Hawke Research Institute
Working Paper Series

No 35

NEW SPACES FOR LEARNING: DEVELOPING THE ECOLOGY OF OUT-OF-SCHOOL EDUCATION

Julian Sefton-Green

Hawke Research Institute for Sustainable Societies
University of South Australia
Magill, South Australia
2006

Hawke Research Institute for Sustainable Societies
University of South Australia
St Bernards Road
Magill
South Australia 5072
Australia
www.unisa.edu.au/hawkeinstitute

NEW SPACES FOR LEARNING: DEVELOPING THE ECOLOGY OF OUT-OF-SCHOOL EDUCATION

Julian Sefton-Green*

Abstract

This paper offers a description of and a contribution to a theory about the sector of out-of-school (non-formal) educational provision for young people. Focusing particularly on arts and culturally based activities, it surveys the forms and structures of such provision and explores how it is used in a range of policy contexts, especially those aiming to redress social exclusion and promote economic regeneration. This is contextualised within a consideration of how out-of-school education could form part of the overall ecology of education provision offered to young people in the community. It draws on examples of study, research and evaluation from around the world. It is aimed at education administrators, academics, researchers, practitioners and social policy makers, and attempts to offer a coherent overview of a crucial but neglected part of what should constitute the educational sector in the global, post-industrialised world.

1 Introduction

Partly stimulated by changed developments in and uses of technology, recent speculation about the new or changing nature of the 'knowledge' economy has prompted interest in the variety of forms of non-formal and informal learning. In turn, this has led to a re-appraisal of what constitutes an educational site, or place for learning. The literature, research and theorising about this field are substantial and extremely broad ranging. It is always difficult to know why a shift in focus like this happens at a particular point in time, and by definition explanations are always likely to be speculative. An investigation of the paradigm shift underpinning the knowledge economy (Webster 1995; Hakken 2003) may be one such trigger, but equally it would be fair to suggest that much of the current interest in out-of-school learning has been

* Dr Julian Sefton-Green is an independent consultant and researcher working in education and the cultural and creative industries. He is currently an Associate Research Professor at the Hawke Research Institute for Sustainable Societies, University of South Australia, where is developing a city-wide initiative to develop new kinds of spaces for learning. He has been the Head of Media Arts and Education at WAC Performing Arts and Media College, a centre for informal training and education, where he directed a range of digital media activities for young people and coordinated training for media artists and teachers.

galvanised by a popular politics (across the western world) that state education systems are themselves in a state of crisis (see Nocon and Cole 2006; Rampton 2006: ch 2, 3). This is not to suggest that such arguments are the only point of entry into this field of study. Indeed, the literature is extraordinarily diverse, drawing from studies of workplace learning, media culture, social inclusion, school-to-work transitions, child and youth provision, and the impact of new technologies, rather than simply emerging as an intra-educational debate.

Whilst this paper will pursue an eclectic range of influences in analysing the nature of informal and non-formal learning, my interest is very much in the complementary or supplementary role played by out-of-school learning in respect of organised provision. I am especially interested in how non-formal kinds of organisation, in effect kinds of 'not-school' schooling, have been initiated, organised, evaluated and theorised as playing (at times) a central role in the wider ecology of learning offered to young people.

Elsewhere (Sefton-Green 2003), I have distinguished between non-formal and informal learning, taking the former to refer to how the learning is organised, and the latter to its modality. I shall be continuing to use these definitions in this work (see also Coombs, Prosser and Ahmed 1973; Livingstone 2006; Smith 2006). Non-formal learning thus describes those kinds of projects, programs and activities that are organised outside of statutory education systems and where young people come together to participate in structured but non-compulsory kinds of education. Informal learning describes learning that might happen casually or in unplanned, disorganised or 'accidental' ways. These are not absolute distinctions (the field precludes this). It is therefore entirely probable that informal learning will occur in a school or that non-formal learning sometimes includes highly formal teaching (Smith 2006). Nevertheless, it is important to have some definitions before approaching the literature.

The main thrust of this paper is to analyse the histories and context of the development of non-formal learning programs. I will begin the process by characterising such programs (in terms of curriculum, pedagogy and institutional type). This is very much an underdeveloped field of study, and although I shall be drawing on examples from around the world – this is a global phenomenon –I do not claim that it is comprehensive. The studies collected by Bekerman, Burbules and Silberman-Keller (2006) show both that this is a widely written about area but equally that there are enormous gaps in our knowledge base. There are, additionally, elements of a manifesto in this study. It describes work led by passionate enthusiasts and sets out both to critique and to offer practical alternatives for young people who may have been failed by, or failed, the educational system in which they find themselves. It is also a manifesto for the field of study. Much of the writing to date is local or consists of evaluations produced for funders and an immediate and parochial audience. One argument of this paper is that the kinds of education described here are a necessary and important part of the whole slate of provision – the 'ecology' referred to above – that modern education systems need to

provide for young people in complex societies. On the whole, the non-formal sector is a 'bottom-up' initiative, developed in response to specific local social problems and, as such, accounts of practice find it difficult to compete with, or even find a voice in, conventional public debate about education. The whole question of resources and organisation, for example, is often divisive and challenging to the status quo. We need now to give structure to the field and to establish it properly alongside other forms of funded learning that claim to fully develop young people's potential.

1.2 Outline of the argument

In the next section of this paper I will define out-of-school learning in terms of institutional structure, mainly revolving around levels of institutionalisation from projects to sectors. I will characterise the qualities of formal organisation and structure as distinct from addressing questions about the nature of the learning. In section 2.3 I will explore who is interested in out-of-school learning and why that may be so. Not only is this revealing from a policy point of view but it is also important in that the research and evaluation to date about this sector reflect the interest and concerns of the commissioning agents. In other words, questions about what we know about this sector are very much implicated in how research and evaluation is used to construct and interpret the field. These methodological and indeed epistemological perspectives are instructive when compared with research about formal education (the school system). With these caveats, section 2.4 will report on some of the claims made for the impact and effectiveness of the non-formal learning sector.

In section 3 I will describe a range of studies of out-of-school learning from around the world. Unlike Bentley (1998), I shall be focusing on those kinds of institutions that mainly exist beyond the statutory school system. In general, the studies and accounts of practice can be categorised into four types. In brief there are, first, studies of experimental/innovative learning sites. Typically these are set up and managed by universities as community/research sites. Secondly, there are programs that are funded to perform a social inclusion function. Third is the arts/community arena, which often includes an ambition to create a youth civic sphere. Finally, we have work or learning set up to meet both the school–work transition (as informal vocational training) and/or as managed children's services. This is only a rough categorisation, as I will argue, and indeed I will attempt to show how the often conflicting funding regimes determine a hybridity of institutional form.

Section 4 is a case study of WAC Performing Arts and Media College in London, UK. This is one of the oldest, largest and most developed out-of-school institutions of its kind. I will describe it in order to theorise a set of questions around pedagogy, curriculum, identity, participation, 'skills', apprenticeships and community; and above all, how such themes can be developed within the form of institutionalisation it seeks to attain. Whilst I will argue that these kinds of organisations and indeed the sector is highly contingent on variable local contexts, and while there is no sense of offering

WAC as an exemplary model, it is sufficiently mature to provide a meaningful example of what such an initiative can offer as an integral part of an education system.

In the concluding section I will raise a series of challenges for the development, implementation and management of a non-formal education sector (taking into account the wider educational ecology in which the sector sits). I intend these challenges to be a basis for policy advice. Through the bibliography, whilst it is not complete, I also aim to make this document a useful repository of information about the non-formal learning sector.

2 What is out-of-school learning? An institutional analysis

This section does not pretend to offer a comprehensive overview of everything that might be said to constitute out-of-school learning but focuses instead on trying to define the key features of the non-formal learning sector. In sections 2.1 and 2.2 I will offer some theoretical models and contexts and in sections 2.3 and 2.4 I will review some of the evaluations of the non-formal learning sector to date and consider who, or more specially what kind of policy interest, is concerned with this sector.

2.1 Boundaries and definitions

The obvious key theoretical issue governing analysis here is how we choose to define the boundary and other kinds of demarcation or distinction between formal and non-formal domains. For example, the less organised (non-compulsory) clubs and after-school societies have played a key part in the history of complementary education. The school play, film clubs, computer clubs, even the fashion show are, on one level, kinds of non-formal learning. They do, however, usually take place in school and, although sometimes organised by students, they are often led by teachers. Sometimes such activities are run according to different disciplinary regimes – calling the teacher by a first name, for example. In other circumstances they act like extensions of the formal curriculum and function like study groups. Playing team sports in these circumstances, to take another example, can vary in respect of how significant representing the school is, as denoted by the wearing of team regalia.

Many non-formal activities within schools or colleges often replicate workplaces. A good example of this would be the school magazine or newspaper – these days as likely to be a radio or podcasting station. Although such activities can be incorporated into the curriculum (the newspaper in media studies, for example), these kinds of organised activities have shown great persistence in remaining on the margins of the curriculum and often act as the defining feature of a school's community participation. As learning systems (if such a phrase is appropriate), these activities are often characterised by a reliance on role and function, hierarchy and goal-oriented process (the newspaper, the play, etc). Frequently the outcome of these processes is public and community focused, such as performances and public presentations.

These kinds of semi-formal activities are often used as evidence of the added value provided by schools and colleges, and participation in them is often used as evidence of a young person's breath, depth and sociality. However, it should be recognised that such provision is often correlated with affluent (privately funded) schools and is often not available to all. Even within elite environments, where the provision is available, participation may be restricted, and places allocated on the basis of selection (sometimes by ability) and usually involvement is voluntary and based on interest, enthusiasm or engagement.

I have described these features in some detail because we shall return to some of the core principles of voluntarism, selection, workplace learning, public performance and organised roles below. However, the existence of these features and styles within the formal education system shows both that we need to be more subtle in our appreciation of how the social contexts of schools can support learning and, equally, that it is difficult to define the boundaries of non-formal learning with absolute distinction from the formal sector.

2.2 Institutional structures

A further complication in defining non-formal learning lies in the fact that those organisations that exclusively or significantly provide non-formal learning opportunities do, of course, differ from each other quite dramatically. The key issue is that in general the funding and management of out-of-school provision is administered separately from core state or local authority management of schools. In other words, to date, the provision of out-of-school services has been typically controlled by a youth services department rather than from within a core education role. Sometimes the specialism of the service defines the funding, so for example sport or arts programs are often run from those areas if they exist beyond general youth/education departments. Of course in some countries youth and education departments are organised in sister sectors. In the UK the recent attempt to harmonise and unify children's services, articulated in the policy known as Every Child Matters (http://www.everychildmatters.gov.uk/), does attempt to coordinate the delivery of services. However, it is uncontroversial to suggest that we are living through a period where the different histories and aspirations behind such provision are still very evidently evolving. In most countries this is because the out-of-school arena tends to be a more discretionary area of expenditure and youth or cultural services budgets do not have the core stability of school spending. In the US, which has a much lesser tradition of public provision (as opposed to private support), the funding landscape is even more distinct.

This extraordinary variety in funding mechanisms (often within one country let alone between different ones), with significant regional and local variation, means that in analytical terms it is very difficult to talk about a non-formal sector as distinct from a collection of institutions. In many ways, as the sections below will explore, the non-

formal learning sector is carried forward through atypical exemplification – an approach that complicates scaling up and wider policy development. It may just about be possible to describe a range of non-formal institutions but how and in what ways they might constitute a sector (being available to all within a de-limited locale) is not at all clear and, although section 3 will report on examples from around the world, this is not at the level of comparing sectoral transformation. This theme will be pursued. At this stage it is important to point out that the absence of institutionalisation, and especially core funding that may create stability beyond immediate incarnations, is probably the single most important cause of this form of collective (rather than planned) organisation.

Bernard Davies' (1999a,b) history of youth provision in the UK suggests a story of organised, church-led activities that gradually became secularised and then mainstreamed through statutory local authority control as anxiety about uncontrolled youth became focused on concern about youth culture (in the postwar boom period). James (1993) tells a very similar story about comparable work in the US, especially California. These types of analyses, Smith (2006) argues, show a shift away from an interest in developing 'associational' values towards the use of such programs in the state's management of the problem of youth. The last twenty years have seen an encroachment of interest by the education sector as concerns about falling standards of state educational provision and the growth of the lifelong learning agenda have transformed the terrain for youth clubs away from play, with an emphasis on offering new experiences for personal development, towards activities that can be seen to supplement qualifications. Youth clubs have thus moved away from being informally led meeting places offering enriched experiences (trips, plays, physical challenges) as youth club leaders have had to become increasingly qualified. Youth clubs today offer fewer unstructured, unsupervised moments and more organised, visibly 'educational' experiences.

This attention to the changing nature of youth leaders and the gradual orientation away from the purely pastoral to curricular responsibilities is, of course, profoundly influenced by neo-liberal economic values. Here the drive to provide structured experience is part of the focusing of attention on value for money at the point of service delivery. It is not as it was in the older welfarist era about saving youth from poverty. The normative models of behaviour and leisure use have not gone away, but they are now complemented by the drive to improve the workforce in a cost-effective fashion. In practical day-to-day terms this means that qualified leaders run structured activities, they keep attendance registers and offer, sometimes formally and sometimes in looser terms, a means of monitoring and reflecting upon learner progression. A tangential but related concern here is that current interest in portfolio methods of accreditation mean that out-of-school achievements can be incorporated in ongoing holistic validation systems.

This focus on leadership and curriculum organisation – a term that encompasses both schooled and other kinds of learning – is part of the welfarist narrative behind the

growth of the non-formal sector. In Spain, by contrast, there is a tradition of development proceeding on the basis of community demand. If young people (not necessarily children in a legal sense) can demonstrate need, it is possible for local funding to be released to meet such demand (Lord, Doherty and Sefton-Green 2002). However, even where demand is created in this fashion, leaders and organisations are then administered by the local bureaucracy. In general it is more common for such initiatives to be conceptualised as forms of welfare provision and for resources and funding to be released and administered accordingly.

This kind of organisation has important implications for how such projects are imagined and delivered. The greater the requirement for leaders and workers to be professionally accredited, the less likely it is that people from local communities can participate in local projects. All funders, philanthropic and state alike, require return from their money (albeit conceptualised differently in terms of long-term investment), and develop audit regimes (Power 1999) accordingly. Demand and need are not quite the same thing and it is inevitable that forms of schooling – the best known and commonly accepted forms of social organisation for young people – dominate the structure of this sector too. It is no surprise that attendance registers, timetabling (in the form of circulating through resources and spaces) and group task-oriented activities are all forms of institutional organisation that dominate provision in the non-formal sector across the developed world. Above all, as Davies' (1999a,b) history suggests, an attention to learning outcomes dominates the discussions of value and purpose behind such activities.

The Scandinavian tradition of work with younger children offers a slightly different model of a teacher in non-formal contexts (http://society.guardian.co.uk/print/0,,329428590-105909,00.html). Here the term 'pedagogue', which does not translate easily into an English institutional term, describes a kind of 'educational' leader who is likely to have some kind of formal training but focuses on developing non-academic kinds of knowledges and practices. Even this very brief description raises a number of questions about such traditions. How do we distinguish between academic and non-academic knowledges? If activities are led and organised, does this mean that they are forms of schooling in the broadest sense? Nevertheless, within Scandinavian societies, forms of day care, playgroups, out-of-school care and youth provision traditionally form a huge part of the educational system and receive a high level of state support, in contrast to the voluntary and participant-led tradition in the Anglo-Saxon neo-liberal economies. One good example of how this Scandinavian tradition is constantly being re-appraised in different social contexts is the project Cross Worker (http://www.koldingsem.dk/page351.asp), which aims to define pedagogy and the pedagogue in work with very disadvantaged people (homeless people or drug users). Here, an attempt is being made to describe and define forms of 'cross working' based on building from the ground upwards a form of accreditation based on experiences and successful ways of working. Not only is this an innovative way of defining and valuing accreditation in these intermediate life worlds; it also shows how we can use such a

process to deconstruct the models of leadership and training we currently use in out-of-school youth provision.

None of this discussion is to suggest that such forms of organisation are inherently wrong or misplaced but it does indicate an homogeneity of system and structure on offer for young people today. Indeed part of the key argument behind this paper is that policy in general needs to perform a kind of magic trick or sleight of hand to offer 'what school is not' as part of a general commitment to education. The more that forms of non-formal organisation replicate schooling the more challenging this becomes.

2.3 How do we know about the sector?

One of the intriguing features of this sector is that, because it often grows between and across funding systems and because many initiatives are local and bottom-up rather than the result of government initiatives, much of its work is unrecognised and to an extent 'un-excavated'. It has mainly developed outside of the 'eye' that forms part of the mainstream education system that examines learning and schools in great detail through education faculties in universities and the research sections of government departments. Although, as the next section will show, there is serious policy interest in describing the impact and effect of the non-formal sector, and in some countries a coherent ambition to develop core aspirations, the evidence about the sector is problematic. In part this is because of methods of data collection about the sector, which in turn reflects on the motivations for focusing on this sector in the first place. This section will explore the range of this interest.

First of all, much interest in the sector is (possibly like this piece) some kind of policy advocacy. In recent years, one of the best known descriptions of the sector and its work and certainly one of the most influential is the collection gathered under the 'Champions of Change' initiative (Fiske 1999). Subtitled 'The impact of arts on learning' and with a rubric describing the works as a 'report that compiles seven major studies that provide new evidence of enhanced learning and achievement when students are involved in a variety of arts experiences', this project was funded by the GE Fund and the MacArthur Foundation. It bears the imprint of 'The Arts Education Partnership' and 'The President's Committee for the Arts and the Humanities'. Most of the authors are university professors and have a longstanding interest in the larger arguments they observe at play in these settings. For example, Shirley Brice Heath, an internationally renowned academic, argues that participating in arts learning develops long-term linguistic abilities, as evidenced by her study of language use in these projects (see also Heath 1994, 2000). This supports a broader argument about the value of non-standard language registers and how non-standard language use should be valued in general by the education system.

We will return at several points of this paper to this study – its findings have been influential and I find it persuasive – but I wanted to introduce it here because of the

ways in which claims about the effectiveness of the sector have to an extent been driven by this academic claim (necessarily particular) about the longer-term impact of linguistic development on educational pathways. I am trying to avoid the view that such an interest would disqualify the insight of Heath et al. Indeed it should be acknowledged that all enquiry is 'ideological', but I am trying to characterise the fact that the sector in general is only known through partial insights pursued inconsistently over time.

The second concern is about how what we know about the sector is influenced by who is doing the investigating. This has been most recently articulated by Nicole Fleetwood (2005). Her analysis of youth media (often produced in the sector we are exploring here) makes the point that, as the global media market prioritises authentic experiences, there is a tendency to exploit youth media for its closeness to the lived experiences of the 'other': minorities, the excluded and those living at the margins. A number of cultural studies approaches to hidden, forbidden and closed kinds of consumption, like Jenkins' classic study of 'trekkies' and other fans (1992), share a common problem with studies in ethnographic anthropology (Clifford and Marcus 1986) in that they run the risk of voyeurism and exploitation. Fleetwood does a service in reminding us how the interest in the experience of excluded social groups, as manifest in their performances and media output, can throw the focus onto the academic researcher and writer.

These are general problems of method and ethics, but I raise the theme here because there is a tendency for work in this sector to run the risk of presenting itself as uncovering or discovering the unknown. Given that a number of studies in the US and the UK are concerned with a culture of racialised youth, a culture that is simultaneously fascinating to and proscribed by the mainstream, there is a sense in which knowledge about work in this sector can be seen to perform this voyeuristic function. Studies of the sector thus need to be extravagant and exotic and they describe and exhibit forms of culture and performance at the margins of mainstream society.

This notion of the exotic can also be applied to the kinds of learning on offer in non-school environments. Just as the exhibition of culture can be uncovered by the tourist gaze of the cultural anthropologist, so new and other kinds of learning are on display in the studies of out-of-school learning. Just as Fleetwood has exposed the cultural marketplace of a fascination with the rare and the authentic, so, it could also be argued, education academics are as interested in the rare and the unusual. The work of Michael Cole on the 'Fifth Dimension' program (see section 3.1) was established to capture qualitatively different features of learning than could be observed within the framework of conventional schools. Recent interest in communities of practice (Lave and Wenger 1991) has encouraged the growth of participant observation and ethnographic forms of study and these enhance an interest in 'other' kinds of learning. The crossover of work from cultural and media studies to education (from Buckingham and Sefton-Green 1994 to Sefton-Green 2004) is further evidence of how learning in out-of-school culture becomes interesting though its perceived structural difference from schooled learning.

I am not trying to suggest that all studies of the non-formal learning sector are unsound or politically incorrect (I would be being hypocritical if I did) but I am saying that most studies of the sector are more interested in its difference and its unusualness than the average and the everyday. This is quite different from the values implicit in many studies of learning and schools, which often stress the banal and the average. Indeed a notion of norms is crucial for policy purposes in that ideas about common standards are central to an evaluation of policy outcomes. Government and policy studies of out-of-school learning tend to have a more instrumentalist foci than the kinds of academic adventures I have characterised. Indeed, as the following sections show, this 'epistemological clash' becomes more problematic when trying to make the policy case for the effectiveness of the sector and thus the need for continued investment.

2.4 Evaluating the sector

Despite the fact that we do not have consistent data about this sector (as argued persuasively by Livingstone 2006) and despite the fact that evaluation is partial and carried out for a range of motives, most evaluations of out-of-school learning, especially those that describe arts, media or technologically based projects, are extremely positive about such activities. This is clearly related to the relative immaturity of the evaluative mechanisms employed to describe the sector and we should be cautious about how we interpret such evidence. I would also suggest that the same discipline used in describing more conventional kinds of learning in schools is not applied as rigorously to evaluation of this sector (although of course there is considerable criticism of how that evidence base is constructed and mobilised). However, this caveat should not stand in the way of recognising that the sector may be, and is usually reported as being, extremely successful. And success here is not just defined relative to the school sector (ie success out-of-school can be defined against failure in school) but possibly absolutely: that out-of-school educational experiences can lead to socially and economically productive outcomes.

Some of the challenges in describing the impact and effectiveness of the sector are typical challenges relating to more general discussions about the impact of the arts. From an education perspective, meta-reviews (like that collected by Winner and Hetland 2000) are balanced by wider policy perspectives (for good examples of literature reviews in the UK see Reeves 2002; Ruiz 2004; Scottish Executive Research 2005). Both the policy-based research and the educational studies point out that it is very difficult to prove that arts or media (cultural) activities can absolutely and exclusively provide positive impact or indeed (especially from an educational point of view) are more effective in developing learning. However, all of these meta-reviews show how an enormous amount of effort and resources have been put into investigating such beliefs (see also the literature review for the Australia Council: Oakley forthcoming). This creates a very strange kind of discourse. Whilst the research evidence base appears to support the value of cultural and non-formal activities it equally is very stringent that such a case cannot be proven. The repeated desire for

governments and other funding agencies to commission such research year after year suggests that we are dealing with a problem of faith rather than a rational policy impasse. The abstract for the work commissioned by Barnados (a UK children's charity) exemplifies this contradiction:

> *Arts projects* have become an important part of *community development strategies*. In addition to any creative achievements, projects are expected to have positive and measurable impacts on local social capital. Evidence for this is routinely demanded by funding organisations, and formal *evaluations* of projects have become a condition of investment. However, quantifying the impact of the arts in terms of *social gain* presents considerable difficulties, arguably greater than in any other field of evaluation. These problems are not just methodological. They also raise the question of the extent to which creative processes can – or should – be managed and controlled. (Newman, Curtis and Stephens 2001: 1, emphasis original)

And yet there is no shortage of evaluations describing positive impact. Smyth and Zappala's (2002) evaluation of the Smith Foundation's Computer Clubs in the USA, or the extensive work reported on the website of the Forum for Youth Investment (http://www.forumfyi.org/Files/OSTPC8.pdf), which explores projects and programs aiming to extend opportunities for youth engagement and learning, and especially Toleman et al (2002), all record two kinds of finding.

The first set of findings reports on need and opportunity. Research from around the world consistently shows how young people from low-income families are excluded from the sorts of learning and community opportunities that offer precisely the kind of engagement (it is argued) that they both want and need. A study of opportunities in Little Rock, Chicago, Kansas City and Sacramento County (Toleman et al 2002) uniformly shows a poverty of provision both in kind, range and quantity. It shows that there are 'significant recurring gaps in after-hours provision across the board' (2002: vii). Equally, this work points to the need for a dedicated infrastructure and planning system (what I am trying to define as a sector) covering leadership, coordination, training, resource provision and so on. Evaluations consistently repeat these kinds of institutional findings. The second area of findings relates to the quality of the activities, experiences and transactions provided. This depends much more on the nature of the academic enquiry motivating the evaluation.

It is true that there are few research projects arguing that nothing special happens in out-of-school surroundings and, as I have already suggested in the section above, there is a tendency to use research for proselytising purposes. Nevertheless, taken as a whole, arguments about the value of out-of-school learning are strong. Unlike the policy research exploring economic impact (see above), most researchers are comfortable about making claims for social benefits in terms of community cohesion and/or

individual personal benefits – especially for young people described as being 'at risk'. Across all countries surveyed this stands as a cipher for delinquency, at risk of being involved in crime or vulnerability to drugs. Social groups who experience multiple oppression and deprivation, especially ethnic minority youth in urban centres, are frequently described as benefiting from such programs. I have already mentioned the Champions of Change work as being especially important in its political reach and impact.

2.5 Summary of key issues

In summary, research and evaluation makes a convincing (though not unproblematic) case that out-of-school programs and projects can make an important intervention in both social and educational opportunities for young people and especially for young people from deprived socioeconomic circumstances. However, across the developed world there is a tendency to repeat experiments and initiatives in developing opportunities rather than build accounts of sustained work. There are very few longitudinal studies of how such work might provide social investment over time. This would be more possible in areas where the non-formal sector is more developed.

3 A typology of provision: projects, programs and sectors

This section aims to provide an institutional analysis of the non-formal, out-of-school sector. It is divided into four parts. Firstly, those projects or programs set up and managed by universities as community/research sites. Second is the arts/community arena. Thirdly, there are programs that are funded to perform a social inclusion function. Finally we have work set up to meet both the school–work transition (as informal vocational training) and/or as managed children's services. This typology is only provisional. Clearly some projects and organisations cross boundaries but these categories seem most useful at this point in time. This section not only aims to provide a range of examples of work in the sector, but it also aims to begin to theorise the sector from an institutional point of view. This not only means understanding the mechanisms for managing, delivering and monitoring such projects but how such provision might be analysed in its policy context. The kinds of categories used here thus seem most helpful in defining stakeholder interests.

3.1 The research site

Nocon and Coles' (2006) history of the Fifth Dimension program and its associated manifestations (such as 'Clase Magica': see Vasquez (2002), and the 'Magical Dimension'. See http://129.171.53.1/blantonw/5dClhse/clearingh1.html) describe how Michael Cole and colleagues at the University of California, San Diego established a series of after-school programs for children to create a 'system of mixed activities [where] children come to play (and learn); adult students come to learn (and play); and researchers and community members come to work (and play and learn)' (2006: 106).

This chapter describes how the Fifth Dimension program stemed from an interest in developing neo-Vygotskian theories of learning and from a belief that offering such learning opportunities would particularly benefit children entrapped by poor quality state education systems, with their emphasis on testing and sorting. Nocon and Cole's chapter is called 'School's invasion of "after-school"' and it relates a ten-year history of how such aspirations have been institutionalised and incorporated by the vicious cycle of testing and discrimination. Originally, the Fifth Dimension program aimed to capture a certain idealism in education, not only in offering a site of public good (like the Massachusetts Institute of Technology's supported computer club network), but a place where research and learning might be fostered in non-judgemental environments.

However, whilst philanthropic funding from university sources may have underpinned these aspirations, the desire to become financially self-sustaining effectively meant that Fifth Dimension was pressed into the service of colonising after-school spaces to facilitate remedial and supplementary basic skills tuition as part of the changing neo-conservative agendas in education. This is not to say that the after-school program stopped serving children from poorer communities or indeed that it stopped being valuable as a research site. However, the initial open-endedness of the program has clearly become pressed into service through the only funding alternatives available and this now means that the program performs a different function to that originally envisaged. It may be that, as a research site, such programs can have only a limited lifespan. Whilst the proponents of such programs find this painful and troubling, it clearly needs other kinds of policy interventions to move beyond this process of incorporation.

Activities in the Fifth Dimension program revolve around the use of special computer software in typically voluntary non-coercive power relations between child and teacher. Adults are crucial to the learning regimes in these kinds of places but are constructed differently than in standard teacher–pupil power relationships. Classic progressivist interests in student-led learning pace, open-ended assignments and low adult–child ratios predominate. Publications from the program allow for subtle and detailed explorations of neo-Vygotskian kinds of learning and, of course, offer great resources for teacher training and professional development.

The University of California is not the only university to support programs in this way. Harvard's Project Zero has also fostered what might be termed a research and development model of investment and research (http://www.pz.harvard.edu/Research/ResearchOutSchool.htm). As mentioned above, MIT has developed a network of computer clubs. All of these initiatives aim to offer community work for university volunteers and clearly provide an important role in providing professional development for educators as well as a research site. All three examples here also offer a mechanism to proselytise theories of learning. They are clearly led by adults and, unlike other kinds of provision, offer purpose and direction: other values of association, community ownership and so on are proper but secondary

aims. It should be noted that this model of after-school/out-of-school provision is associated with American kinds of social organisation and the North American tradition of community/public engagement by universities.

3.2 Community arts

The arts (and more recently the media and media arts) have traditionally been a key site for the development of programs for young people. In the US, the Champions of Change work (Fiske 1999) already referred to above made a very clear case that these kinds of activities possess all the qualities required to develop the core values of a non-formal educational program. In addition, there is a long tradition of work in this area with a mature and reflexive kind of practice as well as professionally trained and experienced adults who are used to working in this way. Recently, interest in the notions of the creative economy or the creative and cultural industries (a term used to define an economic sector: see Hartley 2005) and of knowledge workers in the era of fast capitalisms (see Florida 2004; BOP/Stanley 2004) have all combined to make this area of work carry a huge burden of expectation. The fact that young people appear especially motivated to work in cultural forms, and concomitantly ameliorate various kinds of social exclusion through participation in these projects, makes this the largest area of non-formal/out-of-school work.

A solid meta-level resource describing work in this area is http://aep-arts.org/ThirdSpacetoolkitpage.htm. This proffers the notion of the 'third space' as a way to overcome economic disadvantage and promote positive learning, with both enabled because of the ways that the arts stimulate special kinds of motivation and engagement. Goodman (2003) described work in video production in a New York centre and began an interesting debate to try to identify the precise nature of the learning that makes such projects appear to be so effective. Maira and Soep (2005) have collected a number of studies of learning in practice, exploring how questions of youth identity and globalisation make such projects so resonant. In addition, Hull's work (eg Hull and James, in preparation) has especially explored how the perspective of language and literacy offer a way of valuing and understanding learning in these contexts. Taken together, this work shows the beginnings of a systematic attempt to theorise out-of-school learning and to make the case that such learning can fulfil a vital and important part in young people's growth and development. Hull and Greeno (2006) explore how concepts of learner identity are crucial to effective and socially meaningful learning. Further examples and accounts of practice can be found in Tyner (2003).

The booklet *What works in youth media: case studies from around the world* (Kinkade and Macy 2003) is more typical of literature describing this field. The case studies included here all stress core features of how such projects offer young people voice, and an audience, and describe opportunities for civic and personal engagement with themselves and their immediate and wider life worlds. Some of these concepts have been interrogated by academics working in this area (see Soep's investigation of voice,

for example, forthcoming). But accounts of projects, like this publication, are freely espoused by politicians and policy makers. As the case study in section 4 makes clear, long-term questions of growth, progression and sustainable funding are frequently not addressed in this kind of literature, which can undermine the long-term claims made about such initiatives.

3.3 Social inclusion

The research represented on the resources page about arts and the community (http://www.knowledgeplex.org/topic.html?c=290) and studies like Reeves (2002) and Ruiz (2004) describe a policy research focus that attempts to provide evidence supporting the impact of cultural and/or arts interventions. These are all meta-level reviews and survey a range of methods employed by researchers to substantiate claims about the social impact of the arts. A distinct sub-set of this research focus concentrates on arts-based interventions with a social inclusion focus. Here, programs and projects are often devised, managed and led with the aim of engaging reluctant or disengaged youth and in many cases aim to act prophylactically: to reduce repeat offending, keep kids off the streets and out of crime and so on. Merton et al (2004: 32) offer up informal and non-formal education as the key rationale for the effectiveness of youth work, situating a number of initiatives in this tradition. Work described by the SPLASH National Support Team (2004) exemplifies work funded by the British home office over a summer holiday period, which offered funds (on a bid basis) for organisations to run programs demonstrating this kind of social impact.

Although there is a good deal of scepticism towards the idea of social inclusion as a political project (see for example Edwards, Armstrong and Miller 2001), and the idea is very much constructed as part of the UK's New Labour project, social inclusion agendas also dominate projects in this arena in Australia and New Zealand. In the UK, the Youth Justice Board has worked with the Arts Council of England to promote non-formal centres and programs for young people as part of their probation management. Frequently the arts, and especially those media arts calculated to appeal to inner city youth, are proffered as a means to re-engage reluctant learners, motivate young people to acquire basic skills in educational environments and develop a sense of self though articulation with cultural forms.

In the US and Canada the tradition of working with socially marginalised young people is not framed in quite the same way and there is an equally long tradition of community activism, and of providing interventions for excluded social groups. Here, the idea of self-sustaining, self-organising group participation, often on a single-issue, single-project basis is the primary mode of operation. De Castells and Jenson (forthcoming) here articulate the political and social rationale for providing resources in this way:

> With youth for whom formal mainstream schooling had been a hostile and exclusionary environment, we hoped community-based activist work

> which engaged non-traditional forms of literate practice could assist participants to think and act from the concrete particularities of their own, personal and immediate circumstances, to theorize those conditions in a powerful and legitimate secondary discourse, and to find or to devise practical means of engaging with and rising above them – something that schools should be doing for them but are not.

These comments are made in the context of a project specifically set up to support young gays and lesbians to make films about their experiences. Obviously this tradition has much in common with community arts but it has received a distinct impetus in recent years, as is exemplified in the argument made by and the reception of the Champions of Change initiative.

3.4 Managed services

This final section connects most evidently with the ways in which schools themselves work out of hours and in the community, and refers to the ways in which school institutions seek to extend provision in an organised or semi-organised fashion. The story of the Fifth Dimension, recounted above, has already shown how some of this articulation is difficult to manage. Typically, though not exclusively, the notion of managed services in relation to non-formal learning describes work for younger children (in the way that the section above is primarily concerned with youth).

The Forum for Youth Investment (http://www.forumforyouthinvestment.org/_docdisp_page.cfm?LID=AF111C34-ED9D-44D7-83EDA1252D201C42) offers a range of resources describing policy, research and practice in this field. Obviously the key difference between after-school and out-of-school provision is mainly determined by the learners' voluntarism (for younger children there is a childcare dimension to participation) and most obviously their relationship with school in the first place. A recent report describing a wide range of strategies used across the US to re-connect with youth and increase school retention focuses on a blurring of school and community boundaries, offering progressive kinds of accreditation and flexible service delivery (Martin and Halperin 2006). This does not quite describe the non-formal sector but it does show how forms of non-formal organisation are being incorporated by the mainstream. This book also argues for a holistic coordination of services for young people.

The pamphlet by Craig, Huber and Lownsbrough (2004) asks a similar sort of question but takes participation by young people for granted. Their focus is on the interdisciplinary nature of professionals required to work in this sector and is useful in drawing attention to the complicated nature of joined-up thinking required to make non-formal initiatives effective. Whilst activities offered under this banner tend to be forms of organised play, the role of adults frequently takes on a pastoral slant and, whilst it is possible to interpret such regimes negatively and/or from a Foucauldian perspective as

the interventions of the state in micro-managing individuals, it is also true that it is precisely this additional support that participants in non-formal learning programs find so important, as will be exemplified in the following section. Indeed, the compartmentalisation of professional expertise found in schools (alongside other forms of organisational complexity, like timetables and subjects) is precisely part of the reason for alienation from and rejection of school. The argument is that rejuvenating these services in a holistic and joined-up way in collective, out-of-school sites is a cost-effective and successful way of managing social and welfare support for children and young people.

3.5 Summary of key issues

The purpose of this section has been to describe, in the most general terms, the different regimes and modes of non-formal learning. There is no doubt that comparative studies across the world show different kinds of cultural traditions at work and also illustrate how this sector has been a prime site for contemporary political interests – such as with social inclusion. There are no consistent funding regimes, no consistent forms of training (other than minimum compliance around child protection, for example) no consistent messages about the role of adults or the organisation of activities. However, all types of provision report success and engagement with young people. In all cases we are talking about an organised and motivated activity led by adults (albeit in different ways). Successful programs are characterised by voluntary engagement in learning and perhaps by an attention to supporting marginalised young people. In many cases, the success of programs is defined by their implicit compensatory role for learners. In some types of provision the role of the formal education system is controversial and difficult, while at other times it is supportive and beneficial. The randomness and unevenness of provision is evident.

4 Case study: WAC Performing Arts and Media College

This section describes one non-formal learning institution in detail. It is not a typical institution (the immaturity of the sector precludes such scope), but it does exemplify key features. The purpose of this section is to get a richer picture of what such provision might mean in practice and to begin to extrapolate these salient structural points in order to build up a working model of out-of-school learning centres. The section will conclude with a summary of those features.

The WAC Performing Arts and Media College (WAC) is one of the oldest and largest institutions of its type in this sector. It is based in London, UK. It has been described in previous research (Calouste Gulbenkian Foundation 1982; Seltzer and Bentley 1999; Lord et al 2002), and probably began as the third type of organisation (see 3.2 above), but now sits across the social inclusion and managed services typology.

4.1 History and activities

The WAC Performing Arts and Media College (www.wac.co.uk) was founded in 1978 as the Weekend Arts College. It is not a college in any legal sense. It changed its name in 2000 when it began offering courses throughout the week but retained the acronym WAC, as by that stage it was colloquially known by this name amongst its core constituency.

WAC was founded by two teachers of drama and dance working in a comprehensive school in the London borough of Camden. One of those founders, Celia Greenwood, is still its current director and her personality is a key to the organisation's success and longevity. WAC began as a program of activities, offering dance and drama lessons to young people from low-income families on Sundays at a local interdisciplinary community organisation called InterAction (see Landry et al 1985 for an analysis of the voluntary sector context for this kind of institution). These lessons were offered to 14 to 25 year olds (a sectoral definition of youth) whom the founders had identified as being talented and interested in drama and dance but who had been denied the advantages of private lessons. WAC intended to offer high quality, professional standard teaching so that students would be able to become sufficiently skilled to compete at auditions for conservatoires or pursue other routes to employment in the arts.

This focus on skills teaching and professional training implicitly defined a pedagogy and mode of practice that has sustained the organisation over the last thirty years. It led to a form of organisation modelled on schools and other training centres, especially those derived from conservatoire settings. Staff were and still are recruited on the basis of their credibility as professional artists. This in turn impacts on teaching styles and aspirations. The inner London authority of Camden is extremely socially diverse and WAC aimed to meet a social/political objective in conjunction with its desire to foster talent and create opportunity. Around 65 per cent of current students are black, mainly from London's Afro-Caribbean communities, although it is noticeable that the largest ethnic minority group is now comprised of mixed race students. The desire to offer practical opportunities for black and working-class young people drove WAC, and it has focused over the years on providing a point of entry into what is now known as the creative and cultural industries. However, it is very keen to balance opportunity alongside the aspiration to foster talent so that it preserves a social as well as a vocational purpose.

Nevertheless, WAC has been an important centre for first opportunities for many young black artists and most successful black British dancers. In addition, many black British actors, as well as a good proportion of musicians, have at some stage trained at WAC. Not only does this establish its own dynamic – offering realistic routes for career aspirations – it has also helped WAC develop its own aesthetic and contribute towards broader changes in culture. In the mid 1980s WAC supported a semi-professional touring group, Fusion, which fused drama, dance and music from the African diaspora.

On an equally important note, WAC uses older students as teaching assistants right from the very beginning, and this now means (nearly thirty years later) that many of the staff are black and have been trained within the institution to which they now wish to give something back.

Unlike many arts and media-based projects, WAC was founded by ex-teachers rather than ex-artists and early classes preserved a strong sense of the classroom. Activities are organised around conventional arts disciplines: drama (incorporating physical theatre, text and audition work); music (incorporating vocals, music technology and instrumental work); video; digital arts; and dance (incorporating contemporary, jazz, ballet, etc). Although there are integrated theme-based projects (which is how many community arts projects are organised) and productions, this curriculum structure has remained.

After about seven years of providing the Sunday classes for youth, WAC opened its junior programs (for children aged 5–13) on Saturdays. These classes follow a similar curriculum structure but stress participation and involvement. They aim to prepare students for progression into the senior WAC program but above all aim to offer an experience of pleasure and structured activity stressing performance disciplines. This junior program clearly espoused the general value of arts education with beliefs in the transferability of learning and the value of positive feedback. Like the senior program, junior classes lead to performance and public presentation – the main form of validation. Although forms of certification and term reports are offered (at junior and senior level), these are not publicly examined (unlike the model of standardised grade advancement on offer in music and dance) and their status and value is defined purely by the stakeholders.

Partly in response to the success of delivering programs to a larger cohort (the junior program now serves around 250 children per week for 25 weeks a year, in addition to offering holiday programs), WAC began a dedicated project offering work with young people with severe learning difficulties, frequently with complex physical impairments. This program does not offer typical forms of arts therapy (in the medical sense) but aims to provide broader kinds of respite care and stimulating activities and to promote communication and expression. Many students attending WAC work on this program as volunteers as do a wide range of staff.

In the mid 1990s WAC began offering a dedicated series of social inclusion programs and broadening its arts base to include media activities. The social inclusion programs offered an arts/media program to young people who had failed or been failed by the school system. One of the programs was run for young people still in statutory education (the only compulsory program run by WAC), and offered WAC as an off-school site of learning allowing students to pursue formal qualifications. The other programs (lasting from six months to an academic year), targeted young people who had been in prison, who were coming out of care or who were homeless, that is, those

experiencing multiple social deprivation. These programs offered organised study with media and arts training and, in most cases, formal accreditation and qualifications, with WAC now acting as an examination centre.

In 2003 WAC started offering a foundation degree (undergraduate level) and is currently (2006) in the process of gaining accreditation as offering training in drama, dance and music at professional standards. Most of the students in this course are black and the course content focuses on art forms of non-western origin. This will complete a journey from supplementary classes offering access to professional training to becoming the kind of institution (complete with accreditation functions) delivering that training itself.

This process of gradual institutionalisation encompasses a wide range of additional activities. For a period, WAC ran youth club activities in a local centre owned by its host organisation. It has run activities for young mothers and offered projects for young babies and carers. It has run training programs for artists, offering workshop skills, and is aiming to offer staff a wider range of employment opportunities in the creative sector. It has acted as a research centre in partnership with universities exploring its unique forms of teaching and learning as well as being a site for innovative program development. It offers support and incubation faculties for small businesses in the creative sector, and is developing apprenticeships in the creative industries.

It now provides learning opportunities for around 750 young people per week over a year, has around 12–14 full-time staff and employs about 200 part-time staff over a year. Its turnover is around £1.3M.

4.2 Funding, structure and organisation

The founder, Celia Greenwood, would not claim that she planned this kind of growth or indeed envisaged that WAC would become such a significant organisation in the non-formal learning sector. In 2004, the London Development Agency (the economic arm of the government for London) commissioned a study of the overall impact of non-formal learning organisations on the creative and cultural sector (BOP/Stanley 2005). This found that WAC was by far one of the most long-lasting and largest organisations of its kind in London, and probably in the world (see Goodman 2003; Tyner 2003). These two issues of size and age are important. The range and size of WAC's operations support considerable and important additionality (see 4.3 below) especially in terms of care regimes and progression possibilities. Becoming too large can impact on group size and one-to-one relationships and may suggest ceilings to growth for organisations of this nature. The age of the organisation means that not only is there a community of stakeholders (grandchildren of first generation students now attend Saturday class), it also means that the organisation is perceived to meet a core role in community aspirations, which is especially important for black and ethnic minority communities. While the sector is typically characterised by a high turnover of organisations (like

independent labels in the music business), WAC's intergenerational stability means that its experience has become part of its capital value. Given how policy tends to repeat the start-up process for work in this area, continuity is not only cost-effective but efficient in terms of client impact.

However, the fact that WAC is not planned and does not have core sustainable funding means that it runs the risk of re-defining itself to meet changing funding objectives (a typical sectoral problem). In 2002, WAC had 42 separate funders, all of whom required different monitoring and audit arrangements. The organisation has some core funding (unusually for organisations in this sector) comprising around 15 per cent of annual turnover. Funders here include the local authority (which values work with young people from a social inclusion or youth provision point of view) and the Arts Council of England (which supports the original weekend program). Neither of these funders' grants has kept pace with the expansion of the organisation or its program, and the growth of core staff (with gradual increases in cost to reflect experience) creates a constant funding problem. Core staff, it should be noted, are paid less than peers in formal education and do not have pension benefits.

The BOP/Stanley report (2004) found that typically non-formal learning organisations were more dependent on funding from charitable trusts than any other source in the organisations' first ten years of life. WAC now only earns around 40 per cent of its income from that source and now receives around 60 per cent of funding from mainstream education funding. This probably explains the drive to become an accreditation centre as funding in the UK in this area is frequently conditional on these sorts of outcomes, although such a direction does not indicate a great change in mission or purpose. Furthermore, in the UK context, WAC is able to draw upon European funds, many of which are aimed at ameliorating structural disadvantage in the labour market, promoting social inclusion, and up-skilling people with few or no qualifications. Further to this, developing the creative uses of new technologies and promoting career routes into the creative industries are important drivers here.

Core staff, nevertheless, have to be adaptable and work across projects (which is the main kind of funding). This means that core staff functions can never be fully realised. Whilst this is a constant source of difficulty and under-investment, it also means that the organisation is never completely institutionalised. Staff are very motivated by the ethos of the organisation and cover a wide range of job responsibilities. Whilst most of the entrepreneurial drive and initiative is concentrated in the hands of senior staff, this means that most staff who work in a freelance capacity are employed for their specialist knowledge and skills. This can cause problems of continuity and it means that staff can become overloaded with pastoral responsibilities. However, the flip side is that it keeps staff fit-for-purpose and enables WAC to draw on a large repertoire of specialist professional knowledge. In other words, the company model at work resembles the modern production company (see Caves 2000) in the film or theatre business, where the company comes together for the duration of a project and then disbands. The labour

pool, however, can find work within the locality (in this case London), and the whole structure is dependent on a very modern kind of networking. This is quite unlike the structure of modern schools or how professional educators characterise their lives in contemporary society.

There is huge potential for disorganisation within this structure both in terms of staff and students. Nevertheless, WAC has achieved managerial quality certification ('Investors in People': http://www.investorsinpeople.co.uk) and is characterised by its strong 'family'-style ties and high degrees of motivation and investment. Here the fact that many staff have grown up with the organisation and have a high degree of identification with it is axiomatic to how it works as a 'community'. This structure of loose ties, high network fit and strong personal identification (see essays in MacCarthy, Miller and Skidmore 2004 for an analysis of these concepts) is important to the organisation's day-to-day work and sits interestingly alongside its more formal teaching and learning activities.

Finally, a comment on its legal structure. WAC is currently the key department within a larger host organisation. That organisation mainly acts as a leasing agency for dedicated National Lottery funded premises (led by WAC's reputation and range of activity). This legal status means that the organisation can be supported by other income streams and is crucial to a healthy cash flow. The diversity of WAC's own income-raising strategies also gives financial strength though diversity and spreading risk. On the other hand, its dependency on another organisation makes WAC vulnerable and unable to fully direct its future. Eventually WAC will probably become a charity in its own right with a board of trustees reflecting its core values, history and mission.

4.3 Summary of key features

This section lists the key features from the preceding two sections in order to offer a simple summary of generalised principles or institutional factors determining sustainable and high quality provision in this sector. The key purpose of this summary is to explore how 'scalable' or transferable the lessons from case studies from around the world might be in different micro-economic or social circumstances. Whist there is no doubt that many societies offer and will continue to offer kinds of out-of-school learning for social and educational aims, how such organisations can be developed will depend on the kinds of factors outlined here.

One key issue for developing growth in this area is how local economies (here meaning both the limits of skilled and experienced labour as well as taking into account possible areas of economic growth) can develop models of *projects, programs, organisations* and *institutions* in order to create a meaningful *sector*. These terms are emphasised because they indicate different levels of maturity and growth and these depend on the following list. The predilection of governments not to invest systematically in this sector often means that development takes place without this kind of review, and so

governments waste resources by re-inventing the pilot and development (rather than the more mature and sustainable) investment stage.

1. Leadership. Typically charismatic, social entrepreneurs like the founder of WAC are vital. Leadership and drive come from this heartbeat.
2. A pool of qualified (and/or trained) labour able to work in this sector. WAC's positioning in London is not an accident. Qualifications mean credibility and commitment as much as they describe formal, externally validated forms of certification.
3. A funding regime or ecology that is diverse and can respond to 'bottom-up' entrepreneurial drive. A too thin or single-source funding regime will produce a much more dependent kind of state agency. Again, it is no accident that an organisation like WAC has developed within the complex and diverse supportive regimes existing in a place like London.
4. WAC's structural success is very much due to its range of art forms and the fact it works across diverse age ranges. All of these allow for kinds of *progression* both within the institution, across organisations within the sector and/or between work and training in a way that, where necessary, supports non-traditional learners – or at least those who have not achieved success within the mainstream.
5. The teaching and learning styles in WAC cannot be reduced to a simple notion of 'informal learning'. They intersect with other traditions, both community, arts-based and cross-cultural. A clear pedagogy, and a clear articulation of standards and achievement is as crucial in this sector as elsewhere. WAC's positioning in respect of real opportunity in the creative and cultural industries impacts on these teaching and learning models. Probably the fact that virtually all attendance and participation is voluntary is also structurally significant.
6. The organisation is not merely a collection of projects or programs; it does offer significant 'additionality'. This is both in terms of its operational effectiveness (the delivery of cost-effective services) but also in terms of its added community value. Here, quality and depth of care, motivation and personal involvement all come into play. The value of the social network as well as its social capital functions are crucial. Ethos and values are a central part of its distinctiveness and long-term achievement.
7. The inter-relationships between WAC and the other institutions it either complements or serves or works in partnership with or opposes are crucial. There are cost–benefit gains and losses for WAC as it journeys towards whatever kind of institutionalisation is legally or operationally viable at this point in time. How WAC can preserve its difference from what it is not (see 5.1 below) as the mainstream begins to incorporate aspects of the non-formal sector raises a real policy challenge about how structural and institutional diversity can be fostered in the increasingly centralised and bureaucracatised regime of governance that characterises the new public management ethos.

5 Conclusions and recommendations

This section aims to draw together the themes from the preceding argument and, in particular, to focus on challenges for policy makers aiming to invest in this sector. In broad terms, the case is made and agreed that the non-formal sector plays a vital part in providing opportunities to young people, especially those who have been marginalised in other ways. At its best the sector offers a way to square the circle of social exclusion and economic regeneration. Yet the promise of this 'alchemy' does of course carry with it unrealistic expectations and indeed most evaluations of work in this sector end up repeating a mantra of short termism, underdeveloped institutions and problematic practice.

5.1 What is formality? The paradox of institutionalisation

One of the key arguments in Bekerman et al's (2006) important collection is that it is ultimately impossible and fruitless to distinguish between formal and informal learning. A series of scholars have identified the ways in which the concept of formality makes little difference when applied to the ideas of learning per se. This is why that collection is entitled 'Learning in places' because what clearly does make a difference is where learning takes place and how the specificity of place crucially defines how the learning works. Formality or informality becomes an issue in non-formal educational settings in that it impacts on how learning is structured and organised (from student and teacher perspectives) and in particular how learners construct their pedagogic identities within such frames.

Places like WAC, or indeed the sites described by Tyner (2003), mimic the structures of school. Such places seem to comply with the determinist logic of mass schooling which needs to organise bodies in time and in spaces. The use of finite specialised resources necessary for high quality arts and media arts provision only exacerbates such trends. Yet the different disciplinary regimes in such places create a paradox: a kind of not-school. Indeed the history of WAC and places like the Educational Video Centre in New York (Goodman 2003) portray a kind of institutionalisation as they grow. The added value of practice in these places is clearly related to the 'glue' that attaches with such growth. And yet they have also managed to construct themselves, their practices and indeed the way learners imagine themselves as pedagogic subjects within such places as not-schools – almost as anti-schools – whilst defining themselves as learning sites.

There is a simple issue here that non-formal learning needs to be able to confidently and fairly continue to present itself as 'what it is not'. And yet if it is funded and managed by the state this becomes increasingly difficult as the mechanisms used by government tend to homogenise services. The key challenge stemming from this is that audits and evaluations of work in this sector need ways to capture and value these differences

beyond conventional standards. In fairness, this is a core concern arising within the school system as well.

5.2 Growing the learning ecology

The second key challenge for policy makers in the non-formal sector is to ascertain what kind of support is needed and over what length of time. Many of the organisations described in this paper have grown from the bottom up. Whilst people on the ground continue to make the case that long-term effectiveness depends on sustainable funding regimes, and the sector is characterised by a high turnover of short-lived institutions, what implications do such arrangements have for effective intervention? Indeed, the absence of systematic interventions around the world – even at its most developed, this sector is highly unstable – does also beg the question as to whether interventions are necessary, and if so to what extent?

One key finding from a survey like this is that such interventions are a central part of civic society across the world. Even if we are just talking about an aggregation of projects rather than a coherent funded sector, there can be no doubt that projects and programs clearly meet a need (however successfully they may be said to address that need). In that sense, governments need to face up to the fact that the sector exists de facto.

The central question for governments has to be the extent to which they remain satisfied with the degree of failure of the formal education system and, in particular, the impact of that failure on young people who become disengaged from employment and society in general. One argument of this paper is that this sector is a cost-effective way of addressing these problems in a positive and socially integrated fashion. Here, the ways in which governments tend to develop remedial and additional support within the formal structures testify to the fact that they wish to address these concerns but find it difficult to work in partnerships with organisations that are independent or semi-independent.

Ultimately these kinds of questions come down to how resources are prioritised, how they are championed politically and how effectively they are fostered by the current regime of election-driven funding cycles. One interesting contrast here is with the growth of information technologies and forms of commercially driven digital culture. It is now generally agreed that this latter domain provides an important kind of learning resource, and that it supports and mediates many kinds of informal learning that takes place out of school. It can definitely be argued that these developments are a key part of the changes in the overall learning ecology of our times. Of course the contrast between these developments and the sector we are exploring is that the digital and cultural domain is primarily commercially driven. But this has not stopped governments financing and supporting digital learning within the formal education system. It is recognised that such investments reach the more affluent sections of society more

effectively and this shows up the fact that the non-formal sector is competing (poorly) alongside other investments in the learning ecology (for an analysis that after-school provision replicates social inequalities see Adler and Adler 1994). The non-formal sector needs to find a way of escaping its associations as a remedial social enterprise and find a narrative that emphasises its capacity for transformation rather than dependency.

The current interest in forms of social capital and proper concern for political engagement is perhaps a new way of expressing some of these ideals. Lownsbrough, Thomas and Gillinson (2004) and Machin (2006) particularly support the idea that the sector should be conceptualised in these terms. Machin argues: 'Non-formal learning experiences tend to be more relevant to social capital discussions where individuals can glean non-monetary benefits that can enhance their life chances by participating in the learning experience itself' (2006: 21).

All of these ideas can be accommodated in the model of a learning ecology. As in debates about the environment and other kinds of eco-sustainability, the political challenge is to finds a way of making public debate take a holistic view of teaching and learning rather than simply focusing on the school system as if tinkering with part of the ecology does not impact on other areas.

5.3 Looking forward

This final section aims to lay down four challenges for research and theory in this area.

The first argument here is that it is necessary to explore the inter-relationships between institutional structures and their support and funding regimes if we want to properly evaluate the impact and effectiveness of this sector. The story of the colonisation of the Fifth Dimension schools agenda is a good example of how the specifics of curriculum and pedagogy get determined by larger forces. Research needs to examine all of these influences to show their inter-connectedness. By implication here, future research also needs to imagine and explore meaningful indices and metrics to describe impact and effectiveness. Not only is this a difficult challenge in its own right, it is doubly important when working across sectors as bringing together the languages of education, the arts and social work will carry with it complex differences of discipline, value and method.

Research needs also to move beyond the rhetorical position of just 'making the case' for valuing work in this sector. We need to know more about the particularities of the learning in context (including pedagogy, curriculum and spaces) that characterises non-formal learning. We also need projects that follow individual learners across sites, focusing on changing life opportunities and showing how learning works for individuals across formal and non-formal places, exploring the broad learning ecology. These kinds of cross-sectoral interdisciplinary approaches are very rare.

The third challenge requires us to explore how young people access pathways or face barriers in the transitions from school to work given the changing nature of employment and work itself in many countries. Raffo (2006) argues that there are limits to the rational discourse dominating how advice and support for young people aims to 'teach' career paths. Indeed one finding from the work surveyed above is that non-formal learning sites are themselves central to the formation of new and vibrant networks. Research here needs to explore how these kinds of institutions offer an interface between employment networks and training institutions and how working in this sector may offer productive pathways to employment and economic growth.

Finally, it is very apparent from the whole paper that simply using the concept and the practice of non-formal learning *in contrast* to the formal sector is a productive lens to explore questions about schools (or learning spaces), learning (and teaching), training, youth, community and, above all, how systems of management and bureaucratic control create effective institutions within the education system. It allows us the opportunity to re-conceptualise the persistency and stability of schooling. As a sector it supports practical ways of imagining alternative kinds of organisation, raising questions about local democracy, civic engagement and social justice. Exploring how non-formal provision sits within this ecology is a productive way to ensure that we can return in an imaginative and positive way to addressing key questions about how we organise teaching and learning today.

Acknowledgements

Thanks to Stephen Atkinson, Barbara Comber, Phil Cormack, Julia De Roeper, Rob Hattam, Rosie Kerin, Helen Nixon, Sam Sellar and Lana Zannettino for their comments on an earlier draft of this paper.

References

Adler, P and P Adler (1994) 'Social reproduction and the corporate other: the institutionalisation of afterschool activities', *Sociological Quarterly*, vol 35, no 2, pp 309–28.

Bekerman, Z, N Burbules and D Silberman-Keller (eds) (2006) *Learning in places: the informal education reader*, Peter Lang, New York.

Bentley, T (1998) *Learning beyond the classroom: education for a changing world*, Routledge, London.

BOP/Stanley, D (2004) *Supporting talent to enterprise programme*, available at http://www.wac.co.uk/downloads/step_executive_summary.pdf

Buckingham, D and J Sefton-Green (1994) *Cultural studies goes to school: reading and teaching popular culture*, Taylor and Francis, London.

Calouste Gulbenkian Foundation (1982) *The arts in schools: principles, practices and provision*, Calouste Gulbenkian Foundation, London.

Caves, R (2000) *Creative industries: contracts between art and commerce*, Harvard University Press, Cambridge, MA.

Clifford, J and G Marcus (ed) (1986) *Writing culture: the poetics and politics of ethnography*, University of California Press, Berkeley.

Coombs, P, C Prosser and M Ahmed (1973) *New paths to learning for rural children and youth*, International Council for Educational Development, New York.

Craig, J, J Huber and H Lownsbrough (2004) *Schools out: can teachers, social workers and health staff learn to live together?* Demos, London.

Davies, B (1999a) *From Thatcherism to New Labour: A history of the Youth Service in England, volume II*, Youth Work Press, Leicester.

Davies, B (1999b) *From voluntaryism to welfare: a history of the Youth Service in England, volume I, 1939–79*, Youth Work Press, Leicester.

de Castells, S and J Jenson (in preparation 2006) 'No place like home: sexuality, community and identity among street-involved queer and questioning youth', *McGill Journal of Education*.

Edwards, R, P Armstrong and N Miller (2001) 'Include me out: critical readings of social exclusion, social inclusion and lifelong learning', *International Journal of Lifelong Education*, vol 20, no 5, pp 417–28.

Fiske, E (ed) (1999) *Champions of change: the impact of the arts on learning*, Arts Education Partnership and Presidents' Committee on the Arts and Humanities, Washington, DC, available at http://aep-arts.org/PDF%20Files/ChampsReport.pdf

Fleetwood, N (2005) 'Authenticating practices: producing realness, performing youth' in S Maira and E Soep (eds), *Youthscapes: the popular, the national, the global*, University of Pennsylvania Press, Philadelphia, pp 155–72.

Florida, R (2004) *The rise of the creative class*, Basic Books, New York.

Goodman, S (2003) *Teaching youth media: a critical guide to literacy, video production and social change*, Teachers College Press, New York.

Heath, Shirley Brice (1994) 'The project of learning from the inner-city youth perspective' in A Villaruel and R Lerner (eds), *Promoting community-based programs for socialisation and learning*, New Directions for Child Development Series 63, Jossey-Bass, Cambridge, MA, pp 25–34.

Heath, Shirley Brice (2000) 'Making learning work', *Afterschool Matters*, vol 1, no 1, pp 33–45.

Hakken, D (2003) *The knowledge landscapes of cyberspace*, Routledge, London.

Hartley, J (ed) (2005) *Creative industries*, Blackwell Publishing, Oxford.

Hull, G and J Greeno (2006) 'Identity and agency in non-school and school worlds' in Z Bekerman, N Burbules and D Silberman-Keller (eds), *Learning in places: the informal education reader*, Peter Lang, New York, pp 77–98.

Hull, G and M James (in preparation) 'Geographies of hope: a study of urban landscapes and a university–community collaborative' in Peggy O'Neill (ed), *Blurring boundaries: developing writers, researchers, and teachers: a tribute to William L Smith*.

James, T (1993) 'The winnowing of organizations' in SB Heath and M McLaughlin (eds), *Identity and inner-city youth: beyond ethnicity and gender*, Teachers College Press, New York, pp 176–95.

Jenkins, H (1992) *Textual poachers: television fans and participatory culture*, Routledge, London.

Kinkade, S and C Macy (2003) *What works in youth media: case studies from around the world*, International Youth Foundation, Baltimore.

Landry, C, D Morley, R Southwood and P Wright (1985) *What a way to run a railroad*, Comedia, London.

Lave, J and E Wenger (1991) *Situated learning: legitimate peripheral participation*, Cambridge University Press, Cambridge.

Livingstone, D (2006) 'Informal learning: conceptual distinctions and preliminary findings' in Z Bekerman, N Burbules and D Silberman-Keller (eds), *Learning in places: the informal education reader*, Peter Lang, New York, pp 203–28.

Lord, P, P Doherty and J Sefton-Green (2002) *Making connection: media education and social inclusion*, National Youth Agency, Leicester.

Lownsbrough, H, G Thomas and S Gillinson (2004) *Survival skills: using life skills to tackle social exclusion*, Demos, London.

MacCarthy, H, P Miller and P Skidmore (eds) (2004) *Network logic: who governs in an interconnected world*, Demos, London.

Machin, S (2006) *Social disadvantage and education experiences*, OECD Social, Employment and Migration Working Paper No 32, OECD, Paris.

Maira, S and E Soep (eds) (2005) *Youthscapes: the popular, the national, the global*, University of Pennsylvania Press, Philadelphia.

Martin, N and S Halperin (2006) *Whatever it takes: how twelve communities are reconnecting out-of-school youth*, American Youth Policy Forum, Washington, DC.

Merton, B et al (2004) *An evaluation of the impact of youth work in England*, Research Report 606, Department for Education and Skills, Leicester and London.

Newman, T, K Curtis and J Stephens (2001) 'Do arts-based projects result in social gains? A review of the literature', Barnados, Essex, UK, available at http://www.barnardos.org.uk/resources/researchpublications/documents/commarts.pdf

Nocon, H and M Cole (2006) 'School's invasion of "after-school": colonisation, rationalization or expansion of access?' in Z Bekerman, N Burbules and D Silberman-Keller (eds), *Learning in places: the informal education reader*, Peter Lang, New York, pp 99–122.

Oakley, K (in preparation 2006) 'Arts, education and the creative workforce', Australia Council/Queensland University of Technology.

Power, M (1999) *The audit society: rituals of verification*, Oxford University Press, Oxford.

Raffo, C (2006) 'Disadvantaged young people accessing the new urban economies of the post-industrial city', *Journal of Education Policy*, vol 21, no 1, pp 75–94.

Rampton, B (2006) *Language in late modernity: interaction in an urban school*, Cambridge University Press, Cambridge.

Reeves, M (2002) *Measuring the economic and social impact of the arts: a review*, Arts Council of England, London.

Ruiz, J (2004) *A literature review of the evidence base for culture, the arts and sport policy*, Scottish Executive Education Department, Edinburgh.

Scottish Executive Research (2005) *Quality of life and well-being: measuring the benefits of culture and sport: literature review and think piece*, Scottish Executive, Edinburgh.

Sefton-Green, Julian (2003) 'Informal learning: substance or style?', *Teaching Education*, vol 14, no 1, pp 37–51.

Sefton-Green, Julian (2004) 'Initiation rites: a small boy in a Poke-world' in J Tobin (ed), *Nintentionality, or Pikachu's global adventure*, Duke University Press, Durham, NC, pp 148–64.

Seltzer, K and T Bentley (1999) *The creative age: knowledge and skills for the new economy*, Demos, London.

Smith, M (2006) 'Beyond the curriculum: fostering associational life in schools' in Z Bekerman, N Burbules and D Silberman-Keller (eds), *Learning in places: the informal education reader*, Peter Lang, New York, pp 9–34.

Smyth, C and G Zappala (2002) *The Smith Family Computer Clubs pilot program: a progress report*, The Smith Family, Campertown, NSW.

Soep, E (forthcoming 2006) 'Beyond literacy and voice in youth media production', *McGill Journal of Education*.

SPLASH National Support Team (2003) *SPLASH Final Report*, Youth Justice Board, London.

Toleman, J, K Pitman, N Yohaim, J Thomases and M Trammel (2002) *Moving an out-of-school agenda: lessons and challenges across cities*, Forum for Youth Investment, Takoma Park, MA.

Tyner, K (ed) (2003) *A closer look: media arts 2003*, National Association for Media Arts and Culture, San Francisco.

Vasquez, O (2002) *Le Clase Magica: imagining optimal possibilities in a bilingual community of learners*, Lawrence Erlbaum, New Jersey.

Webster, F (1995) *Theories of the information society*, Routledge and Kegan Paul, London and New York.

Winner, E and L Hetland (eds) (2000) *Journal of Aesthetic Education, Special Issue: The Arts and Academic Achievement: What the Evidence Shows*, vol 34, nos 3–4.

http://129.171.53.1/blantonw/5dClhse/clearingh1.html
http://aep-arts.org/ThirdSpacetoolkitpage.htm
http://www.everychildmatters.gov.uk/
http://www.forumfyi.org/Files/OSTPC8.pdf
http://www.forumforyouthinvestment.org/_docdisp_page.cfm?LID=AF111C34-ED9D-44D7-83EDA1252D201C42
http://www.koldingsem.dk/page351.asp
http://www.knowledgeplex.org/topic.html?c=290
http://www.investorsinpeople.co.uk
http://www.pz.harvard.edu/Research/ResearchOutSchool.htm
http://society.guardian.co.uk/print/0,,329428590-105909,00.html

HAWKE RESEARCH INSTITUTE WORKING PAPER SERIES

All papers are available online at www.hawkecentre.unisa.edu.au/institute/working.htm

Papers 1–6 and 12–21 can also be ordered in hard copy (free of charge) from

Kate Leeson, Editor,
Hawke Research Institute
University of South Australia
St Bernards Road
Magill
South Australia 5072

Telephone +61 8 8302 4371
Facsimile +61 8 8302 4776
Email: katherine.leeson@unisa.edu.au

No 35 Julian Sefton-Green, *New spaces for learning: developing the ecology of out-of-school education*, 2006.

No 34 Daniel Baldino, *Problems of order, identity and justice in world politics: fighting terror and the role of external actors in fostering democracy abroad*, 2006.

No 33 Simon Robb, *Forty-four things recovered from the ruins of a sustainable society*, 2005.

No 32 Simon Robb, *A terrorist imagines the king's death in a socially sustainable utopia*, 2005.

No 31 JaneMaree Maher and Jo Lindsay, *Conceptual orthodoxies and women's everyday labours: rethinking the employment of mothers*, 2005.

No 30 Stephen McKenzie, *Social sustainability, religious belief and global ethics: outlines for research*, 2005.

No 29 Emily Potter, *Ecological consciousness in Australian literature: outside the limits of environmental crisis*, 2005.

No 28 Susan Greenfield and panellists (Kate Leeson, ed), *Gender and the brain: roundtable discussion with Baroness Professor Susan Greenfield*, 2004.

No 27 Stephen McKenzie, *Social sustainability: towards some definitions*, 2004.

No 26 Bruce Johnson, *Local school micropolitical agency: an antidote to new managerialism*, 2004.

No 25 Rhonda Sharp and Sanjugta Vas Dev, *Bridging the gap between gender analysis and gender-responsive budgets: key lessons from a pilot project in the Republic of the Marshall Islands*, 2004.

No 24 Margi Prideaux, *Beyond the state: building regimes for species protection in all oceans*, 2003.

No 23 Susan Himmelweit and Maria Sigala, *Choice and the relationship between attitudes and behaviour for mothers with preschool children: some implications for policy*, 2003.

No 22 Jane Kenway, Elizabeth Bullen and Simon Robb, *Reshaping education in globalising, tribalising, hybridising times*, 2003.

No 21 Jennifer McKay, *Encountering the South Australian landscape: early European misconceptions and our present water problems*, 2002.
ISBN 0 86803 820 2

No 20 Ian North, *StarAboriginality*, 2002.
ISBN 0 86803 819 9

No 19 Deborah Bird Rose, *Love and reconciliation in the forest: a study in decolonisation*, 2002.
ISBN 0 86803 818 0

No 18 Susan Feiner, *The political economy of the divine*, 2002.
ISBN 0 86803 817 2

No 17 David Wilkinson, *Unhealthy encounters: legacies and challenges for the health status of settler and Aboriginal communities*, 2002.
ISBN 0 86803 816 4

No 16 Mbulelo Vizikhungo Mzamane, *Where there is no vision the people perish: reflections on the African renaissance*, 2001.
ISBN 0 86803 815 6

No 15 Glen Lehman, *Interpreting globalisation using Taylor's communitarian-republican model*, 2001.
ISBN 0 86803 814 8

No 14 Rohana Ariffin, *Domestic work and servitude in Malaysia*, 2001.
ISBN 0 86803 813 X

No 13 Howard Harris, *Making business ethics a competitive advantage*, 2001.
ISBN 0 86803 812 1

No 12 Ed Carson and Ben Wadham, *Regional devolution, contractualism and the corporate citizen*, 2001.
ISBN 0 86803 811 3

No 11 Gerald McBride, *Adelaide's recipe for life: wisdom of the Kaurna*, 2000.
ISBN 0 86803 810 5

No 10 Wendy Seymour, *The technological promise: enhancing social participation and citizenship for people with disabilities,* 2000.
ISBN 0 86803 809 1

No 9 Rick Sarre, Meredith Doig and Brenton Fiedler, *Using the principles of corporate social responsibility in the process of risk management and accountability*, 2000.
ISBN 0 86803 808 3

No 8 Nicholas Procter, *The local–global nexus and mental health of transnational communities*, 2000.
ISBN 0 86803 807 5

No 7 Margaret Brown, Justin Beilby and Eric Gargett, *Participating in end-of-life decisions: the role of general practitioners*, 2000.
ISBN 0 86803 806 7

No 6 Lois Bryson and Alison Mackinnon, *Population, gender and reproductive choice: the motherhood questions: directions for policy*, 2000.
ISBN 0 86803 805 9

No 5 Debra King, *Stakeholders and spin doctors: the politicisation of corporate reputations*, 2000.
ISBN 0 86803 804 0

No 4 Anne Hawke, *Measuring the impact of gambling: an economist's view*, 2000.
ISBN 0 86803 803 2

No 3 Rhonda Sharp, *The economics and politics of auditing government budgets for their gender impacts*, 2000.
ISBN 0 86803 802 4

No 2 Claire Woods, *Communication and writing: footprints on a territory*, 2000.
ISBN 0 86803 801 6

No 1 Marjorie Griffin Cohen, *The World Trade Organisation and post-secondary education: implications for the public system in Australia*, 2000.
ISBN 0 86803 800 8

Postgraduate Working Paper Series

No 3 Valerie Adams, *Laughing it off: uncovering the workplace experience of aged care nurses*, 2006.

No 2 Reina Ichii, *Time use indicators as a useful tool for evaluating childcare policy and funding*, 2005.

No 1 Deborah Tranter, *Why university? A case of socio-cultural reproduction in disadvantaged secondary schools*, 2005.

THE HAWKE RESEARCH INSTITUTE FOR SUSTAINABLE SOCIETIES

The Hawke Research Institute for Sustainable Societies (HRISS) promotes research into ways of fostering sustainable democratic communities in globally connected societies. It includes researchers and postgraduate students from the Division of Education, Arts and Social Sciences and the Division of Business at the University of South Australia.

The institute's goals are to

- foster research on inclusive, participatory social practices where socio-cultural goals are not subordinated to economic ends;
- further the development of interdisciplinary research contexts in which knowledge about sustainable societies can be developed and applied;
- contribute to national and international policy on sustainable societies.

HRISS activities aim to develop networks of researchers, locally and internationally; to pursue funded research activities; to publish and disseminate research results widely; and to enhance support for postgraduate students and early-career researchers. These activities include seminar series, conferences, public lectures, working groups and networks on interdisciplinary research themes, and assistance with grant writing and publication. HRISS also offers visiting fellowships and scholarships.

Website: www.unisa.edu.au/hawkeinstitute

Hawke Research Institute Director:
Professor Alan Mayne
Telephone +61 8 8302 4032
Facsimile +61 8 8302 4776
Email alan.mayne@unisa.edu.au