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Critical social pedagogy: Colliding with neo-liberal education management

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> All social movements involve conflicts which are reflected intellectually in controversies. It would not be a sign of health if such an important social interest as education were not also an arena of struggles, practical and theoretical (Dewey 1938, v).

Abstract
This paper reports research conducted by the Research Centre for Learning and Social Transformation. Our work on workbased learning (WBL) reframes the dualism of higher education and vocational education and training within a critical social pedagogy framework. In implementing WBL we are aware of the epistemological and historical backgrounds of workbased learning and the tensions between competing interests embedded in it. Some of these backgrounds will be explored briefly to position our view on WBL within broader educational debates. The paper argues that two main forces, economic responsiveness and critical social pedagogy form an integral, historic part of WBL. The specific expression of these debates in our application will be described as principles of ethical practice and quality education developed in the Graduate Diploma of Social Sciences (Community Services).

Introduction

From schools to universities, the inclusion of work in institutionalised learning processes is seen as a major advance towards a more economically viable output (ie. employable school leavers and graduates). Consequently, 'workbased learning' and its more limited sibling 'workplace learning 'are emerging as the latest innovations throughout the education system. In higher education, WBL can be seen as a strategy to break down barriers between vocational and academic education and as an opportunity to improve access to higher education. Hand in hand with 'seamless' education and recognition of prior learning, WBL is making inroads in traditional education institutions. The debate about vocational outcomes of schools and universities is longer philosophical and technical. Apart from implementation issues, schools and universities are struggling to embrace WBL, which is often seen as purely instrumental and as selling the role of education short. Schoolteachers have resisted the production of 'factory fodder' since the beginning of mass education and universities pride themselves on the unfettered pursuit of knowledge. In our experience, these two positions form an integral part of a WBL dialectic, they need not be mutually exclusive and a quasi-stationary balance between economic responsiveness and critical social pedagogy can be attempted.

Historical and epistemological backgrounds of WBL- a brief overview

Although spoken of as educational innovation, WBL has a long history of experimentation and the educational concepts and practices described as workplace learning and WBL have a rich epistemological tradition in debates about

- the relationship between education and the economy
- the relationship of theory and practice in education processes
- the dualism of education and training and associated social and institutional divisions.

In the following we will briefly address the three points identified above before giving examples from our practice.

The relationship between education and the economy

The relationships between education and the economy have been publicly debated from different viewpoints since the advent of mass education (Dewey 1916, Illich and Verne 1976, Gee 1994) By and large, since the early 20th century, education has been seen as a vehicle to deliver economic and socio-political outcomes. Dewey (1916) first identified contradictions between the principles of emerging democratic societies and classical, elitist education on one side, and the increasing demand for technically educated labour on the other. He lead the development of a new educational philosophy that would inform much of the on-going debates about the appropriate provision of education to the masses. His educational philosophy linked the requirements of a political democracy to industrial reorganisation by using the 'experimental method' – a teaching approach that develops knowledge as a pragmatic instrument to understand and manipulate one's environment (Rutcoff and Scott 1986, 13). Embracing a curriculum that delivered technical skills and knowledge, he also argued constantly and consistently for the development of 'critical and inquisitive minds' as a major role of education in the (then) new century, if that education was not only to deliver economic outcomes but to deliver the conscious and active democratic citizen as well (Dewey 1916). Furthermore, he established the argument that uncritical and compliant workers are, in fact, counterproductive to the new scientifically advanced workplace. Whilst not defined as 'workbased' the 'experimental method' shares some common features with WBL and can be seen as one of its forerunners. It introduces 'real life' experiences into the learning process and encourages students to investigate and research physical and technical applications wherever they can be found in order to develop a technical and critical understanding of their environment. The 'experimental method' actively and deliberately challenges the classical division of theory and practice in education.

These political, economic and philosophical dimensions of WBL were echoed somewhat later, on the other side of the world and across the political divide in attempts to educate the fully developed socialist personality (Krupskaya, 1961), individually, socially and politically active and responsible. The Soviet education system was charged with delivering a technically skilled, politically conscious and reliable workforce within a short period of time. The approach developed by Makarenko (1951) gave new meaning to the integration of work, education and living and informed Soviet education policy for some time, eventually contributing to the creation of a polytechnic education system. Makarenko's collectives of young people organised themselves around work sites and their requirements and based social and political decisions on a value system founded on productivity and responsibility for the new nation. Education in this context was predominantly workbased, supported by a strong commitment to self-management and accountability to the collective. Its outcomes as reported by Makarenko were remarkable in their complexity of outcomes, technical, social and political.

The relationship of theory and practice in education processes

The quest for an integration of theory and practice in education strongly reflected the increasing demands of industrialised societies to qualify their members to be able to apply

science and technology in the production processes. As industrialised work evolved into more complex activities, the generally educated high school and university graduate was no longer seen to be capable of meeting the demands of the labor market, especially and the higher end of the qualification spectrum.

The linking of theory and practice in education has re - (in)formed the educational repertoire since the mid 19th century (Frey 1990). Described in the past as 'project method' (Kilpatrick 1918,von Bothier 1980,Waks 1997), 'experimental method' (Dewey 1938), 'Aktionsmethode' (Soukup 1972) and polytechnic education (Beck 1990), 'WBL' or the use of 'productive activity' (Wagner and Childs 1998) as basis for educational practices accompanies educational innovations that aim at 'useful' and marketable outcomes, ie. opportunities for students to better participate in socially productive, income generating activities.

A historical exploration of the theory and practice divide reveals one fundamental controversy between different philosophical stances on the origins and development of knowledge. Although a wider range of arguments exist, two main positions are historically juxtaposed in the education debate, the idealist view that knowledge exists independently of concrete experience and purpose and the materialist view of an inseparable dialectic between material basis and consciousness. Both views continue to influence current debates of the relative value of different education processes in academic and vocational institutions of learning.

Idealists in classical Greek philosophy have argued a notion of knowledge as uncontaminated by the practical purposes of human existence.

> Much as these thinkers [Plato and Aristotle] differed in many respects, they agreed in identifying experience with purely practical concerns: hence with material interests as to its purpose and with the body as its organ. Knowledge, on the other hand, existed for its own sake free from practical reference, and found its source and an organ in a purely immaterial mind: it had to do with spiritual and ideal interests (Dewey 1916, 262-263).

Learning in this context is contemplative and directed towards the cosmos, as a model of perfect society and the learner needs to be free of real life interference. The 'loftiness' of this pursuit of knowledge is still apparent in academic practice and serves to identify 'theory' as superior to 'practice'.

On the other hand, the materialist view as argued by Marx saw " (t)he production of ideas, of conceptions, of consciousness, …[as] directly interwoven with the material activity and the material intercourse of men (sic), the language of real life" (German Ideology, cited in Fromm 1961, 21).

Learning in this context is active and directed towards the barriers limiting human endeavours and learners need to be embedded in the real world.

This view is echoed by many researchers of learning, who see the development of symbolic actions as based in concrete operations (Vygotskii 1978). Learning, if it is to lead to action, needs to develop as interaction of theory and practice that recognises its social embeddedness. (Leontjew 1982, Holzkamp 1985). The resulting 'praxis' integrates 'logos' and 'doxa' and strives to demystify the relationships between man (sic) and the world (Freire 1973). It is inherently practical, theoretical and critical.

The education and training dualism : social and institutional divisions

Hand in hand with these differing positions on the formation of knowledge is a clear dualism of education to work and general education mirroring the separation of theory and practice. Institutionally, the separation of universities from VET systems and streaming in secondary schools represents the education and training dualism.

This dualism is a reflection of complex social arrangements

> … the source of this dualism [lies] in the division of society into a class laboring with their muscles for material sustenance and a class which, relieved from economic pressure devotes itself to the arts of social expression and social direction(Dewey 1916, 336).

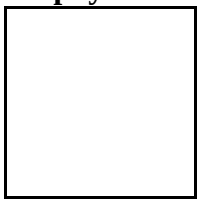
Although current changes to the education system promote the development of vocational skills across the institutional spectrum, in many ways the production of independent, critical knowledge is still seen as the domain of universities, whereas WBL, even in university courses, is seen to cater to industry interests and as under pressure to conform to utilitarian demands (Garrick and Kirkpatrick 1998). The division of academic and vocational curricula continues to provide the institutional base for the reproduction of social divisions, of privilege and disadvantage be they class, gender or race based. It directly reinforces the different value, type and accessibility of education and training and their social and economic recompense. To soften the impact of these divisions educationally, within a university context, WBL could form an integral part of a whole range of courses that are industry generic rather than employer specific. Resisting a hierarchy of knowledge they can be accessible via RPL processes that recognise vocational and professional practice as equivalent to undergraduate study.

These backgrounds and contexts position WBL not only as educational technology and method but as a site of struggle between contradictory economic, social and political interests and differing views on the role of learning and education in contemporary society. It is our argument that these tensions and contradictions impact on the implementation of WBL regardless of place and time. Invariably, they require complex management strategies if WBL is to balance the benefits, losses, inequities and disadvantages inherent in attempts to cross traditional boundaries between academic and vocational education.

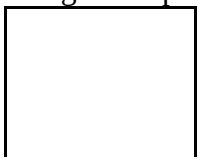
Workbased learning as critical social pedagogy : a theoretical model.

The following matrix depicts the interdisciplinary nature of the underpinning frameworks for our understanding of critical social pedagogy.

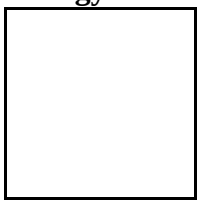
Philosophy



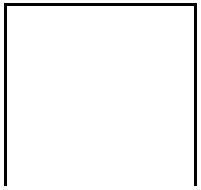
Hope as ontogenetic principle: E. Bloch



Psychology



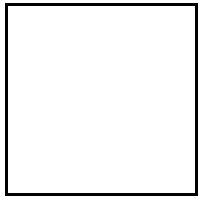
Psychology of human action:The development of abstract concepts from concrete operations: Leontjev, Vygotsky



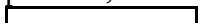
Critical psychology: The

Critical Social Pedagogy:
The application of an inter-disciplinary action focus with the aim to balance power inequities and economic,social and political disadvantage.

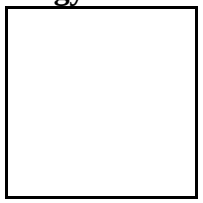
Education



Integrating theory and practice, developing critical minds:J.Dewey



Sociology



Organisations as 'organic' processes, individuals and organisations at the centre of force fields: K.Lewin

Workbased learning as critical social pedagogy: examples from practice

In our practice we build on previous experimentations with WBL and struggle with the same issues: the relationship between education and the economy, the relationship between theory and practice and the education and training dualism. In the following discussion we focus on the main strategies and principles developed to guide that experimentation with examples drawn from the workbased Graduate Diploma in Social Sciences (Community Services). The course is industry generic and caters for experienced community sector workers from a cross-section of organisations (community based, government departments, charities) and working with diverse social services clients (eg youth, women, NESB communities, housing tenants and prisoners).

Principles of ethical practice and quality education

WBL has led us to question the assumptions about privilege, elitism and the production of knowledge within a tightly bounded university system. As we have asked questions about what appropriate learning processes may look like when the education and training dualism is confronted, we inevitably have also confronted the university's equity practice, assessment processes, curriculum decisions and questions of relevance and utility of university learning. Our own learning process has led to the formation of a set of practice guiding principles that try and make sense of challenges generated by WBL in a university environment.

First and foremost, our overarching principle is to operate 'ad hominem', that is to put people before principles. In concrete terms, our equity processes are detailed, well developed and provide for the greatest possible accessibility. Often, universities pride themselves on their access programs allowing non-traditional students to enter degree programs, however in very few cases does this translate into the restructure of courses to cater for non-traditional students In our program accessibility is supported by appropriate, inclusive learning processes that do not discriminate on the basis of pre-existing educational qualifications. Instead we start from a position of shared expertise in our work and as 'workers' within exploitative work environments. By recognizing work as curriculum (Childs, 1997) students can actively engage in workplace enquiry and the production of knowledge is both grounded, shared and developmental. The comparison of different work practices between creates instant starting points for critical analysis and reflection as well as for the development of improved practice.

Following on from this basic position, we define learning as cross-disciplinary and multi-disciplinary. Work does not fit neatly within disciplinary boundaries, however disciplinary knowledge can enrich learning and diversify action possibilities. Thus learning is an active investigation of and enquiry into existing realities. Such an approach establishes a community of learners who are also ethical researchers and workers. On this foundation, the course represents *sustainable and defensible education practice* and allows for *the development of skills and knowledge that is at once technical, interpretative and critical.*

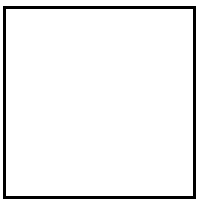
Sustainable and defensible education practice

Whilst the increasing commodification of education appears to be unstoppable, we are of the view that we can apply strategies and mechanisms that protect students and their industry from exploitation and therefore enhance our chance to continue providing education to the

sector. The long-term ability to provide education programs to the community services industry rests on our ability to provide a cost effective, accessible, equitable and useful qualification. Obviously, these intentions are in tension some of the time and our role is to negotiate the best outcomes for students within and sometimes challenging existing boundaries. Sustainability and defensibility refer to economic, pedagogical and equity criteria that underpin our practice. These will be explored further in the following.

In using the institutional 'freedom' created by pressures to change the economic base of universities, different opportunities and dilemmas arise (Wagner & Childs 2000b). Most innovations are judged on economic grounds, ie their ability to generate income. In terms of course development this implies fee-paying programs. Due to restrictions in the number of government funded student places, new courses, in most cases, can only be offered if they are self-funding. Obvious dilemmas are associated with this. For example, fee paying courses privilege students from wealthy backgrounds or from corporations who fund the course. The 'purchaser' can manipulate course content; courses can target 'wealthy' industries and professions (eg business and marketing). Another hurdle is created by university policy to not allow undergraduate fee paying courses. Whilst this is an equity policy and needs to be supported it requires creativity and flexibility to develop a post-graduate program that is not exclusive in itself. Whilst we have not been able to resolve all the dilemmas we have attempted to maintain sustainable and defensible practices by using five key strategies. These strategies, by and large, address

- financial concerns and value –for- money considerations
- access issues
- questions of credibility
- the development of critical and emancipatory practice grounded in instrumental and interpretive learning, and the



adoption of a learning cycle that responds to students' and universities contexts.

o Financial Strategies

Keep fees as low as possible:

The cost of a course can be calculated in various ways. Although definite funding formulae exist within the university, exemptions and reductions can be attempted. By spending most of the income on course delivery, the profit margin is reduced, as is the cost to students. This requires sound policy and strategic knowledge and good internal networks. In a climate of paucity of resources within higher education, sacrificing potential profit requires a clear commitment to accessibility of higher education.

Negotiate variable funding models:

In order to ease the financial burden on individual students, negotiations with employers often result in some support being provided by them. This can take the form of a percentage of fees being paid, students being granted special leave for block study sessions or other allowances being provided. The workbased learning approach allows us to demonstrate utility to employers. They can see a direct organisational benefit from student research and development projects and are therefore more willing to provide support. However, students who have part or all of their fees paid by employers can encounter a need to negotiate their interests with those of the employer. This process assists in the development of an organisational and not just and individual identity of the student.

o Access Strategies

Recognition of prior learning (RPL):

The Centre is at the forefront of RPL developments in the Australian higher education landscape. The RPL policy adopted by the university is based on the Centre's work (Childs & Thompson 1999) and accepts equivalence of learning outcomes regardless of types of learning. Underpinning our RPL policy and practices is a commitment to equity and accessibility in education, with the aim to recruit into rather than exclude from universities non-traditional student bodies. In the case of the community services industry, it is well documented that workers develop expertise by way of work experience and professional practice without certified or accredited training programs. Often, individuals bring a mixture of formal and informal training and education experiences to their work that goes unrecognised in traditional university degrees. The Centre assesses individuals on the basis of all their experience. Students can access the postgraduate degree from a combination of backgrounds including but not necessarily with an undergraduate degree.

Teaching, learning and assessment strategies

Our problem posing approach based on Freire's seminal work (1972) incorporates a set of practice guiding principles for the design and implementation of education processes. This set, defined as spectra for decision-making (Wagner and Traucki 1985) and consists of a) process versus product orientation b) investigation versus prescription c) generative themes versus issues d) critical thinking versus mystification. These principles in turn lead to the following micro strategies for teaching, learning and assessment in our workbased learning practice.

Learning outcomes are integrated across traditional subject boundaries. The curriculum is interdisciplinary and flexible in response to students project requirements. Assessment is based on a portfolio of a learning diary, project rationale and development, project outcomes and other relevant tasks. Theory formation proceeds from and is grounded in students' work experience and exploration of their workplaces. Theoretical inputs are based around the research projects and core subjects of the course focus on generic content areas, applicable to all workplaces, such as context, policy and program issues in the industry, research methods, work and research ethics. Peer group learning provides a venue for experience exchange and debriefing and a workbased learning co-ordinator supports individual students in their project needs.

o Credibility Strategies

Develop university/industry partnerships

The Graduate Diploma is 'owned' and delivered jointly by the university and the Association of Childrens Welfare Agencies (ACWA). ACWA is a peak body representing its member organisations and individuals but is not an employer organisations. ACWA's training arm, the Centre for Community Welfare Training (CCWT) is the largest training provider to the industry in Australia. The partnership was established in 1997 and includes research, education and training and policy development. The partnership between a higher education provider and a peak organisation demonstrates a commitment to the integration of theory and practice in concrete terms. In practice members of both organisations operate as colleagues in the degree and share supervision and teaching responsibilities. The workbased learning co-ordinator is positioned across both organisations.

Design industry wide rather than employer specific programs

The degree is designed for and accessible to the whole industry and not accountable to a single employer. This enhances its credibility in university terms, where employer programs are often seen as 'Mickey Mouse' and not rigorous. Given that there is no single employer impacting on course content or delivery, decisions about curriculum and learning process are guided by academics and their partners.

Generate multi-level and multi-interests benefits (students, workplaces, communities)

To sustain a fee paying, workbased program in an impoverished industry, the benefits need to accrue to all sides involved. Contributions are required from all levels of the organisations by way of collaboration with the student/worker and by way of support for the project. The more tangible outcomes can be delivered the more support is available in the workplace. Identifying and delivering projects that benefit the organisation as a whole and that contribute to improvements in service delivery to clients, advocacy for larger client groups or program development for local communities forms part of the course requirements.

These strategies form some of the organisational and material base of the program. In the following we will address pedagogical and philosophical issues.

Developing critical and emancipatory practice grounded in instrumental and interpretive learning

The integration of vocational and academic learning and of theory and practice that underpins the Centre's workbased practice requires the development of practical, analytical and critical skills and knowledge. The Centre's foundation in critical social pedagogy as outlined earlier

gives direction to the practical, analytical and critical knowledge we try to develop. We base our educational practice predominately on the works of Freire (1972, 1974) and Habermas (1971, 1984). It is not our intention to enter into a detailed exploration of their work here. However in the context of our practice we interpret these works in different ways. For example, Freire's (1974) concern for liberating educational praxis underpins much of our educational goal setting and design of learning processes. Habermas' typology of 'knowledge generating human interests' (1971) and its practical implications are useful to illustrate the type of educational processes we see as appropriate.

The typology describes three categories of interest in the search for and development of knowledge, instrumental-technical, interpretive and critical- emancipatory. Simplified these can be expressed as 'know-how', 'know-what' and 'know-why' but also have a directed action component added.

The Centre experiments with different strategies to develop professional skills (know-how), analytic competence (know-what) and critical knowledge (know-why). The strategies are emergent and change and develop almost weekly. Currently, program planning and management is based on "three steps of workbased learning (Childs, 2000); 1.understanding and describing immediate experience, 2. reshaping practice and 3. problematising practice. Each of these steps operates as a 'banner' to describe the major activities within each phase of the program; they are sequenced and developmental. In all steps, a combination of skills, analytical competence and critical knowledge is developed on different levels. Underlying these steps is the well-known learning and action research spiral of orientation/reflection, planning, action and review/reflection (Freire 1972). However, both attempts to segment and describe the process are analytic and do not necessarily capture reality fully.

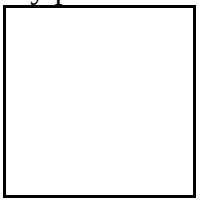
o Adopting a responsive learning cycle

Developing and describing the overall process as three steps provides the flexibility needed to respond to individually different learning journeys. Given that students arrive with different backgrounds and 'starting positions', their movements through the program and their points of arrival will differ also. In the following we describe some micro strategies we use during the three steps of the cycle.

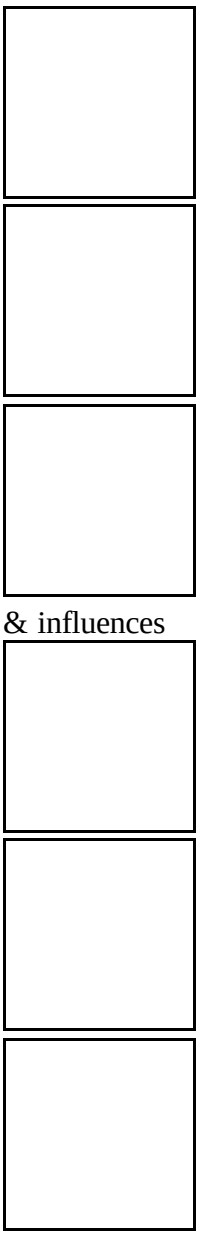
Understanding and describing immediate experience -orientation/reflection

In order to ground the program in each students' current level of understanding, skill and knowledge, the first phase requires the description of the 'status quo' in each organisation. This description serves a number of purposes. It is used as the base for planning and decision-making about appropriate research projects that generate useful organisational outcomes, it is used as a 'benchmark' for students to assess their own development and as an indicator for students instrumental, interpretive and critical skills and knowledge. It serves as a point of comparison between different organisations, a strategy that in itself can generate critical perspectives and innovative thought and it is the beginning of the theory formation process students and staff will engage in during the course. It is the first tangible contact between teaching staff and the organisations participating in the program.

In very practical terms, activities in this phase are described as



"beginning your learning journal, & peer group sessions



identifying and planning your project

developing ‘academic’ skills

beginning to systematically to analyse and describe practice, ideas & influences

stock-take of your workplace

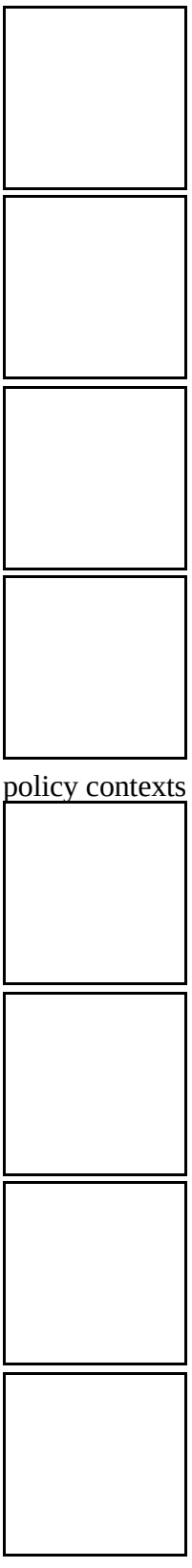
beginning consultations

considering ethical issues” (Childs, ibid).

Problematising practice- review/reflection

The focal point of the program is the development and implementation of a workbased project that combines instrumental outcomes with the exploration of alternatives, improvements, challenges and theoretical inputs. It engages students in issues of organisational change and leads them to reflect on their role as organisational actors. On occasions, they find themselves in disagreement with their managers and learn to negotiate, manipulate or circumvent conflict situations. More often, the hurdles they encounter form part of their theory formation and are analysed and strategised within a complex framework of organisational, policy and interest analysis.

In concrete terms, activities are described as



"continuing journal and peer group meetings

strengthening self-directed search for new insights about project

considering alternative actions

strengthening knowledge and understanding of 'organisation' & policy contexts

networking & consultation with stakeholders

forming clear questions

developing & implementing project

considering ethical issues" (Childs, ibid).

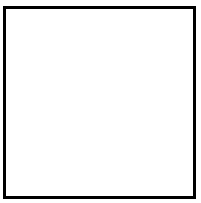
Reshaping practice- planning/action

Having engaged in change processes, both the pre-existing and the current 'quasi-stationary equilibrium' can be explored from different perspectives and often contradictory viewpoints. This is the most difficult part of the process because it requires the recognition of interest led

decision-making and a high level of ambiguity tolerance. Often workplace practice, especially in human services, clouds an understanding of whose interest is being met and in whose interest practices are adopted. Demystification of these everyday beliefs presents a major challenge and requires careful process management.

In concrete terms, activities are described as

- "continuing journal and peer group meetings
- testing and evaluating your project and ideas
- strengthening organisational and cultural analysis as it relates to your project
- final stages of project
- retrospective analysis of your learning, ethics, assumptions, project limitations, contexts
- seeking feedback from organisation, key stakeholders, network
- reporting
- justifying



reconsidering alternative actions" (Childs, ibid).

Conclusion

The paper has outlined the workbased learning practices of the Research Centre for Learning and Social Transformation. It positions a workbased degree at the intersection of several overlapping interests and concerns of industry and the university. Individual qualification and organisational development, vocational and academic education, integrating theory and practice and sustainable and defensible education practice all form part of the considerations overarching the process design and curriculum development for the Graduate Diploma. The many tensions, contradictions and limitations arising in a program that fits non-traditional education models into a traditional education system are apparent in the list of strategies that we need develop in order to maintain the program. Our experimentation with WBL in a university context has indicated the need to develop principles and strategies that confront a bounded, segregated education system that compartmentalises and privileges types of knowledge. In our process of WBL implementation we have drawn on and fit into its historical and epistemological background, which acknowledges education as a site of struggle, practical and theoretical for all participants in the process.

References

Beck, R.H. (1990) *Polytechnical education: A step*. Berkley, National Centre for Research in Vocational Education.

Childs, M. (2000) Three steps of workbased learning. *Teaching Materials*, Graduate Diploma Social Sciences, UWS.

Childs, M. & Thompson, R. (2000) Accrediting prior learning at UWSN. *University of Western Sydney Policy Papers*.

Childs,M. (Ed.)(1997) *A slight breathing space. A guide to working with micro and small to medium business enterprises for adult educators and the VET sector.* University of Western Sydeny Nepean.

Dewey, J. (1916). Democracy and education, New York, Macmillan.

Dewey, J. (1938) *Experience and education*, New York, Macmillian.

Freire,P.(1974) *Education as practice of freedom,* London, Writers and Readers Publishing Cooperative.

Freire, P. (1972) *Pedagogy of the Oppressed*, Harmondsworth: Penguin.

Frey, K. (1990)*The project method*, Weinheim, Beltz.(in German).

Fromm, E. (1961) *Marx's concept of man,* New York, Frederick Ungar Publ.

Garrick,J.and Kirkpatrick,D.(1998) 'Workplace learning degrees: Critical questions for research' *VET Research. Influencing policy and practice*. Proceedings of the first national conference of the Australian Vocational Education and Training Research Association. 321-326,Sydney AVETRA.

Gee,J.(1994) 'Quality,Science and the lifeworld.The alignment of business and education' *Focus:occasional papers in adult basic education. 4, 1-35*.

Habermas, J. (1971) *Knowledge and Human Interest*, Boston: Beacon Press.

Habermas, J. (1984) *Theory of Communicative Action*, Boston: Beacon Press.

Holzkamp ,K.(1985) *Foundations of critical psychology*, Frankfurt, New York, Campus. (in German)

Illich, I. and Verne,E. (1976) *Imprisoned in the global classroom*, London, Writers and Readers Publishing Cooperative.

Kilpatrick, W.H. (1918) *The project method*, New York, Teachers College,Columbia University.

Krupskaya, N.K. (1961) *Reminiscences of Lenin*, New York ,International Press.

Leontjew,A.N.(1982) *Action, cognition and personality*, Weinheim, Beltz. (in German).

Makarenko, A.S. (1951) *The road to life. An epic of education*. Moscow, Progress Publishers.

Marx, K.and Engels , F. (1939) *German Ideology*, NewYork, International publishers.

Rutkoff, P.M.and Scott, W.B. (1986*). New school. A history of the new school of social research*. London,The Free Press, Collier, Macmillan.

Von Bothier, H (1980) On the theory and practice of project method teaching, *International Journal of Political Education, 3(2), 123-39*.

Vygotskii, L.S. (1978) *Mind in society: the development of higher psychological processes*,Cambridge, Harvard University Press.

Wagner, R .& Childs, M (2000a) Workbased learning as critical social pedagogy, *3rd National Conference of the Australian Vocational Education and Training Research Assoc*. (AVETRA), Canberra, February 2000.

Wagner, R. & Childs, M. (2000b) Workbased learning and the academic workplace, paper presented to *Working Knowledge Conference*, Centre for Research in Adult and Vocational Learning, UTS, December 2000.

Wagner, R and Childs, M (1998) *Annual Report*, DRG Workplace Learning and Organisational Development, UWS Nepean.

Wagner, R. and Traucki, C. (1985) *Only Change is Permanent*. Sydney: Youth Refuge Association of NSW.

Waks, L.J. (1997) The project method in postindustrial education, *Journal of Curriculum Studies*, *29(4)391-406*.