or another. But from this to becoming the guardian or follower of an orthodox educational science is something akin to the difference between the reasonable and autonomous adoption of outside influences and simple cultism or, where appropriate, even pure fanaticism.

Orthodox educational sciences tend to sacralise and preserve the inheritance of their maestros and end up functioning through exclusion. Rather than enabling good ideas and methodologies to enrich each other, orthodoxies seal off their own and arbitrarily invalidate those of others. And as if that were not enough, as we have mentioned, they often even betray the legacy they set out to conserve. Many of the most prestigious educationalists including Paulo Freire himself never ceased to cry out against the mimetic, uncritical repetition of educational ideas and the mechanical application of educational methods, including their own.

In his book *The Training of Reflexive Professionals*, Donald Schön tells the story of the rabbi “whose followers reproached him for not having followed the example of his illustrious father. ‘I am exactly like my father’, he replied, ‘he did not imitate, and I do not imitate’” (Schön, 1992, p.164).

4. Educational practice as the source and final test of educational science.

Under this heading we set out to elaborate on the defence initiated above of practicing educational science through methods A and B. The title in fact paraphrases a comment by Dewey in which he asks, “What is the place and the role of educational processes that results when they are considered as a source? The answer is: 1) that educational practices offer the data, the material made up of the problems of the inquiry. These constitute the only source of the last problems to be investigated. These educational practices are also: 2) the final value test of the conclusions of all the investigations. (Dewey, 1964, p.36).

Educational practice must therefore be the origin and destination of educational investigation. It's like a two-way street. And depending on the length of the journey and the frequency with which it is travelled we will produce different educational science formats. From the experiential in which the coming and going is constant and immediate, to the speculative educational science in which the distance has become so long that it has managed to break all links between theory and practice; it is then that the educational discourse runs the risk of becoming a superfluous, aestheticising exercise, or worse still, pure noise. Some people believe the adage which says theory is the most practical of all things (Dewey, 1964), but they should be reminded that this refers only to the good theories.

Between experiential and speculative educational science there exist various opportunities to modulate the length and frequency of that two-way journey. Some options make a certain distance recommendable, because it is true to say there is a model of educational knowledge whose production is not fostered by haste. Theorisation must never hide away in an ivory tower, but sometimes requires a certain interruption in which it may even be favourable to lose sight, only momentarily, of the most immedi-

ate and circumstantial problems of reality – the ones that leave no perspective for those who encounter them. In any case, as Dewey suggests, this occurs in the laboratory or the study, that which must never be lost is the necessary “living connection between practical task and scientific work” (Dewey, 1964, p.46).

Another possible way of modulating the journey back and forth, in this case situated in the proximities of experiential educational science but better produced methodologically speaking, is investigation-action and its variants. Successful application of this method, which means the effective involvement of practical educators, can conjugate, as Stonehouse (1984) sought, the production of educational knowledge, renewal of educational practice and the training of educators. This is in fact an update of that dialectic which established that it is transforming the reality we know that really trains us.

5. Neither pessimists nor enlightened

In educational science classes in the past they explained that there were three types of educational-science pessimism: the fatalist, according to whom the power of education is nil or extremely low, given that everything is terminally predetermined; the biologist, who refers the shaping of personality and capabilities to the genetic load of each individual; and the sociologist, who has little confidence in intentional education given the influx of decisions from the social medium in which chance has placed each person.

Then we have educational-science optimism, which in turn has two complementary versions: that which is formulated from an individual or personal point of view (we human beings can be educated and our education is an essential, indispensable requirement for attaining our own fulfilment as persons); and that which is formulated from a social perspective (education is one of the fundamental drivers of progress, social transformation, equality, justice and so on).

Obviously, expressing a certain degree of educational-science optimism is a necessary part of the teaching task. One of the conditions of educational success is holding reasonable confidence in the possibilities of achieving that goal; even if it is based on prophecies of self-fulfilment. In fact, all the great educators and educationalists have been optimists; had it been otherwise it would be difficult to imagine how they would have achieved their objectives. We should not profess naïve educational-science optimism however; the arguments and evidence exhibited by the pessimists, be they biological or sociological, should be known, but without entirely believing them, because there is also convincing evidence of the power of teaching. To put it another way, we must have the hope of educational success, but not be gullible. And above all, we must take precautions when faced with the enlightened hyper-optimists and visionaries who consider themselves called – them and nobody else – to redeem humanity through the teaching they preach. So be on guard against the educational-science sects, because they too exist.

6. Recover global perspectives.

The aspiration of scientism has shredded and scattered educational knowledge. This is a probably inevitable fact with its pros and cons. Among the former must be considered that, in addition to having reached and maintained a place in academics, we now know much more about many more elements of the teaching universe and process. But

among the 'cons' we find, above all, that on the way we have been losing global perspectives on the teaching process, action and institutions. We know more in relation to the process of teaching, and much more about cognitive development and moral and social and neurological development – but the nineteenth-century idea of integral education remains almost as they left it in the 19th century, playing a simply rhetorical role in the preambles to our laws on education.

As for the educational institutions and to refer solely to the institution par excellence, the school, it must be recognised – and should please us immensely – that we have specialists in everything: school organization and management, didactics in all subjects, legislation, out-of-school activities, pupils' use of the new technologies, initial and continued teacher training, evaluation, special education, guidance and tutoring, values education, school architecture and ergonomics, hygiene, underachievement at school, coeducation, environmental education, interculturalism, parent participation and so on. Every aspect, problem, and corner of the school has its specific experts, researchers, doctoral theses, bibliography, congresses and courses.

This is all very well, and must be continued. But this direction – analytical and specialising – that educational knowledge has taken is not enough. If it aspires to really serving educational action the direction must be complemented with a comprehensive, globalizing perspective. Because the fact is that an educator or teacher is not an evaluator, or a computer expert, or psychotherapist, interior designer, historian, mathematician or linguist. He or she is substantively a teacher; a teacher that, as such, is just what we want him or her to be, an educator; and that he or she forms part of an institution that should work as such; in other words, as a whole. A primary school, centre of secondary education or university cannot be a conglomeration of classrooms or a kingdom of factions (many already are, and this is the trend). A teaching centre is a community; that is, a shared project and a system in which all its elements are constantly interrelated. That is why, in addition to sectorial and specialised knowledge, comprehensive, global perspectives are required. It is precisely these perspectives that are lacking in educational science today. Montessorian educational science, that of Ferrer and Guardia, of Decroly, Freinet, and Neill, that of so many, and so different one from the other, are similar in that they are not solely didactical strategies, not simply an idea about the teaching task, a conception of the curriculum, a way of proposing discipline, participation, or management of the school, or certain technologies and so on. They are these things too, but all mixed together.

7. Rehabilitate the good models

Dewey proposed systematically studying what good teachers do intuitively; that way – he would say – we can avoid the waste represented by their educational best practice being enjoyed only by those who have had personal contact with these gifted individuals (Dewey, 1964). In this sense, we thought that the moment we knew how to locate and formulate that which these fine educators have and do in common, we would resolve some of the mysteries of education. As we would also be on the way to discovering some of the secrets of educational science if we could elucidate on what unites in

their diversity such renowned educationalists as, for example, those we have mentioned in the previous paragraph.

Take, for instance, Makarenko, Freinet and Neill, to name just three educationalists that we used to call experiential and who, moreover, are in fact so different, if not to say contrary, to each other in so many areas (historical, social and political context, ideology, targets, the educational methods they developed, etc.). We can easily disagree with certain aspects – and even in general – of the educational science of one or the other, but it would prove more difficult to deny any of them their condition as remarkable, if not to say brilliant, educationalists, who succeeded in the endeavour and understood how to construct and apply consistent educational systems and disseminate them so well. That is why it is also beyond discussion that the three must appear in the history books of educational science. Thus, if we were to study what the contents of their educational sciences share, their ways of performing education and, above all in relation to what interests us here, the way in which they gradually built their respective versions of educational science, this would perhaps provide valuable clues as to how to continue developing educational knowledge, above all in the practical field.

As Pierre Bourdieu (2003: 21) wrote, the logic of academic institutions usually consists in accentuating the differences and conflicts between authors and currents. In educational science we have also entertained ourselves more in highlighting the divergences between one and the other than in locating their coincidences. So what we now propose is to rehabilitate beyond obvious differences these excellent, now classic models of building educational science

8. In educational science, the best criticism is a good project.

In one of his aphorisms, Elias Canetti (1996: 96) said: “It disgusts him to be critical, he is too thankful.” It is true; nowadays, everyone who sets themselves up as a critic (critical thinking, critical theories, critical educational science and so on) is in fashion, sells well, and is thankful. All is open to criticism except criticism itself, so one has to be careful criticising criticism. But we do want to highlight a certain type of criticism which, for educational science, is the one we find to be most honest and productive. We refer to the criticism of the educational reality, or of certain areas of it, that materialises not only or not mainly through discourse, but above all by means of the viable alternative proposal and by action. Because all transforming, renewing or optimizing practice is in itself a criticism of that which is intended to be transformed, renewed or improved. In fact, all the great educationalists, those who have made original contributions, have been explicitly or implicitly critical. Fortunately they did not stop at protest, at the destruum as the Latin maxim says, but rather they dared to engage the aedificabo, to propose and build.

Because criticism alone, without an alternative proposal, without a project or action, may be brilliant, rigorous and precise but, and though it could seem to the contrary, criticism without an alternative proposal is still the easy, weak, feeble-spirited option. That there are those in educational science who devote their attention solely or fundamentally to criticism and nothing more should not be cause for concern. More worrying would be

if the majority or the foremost members of the academic educational corporation took it up or captured the biggest audience: it would be as if, in the ranking of art, the critics of film, painting and literature were situated above the film producers, painters and poets.

9. Desire to be understood

Perhaps one of the reasons – maybe not the most significant, but one of them – for which the public audience granted to educationalists is lower than it should be is that, in general and with certain honourable exceptions, our usual methods of expression leave a lot to be desired, especially as concerns clarity. And this constitutes a double sin.

In the first place, because if we look at educational contents closely they are not so esoteric or complicated. Fortunately or unfortunately, most solvent content in our discipline is still quite intelligible, though some strive to achieve the contrary, possibly to affect rigour and depth. They discovered that science uses a language reserved for the initiated and thus complicate their expression to appear like scientists. The products of science are certainly complex, but not all confusion is scientific.

Secondly, not making an effort to achieve clarity is a grievous sin, especially for educationalists: it is a flagrant contradiction that those who profess to being experts in the transmission of knowledge can be clumsy in transmitting their own wisdom. So it is important to be careful with language, persist in the healthy habit of stipulating the meaning of the terms being used and avoid renaming the same concepts every other minute. In short, try to be intelligible to colleagues, pupils and the public in general.

But this attempt at clarity does not imply lowering exigency, reducing levels or trivialising the content of educational discourse: rigour and clarity are not necessarily antagonistic demands. In the prologue to an edition of a classic from children's literature, Rafael Sánchez Ferlosio (1972: 7-16) warned that degrading the language, like those adults who try to ingratiate themselves with children by imitating their babbling, apart from being a linguistic perversion also objectively constitutes "an act of contempt" towards the receivers and, consequently, maintains them in a state of linguistic inferiority. And it is true, making light of the discourse shows a lack of respect towards others; as does the opposite: arbitrarily converting the discourse (unnecessarily) into something hermetic. Moreover, the latter also constitutes a symptom of mental confusion, didactic idleness or intellectual dishonesty on the part of the speaker.

10. The demand for an example

We believe a theoretical educational discourse is relevant when the author is able to offer real or plausible examples for each of its statements, be it affirmative or negative. We do not now raise this demand for an example so much in relation to the wish to make oneself understood (though this too: examples are always instructive), but rather as a measure of prevention to avoid the speculative educational discourse running wild. In other words, it would amount to a kind of methodological self-imposition that anyone who decides to take up educational science should adopt: not to formulate any idea that cannot be exemplified or retranslated in the shape of criteria, method, instrument, practice, or way of being. It would be a case of guaranteeing that, while wandering around the theory, we are able at any given moment to travel the road that runs from

abstraction to reality and vice-versa. Precisely to facilitate that the target audience (teacher, educator, student of educational science or teacher training, and so on) can also travel the same route from the point of view of their own experience and reflection and that the discourse can finally make sense and be of use to each of them.

Notes

- 1 To cite only books (not articles) specifically dedicated to educational epistemology published by Spanish authors from the late seventies to the early eighties: AA.VV., 1978 (includes works by A. Escolano, V. Sánchez de Zavala, M. Fernández Pérez, M. A. Quintanilla, J. García Carrasco, A. Pérez Gómez, J. Gimeno Sacristán); Pérez Gómez, A. I., 1978; Esteve, J. M., 1979; Colom, A. J., 1982; AA.VV., 1983 (with works by A. Escolano, P. Palop, J. M. Quintana, A. J. Colom, J. García Carrasco, J. L. Rodríguez Diéguez, J. Basabe, G. Gutierrez); García Carrasco, J., 1983; Sarramona, J., Marqués, S., 1985.
- 2 A few years ago we published an aphorism that said: "Communicate about communication is the same as meta-communication. Theorize on theory is the same as meta-theory. Think about thinking is the same as meta-cognition. Therefore, communicate on meta-communication, theorize on meta-theory and think about meta-cognition. And so on, successively, until silence, idiocy and madness." (Trilla, J., 1998: 70).
- 3 A reference to the text of the lecture presented by the author on the occasion of being invested Doctor *honoris causa* by the Technical University of Braunschweig (Germany).
- 4 On Brezinka's concept of "Practical education" and other previous epistemological works by this author, see: Brezinka, 1980, 1990.
- 5 On the presence and treatment of educational subjects in the media, see the interesting study by J. Carbonell and A. Tort (2006).
- 6 *Gaceta de Madrid*, Year CCXLIII, Number. 129, Sunday, 8 May 1904, Volume II, p. 529.
- 7 Obviously, those who are situated in A and B also practice educational science not only based on reality but also equally using other discourses that help them understand it and see how to optimize it: they take and employ other discourses to guide their educational action. But the difference between the methods used by A and B to practice educational science and the speculative model is that in the latter case the other discourse is not now a medium but becomes an end. The speculative educationalist generally does not read Kant for help in knowing how to educate better, but rather to gain better knowledge of Kant's thinking. Which – it goes without saying – is entirely legitimate intellectually and even, if done well and, taken as read that Kant has much to contribute to educational science, will not only be intellectually legitimate but also educationally useful. This latter quality however is only applicable in the second instance, in other words when that reading of Kant receives a rereading that is specifically educational. With a little experience in reading or listening to different forms of educational science one realises with relative ease when someone uses Kant from B or from C.
- 8 "In the clouds and their proximities, at the summit of the educational 'Olympus', all educational technique in the field of education in its strictest sense was considered heresy." Makarenko, A. S. (1977). *Poema pedagógico*. Barcelona: Planeta, p. 494-495. In other works we have referred specifically to Makarenko's way of producing educational knowledge. (Trilla, 2001, 2006); on this question, also see Re Depaolini, G. (1985).
- 9 We have referred more extensively to this in ayuste, A.; Trilla, J. (2005).
- 10 Without going further, in the work by Paulo Freire, always presented as the emblem of the critical paradigm, there are methodological proposals perfectly legible from a technological approach and, it goes without saying, discursive contents that in no way would turn their nose up at a hermeneutic label.
- 11 On this subject, see: "Lo que no se debiera hacer con Freire", included in Trilla, J. (2002: 174-180).

References

- AA.VV. (1978). *Epistemología y educación*. Salamanca: Sígueme.
- AA.VV. (1983). *Estudios sobre epistemología y Pedagogía*. Madrid: Anaya.
- Ayuste, A.; Trilla, J. (2005). "Pedagogías de la modernidad y discursos postmodernos sobre la educación". *Revista de educación*. 336, pp. 219-248.
- Brezinka, W. (1980). *Metateoria dell'educazione*. Rome: Armando.
- Brezinka, W. (1990). *Conceptos básicos de la ciencia de la educación*. Barcelona: Herder.
- Brezinka, W. (2002). "Sobre las esperanzas del educador y la imperfección de la Pedagogía". *Revista Española de Pedagogía*, LX, 223, 399-414.
- Bourdieu, P. (2003). *El oficio de científico. Ciencia de la ciencia y reflexividad*. Barcelona: Anagrama.
- Canetti, E. (1996). *Hampstead*. Madrid: Anaya-Muchnik.
- Carbonell, J., Tort, A. (2006). *La educación y su repercusión en los medios*. Madrid: Morata.
- Colom, A. J. (1982). *Teoría y metateoría de la educación*. Mexico: Trillas.
- Dewey, J., (1964). *La ciencia de la educación*. Buenos Aires: Losada.
- Esteve, J. M. (1979). *Lenguaje educativo y teorías pedagógicas*. Madrid: Anaya.
- Habermas, J. (1988). *Conocimiento e Interés*. Madrid: Taurus.
- García Carrasco, J. (1983). *La Ciencia de la Educación*. Pedagogos, ¿para qué? Madrid: Santillana.
- Kuhn, T. S. (1975). *La estructura de las revoluciones científicas*. Mexico: FCE.
- Makarenko, A. S. (1977). *Poema pedagógico*. Barcelona: Planeta.
- Palop, P. (1982). Gnoseología y educación. Sobre el estatuto gnoseológico de la Pedagogía. *Educació i cultura*, 2, pp. 13-32.
- Pérez Gómez, A. I. (1978). *Las fronteras de la educación. Epistemología y ciencias de la educación*. Madrid: Zero-ZYX.
- Re Depaolini, G. (1985). "Su Makarenko: la dialettica di passi educativa e teoria pedagogica", en AA. VV., *Studi di epistemologia pedagogica*. Milan: Edizioni Unicopli, pp. 141-261.
- Sánchez Ferlosio, R. (1972). *Prólogo, en Collodi, C. Las aventuras de Pinocho*. Madrid: Alianza Ed., pp. 7-16.
- Sarramona, J.; Marqués, S. (1985). *¿Qué es la Pedagogía?* Barcelona: Ceac.
- Schön, D. (1992). *La formación de profesionales reflexivos*. Barcelona: Paidós.
- Stenhouse, L. (1984). *Investigación y desarrollo del curriculum*. Madrid: Morata.
- Trilla, J., (1998). *Aprender lo que se dice aprender. Una teoría alfabética de la educación*. Barcelona: Octaedro.
- Trilla, J. (2001). "Antón Semionovich Makarenko y otras pedagogías marxistas", in J. Trilla (coord.) *El legado pedagógico del siglo XX para la escuela del siglo XXI*. Barcelona: Graó, pp. 123-150.
- Trilla, J. (2006). *La aborrecida escuela*. Barcelona: Laertes.
- Trilla, J. (2006), "Pròleg", in Makàrenko, A.S., *Poema pedagògic*. Vic: Eumo, pp. XXVII-LXII.
- Vázquez, G. (2004). "El discurrir de la Pedagogía (general) en el siglo XX: el quehacer de una reflexión sistemática sobre la acción educativa". AA.VV. *Un siglo de Pedagogía Científica en la universidad Complutense de Madrid*. Madrid: Universidad Complutense, pp. 27-34.