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Outcomes based education? Rethinking the provision of compulsory education in Western Australia

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Outcomes based education (OBE), which emphasises a radical reinterpretation of the enterprise of education, is a phenomenon enveloping the Australian compulsory education sector. This paper examines the theoretical tenets of OBE as articulated by its chief exponent, William Spady. It then explores the effects that OBE implementation is having on the Western Australian educational fraternity, touching upon current tensions and emerging consequences. Implementation exigencies in one area of the WA curriculum (Mathematics) are then considered; and finally, possible future 'outcomes' are suggested should the identified concerns fail to receive due attention.

Cause for concern

Compulsory education in Western Australia (WA) has been experiencing systemic insecurity for over a decade. Since the introduction of Outcomes-Based Education[1] (OBE) circa 1990, the State has struggled to maintain traction. The last several years have been particularly problematic. Disaffection has manifested in disgruntled teachers setting up their own anti-OBE website (PLATO, 2005; launched on June 14th 2005, and at time of writing having 185,000 hits); others voicing their angst via the State School Teachers Union website (2005); and still others, as well as secondary school students, turning to the print media for a hearing (The Sunday Times, Aug 7, 2005; *The West Australian*, Nov 23, 2005). At the same time, numerous university professors have questioned the veracity of OBE as an adequate curriculum design device (eg, Bray, 2005; Cairney in Ferrari, 2006; Cole, 2005); and one private school sector union has surveyed its teachers regarding OBE initiatives with a view to boycotting the process altogether (*The West Australian*, February 11, 2006).

[1] One School District in the USA which considered implementing OBE reported that "OBE is referred to by over 20 different names including Performance Based Education, Standards Based Education, High Performance Learning, Total Quality Management, Transformational Education, Competency-Based Education, and Break-the-Mold Schools, among others. Its proponents have continually changed the name due to the negative implications associated with the program. However, all of these titles refer to a similar philosophy and a plan which implements radical and "systemic" change into schools" (Watch District 46 Schools Home Page).

Further, the immediate past Federal Minister for Education, Science and Training has stated outright that children's education is suffering as a result of having been "…infected by what's known as the outcomes-based education model…" (Nelson, Sept 2005). The current Federal Minister has expressed similar concerns (*The West Australian*, March 21, 2006).

In all of this, the State Minister for Education and Training, the Curriculum Council (CC), and the Department of Education and Training in Western Australia (DETWA) have continued to insist that all is well in the world of WA Education. This is despite the fact that in response to considerable public pressure, a *Parliamentary Inquiry into Changes to the Post-Compulsory Curriculum in WA* (2005) was established; the CEO of the Curriculum Council was moved from that position (*The West Australian*, August 24, 2005); likewise the current Director-General of DETWA and past CEO of the CC; and eventually, the Minister herself.

The OBE journey in WA compulsory education has included some very rough terrain. Concerns with problematic way-points abound. It seems that in attempting to implement OBE, WA has experienced the same destabilising effects that have been reported elsewhere (discussed in the next section). It has been suggested, for example, that the underlying philosophy of OBE has not been comprehensively thought through (Tavner, 2005; Towers, 1992); that teachers are drowning under a deluge of convoluted documentation (Dawson & Venville, 2006; Power & Berlach 2006); that assessment protocols are excessively time-consuming and insufficiently competitive, thereby resulting in a 'dumbing-down' of standards (Berlach, 2004; Roberts, 2005); that teachers are grappling with not knowing what to teach as a sequentially-based syllabus is no longer the *raison d'être* of education (Williams, 2006).

It has also been argued that sound and time-tested pedagogical imperatives have been jettisoned in favour of a politically-driven ideology (Donnelly, 2004); that the levelling process adopted by the Curriculum Council is psychometrically flawed (Andrich, 2006; Kessell, 2007; Tognolini, 2006); that those in control of spearheading OBE initiatives have lost their way and with it, the trust of the teaching profession (Nelson, 2005; *The West Australian*, Nov 23, 2005); and that many teachers are leaving the profession due to experiencing on-going frustration with OBE's radical 'reforms' (DETWA Nov., 2003; Nov., 2004). What is of further concern is that some government schools (eg, Kelmscott and Rossmoyne Senior High Schools) are openly defying Departmental directives not to publicly oppose OBE initiatives; while several private schools are bypassing the OBE system altogether and instead offering their students the International Baccalaureate (eg, Scotch College, St Brigid's College, Treetops Montessori). Such is the depth of discontentment.

So precisely what is OBE and why has it divided the educational community to such an extent? The remainder of this paper explores the genesis of OBE; considers how implementation in one area of the WA curriculum (Mathematics) has been attempted; and looks to a possible future scenario should the concerns identified fail to be addressed.

The theoretical platform of OBE

OBE has been criticised as being too general, convoluted and jargon-laden to be of much practical value (Donnelly, 2004; Dykman, 1994). *Prima facie*, one would be hard-pressed to sustain such criticism given the definition of OBE provided by William Spady, the paradigm's chief architect.

> Outcomes-Based Education means clearly focussing and organising everything in an educational system around what is essential for all students to be able to do successfully at the end of their learning experiences. This means starting with a clear picture of what is important for students to be able to do, then organising the curriculum, instruction and assessment to make sure this learning ultimately happens (1994, p.1).

Spady's theory of OBE stems from this general definition and has been expounded in this and other works (1988, 1998). His position can be largely distilled down to five overarching principles. Firstly, the beginning point of learning is not inputs but outputs. That is, once the end product of learning has been established, only then can curriculum design be considered. This he refers to as the principle of 'designing back' or 'designing down' (1994). Secondly, individual authorities (normally schools) accept responsibility for determining how the big picture outcomes are to be achieved. In this, Spady sees teachers as moving from a primary responsibility as expositors of a syllabus to one of becoming curriculum designers. Thirdly, norm-referenced assessment is unfair in that it ranks students, often on single-test performance, rather than expecting the best of *all* students and finding precisely that via multiple assessment scenarios. To facilitate what he terms 'high expectations', students ought to be given as many opportunities as required to demonstrate criterion-based success, so as to obviate the need for what amounts to mandated 'failure'. What is traditionally termed failure, Spady would likely refer to as 'delayed success'. Fourthly, in the task of learning, importance of understanding ought to have precedence over time constraints. In other words, students should be allowed as long as they need to exhibit mastery over a particular concept. Finally, the process of learning is as important (if not more important) than the content to be learned. Learning should be enjoyable rather than be, as is often the case, the agent for disenfranchising the learner.

In essence, Spady's five key principles can be summarised as follows.

- Begin with the end (outcome) in mind
- Individual schools design a curriculum around predetermined outcomes
- Comparing student performance is educationally counter-productive
- All learning should be calibrated so as to allow for individual success
- Process is at least as important as product.

In theory, these principles appear benign and perhaps even educationally efficacious, however, closer examination provides greater illumination regarding the environment in which they were conceived. Spady's philosophy, as articulated above, is 'bird's-eye-view' in nature. That is, it presents 'big picture' imperatives without delineating precisely how such a big picture looks in practice. If the framework is understood and people empowered to embrace change, Spady (1998) would argue, then the rest will simply fall into place.

Spady is not particularly concerned with extant militating factors such as the highly bureaucratised nature of schools; the fact that schools are organised around structures that facilitate chronological progression; that strict timetabling is required for the management of large numbers of students; and that the mind-set of teachers is imbedded in curriculum exposition rather than curriculum generation. Such disregard of cultural imperatives, together with an absence of guidance regarding practical matters is evident in most of Spady's work. In a session offered to delegates from the *Australian Curriculum Studies Association* (Spady, 1993), for example, workshop notes distributed by Spady were high on hyperbole and motivation but low on implementation strategies. A reworking of those notes for *Paradigm Lost* (1998) indicates the same paucity of practical 'on-the-ground' strategies. Spady would doubtless argue that his mission is not one of implementation. A fair defence was it not for the fact that few if any successful OBE ventures have ever materialised, thus casting doubt not only on implementation deficits but on the very nature of the theory itself.

Spady's general approach is reminiscent of that promulgated by the early deschoolers such as Illich (1970) and Reimer (1971), who likewise wrestled with various models but failed to show how these were to be realistically implemented given the constraints of existing systems and structures. Thus, the professed clarion call of the deschoolers could well be distilled into a call for nothing more than deinstitutionalisation in general. Spady is not much different, except that deinstitutionalisation has been replaced by the vague notion of a "future empowerment paradigm" (1998, p.130). In *Paradigm Lost* (1998), he advocates nothing less than complete reform of schools and schooling but like the deschoolers, fails to indicate how that is going to happen in practice.

The impossibility of translating OBE theory into practice is precisely what the 46th Illinois School District found when in December 2000, the School Board approved the hiring of William Spady to advise District 46 in the Strategic Design Process. After working with the process for a number of years, the District decided to abandon Spady's "controversial beliefs" (p.2) as practically unworkable. The following is taken from a record of meetings.

> Proven results should be our guide in planning for the future of our schools. Unfortunately, we have found little evidence of positive results from affective outcome-based programs like Dr. Spady's. States that have implemented them, such as Pennsylvania, New York, Minnesota, Oregon and Ohio, have largely abandoned them and are returning to strong academic standards-based curriculums… The real issue with the Strategic Design Process centers on the process itself. The types of questions asked lead to defined outcomes (goals) that are vague, fuzzy, and difficult to implement and measure… At the May 7th [2002] School Board Meeting, the Board discontinued the use of William Spady as a consultant to the district. (Watch District 46 Schools Home Page).

In WA, similar views have been expressed. With a recent change occurring in the Education and Training portfolio, Steve Kessell (2007), recently retired Associate Professor of Science and Mathematics education, made the following observation:

> The former minister touted OBE as "world best practice", claiming it has been implemented across Australia and other OECD countries. The last part is technically correct: OBE was implemented in many of those places, and virtually all are now abandoning it as a failed experiment.

As educational change management guru Michael Fullan (2001) has insightfully pointed out, success *per se* is largely determined by what teachers think about the intended changes. As advertisers well know, perception is everything. If teachers fail to find any sense or meaning in an intended reform, insists Fullan, then regardless of any touted benefits, the change will most likely not succeed. Change managers attempting to implement a radically different educational model, without first clearly thinking through the implications for classroom practice, are likely to encounter a collision of paradigms and with it, create system-wide insecurity and instability.

For a fleeting moment, a candle shone in the OBE darkness with the establishment of a *Parliamentary Inquiry into Changes to the Post-Compulsory Curriculum in WA* in 2005. It seemed that the State government was getting serious about addressing the shortcomings of OBE. Many individuals made submissions to the Committee believing that a time for change was imminent. Sadly, the light seemed to be extinguished even before the candle had time to flame, for as one observer noted,

> The committee has been duly called into existence and held its first hearings. But this stratagem was somewhat blunted by Minister Ljiljanna Ravlich implying that its deliberations would have little or no weight in her decisions, a particularly unpleasant contempt for the processes of Parliament (Rutherford, 2005, p.19).

The Committee report was presented on June 29 2006, but not without controversy. Predictably, given the Minister's comments cited above, a majority report representing the views of the three government members of the committee [Guise, Hyde and Whitely] and its government chairman [Stephens] generally supported the OBE agenda, but had serious reservations about its implementation (Stephens, 2006). The three non-government members [Constable, Hames and Waldron], however, took the unusual step of producing a Minority Report which indicated that certain recommendations raised more questions than they answered and that many in fact "create a high degree of uncertainty" (Constable, Hames & Waldron, 2006). On the surface, it would appear that the Report/s failed to deliver much by way of clarification.

This was a missed opportunity for exploring in detailed fashion the two key issues surrounding the OBE debate. The first relates to the adequacy of the model as the driving theory behind the State's provision of compulsory education. This has been explored elsewhere (eg, Berlach, 2004; Evans & King, 1994; Treloar, 2005). Suffice it to say that until compelling evidence for the success of OBE can be presented, then the value of the theory for practice remains suspect. To date, such evidence does not appear to exist. The second issue, and the one to be explored further here, relates to the manner in which one educational jurisdiction (WA) has managed OBE planning and implementation.

Planning exigencies

Hindsight suggests that from its inception, the process of managing WA's move to OBE has not been well handled. The missing ingredient appears to be a master plan which interpreted the OBE philosophy for the immediate context; described precisely what changes were to be instigated; indicated how these were to be implemented; provided appropriate levels of professional development for key stake-holders; and adequately funded the total process. As DETWA's (2003) own evaluation of the Curriculum Improvement Program (CIP) indicated, teachers were generally not positive about the manner in which implementation was handled. Hoping to learn from mistakes, DETWA initiated a corrective known as CIP Phase 2. Although general receptivity has been somewhat more positive, the plethora of continuing concerns regularly appearing in the media would indicate that general criticisms pertaining to OBE planning matters have not abated.

Rather than having been driven by a strategic vision, the process of implementation seems to have occurred by *ad-hoc* fiat, resulting in an unimpeded layering of convolution upon convolution. The prime example of this is the confusion which raged, and continues to rage, over the burdensome, repetitious, and pragmatically dubious nature of the documentation provided to teachers. This situation seems to resonate with the experience of Fullan (2001), who suggested that the structural changes, curriculum and accountability measures, popular in the 90s, created general overload and did little to change the quality of teaching and learning. But one does not need to be of Fullan's stature to realise this, as indicated by the comments of a Year 9 student:

> You should see the booklets of stuff we are given for each task. You can wade through it and still not find out exactly what you need to do. It's no good asking for anyone to explain it to you because these outcomes are written so that two people reading them can see two different things. (Dell, 2005, p.48).

Since 1998 teachers have been required to negotiate their way through vague and often discordant planning documentation. Of those who have made the trek through the materials, many complain that at the end of the process they are no clearer about what they are required to teach than when they commenced the journey (Dawson & Venville, 2006; Power & Berlach, 2006). Practising and preservice teachers alike have expressed enormous frustration at having to engage in this decoding and demystifying process in an attempt to make sense of the documentation.

A participant at a recent professional development event attended by one of the authors was shown a new curriculum document. He glibly responded "just don't ask me to 'unpack' anything else, because I won't do it". Such a sense of irritation at being required to engage in what was perceived as largely a meaningless process is not uncommon among teachers. At a recent in-service held by the *Association of Independent Schools WA* (2006), a presenter introducing a trial project relating to diagnostic mathematics materials, made the comment that the final product had to be something that teachers could pick up and use without needing to attend a professional development course on 'making sense of it'. Statements such as these are illustrative of conversations occurring on a regular basis in school staffrooms, at staff meetings, and at professional development seminars. Teachers are increasingly complaining that professional development has not been focused on how to be more effective in the classroom, but rather, on how to decipher obtuse and often irrelevant documentation.

Given its past failures in providing adequate documentation for resourcing teachers, the CC must be given credit for compiling *Elaborated Guides* (2006, some as Working Versions at time of writing) in each Learning area.

These are comprehensive documents which finally provide some content regarding what needs to be taught. These documents needed to be prepared as teachers saw their predecessor, the *Curriculum Guides* (CC, 2005), as being of little value at a time when they were crying out for guidance regarding content to be taught. This is despite the fact that the government report *Investing in Government Schools: Putting Children First* (Robson, 2001) strongly recommended that the Guides be "sufficiently comprehensive and detailed that schools and teachers understand what they are expected to teach…" (p.5).

By way of exemplifying the confusion that reigns, documentation in the Mathematics Learning area is considered in what follows. The reader is asked to bear in mind that unlike their secondary counterparts who normally teach two learning areas, primary teachers are required to teach eight, hence quadrupling the time required for the deciphering process.

A typical example: Mathematics learning area

There are more outcomes in Mathematics than any other learning area. In contrast to the 19 plus learning area outcomes for Mathematics, there are only four in the Arts learning area and nine in the English learning area. Technically, there are 19 outcomes however, in reality there are several more. Outcomes such as number 15, for example, the first one related to 'Space', is separated into three distinct outcome areas, labelled a, b and c in the supporting documentation. A number of other outcomes are further divided into subsections, which in reality, makes each a separate outcome. Outcome six, for example, is divided into two parts – a and b – the first referring to whole number and the second to fractions. The 19 official outcomes are arranged over 7 clusters, namely, 'appreciating mathematics', 'working mathematically', 'number', 'space', measurement', 'chance and data' and 'pre-algebra' (the latter becoming 'algebra' at level five). Teachers need to teach all 19-plus outcomes, across all 7 clusters. Two of the clusters, however, 'appreciating mathematics' and 'working mathematically', are not taught separately from the other clusters, being overarching clusters. Six of the seven clusters are levelled in the *Progress Maps* and *Outcomes Standards Framework*; 'appreciating mathematics', however, is not levelled.

The learning area outcome descriptors themselves are long-winded and tortuous. Learning area outcome one descriptor, for example, in the 'appreciating mathematics' cluster states the following.

> Show a disposition to use mathematics to assist with understanding new situations, solving problems and making decisions, showing initiative, flexibility and persistence when working mathematically and a positive attitude to their own continued involvement in learning and doing mathematics. (*Progress Map* Mathematics, 2005, p.14)

And, for learning area outcome nineteen of the 'algebra' cluster, the descriptor reads as follows.

> Write equations and inequalities to describe the constraints in situations and choose and use appropriate solution strategies, interpreting solutions in the original context. (*Progress Map* Mathematics, 2005, p.114)

Apart from the vague language in which the outcome descriptors are couched, consistency is a further problem. Whilst the CC website claims that documents are 'consistent', it is clear that this is not the case. Teachers face an added complexity with Mathematics in that the *Progress Maps* are conceptually different from all of the other learning areas. For example, the wording is different with terms such as 'aspects' not being used in Mathematics. A further example is that the Mathematics elaborated *Curriculum Guides* run over some 46, A3 sized pages and are written across the *Curriculum Framework* 'scope and sequence' phases of development. As such, they do not currently correspond directly to levelled outcomes from the *Progress Maps* or *Outcomes and Standards Framework* documents. Such semantic and visual incongruities create extra work that hampers teachers in the task of planning and preparing learning experiences for their students.

Sadly, WA is not the only State where such generally obtuse and inconsonant policy and planning documentation abounds. Neither is it confined to Mathematics. After conducting a comprehensive comparison of Australian State and Territory K-10 Science curriculum documentation, Dawson and Venville (2006) reported thus.

> We wrote this paper initially to quell our curiosity about what was happening in the rest of Australia outside of Western Australia. The paper was far more difficult to write than anticipated. Although we are both experienced science teachers and academics in science education, some of the documents were extremely long (over 200 pages), the language dense, jargon laden and exclusive. The documents were complex and difficult to interpret without assistance (p.23-24).

At a time when there is an extreme shortage of qualified science teachers around the nation, one would be foolish to ignore the potential effects of such an estimation; more so given that the authors conclude with the following sentiment.

> …we can only imagine that it would be almost overwhelming for newly qualified science teachers, non-science specialists attempting to teach science unassisted or primary teachers who must cope with similar documents from other learning areas (p.24).

Given that a nation-wide shortage of qualified mathematics teachers in the same order as that for science teachers exists, it would be prudent for

authorities to investigate how much general dissatisfaction is specifically related to curriculum policy and consequent curriculum documentation.

The challenge

A survey conducted by the State School Teachers' Union relating to teacher attrition found that.

> Of the respondents [n = 807], 61 per cent said they were considering a career change or retiring and 16 per cent had already decided to do so. Nearly 70 per cent said they now found teaching less rewarding and 53 per cent were unable to complete existing work schedules. About 20 per cent had taken personal time off work this year and 11 per cent had taken sick leave because of the stress of implementing OBE (*The West Australian,* November 23, 2005, p.1).

It would be foolish to suggest that OBE is entirely responsible for teacher attrition. On the other hand, it would be equally as foolish to disregard dissatisfaction with OBE as a significant contributing factor. As a result of WA's presently buoyant economy, there has been a general downturn in the number of school leavers entertaining tertiary study, preferring rather to enter the attractive labour market being largely driven by the mining sector. Teacher education is no exception, with the number of individuals entering teaching courses showing a marked decline across all WA public universities (Tertiary Institutions Service Centre, 2006).

Added to this concern, it has been reported that, nationally, between 25% and 30% of beginning teachers leave the profession within the first five years of commencement (Canavan, 2004; Department of Education Science and Training [DEST], 2003). In WA the figure is even higher with Department of Education and Training (2006) documentation indicating that "the Department loses up to 35% of beginning teachers in the first two years of employment and up to 50% within five years" (p.12). As Ramsey (2000) observed "teacher education graduates and many young teachers have skills, including higher order personal skills so critical in the profession, which are valued in the wider labour market" (p.40). The Committee for the Review of Teaching and Teacher Education (DEST, 2003), realising this, counselled as follows.

> The most crucial factor in ensuring an adequate supply of teachers for the future will be to retain and support as many of those teachers currently employed as possible, particularly those in the earlier years of their careers (p.144).

It is incumbent upon the WA government to take every conceivable measure to retain teachers in the existing workforce. This must include addressing some of the concerns raised by the many aggrieved by the OBE agenda.

If theoretical and implementation concerns surrounding OBE fail to be addressed, if system administrators continue blaming the failure of OBE on "teachers resisting the reform agenda", and if teacher numbers continue to decline, then there is real danger of the system being stressed beyond the bounds of endurance. Based on a review of the reasons for the breakdown of systems undertaken by the Organisation for Economic Co-operation and Development (OECD, 2003), this is not an unrealistic prediction. The OECD has suggested six possible scenarios for schooling in the future up to 2020. These are as follows.

1. Bureaucratic School Systems Continue
2. Meltdown scenario
3. Schools as Core Social Centres
4. Schools as Focused Learning Organisations
5. Learning Networks and the Network Society
6. Extending the Market Model

On the basis of concerns about how education is being conceptualised in Western Australia, the prognosis seems to best align with the characteristics detailed for the "meltdown scenario". For this scenario, the OECD suggests that

> [t]here would be a major crisis of teacher shortages, highly resistant to conventional policy responses. It is triggered by a rapidly ageing profession, exacerbated by low teacher morale… Crisis management predominates. Even in areas saved the worst difficulties, a fortress mentality prevails… The crisis, is in part caused by teaching's unattractiveness… (2003).

Aware that signs of disintegration were evident in WA, the Federal Minister for Education, Science and Training was reported as encouraging the State government to "act decisively to halt what has all the hallmarks of becoming an educational disaster for WA's schoolchildren" (*The West Australian,* March 22, 2006, p.20).

Potential disaster or not, the issues surrounding OBE's ideological framework and implementation deficits have divided the educational community and destabilised education in Western Australia for well over a decade. Evidence suggests that education authorities would be unwise to wait any longer before making a careful audit of OBE's bona fides, examining other paradigms for the provision of compulsory education, and then taking the bold step of choosing the model which offers the greatest empirical evidence of success.

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