

Mathematics Teachers as Democratic Agents

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Abstract: This paper considers the role of schools, and particularly that of all teachers (including mathematics teachers), in the construction of social democracy. It is argued that, in the present context of economic rationalism, in which teachers are becoming progressively deprofessionalised, and in which schools are being increasingly subjected to market forces, there is an urgent need to challenge the effects of economic rationalism on education, and especially to produce better educated and more highly professionalised teachers. Further, and more significantly, it is argued that such teachers, having (i) a significantly broadened knowledge base, (ii) a deep commitment to political change leading to democratic social life, and (iii) greatly increased power enabling them to regain control of their professional discourse and the process and content of schooling, might then, as teachers of subjects and children, simultaneously undertake a leading role in the difficult task of social reconstruction directed towards promoting increased autonomy and real democratic participation of the citizenry.

Kurzreferat: *Mathematiklehrer als Agenten für Demokratie.* In diesem Beitrag wird die Rolle der Schule und insbesondere die aller Lehrer, Mathematiklehrer eingeschlossen, bei der Herausbildung einer sozialen Demokratie betrachtet. Im Zusammenhang mit dem derzeitigen ökonomischen Rationalismus, in dem Lehrer mehr und mehr entprofessionalisiert und Schulen in zunehmendem Maße den Kräften des Marktes unterworfen werden, hält der Autor es für dringend erforderlich, die Auswirkungen des ökonomischen Rationalismus auf Bildung und Erziehung zu hinterfragen und vor allem für eine bessere Bildung und Professionalisierung der Lehrer zu sorgen. Des weiteren argumentiert er, daß Lehrer, als Lehrer von Fächern und von Kindern, gleichzeitig eine führende Rolle bei der schwierigen Aufgabe der sozialen Rekonstruktion in Richtung auf eine Förderung größerer Autonomie und wirklicher demokratischer Partizipation der Bürgerschaft übernehmen, wenn sie (i) eine wesentlich erweiterte Wissensbasis haben, (ii) sich für einen politischen Wandel hin zu einem demokratischen sozialen Leben engagieren und (iii) über wesentlich größere Macht verfügen, welche es ihnen ermöglicht, Kontrolle über ihren professionellen Diskurs sowie Prozeß und Inhalte schulischer Bildung wiederzugewinnen.

ZDM-Classification: A40, B10, C60

1. Introduction

I am not a maths teacher, although many years ago I was one and was happy to be so. I am not a maths educator, but I do teach education in a university which engages in the pre-service education of teachers, and so I do come into contact with maths educators and I probably do contribute something to the education of some future maths teachers. But what has maths, and teaching maths, to do with democracy? As a maths teacher myself I was primarily concerned with substance such as index laws and with ideals such as trying to foster a love of maths in kids; and I'm certain "democracy" never entered my mind either in the classroom or in the rare times when I thought about my broader role as a teacher.

But I was young then, and very instrumentally orientated. Perhaps I had not been well educated. There was so much I didn't see as I strove to teach that $a^m \times a^n = a^{m+n}$. I have been trying to make amends for that ever since.

This paper, which considers the role of schools, and particularly that of teachers, in the construction of social democracy, is part of that process. It argues that, in the present context of increasing economic rationalism, in which teachers are becoming deprofessionalised, and in which schools have been caught up in what Whitty (1992, p.22) and others have called "the grand narrative of the market", we need to educate better, more highly professionalised teachers. Further, and more significantly, it argues that such teachers should have greater control of the process and content of schooling, so that they might take a leading role in social reconstruction directed towards promoting increased autonomy and real democratic participation of the citizenry.

2. Disempowered, deprofessionalised and re-defined teachers

A century ago teachers were trained, mostly in classrooms, to offer basic instruction and to assist directly and indirectly in social control. A hundred years of struggle and progress resulted in a tertiary-educated professional body, centrally involved in the determination and development of curriculum content, schooling practices and educational policy in general. Today things are heading backwards at an alarming rate.

Since teacher-professionalism reached its heights in the Western world around the mid-1980s, varied but interconnected pressures have eroded teachers' professional control, autonomy and social status, and have simultaneously contributed to the deskilling and devaluation of teaching as a profession¹. Within the broader context of growing economic rationalism, teachers are being redefined as contracted employees subject to direct management, and are becoming re-positioned such that their expertise and professional knowledge is decreasingly called upon in areas central to the needs and requirements of those whom they teach and serve. Teachers are having to leave decision making in areas such as curriculum and educational goals and policy to others, and in virtually all Western countries it has become the trend for teachers, from early childhood to university level, to do less instructing and more administrative or managerial control work. Teachers are now becoming increasingly accountable in crude cost-benefit terms as managers of the human and financial resources in their schools, while performing decreasingly professionally-valued instructional activities.

Many commentators (eg. Aronowitz and Giroux, 1985;

¹I wrote at the beginning of the 1980s (Harris 1982, p. 137) that in order to maintain their economic position:

"... teachers will experience a new and increased intensity of work, and a new type of work concerned less with direct instruction and more with direct administration and control, itself subject to more administration and control from above."

That is a prediction I take no joy from having seen come true.

Marshall and Peters, 1990) have noted that the areas in which teachers can exercise professional expertise have been seriously reduced; and that educational policy and reforms in schooling and curricula now commonly look beyond, bypass, or ignore the input and experience that teachers might offer. Teachers are even being portrayed as part of the problem with contemporary schooling rather than as a professional body capable of bringing about solutions. This general approach, along with the broader “logic” of economic rationalism and pedagogical instrumentality, has disempowered teachers by deskilling and devaluing their instruction function, by re-defining them as civil servants implementing the dictates, objectives and goals of senior administrators in school and civil bureaucracies, and paradoxically by increasing their role in social control.

This phenomenon is not only a result of economic rationalist trends. Varied cases for “disempowering” teachers, lessening their autonomy, and devaluing their role in the determination of curriculum content and educational policy, are now emanating from numerous diverse contexts. Included in these, somewhat disturbingly, are both liberal and social-democratic sources, which, unwittingly or otherwise, are supporting rather than opposing even the crudest economic rationalist positions. Commentary on the role of the teacher has tended recently to promote a particular form of dis-empowerment, which I have characterised elsewhere (Harris 1994, p. 4) as “subdued agency”. In starting either from a pessimistic view about the potential of teachers to promote social change, or from a moral concern over whether teachers have the right to impose their values and ideals on pupils, or from a political concern that pupils might have no need to suffer “correction”, this discourse has cast the teacher not as the deliberate promoter of particular ends, but rather as one who lays out options without favour, and who facilitates the process of choice among available options.

This is not to say, however, that there is not also considerable literature promoting teacher empowerment and teacher-control in schools. The problem here is that that side of the debate has been largely appropriated by economic rationalism, in which context the role of teachers has been repoliticised away from broader concerns of determining curricula, formulating educational goals and promoting social reconstruction, and towards the realm of efficient school management within an educational market-place. Such redefinition of the job of teaching has perversely established a practical context of disempowerment and deprofessionalisation within a rhetorical context of empowerment. I suspect this has contributed significantly to the situation of teachers today in much of the western world – a present history of decreased status and control with relation to educational issues, loss of autonomy, worsening of conditions, loss of purpose and direction, destruction of health, increased anxiety and depression, lowering of morale, and, despite a continued proliferation of policy rhetoric to the contrary, subjugation to increasing government and other external controls of schooling and curricula. The initiatives currently being imposed on teachers are serving, at one and the same time,

to reduce the professional knowledge and critical scholarship which underlies teachers’ work, and to decrease the political impact that teachers might bring about through their instructional activities.

It need not be thus. Teachers, and society, do not have to accept economic rationalist appropriation and instrumentalist functions. Teachers, if they wish it, and irrespective of the subject they teach – *maths teachers are included equally with all others, no more or no less* – can challenge the present. They can adopt an informed counter-hegemonic political-epistemological position from which they can seek to control the educational purposes of their schools, and to direct those purposes towards rational social reconstruction characterised by true participative democracy.

3. Schooling, democracy, and teachers

This is not the place to undertake sustained consideration of the nature of democracy and the potential for schooling to help bring it about. The best I can hope for here is to lay out certain points, and then develop my own particular discussion upon them.

Democracies are commonly characterised as social formations in which people are free to live autonomous lives, where they have largely equal rights as citizens, and where in principle, and as far as possible in practice, all have equal power and opportunity to exercise those rights. Schooling for democracy might thus be charged with preparing the young to become, in their turn, autonomous citizens capable of responsibly exercising appropriate power and rights. Such schooling, and of course the curriculum, would be centrally although not exclusively directed to equipping all educands with the necessary conditions of an autonomous life, and the propensity to participate in the exercise and control of political power.

This may appear straight-forward, but there are paradoxes and other difficulties lurking here. I shall consider three of these in some detail, and then return to my broader theme – the role of teachers in the wider context of educating for democracy.

First: it must be recognised that, *prima facie* yet significantly, schools are contradictory places to prepare students for democracy. Schools themselves are not democratic institutions: in fact a large number of their practices are far removed from those usually regarded as democratic. This has led some to advocate forms of democratisation of schooling, and to champion issues such as equality in decision making, extensions of children’s rights, freedom of choice, etc. within schools. I find such a position educationally, socially and politically suspect. Rather, I would want to maintain that in many areas of schooling, and especially those concerning formulation of the curriculum, and assessment, it is appropriate that democratic practices, or at least those relating to equality, majority decision making and the like, are largely removed. It would be unwise to generalise too widely, if for no other reason than because we would expect modifications as pupils gain in maturity. But there are certain things within schooling which, as I have argued elsewhere (Harris 1990), should be the province of teachers. Central among these are setting and

controlling the learning environment, determination of the curriculum, and assessment of its mastery. This means that for pupils-as-future-citizens, a first step, and a long continuing one, in preparing to participate in democratic processes and in building up the dispositions required for autonomy, is to comply in the engagement with a largely imposed curriculum, and to do so within the learning and authority constraints associated with formal schooling.

This is not necessarily a fascist or authoritarian position. It has roots in the most liberal of liberal theorists, John Stuart Mill, who emphasised that the principle of liberty which he so strongly advocated was not meant to apply to children or those who have not yet attained maturity of their faculties (Mill 1964, p. 73) And it has deeper roots in Aristotle who recognised that behaviors and dispositions, especially social and ethical ones, are not inherent in individuals but rather have to be learnt through practice and reinforced through habit. Both Mill and Aristotle offer clear justification for withholding certain democratic rights and practices from the young for the purpose of having them learn how properly to use them when they are eventually bestowed. This position also justifies teachers intervening in their pupils' development towards the end of producing informed, critical free thinkers (and I take it that if teachers are to so intervene, then they should understand the complexities of the situation). Here, then, we reach the *first major paradox confronting teachers*: in and for the very promotion of democracy they have to engage in certain non-democratic practices.

Second: there is a peculiar pointlessness in advocating schooling for democracy and autonomy within broader social contexts where schooling itself undemocratically favours some individuals and groups and disadvantages others, or where the potential for individual autonomous development is otherwise fundamentally stifled. Under those circumstances "schooling for democracy" and "education for autonomy" are either slogans, fashionable ideals, or hypocritical rhetoric. And such circumstances have prevailed, and still, of course, do prevail, even in societies which announce and proclaim themselves as liberal democracies. Schooling for democracy, or preparing all to become participatory citizens, and building up the dispositions required for autonomy in everyone, can be an effective reality only within social formations which allow for and promote the democratic rights and personal autonomy of all. We will not find it within fascist regimes. And notwithstanding ideological rationalisations to the contrary, such schooling is also not likely to be found within exploitative social relations; whether they be of the capitalist sort based on economic exploitation (think, for one instant, of the real autonomy and power enjoyed by the homeless long-term unemployed underclass), or of a crude socialist sort based on political and ideological oppression and the propagation of unquestioned party dogma. It is also becoming increasingly clear that they are unlikely to be found in social organisations that progressively embrace principles of economic rationalism.

This does not necessarily place us in a defeatist position of leaving schooling be until certain economic and political modes are first attended to. Schooling itself is a power-

ful agency in the dynamics of history; and regardless of all the more powerful structural constraints it operates within, there is still opportunity for teachers (among others) working in schools to determine, to a significant extent (which is itself dependent on the specific conditions of the historical moment in question) to what degree schools are to accept and conserve, or else challenge the existing social order. The potential to promote democracy, even within fundamentally non-democratic contexts, always exists. This now highlights the *second major paradox for teachers*, or at least those working within broadly non-democratic social contexts: in order to promote democracy they must simultaneously accept and challenge those non-democratic social and economic forms which constitute the material context which is their working political environment.

My third major concern relates to the linkage between schooling, ideology, and the formation of consciousness within societies. My developing views on this matter have been expressed in detail before in many places (Harris 1979, 1982, 1990, 1994), and in this present context I shall merely outline those aspects of the position I now hold which bear on the general case I am building up.

To begin with, I accept that the Marx-Engels "ruling class – ruling ideas" thesis, as expressed in *The German Ideology*, is fundamentally correct although clearly in need of detailed modification, particularly with regard to the role and identification of "class", when applied to contemporary circumstances. Next, I take it that the materialist position (see Marx in Feuer 1972, pp. 83-7) that individual consciousness is socio-economically determined and ideologically constituted, is also substantially correct. From these bases it follows that people do not naturally make fully free and autonomous choices, nor are they commonly well positioned to, because their experience and knowledge is, to a significant extent, mediated by history and ideology. And it is largely through this mediation, or the creation and establishment of complex sets of experience and discourse (and within some social contexts through considerable further domination of consciousness by political oppression) that social structures and economic modes are more readily reproduced than fundamentally reconstructed.

These theses, although dismissed as a matter of course by liberal-rationalism, have been employed by Marxism, first to develop a theory of ideology, then to establish a related context of structuralism, and more recently to espouse reproduction theories of schooling and education. Today they even lack "home ground support", given the current unfashionable status of Marxism. But they also suffered earlier losses as divisions grew among their proponents.

The theory of ideology reached a moment of significance with Althusser (c1970), but then faced serious reactions given that its structuralist basis, its reproductive emphasis and its reliance on the ruling class – ruling ideas thesis made it appear not to respect the judgment, autonomy or cultural heritage of the economically oppressed, whom it then too easily categorised as the intellectually oppressed. It took the oppressed, so its critics maintained, to be passive recipients of ruling conceptions rather than as a vi-

tal, generative, culturally productive force; and through its emphasis on “class consciousness” it tended to overlook or downplay the agency of individuals. As Bowers (1984, p. 366) intimated, this theory of ideology, with its structuralist roots, “appears to nullify the individual as a co-participant in the construction and maintenance of social reality”. It appeared to nullify teachers too. Althusser (1984, p. 31) and others did seem to reduce them to a level of near-powerlessness.

The structuralist basis of the theory was also commonly attacked for presenting dominant ideology as impenetrable. Critiques then extended to reproduction theory in general, and to the reproductive function of schooling and education in particular. Critics commonly highlighted resistance in schools, emphasised that schools too were sites for struggle, regaled against over-determinist positions, and sought to resurrect the agency that had been “lost”.

There is no doubt that in the spirited 1970s revival of neo-Marxism many (myself included) became over-enthused with reproduction theory and structuralism, and took them too far at times. This does not mean, however, that reproduction theory is wrong, or that it should be abandoned completely. Reproduction theory had available to it a far more rigorous theory of ideological formation than its many of its proponents displayed, and than many of its critics, particularly in the field of education, granted it. Let me here stress one aspect of the theory which was not adequately acknowledged, possibly because it was not adequately spelt out.

Reproduction theory, along with variants of structuralism, *does* posit that people are constituted as ideological subjects. But it does not then claim, or at least *should not* claim, that all but a few privileged intellectuals are simultaneously converted into ignorant fools. Reproduction theory, properly articulated as a socio-historic theory, respects people’s knowledge, culture and heritage, but it also recognises that people generally come to perceive the world largely in available categories presented as epistemically privileged. Within this process of epistemological constraint people have room to manoeuvre – room itself related to historical material conditions – and for a host of varied reasons, some (who need not necessarily be academic intellectuals) will manoeuvre and challenge more than others. Social agents are not passive bearers of ideology, but rather actors who construct their world through levels of contest and struggle.

The identification of epistemological constraint within a socio-historic context, however, is crucial, in that it reveals the propensity for an active, appropriating ideological subject to embody an initial belief that one is not an ideological subject – that one acts freely and autonomously rather than within structural constraints. It also indicates that a first move towards recognising and countering ideology would be to identify the nature, and then seek out the details, of one’s own (and others’) constitution as an ideological subject. And from this it would follow that a fundamental point in educating for democracy, if democracy is to entail real autonomous agency and genuine access to exercise of political power, would be exposure and de-mystification of existing ideological representations of

and within so-called liberal democratic societies.

Demystification is not a mystical process; and it has been a feature of both supporters and critics of structuralism and reproduction theory that they have failed to give plausible indications of how it might be brought about. As both camps have prevaricated over “agency” they have each, in their own ways, tended to set teachers swimming relatively aimlessly in a sea of non-intervention or unspecified intervention; which would be consistent with theories seeking (mistakenly) to avoid the apparent elitism in taking an interventionist stance.

Demystification requires human agency in counterhegemonic activity. And such activity, if it happens, starts with people who can “see” that mystification is occurring and who have the will to do something about it.

I have argued elsewhere (Harris 1994) that teachers (I will qualify this shortly) might be well placed to engage in demystification; and might also be best placed to restructure and reorientate schooling for the purpose of rational social reconstruction, and, through control of curriculum and assessment, to educate the young to participate in the future exercise and control of truly democratic power. And this now allows me to specify a *third major paradox*: teachers not only have to devise ways of acting counter-ideologically whilst working within a material ideological context, *but they also have to recognise and significantly transcend their own ideological constitution in order to do so*.

The complexities and paradoxes identified indicate a difficult agenda for teachers. If the restructuring and reorientating I have pointed to is to take place, a certain sort of teacher is needed to bring it about (my qualification – above): one who has commitment, knowledge and power – the teacher-as-intellectual, but of a very special kind.

The notion of the teacher-as-intellectual has had wide currency lately through a rapidly developing literature. Within that literature one of the earlier and still one of the most interesting analyses has been that of Aronowitz and Giroux (1985, pp. 23–45), who identify four types of intellectuals within the educative milieu. “Accommodating intellectuals” stand firmly within ideological postures and sets of material practices that support ruling groups in society. “Critical intellectuals” are ideologically alternative to existing institutions and modes of thought, but adopt a self-consciously apolitical posture. “Hegemonic intellectuals” self-consciously provide forms of moral and intellectual leadership for dominant groups and classes (I locate all three types within the mode of “acceptance”). And finally there are “transformative intellectuals”, who advance emancipatory traditions and cultures. It is the transformative intellectual (whom I locate within the mode of “challenge”) that Aronowitz and Giroux look to for desirable pedagogy and social change.

Transformative intellectuals, as Aronowitz and Giroux characterise them, occupy contradictory, paradoxical and tension-filled roles within formal educational institutions. They work within institutions that are fundamental to producing and legitimating dominant culture and social practices; but as workers they offer alternative discourse and critical social practices often at odds with the role of the

institution they work in, and the social practices which support it. As with all teachers, they are pressured to engage with the issues, and follow the discourses and social practices legitimated by the dominant technocratic culture; but to be “transformative” they must resist being incorporated by the very system which employs them, and which disproportionately rewards those who remove critical scholarship and/or political commitment from their teaching.

This valuable formulation paints an easily-recognisable picture (I noted earlier the tension-filled paradoxical role that teachers must play as they simultaneously accept and challenge the material context of their teaching environment). But in the end it is too simplistic in that it glosses over the crucial point that “transformative” intellectuals would themselves be ideological subjects who must somehow both recognise and partly “transcend” their own structural consciousness-formation. To miss this point is to miss the vital complexity of the situation. And it is also to miss the possibility of a solution.

One such solution is offered by Gramsci in his characterisation of organic intellectuals representing a social category rather than a class (Hoare and Nowell Smith 1976, pp. 3–23) which serves to assist people to become increasingly conscious of their own actions and situation in the world. Teachers, in the Gramscian sense of organic intellectuals, begin with a recognition of their own initial constitution as ideological subjects, and they use this as the basis for promoting awareness not only that factors militate against people understanding their world, but also that people can be helped, in this regard, by others who are better informed and/or better placed. This is, in a roundabout way, to accept what critics of crude reproduction theory pointed out; namely that even social reproduction (let alone reconstruction) is an active and contested business. But it is also to accept that people might benefit from informed leadership.

This is now a good place to consider those “qualities” I listed earlier regarding teachers who would undertake the (transformative) challenge of enlightening and empowering pupils, and reorienting schools, toward the end of rational social reconstruction which allows full democratic participation of the citizenry.

First, there is commitment; specifically commitment to social reconstruction on rational democratic lines, rather than to a liberal-neutralist position. This, admittedly, continues to be cause for concern among some. But as there is no such thing as neutral education, there is also no need to resile from commitment to using education for a particular political purpose, especially if the commitment is informed, justified and rational, and the political purpose is worthy. I think it can be fairly claimed that teaching and schooling practices that challenge the status quo with the aim of producing a social order in which people can live autonomous lives and participate in a more egalitarian exercise and control of political power, are as worthy as any, and more justifiable than most.

With regard to knowledge, teachers would better serve if they reached beyond their traditional expertise in substantive curriculum areas and developed *also* a reflexive

awareness of the way content, as well as “having” that content, interacts with power, discourse and the formation of consciousness. This is a highly significant broadening of the knowledge base commonly associated with teaching. But armed with such knowledge teachers, while not totally escaping constitution as ideological subjects, might better recognise how structures impact on consciousness to produce ideological subjects, and how discourse embodies socially constructed classifications and categorisations of the world. Such teachers, if they also recognised how their professional discourse has presently been appropriated, might better situate themselves to collectively regain control of that discourse, in order that they themselves might set the educational agenda (a point to be developed in the next section). They might also then, with justified conviction, promote and direct their agenda towards the end of producing the autonomous, informed, political, moral and cultural agents that collectively constitute a civilised democratic society.

The above, with its deliberate emphasis on the “ideological subject”, unashamedly proposes that knowledge is not gained purely or neutrally, and that all people’s knowledge of all things is not equal. This is not elitism; and it is not anti-democratic. Rather, as well as addressing all three paradoxes laid out earlier, it moves towards dissolving the “problem” of teachers *teaching* – of intervening in the lives of their charges towards the end of making them knowledgeable, critical, autonomous agents.

What is being suggested here for teachers may be difficult, but it is not impossible. Educational institutions such as schools and universities are public spheres which, regardless of the pressures currently placed upon them by economic rationalism, continue to bear commitment to individual and social betterment. They are also historical entities serving historically expressed needs, and thus notwithstanding current technocratic and managerial restructuring, it is still likely that teachers will retain some agency with regard to the transmission of knowledge. Teachers, therefore, can contest intellectual and managerial incorporation, and themselves re-define their role within counterhegemonic practice. They can thus, through their teaching, discourse and interventionary practice, promote autonomy, empowerment, and consequently democracy.

But this will not happen easily; which raises my last point – power. Notwithstanding the bleak nature of their present history, teachers can gain the knowledge required and they can use this knowledge to build their power through, among other things, intervening in and regaining control of the discourse of education. I shall conclude with further discussion on this point.

4. Some notes on discourse

Teachers, along with all educators, have been subjected to a not-so-subtle change in their professional discourse recently. The new discourse, garnered from the marketplace, is a bastardised form of neo-classical economics dealing with inputs, outputs and production functions, generally within the context of “supply” and “demand”. It places schools, teachers and subjects in competition

for capital, as well as for students. It speaks about *subjects* being market-oriented; about *institutions* “marketing” their offerings and themselves; about adopting “competitive market-edge-seeking practices”; about gaining “first mover advantages”; differentiating “high-potential disciplines”; and generally about building competitive positions based on being the low-cost or most efficient deliverer of the most sought after educational services.

This is “marketspeak”; the language, and the political weapon of the “education *industry*”; postulating, naturalising and legitimating the view that education is a commodity in the market place; and that forces in the market place can be relied on to produce optimal educational practices and policy. And this “marketspeak” has a seductive self-legitimation. Given the larger context of global restructuring and its prevailing discourse of economic rationalism, in which market forces are coming to be appealed to in more and more areas which were once matters of government service delivery (e.g. health, social security), there appears to be *prima facie* sense in adopting a discourse touted as a more realistic, more rigorous way of analysing and clarifying issues. But before adopting a discourse it is worth asking two questions: how does a discourse become established and legitimated, and even when it has become so, do we really have to accept and/or use it?

Basically, new discourses do not naturally or magically come into being and take hold. Rather they are the outcomes of political programs; and the development and legitimation of any discourse, of any branch of knowledge, is always the setting of a political agenda and by no means a strictly neutral intellectual exercise. Grace (1988) identifies four moves in the political program of legitimating discourse. First, a new language is introduced as as disinterested expertise – as being natural and neutral (even though language is never neutral) and as being an analytically superior way of thinking (this begins to establish epistemic privilege). Second, it is noted that applying this language involves difficulties (the rigour is heralded). Third, the need to surmount these difficulties and apply the language to produce corresponding benefits such as a clearer vision, is stressed (this further establishes epistemic privilege and disguises the fact that the “epistemic privilege” of any discourse is most commonly nothing more than a disguised extension of professional power). The ideological-political manoeuvre is then completed with expressions of regret that the new approach, which is now accepted and used without serious challenge, and with its ideological naturalisation well under way, hadn’t been followed before.

In considering whether we ought use a particular discourse, it is important to recognise that simply because a discourse may be available, prevalent and legitimated, this does not establish that it is epistemically privileged, or even that it is capable or relevant. We always have options open to us. We can *ignore* the field of discourse, but at the cost of remaining ignorant and impotent within the context of its uses; we can *accept* and adopt the discourse, but at the risk of both being appropriated by it and ourselves legitimating it by our very usage; or we can *challenge* the discourse. The problem, however, is deciding which

option to adopt; and the answer to this is never immediately given. Making a proper choice should require at least serious consideration of the nature and substance of the discourse, the historical circumstances in which it is being produced and presented, and similarly serious consideration of the purposes the discourse seeks to accomplish. What is more the case, however, is that the implications for the historical development and political force of a discourse are seriously influenced by whether challenge does take place or not, and if it does then whether it takes place as an intervention with the discourse in its moment of legitimation, or whether it is mounted from a position of distance and hindsight.

We can now return specifically to the discourse of the educational market-place – a sub-set of economic rationalism. While it does have a *prima facie* touch of realism and rigour, it is very easy to demonstrate, as many commentators have, that there are fundamental problems with both the logic and the analytic value of economic rationalism, and that it hardly offers an authoritative account of educational relations or the educational exchange. There quickly comes a point where economic rationalism turns into educational irrationality, and where, if followed, a worse future and an unrecoverable past await us.

There is thus a very serious point in challenging it. And when we recall that the “epistemic privilege” of a discourse may be nothing more than disguised extension of professional power, it becomes clear that serious challenge is a matter of going beyond debating substantive points within a field: it is a matter of establishing both an opposing rigorous discourse *and professional power*; as part of engaging in a critical, intellectual, and political program.

Challenge becomes increasing difficult as discourses naturalise, with spaces for effective criticism becoming progressively closed off, and thus there is at least a pragmatic need to challenge the discourse of economic rationalism in this very moment of its historical development. To refrain from questioning the economic-rationalist agenda is not merely an intellectual failing – it is a political failing, and a failing with particular pertinence for those concerned with education today. To fail to pursue the intellectual-political agenda of re-establishing control of educational discourse in the present moment could be to allow those with narrow techno-rational interests, who have embraced the non-neutral world of economic rationalism and market forces, and who analyse education with the same categories and within the same framework as they analyse any traditional industry, to establish a discourse which effectively excludes those “outside” it from informed participation. To then legitimate such a discourse, and help privilege its practitioners by silence, ignorance or acceptance, may be to acquiesce in bringing about one’s own eventual impotence. But there is a deeper, more insidious aspect to consider.

In the novel *Nineteen Eighty-four* George Orwell (1974, p. 241) said of “Newspeak” that its purpose was “to make all other modes of thought impossible [such that] a thought diverging from the principles of Ingsoc should be literally unthinkable.” Now I am not suggesting that even the greatest possible saturation by economic rationalism will

result in critical thoughts ever being made “literally unthinkable”. We could, however, go backwards a long long way (as teachers have already). While we are unlikely to lose the democratic entitlement to criticise or challenge, we could lose the more important material foundation for practising democracy – namely the platform from which to exercise our entitlement; such that although there might always be those who will challenge, they may be left to do so from powerless positions, with no one in hearing distance.

Given this, it would be wise for those concerned with education, and with democracy, to neither remain ignorant of that danger, nor to endorse or accept economic rationalism; but rather to enter the political arena of critical intellectual challenge. This is far more than a matter of preserving self-interests. It could turn out that the discourse of economic rationalism, if allowed to guide the agenda for the provision of education, might also bring about the progressive exclusion and silencing of those best able to subject that discourse to critical scrutiny. And if there are no critical voices left, and the economic rationalist have their way, and the market is allowed to rule, with the structurally weak and disadvantaged, and their children, losing out to its inexorable forces, what then for social democracy?

5. Conclusion

Entering the arena of critical scholarly challenge is an unfamiliar conceptualisation and/or practice for many teachers. But there is so much more to teaching than transmitting content. Teaching mathematics entails far more than teaching pupils that $a^m \times a^n = a^{m+n}$. Teaching mathematics is also part of constructing the future, and is therefore a constitutive part of a pedagogy of and for the future.

This is where knowledgeable committed teachers come in: teachers who know their history or geography or mathematics, but who also know how they have come to know what they know, what power having that knowledge bestows upon them, and how they can use their reflexive knowledge to help build the future. Whether mathematics can or cannot be taught democratically in schools is a trivial matter: what really counts is that mathematics teachers can contribute significantly *qua* mathematics teachers to the construction of a democratic world to come.

6. References

- Althusser, L. (1984): *Essays in ideology*. – London: Verso
- Aronowitz, S.; Giroux, H. (1985): *Education under siege*. – Massachusetts: Bergin and Garvey
- Bowers, C. (1984): The problem of individualism and community in neo-marxist educational thought. – In: *Teachers College Record* 85(No. 3), p. 366
- Feuer, L. W. (Ed.) (1972): *Marx and Engels: basic writings on politics and philosophy*. – London: Fontana
- Grace, G. (1988): *Education: commodity or public good?* – Wellington: Victoria University Press
- Harris, K. (1979): *Education and knowledge*. – London: Routledge and Kegan Paul
- Harris, K. (1982): *Teachers and classes*. – London: Routledge and Kegan Paul
- Harris, K. (1990): *Empowering teachers: towards a justification for intervention*. – In: *Journal of Philosophy of Education* 24(No.2) p. 171–183

- Harris, K. (1994): *Teachers: constructing the future*. – London: The Falmer Press
- Hoare, Q.; Nowell Smith, G. (1976): *Selections from the prison notebooks of Antonio Gramsci*. – London: Lawrence and Wishart
- Marshall, J.; Peters, M. (1990): *Empowering teachers*. In: – *Unicorn* 16(No.3), p. 163–168
- Mill, J. (1964): *Utilitarianism, Liberty and Representative Government*. – London: J. M. Dent
- Orwell, G. (1974): *Nineteen eighty four*. – Harmondsworth: Penguin Books
- Whitty, G. (1992): *Education, economy and national culture*. – Milton Keynes: Open University Press

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