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Whole school change that spreads and lasts: A technology of resilience for schools working within adverse conditions

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ABSTRACT:

This paper addresses an enduring issue in educational research and practice: How to achieve whole school change focussed on learning in communities experiencing high levels of social dislocation, educational disadvantage and student disengagement from learning. By focussing on these conditions, I am highlighting the particular challenges of stabilising and sustaining whole school change in these communities. I outline an approach to reform that is framed by an understanding of schools and how they operate from within. This approach differs from reform efforts generally that seek to replicate external successful reform efforts. Rather than grappling with the question of how to transplant or bring particular reforms to scale, the question I focus on is how to bring a focus on teaching and learning to scale within schools that share certain discourses of schooling – forms, practices and structures. These discourses constitute certain technologies – the means and possibilities for change. Significantly, technologies of change are constituted by schooling discourses; they are determined by the nature of schooling; and, they produce certain types of effects that we recognise as schools. I argue that by identifying, naming and describing schooling discourses it is possible to work within and against the technologies they produce to amplify, mediate, validate and subvert certain effects of schooling. This is illustrated through a description of a technology of resilience that is supporting some schools working within adverse conditions to prioritise learning and teaching as their central activity.

Introduction

It is easy to label ideas as utopian when they involve the difficulties of redistributing resources or challenging existing power relations, but what if nothing less will work?

Thrupp, 2002, p. 5

It is well documented that students in schools located in areas where there are high levels of social disadvantage fair badly from schooling compared with those in areas with less community adversity and more resilience. Whilst this issue is an enduring one, the social, economic and cultural conditions that shape it have changed dramatically within the time in which it has been a focus of policy and reform efforts. In Australia, this time is marked from the establishment of the nationally funded Disadvantaged Schools Program in 1974. In the intervening period, new marginalisations relating to globalisation have emerged alongside 'traditional' poverties, and these newer forms are not yet fully explored in relation to education. Despite the accumulation of knowledge about what works in schools and how to manage school reform, the adverse conditions experienced by some schools are not conducive to the slow steady progression towards improvement facilitated by more stable environments. In response to this situation, I describe the disciplinary technologies operating in a small number of public schools in NSW serving communities experiencing new and traditional forms of poverty. My intention is to examine and disrupt these technologies in order to produce more equitable distributions of the effects of schooling.

The effects of schooling have been described in great detail by school effectiveness studies, and school improvement studies have described how these operations may be managed and oriented for particular purposes. In this paper, I work with the knowledge and practice base of both these literatures, thus sharing many overlapping interests with 'new wave projects' or 'third wave thinking'. An example of a third-wave project is Comprehensive School Reform (CSR) that provides designs by which effective school can be created. As Dimmock (2002) observes, "'design' is replacing 'structure' as the focus shifts to schools and classrooms and to a more sophisticated

understanding of the connections between the elements that go to make up a school" (p. 138). CSR and other 'third wave' initiatives are attempting to respond to criticisms of earlier effective schools research that it 'did not prescribe the practical methods by which schools can become successful' (Desimore, 2002, p. 433); and to criticisms of past education reforms 'that although they changed institutional structures, policies, or organizations, they did not activate the proper mechanisms to affect what teacher do in the classroom or how students learn (Desimore, 2002, p. 433).

A persistent criticism of the school effects literature is that it has said a lot about what effective schools look like but little about how to achieve them (see for example Slee, Weiner & Tomlinson, 1998). I use this criticism as a justification for turning to other ways of examining the inequitable effects of schooling. I am interested in how a different lens, indeed a different way of seeing, can suggest alternative ways forward for schools working within adverse conditions. For this reason, I work with poststructural ways of framing the problem by theorising how schooling discourses constitute certain technologies of change. Despite local variations, schools are immediately familiar and recognisable around the globe as a particular institutional form. This is largely due to their disciplinary technologies, which serve as preconditions by which we recognise them as schools. Like prisons, hospitals and factories, schools have their own specific techniques of power. Within this framing of the problem, what we are seeking to understand are the practices of schooling.

At the level of practices there is a directionality produced from petty calculations, clashes of will, meshing of minor interests. These are shaped and given a direction by the political technologies of power. This directionality has nothing inherent about it and hence is cannot be deduced. It is not a suitable object of theory. It can, however, be analysed

Dreyfus and Rabinow, 1983, p.188

Analysis of the practices operating in schools working within adverse conditions in NSW suggests that they do share a directionality that may be thought of as a dominant form, or default mode. This default mode produces differential outcomes from schooling. Those students whose cultural and social capitals are closely matched to

those of schooling fair well, whilst those who cultural and social capitals are not well matched to schooling fair badly. Disciplinary technologies operate differentially and precisely on those who are schooled. These technologies are not uniformly repressive, neither are they by nature insidious, but they operate through 'humble' procedures of training and distribution' (Dreyfus and Rabinow, 1983, p.156).

A core contribution of this paper is to propose a means whereby schools working within adverse conditions disrupt the effects of schooling by amplifying some disciplinary technologies whilst subverting others. This approach requires a careful examination and analysis of the disciplinary technologies of schooling in order to produce certain effects, and a simultaneously acknowledgement that these technologies are 'the clearly articulated expressions of more generalized practices of disciplining both individuals and population' (Dreyfus and Rabinow, 1983, p.153). Modifications to disciplinary technologies can be quickly accommodated and appropriated with new and more sophisticated disciplinary practices. I treat schools as discursive in nature and constituted by relationships of power and knowledge. How these discourses of schooling are constituted by language, experts, organisational processes, a field of knowledge and relations of power, are central considerations in this discussion. Importantly, in terms of disrupting the distribution of the effects of schooling, these discourses constitute the means and possibilities for their own transformation through *technologies of change*. These technologies *amplify, mediate, validate* and *subvert* certain effects of schooling.

Technologies of change are the specific practices by which teachers, head teachers, principals, district and system personnel, constitute themselves as subjects within and through systems of power that operate in schools, and which often seem to be either 'natural' or imposed from above. In these terms, schools make possible a type of management of individuals and are associated with certain modes of training and modification of individuals, not only in the obvious sense of acquiring certain skills but also in the sense of acquiring certain attitudes.

Schooling discourses constitute various technologies of change, but they do not all produce the kinds of effects we want. For example, a study of schools managing to function in South Africa under the same adverse circumstances that overwhelmed

others nearby identified a number of features of the 'resilient schools': a sense of agency and responsibility; flexible and purposive leadership; a focus on learning and teaching as the central activities of the school; a safe and organisationally functioning institutional environment; consistent disciplinary practices anchored in educational purposes and personal interaction; and a culture of concern within the school (Christie, 2001). A fundamental issue for schools working under adverse circumstances is how to bring about and maintain these features of schooling, or, in other words, how to disrupt the default mode of schooling; how to prioritise learning and teaching as central activities; how to produce more equitable effects.

Structural framing: The impact of new and traditional poverties

Structural inequalities in schooling are well documented (see Brown *et al.*, 1997; Teese and Polesel, 2003) and mainly result from inequities in resources. In schools working within adverse conditions, these inequities are exacerbated by high teacher turnover, high numbers of beginning teachers, first-time leaders, high student mobility and increasing numbers of students with special needs. In addition, Fleisch and Christie (2003) argue that 'systematic school improvement, particularly for disadvantaged children, is inextricably linked to wider social, economic and political conditions' (p.). In industrialised countries these conditions include long-term unemployment, shrinking social safety nets, high levels of mental illness, substance abuse and other issues strongly correlated to low-income. Add to these in developing countries and countries in transition, historical legacies such as apartheid in South Africa, genocide in the Balkans and armed conflict in Afghanistan, Iraq and elsewhere. In these contexts, whole school change that spreads and lasts is particularly challenging.

The importance of school completion in schools working within adverse conditions is emphasised by Vinson who included a school completion indicator within calculation of a disadvantage index in his studies into the distribution of disadvantage in New South Wales and Victoria (1999, 2004). Other indicators include unemployment, low income, child abuse, low birth weight, court convictions and emergency assistance. The indicators are chosen because they are direct manifestations of disadvantage

representing restrictions on life opportunities and the attainment of wellbeing. He justifies the inclusion of an education indicator within the index by referring to numerous studies showing that the number of completed years of formal schooling has a positive significant effect on physical and psychological well being that is not simply a side effect of social origins. Indeed, it is a better predictor of good health than occupation or income. A core concern within these communities is how to reverse patterns of student disengagement indicated by reduced levels of school retention, high absenteeism and low levels of achievement (Vinson, Esson & Johnston, 2002).

Alongside 'traditional' poverties new marginalisations are emerging relating to globalisation and new economic, social and spatial reconfigurations (see Dusseldorf Skills Forum, 2003; Brown *et al.*, 1997; Castells, 1996,1998, 2001). As Brown *et al.*, point out there is 'a new political arithmetic' of poverty and disadvantage (1997, p.37), the ramifications of which are not yet fully explored in relation to education. One aspect of this new political arithmetic relates to the location of some schools within, what Castells (1996) describes as, 'black holes' created by uneven development in *informational society*. He describes this type of society as a 'specific form of social organization in which information generation, processing, and transmission become the fundamental sources of productivity and power, because of new technological conditions emerging in this historical period' (1996, p. 21). Within the informational society, some communities 'risk becoming irrelevant from the perspective of the system's logic' (Castells, 1996, p. 2) because they are located outside flows of information generation, processing, and transmission. In this paper, I am concerned with new forms of inequalities emerging in a number of schools located within these communities with a view to a more textured understanding of how they might engage with these new technological conditions.

From the early days of school effectiveness studies, reflected in the often-cited Coleman Report (1966), it has been repeatedly confirmed that school-level effects are dwarfed by the powerful influence of the home environment for student learning. The link between the home and student learning is undoubtedly one of the most important and, at the same time, little understood relationships in educational provision. The fundamental impact of SES has generally been set aside as a variable that can be

controlled for, but not influenced. As a result this relationship remains largely under-theorised in school effectiveness research beyond noting a high correlation between low SES and low achievement. In this paper, I set out to challenge the inevitability of this relationship whilst at the same time accepting its power of predictability.

Background research and practice

Despite sustained critiques by Thrupp (1999 & 2002) and others (see Slee, Weiner & Tomlinson, 1998) of school effectiveness research for not adequately addressing issues of social justice, distracting attention from larger agendas by overemphasising school effects, and blaming teachers, it is a field of research that is related to this paper because it has produced lists of characteristics of effective schools, albeit with little guidance on how to achieve these. Similarly, although school improvement research (see for example Hargreaves, 1997; Fullan, 1997; Stoll and Fink, 1996) has generated insights into school processes, it has tended not to focus on sociological analysis, such as theorizing the persistent effects of social class backgrounds on schooling outcomes. Additionally, and despite some of their most salient findings, school effectiveness and improvement researchers have been criticised for failing to help students from traditionally under-achieving groups in systematic ways.

Within this wide range of studies, this paper draws reflexively on three central themes. First, within this literature, there is a growing recognition of the *centrality of learning in school change*. As Peterson, McCarthy and Elmore point out, 'Changing practice is primarily a problem of learning, not of organization. Teachers who see themselves as learners work continuously to develop new understandings and improve their practices.' (1996, p.148). A second theme recognizes that whole school change needs to be conceived of beyond the process of initial implementation towards *sustainable improvement*. As Hargreaves and Fink note, 'the vast majority of educational change that deepens learning and allows everyone to benefit from it neither spreads nor lasts' (2003, p. 694). Thirdly, long-term experience of significant school change initiatives in the USA in particular highlights the challenge of *how to replicate change across the system* (see Hopkins and Levin, 2000). Sizer's Coalition of Essential Schools, Slavin's Learning for All and Levin's Accelerated Schools all

provide good examples of the challenges faced by 'going to scale', that is, going beyond the particular collaborations which have generated them (see Hatch, 2000).

As illustrated in these last three examples, attempts to bring about change in schools often involve collaborative arrangements between schools and universities, or some other external organization. In Australia, there is a strong tradition of collaborative action research through partnerships involving teachers and academics (see e.g., Yeatman & Sachs, 1995; Cherednichenko, et al, 1999). A high point in this research was the federally funded project, 'Innovative Links between Universities and Schools for Teacher Professional Development'¹. Whilst I draw upon this tradition, I have adapted the approach described in this paper to take into account the particular needs of schools serving low-income communities attempting to implement *whole* school change. These schools are all too familiar with participatory action research as the mechanism by which they secure additional funding through programs such as the former Disadvantaged Schools Program and Innovative Links at the national level; and, in NSW at least, the existing Priority Schools Funding Program and Priority Action Schools Program. Despite the many successful initiatives that have been funded in this way, the resulting partnerships tend to exist on the *margins* of both school and university life and, hence, are constructed around mutual interests, informal associations and mutual agreements. A consequence of these types of formations is that whole staff do not tend to share, and may not even be aware of, a common research agenda. Hence, the emphasis in this paper is on *whole* school change. As a regular academic partner, critical friend and participant in professional learning in schools, this paper also describes how I have attempted to engage in professional dialogue with school-based colleagues about how their organizations function. In particular, I describe how these conversations have developed in a number of schools in NSW receiving additional equity-based funding through the Priority Action Schools Program.

Poststructural framing: Disciplinary Technologies of schooling

As previously noted, discourses of schooling constitute the means and possibilities of their own transformation - *technologies of change*. These technologies have the potential to *amplify, mediate, validate* and *subvert* certain effects of schooling. This

may be illustrated by considering one such technology. In Australia, *roundtables* were supported through the nationally funded *Innovative Links between Universities and Schools for Teacher Professional Development 1994-1996*. They were designed to mediate the form of collaboration between teachers and researchers (Grundy et al, 1999) and they focused on challenging the traditional divide between practitioner and academic research. This technology is still used by the National Schools Network as a means of facilitating partnership and exchange between academics and school-based practitioners. Although this form of technology is made possible by the discourses of schooling, its effects and sustainability within these discourses are not assured. In a review of *Innovative Links*, Yeatman and Sachs (1995) emphasised the fragile nature of sustained collaborations. They observed that, "the form and processes for collaboration between [partners] had to be continually negotiated and renegotiated" (p. 43). This particular technology, like many others, has proven to be difficult to sustain.

Applying Foucault's (1975 & 1976) analysis of disciplinary technologies, such as prison and medical discourses, suggests that successful technologies are likely to be those that build efficiencies whilst increasing surveillance and control. Examples in schooling discourse include groupings based on age, the allocation of one teacher per class, the arrangement of students in rows, the ubiquitous blackboard and hierarchical mechanisms of control. Importantly, these technologies are practices (e.g., groupings and arrangements) and relationships (e.g., hierarchies), as well as techniques (e.g., blackboards). They build efficiencies whilst increasing surveillance and control in ways that are not necessarily oppressive, limiting or weakening. Indeed, the need to utilise limited resources in efficient ways in schools working within adverse conditions suggests that 'successful' technologies may have particular relevance in these contexts.

In this section, I begin to outline a form of disciplinary technology that operates in schools. This technology has differential effects and I suggest that it may be possible to mediate and modify these effects in ways that impact favourably on schools working within adverse conditions. Disciplinary technologies are discourses, not institutions; they operate through schooling practices on the body. Their aim is to produce 'docile bodies, that may be subjected, used, transformed and improved' (DP.

136). For example, a major function of schooling is to sort and select students based upon arbitrary classifications. The primary technique for this purpose is based upon age. Schools are organised into horizontal units into which children of roughly the same age are assigned. The formal curriculum divided into disciplinary knowledges and constructed around these age groupings. As students move through the layers of schooling, certain pathways are open to some and closed to others. Various forms of streaming divert students into high and low status subjects. The high status subjects are those associated with school completion and higher education, whilst the low status subjects are associated with non-completion and weaker qualifications. In schools working within adverse conditions, these streams also stratify students according to race, ethnicity and socio-economic status. This is an effect and not a stated purpose of these techniques. Those students who come to schools with the accoutrements of schooling already well imbued, slip effortlessly into the upper streams whilst others fall into the lower streams. The uniform 'whiteness' of academic streams is contrasted with the uniform 'colour' of non-academic streams. The separation and ranking of students is operationalized through the normalising judgements of teachers. Assessment brings the surveillance and the normalizing judgement of teachers together through increasingly finer and finer differentiation. Surveillance is exercised in the partitioned spaces of classrooms and, to a lesser degree, the bounded areas of the playgrounds. These spaces are regulated and ordered in ways that allow for hierarchical surveillance of students, teachers, and others who work at various levels with the structures of schools.

Surveillance in schools takes many forms but its primary purposes relate to the maintenance of order and the production of docile bodies: these are generally considered to be signifiers that learning is, perhaps, taking place. In schools where surveillance achieves its purpose with little effort, learning is a more likely effect, but in schools that amplify their efforts to achieve order, learning is an unlikely effect. For the most part, teachers consider that they have little choice in this matter; the amplification of surveillance and control measures is a taken for granted response in schools struggling to maintain order. 'The logic is perfectly clear, the aims decipherable, and yet it is often the case that no one is there to have invented them, and few can be said to have formulated them' (Foucault, 1976, p.95).

Under these conditions, he partitioned spaces of schools generally operate independently of each other and with minimal alignmentⁱⁱ within and between spaces. Practitioners operate according to unspoken logics of practice that prioritise surveillance and control through organisational processes; they also emphasise welfare practices over pedagogical ones; and pay even less attention to cultural norms and how they operate.

Disrupting the effects of the disciplinary technologies of schooling

My purpose in this section is to describe how it may be possible to disrupt the effects of disciplinary technologies so as to redistribute the effects of schooling. An alternative emphasis to amplifying surveillance and control within adverse conditions is to amplify coherence across sites of pedagogical practice and, in so doing reinforce alignment between curriculum, assessment and pedagogy in places where learning is taking place. One effect of this ‘disruption’ is to a shift the focus from surveillance and control of students to that of teachers. Hence, teachers' professional learning becomes a specific focus of the pedagogical practice of department heads and other teacher leaders. In the same way, the professional learning of department heads and teacher leaders becomes the specific focus of the pedagogical practice of senior executive; and the professional learning of senior executive becomes the specific focus of the pedagogical practice of principals. In this way, the gaze of supervision and control shifts towards teachers and away from students.

Whilst teaching take places at different sites within schools and address the needs of different learners, these sites can operate in ways that support similar purposes. For example, the issues and questions faced by teachers as they develop learning programs for students, translate into those faced by heads of departments as they support the professional learning needs of teachers, and translate again into those faced by school executives as they build the capacity of their department heads to support the learning needs of teachers. In primary schools, it is also possible to trace the learning needs of students through the pedagogical practices of teachers, team leaders, assistant principals and principals.

Whole school change focused on learning, presents a different set of challenges at each site of pedagogical practice. It also challenges district and system personnel to conceptualise their work with schools as primarily pedagogical in nature. In contrast to the tendency of systems to put downward pressure on schools, a technology of resilience provides a mechanism by which students' learning needs can be translated up through systems. Hence, this disciplinary technology puts upward pressure of schooling hierarchies to take intervene in pedagogical practices: at the district level these practices are related to the learning needs of those working in schools; at the system level these practices are related to the learning needs of those working in districts.

A key assumption of this discussion is that in order to sustain whole school change focussed on learning, the sets of challenges faced by practitioners at various levels of schooling systems are resonant, reflecting common sets of conditions and concerns. Another key assumption is that bringing alignment to scale requires different practices and new forms of language that facilitate talk about curriculum, assessment and pedagogy such as those provided by the frameworks of productive performance, productive assessment and productive pedagogy, respectively (Lingard et al, 2002); it also requires guidelines and time for sustained professional dialogue such as those provided by professional learning teams and protocols.

One of the ways to support and spread learning across schools is to focus school organization around learning, and to work continuously towards a common focus for practitioners at various sites in schooling where teaching takes place. These include classrooms, but they also include other sites where teachers work professionally with each other: teaching teams; department groups; the school executive and formal leadership; the practices of district and systemic support teams beyond the school. Each of these constitutes a 'site of pedagogical practice'. Building coherence across these different sites, or 'bringing alignment to scale', is a way of developing shared understandings of teaching and learning as core activities within the school. Just as students' classroom learning is the primary site of teachers' pedagogical practice, so teachers' learning may be viewed as the site of pedagogical practice for department heads and teacher leaders. In the same way, the professional learning of department heads and teacher leaders is conceptualised as the pedagogical practice of senior

executive; and the professional learning of senior executive is conceptualised as the pedagogical practice of principals.

This approach also casts district and system personnel beyond the school into pedagogical roles, and challenges them to conceptualise their work with schools as primarily pedagogical in nature. In contrast to the tendency of systems to put downward pressure on schools, this approach provides a mechanism by which students' learning needs can be translated up through systems. Hence, it focuses district and system personnel on their pedagogical practices: at the district level these practices are related to the learning needs of those working in schools, while at the system level these practices are related to the learning needs of those working in districts. This is a point we return to later.

The notion of different sites of pedagogical is represented in the table below:

Table 5.1: Sites of pedagogical practice

<i>Practitioners</i>	<i>Sites of practice</i>	<i>Pedagogical practices</i>
Teachers	Classrooms	Classroom practices focussed on enhancing student's learning outcomes with an emphasis on challenging, connected and valued tasks
Teacher leaders	Faculties, Teams or Stages	Team building focussed on enhancing teachers' professional learning, including disciplinary/stage knowledge and related pedagogical skills
Senior Executive	Executive meetings	Leadership for learning focussed on enhancing teacher leaders' ability to support professional learning.

Conceiving of the work of teachers, head teachers and the senior executive of schools in this way also provides a mechanism for aligning programs across departments and subject areas in schools. For example, it provides a means of mapping the scope and sequence of learning programs and setting outcomes across departments so that greater coherence in students' learning experiences may be built.

Classroom practice as a site of pedagogical practice

The classroom practices of teachers are at the heart of most attempts to reform schools. Through these practices, teachers mediate between 'the conceptual demands laid up in the curriculum and the family cultural resources available to the average student in their class' (Teese, 2000p. 5). The gap between these is greatest for schools in adverse conditions, and the stakes are higher for children in these schools who rely on schooling to provide the cultural resources available to others. Whilst teaching alone is insufficient to close this gap, good teaching does make a critically important contribution to improving students outcomes from schooling (Newmann & Associates, 1996; Christie, 1998; Lingard et al, 2001).

Amplifying learning seeks to support good teaching by aligning the classroom practices of teachers with each other and more critically with the school's curriculum. This involves collaboration through sustained professional dialogue about how to engage students in supported learning experiences. A core responsibility of teachers working in teams is to align their interpretations of the curriculum, develop authentic assessment tasks and design pedagogical experiences that support learning. Whilst individual teachers makes a difference, a technology of resilience supports teachers' professional learning through regular, sustained and structured opportunities for teachers to work in teams. Isolated pockets of good teaching practices are not sufficient to achieve whole school reform.

Teacher leadership as a site of pedagogical practice

Heads of department in secondary schools have an important role to play by aligning learning programs at the disciplinary and trans-disciplinary level, they occupy important positions 'in the middle' of these organisational structures, forming a bridge between classroom teachers and senior executive. Much of their time involves coordinating teachers, topics and time, but a technology of resilience conceptualizes their pedagogical practice as primarily relating to the learning needs of teachers within their departments. Although heads of department are involved in administrative and welfare practices, a technology of resilience attempts to build coherence between their pedagogical practice and other sites of pedagogical practice in ways that ultimately support student learning.

A core contribution of teacher leaders is to map the scope and sequence of learning programs. This mapping should produce explicit statements about students' learning outcomes - identifying when learning opportunities should be provided and to what depth they should be sustained. At this site, it does not require prescriptive statements about how these outcomes will be taught and assessed - this is the work of classroom teachers.

One approach to implementing syllabus outcomes is for each discipline to systematically to 'cover' their outcomes. Another approach is for teachers working in different disciplines to coordinate their efforts and work together to support student learning needs. Both these approaches demand clear statements about the curriculum.

Questions that arise when writing explicit statements about student's learning outcomes include:

- What learning outcomes are shared by more than one discipline?
- How should learning opportunities be sequenced?
- How are learning opportunities best matched to outcomes?
- What depth of understanding is required?

Answering these questions requires planning time - professional dialogue.

School leadership as a site of pedagogical practice

Many schools start with structural reforms, such as class groupings, length of lessons, and timetable arrangements, whereas amplifying learning and building the capacity of each site of pedagogical practice highlights the need for professional dialogue that builds shared understandings about the curriculum and how it is aligned with assessment and pedagogy. Within this context, structural reforms are scaffolds for achieving these shared understandings. Such understandings are not written in concrete or sand - they need to hold until new agreements replace them. This is a continuous process of reform and one that is never completed - it provides direction, is difficult and is sometimes derailed.

Conclusion

Once exposed, disciplinary technologies tend to lose their potency. This does not mean that they are defeated, but rather that they 'morph' into new guises. The challenge for those who seek more equitable outcomes from schooling is to find new ways of disrupting their predictable effects. Disruptions are generally not effective or sustained but easily accommodated or actively subverted. Amplifying learning will silence other practices. In seeking equity we can produce inequitable effects. It is important to continually ask questions such as: What practices are made acceptable?; What goes unexplained; What can seem to be solves? The relentless pursuit of a solution requires a belief that what holds us back is discursively constructed and able to be discursively dismantled.

References

- Brown, P., Halsey, A. H., Lauder, H., & Stuart Wells, A. (1997). The Transformation of Education and Society: An Introduction. In A. H. Halsey & H. Lauder & P. Brown & A. Stuart Wells (Eds.), *Education: Culture, Economy, Society*, (pp. 1-45). Oxford: Oxford University Press.
- Brown, P., Halsey, A. H., Lauder, H., & Stuart Wells, A. (1997). The Transformation of Education and Society: An Introduction. In A. H. Halsey & H. Lauder & P. Brown & A. Stuart Wells (Eds.), *Education: Culture, Economy, Society*. (pp. 1-45). Oxford: Oxford University Press.
- Castells, M (2001) 'The new global economy', in *Challenges of Globalisation: South African Debates with Manuel Castells*, eds J. Muller, N. Cloete, S. Badat, Maskew Miller Longman, Cape Town, pp. 2-21
- Castells, M. (1996, 1997, 1998) *The Information Age: Economy, Society and Culture*, Vols. I, II & III. Oxford: Blackwell.
- Cherenichenko, B., Hooley, N., James, W., Kruger, T., Lawson, D., Moore, R., Partridge, J., and Tyson, C. (1999) A developing case study: A collaborative longitudinal experience of school change research. *Australian Educational Researcher*, 26, 3, pp. 57-71
- Christie, P. (1998) Schools as (disorganisations: the 'breakdown of the culture of teaching and learning" in South African schools, *Cambridge Journal of Education*, 28(3), 283-300.

- Christie, P. (2001) Improving School Quality in South Africa: A study of schools that have succeeded against the odds, *Journal of Education*, 26:40-65.
- Coleman, J., Campbell, B., Hobson, C., McPartland, J., Mood, A., Winefeld, F., and York, R. 1966, *Equality of Educational Opportunity Report*. U.S. Government Printing Office, Washington D.C.
- Dreyfus, H. L., & Rabinow, P. (1983). 2nd ed. *Michel Foucault: Beyond structuralism and hermeneutics*. Chicago: The University of Chicago Press.
- Dusseldorp Skills Forum (2003) *How Young People are Faring 2003*. Sydney: Dusseldorp Skills Forum.
- Foucault, M. (1975) *Discipline and Punish*, trans. A. Sheridan. New York: Pantheon.
- Foucault, M. (1976) *The History of Sexuality, Vol. 1: An Introduction*, trans. R. Hurley. New York: Pantheon.
- Fullan, M. ed. 1997 *The Challenge of School Change: A Collection of Articles*, Skylight Training and Pub, Arlington Heights, Ill
- Hargreaves, A. ed. 1997, *Rethinking Educational Change with Heart and Mind*, Association for Supervision and Curriculum Development, Alexandria, Va
- Hopkins, D. and Levin, B. (2000) Government Policy and School Development. *School Leadership and Management*, 20 (1), 15-30.
- Lingard, B., Ladwig, J., Mills, M., Bahr, M., Chant, D., Warry, M., Ailwood, J., Capeness, R., Christie, P. Gore, J., Hayes, D., and Luke, A. (2001). *School Reform Longitudinal Study: Final report Volume 1*, University of Queensland:
- Mac an Ghail, M. (1996) *Understanding masculinities: social relations and cultural arenas*. Buckingham, Philadelphia: Open University Press.
- Newmann, F.M. and Associates (1996) *Authentic Achievement: Restructuring Schools for Intellectual Quality*. San Francisco, CA: Jossey-Bass.
- Peterson, McCarthy and Elmore (1996) Learning from school restructuring. *American Educational Research Journal*, 33(1), 119-153.
- School of Education (University of Queensland), 2001, *The Queensland School Reform Longitudinal Study*, The State of Queensland (Department of Education), Brisbane.
- Slee, R., Weiner, G., and Tomlinson, S. (1998) *School Effectiveness for Whom?* London: Falmer.

- Stoll, L., and Fink, D. 1996, *Changing our Schools: linking school effectiveness and school improvement*, Open University Press, Buckingham, England, Philadelphia
- Teese, R. and Polesel, J. (2003) *Undemocratic Schooling: Equity and quality in mass secondary education in Australia*. Canton: Melbourne University Press.
- Teese, R. and Polesel, J. (2003) *Undemocratic Schooling: Equity and quality in mass secondary education in Australia*. Carlton: Melbourne University Press.
- Thrupp, M. (1999) *Schools making a difference: Let's be realistic! School mix, school effectiveness and the limits of social reform*. Buckingham: Open University Press.
- Thrupp, M. 1999, *Schools making a difference: Let's be realistic! School mix, school effectiveness and the limits of social reform*. Open University Press, Buckingham
- Thrupp, M. 2002, 'Making the Difference: 20 years on', *Discourse: studies in the cultural politics of education*, vol. 23, no, 3, pp.339-45
- Vinson, T. (1999) *Unequal in Life: the distribution of social disadvantage in Victoria and New South Wales*. Jesuit Social Services.
- Vinson, T., Esson, K. & Johnston, K. (2002) *Our Children Our Future. An Inquiry into Public Education in New South Wales. Findings in Brief* (Sydney, NSW Teachers Federation and the Federation of Parents and Citizens Association NSW).
- Yeatman, A., & Sachs, J. (1995) *Making the Links*. Murdoch, WA: Innovative Links Project.

ⁱ This project was funded by the then Commonwealth Department of Employment, Education and Training as part of the National Professional Development Program between 1994 and 1996.

ⁱⁱ Elsewhere, I have discussed ways of modifying and disrupting this default mode using techniques of alignment and backward mapping (Hayes, 2003). In this paper, I extend this discussion by locating these techniques with a more elaborate discussion of the disciplinary technologies of schooling. I draw upon and extend the work of the Queensland School Reform Longitudinalⁱⁱⁱ study, which examined the link between classroom practice and students' academic and social outcomes; and the work of a collaborative research project on whole school change between a university and state department of

educationⁱⁱ that aimed to enhance students' learning outcomes by supporting the learning of classroom teachers, head teachers/stage leaders, senior executive and others who work in schools.