Developing authentic achievement for disengaged young people using an electronic portfolio system

Abstract

Credentials are a salient form of cultural capital and if a student's learning and productions are not assessed, they are invisible in current social systems of education and employment. In this field, invisible equals non-existent. This paper arises from the context of an alternative education institution where conventional educational assessment techniques currently fail to recognise the creativity and skills of a cohort of marginalised young people. In order to facilitate a new assessment model an electronic portfolio system (EPS) is being developed and trialled to capture evidence of students' learning and their productions. In so doing a dynamic system of arranging, exhibiting, exploiting and disseminating assessment data in the form of coherent, meaningful and valuable reports will be maintained.

The paper investigates the notion of assessing development of creative thinking and skills through the means of a computerised system that operates in an area described as the efield. A model of the efield is delineated and is explained as a zone existing within the internet where free users exploit the cloud and cultivate social and cultural capital.

Drawing largely on sociocultural theory and Bourdieu's concepts of field, habitus and capitals, the article positions the efield as a potentially productive instrument in assessment for learning practices. An important aspect of the dynamics of this instrument is the recognition of teachers as learners. This is seen as an integral factor in the sociocultural approach to assessment for learning practices that will be deployed with the EPS. What actually takes place is argued to be assessment for learning as a field of exchange.

The model produced in this research is aimed at delivering visibility and recognition through an engaging instrument that will enhance the prospects of marginalised young people and shift the paradigm for assessment in a creative world.

This article has been developed from studies concerned with an Australian Research Council Linkage project, which is partnered by the Edmund Rice Education Australia Flexible Learning Centre Network (EREAFLCN), Brisbane City Council (BCC) and Queensland University of Technology (QUT) and titled *Sustainable Selves: A New Assessment Model for Marginalised Secondary Students*. The aims of the project are to describe and evaluate the educational achievements of adolescent students who have left formal schooling and are seeking to re-engage through alternative programmes, and to gauge and report the effectiveness of programmes that aim to improve educational, cultural and social outcomes for these young people.

The study aims to examine and analyse educationally disengaged young people's cultural capital. Drawing from research on authentic assessment and digital culture the study will develop a model of an *efield*: a digital interactive space for the representation and exchange of student cultural capital. Concepts of learning and exchange will be based on models of sociocultural psychology and structural sociology.

In this research ideas of marginalisation and inequality are expanded to include students' identities. A sociocultural approach (see for example, Bakehurst 1996; Cole, 1996; Cole & Engestrom 1993; Ivic, 1989; Kozulin, 1986; Kumpulainen & Wray, 2002; Lee 1985; Moll,

1990; Olson, 2003; Rogoff, 1990; Scribner & Cole, 1981; van der Veer & Valsiner, 1991; Wertsch, del Rio & Alvarez, 1995) to the analysis of education is adopted and assessment for learning practices (after, ARG, 2002; Black & Wiliam, 1998; Black, Harrison, Lee, Marshall, & Wiliam, 2003; Crooks, 1998; Daugherty, 2007; Gardner, 2006; Gipps & Stobart, 2003; Harlan, 2007; James, McCormick, Black, Carmichael, Drummond, Fox, et al., (2007); James, 1998; Klenowski, 2003; Wiliam, Lee, Harrison, & Black, 2004) are seen as an effective approach in the operational fields (Bourdieu, 1977, 1993a, 1993b; Bourdieu & Passeron, 1990; Bourdieu & Wacquant, 1992) of education. In the creation of a system of assessment the research related to this paper recognises the fluid transformative nature of identity which is seen to intersperse and interact across multi-contextual sites or what Bourdieu (1993b) describes as the field and sub-fields of cultural production. Such recognition is not currently incorporated in mainstream educational institutions that rely on standardised testing regimes or the "universal features of schooling, including classification, grading, curriculum, surveillance and credentialing" (Olson, 2003, p. xi) to assess and evaluate students' "funds of knowledge" (Lyotard, 1984, p. 6) and "repertoires" (Hicks, 1996, p. 63).

Within mainstream educational institutions, assessment tasks, examinations, tests, and their judgement; marking, grading and the conciliation processes involved with determination; moderation, arbitration and calibration are all socially constructed processes. These processes are distributed within historically developed hegemonic "capitalist imperialist" (Harvey, 2005, p. 91) fields, concerned with education and employment, and operate in accordance with the structure which dominates these fields. The classification system that such processes apply to objects is reproduced in the dynamic of the judgement whereby objects are evaluated. Bourdieu (1993b) describes the processes of judgement, or critique in terms of a sociological test and as operating in "the form of systems of classification and categories of perception" (p. 86) which are particular to, and inform a dialectic in, the field where they operate. This process is seen to operate at micro and macro levels in the education field, from teacher-student talk in a prep class to the examination of a doctorate degree at university, and in all areas of assessment in all fields where things are assessed or critiqued. Bourdieu (1993b) proclaims this process to be inevitable and offers no alternative or more solicitous or charitable possibility. Thus the objective of the research described in this paper is not to produce a new social science where the field of assessment in education would be dominated by ideologically generous, altruistic participants, but rather to expand the repertoires or dispositions of those existing participants and enhance the systems of classification and categories of perception to include other cultural products in the mix of "what counts as knowledge" (Freebody, Luke, & Gilbert, 1991, p. 454). Following this expansion of the boundaries or structure of cultural capital, or funds of knowledge, it is argued that the opportunity for acknowledging and valuing difference will also be given affordance.

The research for this project will develop an eportfolio system (EPS) that will be a type of hybrid computer program. It will incorporate features of a social networking system and will have a similar appearance and operational design to such systems. An integrated section or area of the program will function as an eportfolio and this will incorporate several of the important design features described in Jafari & Kaufman (2006), and provide a dynamic work space for students and teachers. Students and staff will be able to communicate in various formats within the system that will allow for public viewing or degrees of privacy through different permissions and accesses. Students work will be uploaded, negotiated, re-worked, recorded, transferred and so on, in many different ways to provide a tool for creativity, assessment and reporting that is engaging and functional. This tool will make a major contribution to the education, assessment and school engagement for the young people who enrol at EREAFLCN. It is argued that this system will provide the context and space for the creation of culture and negotiation and modification of identities through a field of exchange.

For students, the field in which they participate is a structured system of social entities, in the field of education, which are formed by the individuals or institutions which embody those entities. Bourdieu (1993b) constantly refers to fields as "fields of forces" and "fields of struggle" (p. 30) between power relations within these structures. He describes the relationships within fields in terms of domination, subordination or equivalence which are designated by the accumulation or utilisation of the products, resources or *capital* and these are the subject of contestation in the field. This *capital* has four major categories, economic capital (transferable legal tender), cultural capital (legitimised knowledge, certification), social capital (valued relationships) and symbolic capital (artistic recognition, prestige, honour). In a school situation the nature of students' teachers' and other actors' habituses operating within fields is defined through their relationships to capitals and legitimacy of the field is evolved through historical processes.

In this sense habitus can be seen as a form of identity. Many theorists (see for example, Adams & Marshall, 1996; Baumeister, & Muraven, 1996; Bucholtz, Liang & Sutton, 1999; Côté, 1996; Engeström, Mettinen, & Punamäki, 1999; Erikson, 1968; Fairclough, 1992; Gee, 2000; Giddens, 1991; Gutiérrez, 2002; McAdams, 1990, 1997; Schwartz, 2005; Street, 1995; Vygotsky, 1978; Wertsch, Del Rio & Alvarez, 1995), describe identity in terms of process and fluidity and refer to a transformative nature of identity that moves across discourses. Ideas of transformation of identities are often related to theories of negotiation, contestation and arbitration within sociohistorical and cultural contexts. In perspectives that view conciliative actions as instrumental in identity formation the terms *hybrid*, *hybridise* and *multiple* are often used to describe a notion of confluence and melding that occurs between cultures. These theories are widely applied to the field of educational research and often set in school contexts. Through the negotiation and interaction of identities between participants in classrooms certain discourses are privileged and others marginalised. As these discourses are enacted so too certain identities are privileged and others marginalised. Within this field identity is incorporated and intrinsically linked to historical discourses and repertoires that exist within fields of exchange.

This paper proposes another field within this mix, a field that is aligned closely with conciliative theories of identity and positions teachers as learners.

Several theorists have described versions of *abstract spaces* (Lefebvre, 1991) and Bhabha (1996) discusses cultural hybridisation and "culture's in-between" (p. 54). Bhabha argues for a concept of "hybridity" and maintains that

at the point at which the present attempts to objectify itself as a generalized knowledge or a normalizing, hegemonic practice, the hybrid strategy or discourse opens up a space of negotiation where power is unequal but its articulation may be equivocal. Such negotiation is neither assimilation nor collaboration. It makes possible the emergence of an 'interstitial' agency that refuses the binary representation of social antagonism. Hybrid agencies find their voice in a dialectic that does not seek cultural supremacy or sovereignty (p. 58).

In recognition of Bhabha's assertions the research for this study has adopted the notion of a space of negotiation between cultures where, although power is unequal, terms of negotiation and respectful recognition of discourses occurs in mutually goal orientated dialectics that are neither marginalising nor privileging for any participants.

The hybridised culture or *culture's in-between*; the interstitial field advocated in this research will be produced and developed between staff and students (including between students and between staff in all possible combinations) but will have a unique feature of using an eportfolio system as a

tool and extended electronic site for the field. This interstitial field is seen as a type of electronic and globalised version of what Gutierrez, Larson & Rymes, (1995) described as a "third space" (p. 446) and relate to power, contestation and negotiation in the classroom in terms of "script, counterscript, and underlife" (p. 446). They argue for a classroom structure, or field, where teachers maintain a dominant script and, as way of resistance, students develop a counterscript. This counterscript evolves within the social space of "underlife" which is defined as repertoires and activities students develop to distance themselves from the school institutional discourse. It is constituted by discourses that provide an alternative behavioural trajectory for students and allows them to acknowledge and at the same time contest the teacher's dominant script. These discourses include "unacknowledged cultural references to popular music, film, and television" and provide a way for individual students to take "stances" (p. 451) or develop "dispositions" (Bourdieu, 1997, p. 214) towards the roles they are expected to play. Gutierrez, Larson & Rymes, (1995) present the concept of the third space as "the social space within which counter-hegemonic activity, or contestation of dominant discourses, can occur for both students and teachers" (p. 451).

Although this line of reasoning provides a useful description of a *space* for contestation and negotiation, it falls short of providing a description for a field of exchange and cooperation where all voices are heard and recognised even if power relations are not equal. There seems to be an emphasis on contestation and no provision is made for a situation where teachers are learners. Bahbha's (1996) model recognises fundamental power inequalities but sees a type of common ground for the exchange of dialogue and creation of discourse. During such an exchange teachers would need to learn about students' identities and cultures in order to create these new discourses, or cultures.

Tobin & Llena (2009) recognise the notion of teachers as learners and describe research in an educational field where teachers and students are "culturally other" (p. 1). Their study identified "improvements in the quality of learning environments and outcomes such as coming to school, staying engaged, and collaborating with the teacher and peers to focus on the learning of science" (p. 2). These outcomes were largely attributed to the use of conversations and meetings between a collective of participants in a field which they called a "cogenerative dialogue" or "cogens" (p. 3). The cogens in turn were seen to produce various forms of culture and were described as "seedbeds" (p. 3) for the growth of new culture: "In essence, the cogen field was a place where students and teachers could learn to interact successfully and, in so doing, produce a range of culture that would support successful interactions in similar circumstances in the future" (p. 3). Like *cogens*, the field described in this research will provide a field for "producing new culture, expanding the agency of participants, and changing identities" (p. 3). Unlike Tobin & Llena's (2009) cogens the field in this research will exist electronically as well as culturally. It will be largely enacted in online processes using the internet as a tool and a site. For this reason the term efield has been coined to relate to the field because the electronic component of the field is such an integral and important part of its operation.

As described in the previous section of this paper an electronic portfolio system (EPS) is being developed in this research to capture evidence of student learning and production and to further enhance students' cultural capital. The term electronic portfolio system is used, rather than *eportfolio*, because the eportfolio function is actually an integrated component of a software program that incorporates social networking features similar to those found in programs such as *Facebook*, *Myspace* and *U-tube*. Through an assessment for learning approach it is argued that this EPS will engage students and teachers in the efield and provide a space where there is opportunity for the production of new culture to be created as both students and teachers will have the opportunity to learn from each other, expand their agencies and change their identities. In EREAFLCN schools, the negotiating and

transformation of identities is a key objective of this research and the enhancement of cultural capital is intended to be a coexistent production of this objective.

This section of the paper has discussed young people who attend the EREAFLCN and the cultural capital that they bring with them to the institutions programme. The further learning and development cultural capital that occurs in the institutions programme has been positioned as paramount in an assessment for learning field of exchange to be developed by this research. The idea of developing and maintaining a method of capturing and reporting evidence of students' funds of knowledge and repertoires has been established and the intention to use an EPS in this pursuit was introduced. It is proposed that this EPS will operate through the development of a sustainable, portable model which is couched in a sociocultural approach to assessment for learning and exists in a Bourdieuian field of exchange described in this study as the efield.

The EPS being developed in this research is not a standard electronic portfolio. A highly important feature of the EPS is its communicative resources which are seen as requisite and integral in the structuring of the efield. The EPS has features and appearances similar to popular social networking programs and so includes a broad range of communication tools, upload and download facilities, viewing and editing permissions, and a multi user capability provided by scale of the host server and the positioning of the site on the internet. The contextual features of the EPS are discussed in the following section in more detail.

A field of exchange as an e-portfolio system

The portfolio as a means of education is not a new idea and the notion of portfolios as a tool in assessment for learning is equally well recognised. The many benefits and features of portfolios, and indeed of e-portfolios, in learning situations have been analysed and discussed extensively in educational literature (see Dysthe & Engelsen, 2008; Earl, 2003; Jafari & Kaufman, 2006; Johnson, Mims-Cox & Doyle-Nichols, 2006; Kankaanranta, Grant & Linnakyla, 2007; Klenowski, 2002; Mullen, Britten, & McFadden, 2005; Popham, 2008; Provenzo, Brett & McCloskey, 2005; Sharma & Mishra, 2007; Stefani, Mason & Pegler, 2007).

A thorough investigation and critique of the viability, efficacy and value of e-portfolios in education would be beyond the scope of this paper, however salient points from the existing literature that can be seen as contributing to the development of the learning for assessment instrument in this project will be addressed and exploited.

Throughout this paper the e-portfolio to be constructed for this project has constantly been referred to as an *e-portfolio system* (EPS), a term that recognises the incorporation of other social, educational, and assessment aspects in the program to be developed. To begin with, a major difference in this e-portfolio is that it will actually be a part of, and will reside within, a web-page based social network system, similar in design to web based utilities such as *Facebook*, *MySpace* and *U-Tube*. With this vital factor in mind, the term EPS becomes apposite and points to several advantages of a social network type of program over that of a server based single application program such as the commercially available e-portfolio programs.

Firstly, it enables the program to be web based and thus, externally hosted. The EREAFLCN has limited numbers of comparatively old and underpowered PCs on sites for student access, the main system server is not yet completely developed in its capability, and there is little technical support available for the installation of new programs. This situation was seen as

problematic for the intentions of this research project, which are partially reliant on the successful installation and operation of a newly conceived and developed program. To overcome the potential risks of system inadequacy or failure, lack of qualified support and maintenance personnel, and perceived difficulties with site access and location, it was decided that external web page hosting of the program would be a viable solution.

To facilitate this decision, negotiations were enacted which resulted in an agreement to host the new program for the *Sustainable Selves* project on a new, powerful server at Queensland University of Technology (QUT) Kelvin Grove Campus. The negotiations included the supply of a *shell* program that could be adapted to the requirements of this project by the relatively simple means where a new *user interface* or *front end* is overlaid onto the base program. The key result of this decision is that students at the EREAFLCN, in any centre, need only to log onto the internet to access the EPS. They could actually log onto the program from home or any location with internet access. In light of the sociocultural theoretical foundations of the model that encompasses the EPS, this factor is seen as highly significant.

Secondly, producing the program on a powerful server at QUT gives research team members access to direct input and surveillance and provides the means for IT experts, based at QUT, to maintain and develop the EPS. This factor has clear and important implications in terms of research development, but also provides for the rigorous production of a robust, efficient EPS and one that is also aesthetically attractive. A website that works well is important, however, considering the nature of the cohort that will be using the EPS described in this project, a website that *looks good* is equally important.

Recognising the inclusion of professional aesthetics draws out a third advantage of the EPS envisaged for this project. Attractiveness in social network websites can contribute to participation (Greenberg, 2006; Sharma, & Mishra, 2007). This is an important issue for the EPS in this study as the engaging effects derived from the social nature of participation in an online community (Provenzo, Brett, & McCloskey, 2005) are seen to be contributing factors in the notion of a field of exchange as an EPS. Through participation and engagement in a network, students will become incorporated in the exchange of cultural capital with teachers, other students and institutions and thus students' and teachers' habitus can be seen to operate in the field of exchange as an EPS. Following are some prominent issues that indicate the appropriateness of an EPS for this project.

The EPS will provide a tool that is an uncomplicated, highly apt use of ICT for learning and learning management on an individual and societal basis. It will employ highly sophisticated complex technological equipment in simple practical ways that allow for easy access and great utility in a user friendly, appealing domain. The EPS can exploit computers for their most useful abilities such as indexing, matching and rapid information collation and become the most important knowledge management tool in the EREAFLCN repertoire.

Access, equity, agency and portability are important features in the EPS being designed for this project. It will be accessible by all EREAFLCN students regardless of skill levels or cultural capital attainment and delivered at a negligible cost. The EPS will be universal and equalising for users making the exchange of cultural capital possible and probable. It will through presentation and display, exhibit cultural capital attainment and exchange, focusing on the positive aspects of engagement and participation. The EPS can provide students with cultural capital, in the form of evidence of skills and knowledge that transcend those represented by mainstream formal credentials. This knowledge, understanding and skills are recognised in this system, as apposed to more objective quantitative systems used in mainstream educational institutions (Dysthe & Engelsen, 2008; Greenberg, 2006; Jafari &

Kaufman, 2006; Kankaanranta, Grant & Linnakyla, 2007; Provenzo, Brett & McCloskey, 2005; Stefani, Mason & Pegler, 2007).

The system will need to incorporate rigorous security systems that allow for privacy and agency with a permissions hierarchy, but also allow for communication and display. In this system, a student will be able to decide who has access to designated information in their personalised version of the EPS. In order to fully exploit the system however, it will require the ability to cross-reference the contents with certain standards, teachers' instructions or other students' submissions. It should include an information gathering and storage facility that can be used to create profiles of prospective employers or educational institutes, in a similar fashion to the way *MS Office Outlook* operates.

The EPS should be *smart!* A system that automatically updates information would be very useful, and relatively easy to create. In such a system, documents such as resumes could utilise hyperlinks or apps and cross-reference newly created documents with appropriate employers or institutions. This would look like a wiki in effect and would have many applications.

The features mentioned above are some of the major items that the research will develop and incorporate in the EPS. Throughout the research, an important theme will be recognition of students' and teachers' habitus as being at *work* in the field of exchange as an EPS, and that cultural capital is being exchanged during assessment for learning events.

For example a student may be working on a piece of music with the intentions of having the assessment of that piece count towards a Certificate III in Music Industry (Technical Production). During the school term the student would submit the piece via an internal email system to her/his teacher. The teacher would check the piece for suitability (inappropriate language or themes are not permissible and would be censored at this stage). If there are no contravening issues the student would upload the piece, which may include an accompanying video, to the front end, or first page of the EPS. This page could look something like a *Facebook* blog page where students and staff can upload (approved) artefacts and take part in blog threads. All students and staff would then be able to view the music piece and would be encouraged to make comments on it. Participants would also be able to rate the piece by at least three different methods.

The first method is where participants enter the blog thread and type in comments, in a similar fashion to the way this is done on *Facebook*. The system records this blog page and so at any time system users can enter that page and see a list of comments, including discussion, argument and so on, regarding the piece of music/video. This type of information could easily be studied, analysed and sorted for several types of assessment purposes.

The second method is by applying a tag. A tag in this sense is similar to a keyword(s) a single word (or possibly two or more words, the optimum model for this is still under consideration), that is recorded on a tag cloud. A tag cloud is a display of all the words entered for that piece exhibited on one page in a graphic format. As these words are compiled in the tag cloud, the words which have been recorded more frequently grow in visible size on the page, so the reader can see at glance the order by frequency of words (or perhaps short phrases) that have been allocated by peers and staff to that piece of music. This is a useful form of rating that actually has a qualitative and quantitative component.

The third method is simply a Likert process where participants select a one to five star rating designation by clicking on the number of stars deemed appropriate. The research being

discussed in this paper intends however, to provide several categories of star ratings. For example participants could rate a piece of music/video on a one to five scale for *commercial potential*, or possibly *moral values*, *communicable messages*, *attitudes*, *dispositions*, *emotions* and so on. Such categories will be considered and trialled over the length of the research, but the prominent point is that the system provides for several and varied forms of this survey method. The system can provide any number of categories and so the possibility of creating specialised or particular categories for individual, or groups of, artefacts to be rated is a real consideration. Researchers on this project are currently working on the concept of using five star rating processes in a combination effect to provide a visual scatter graph automatically that would graph against an *X-Y* grid or possibly a three dimensional Cartesian coordinate system graph.

Ways of utilising these processes in assessment for learning approaches will be developed, but clearly the notion of a field of exchange is evident in these system tools. Through the process of negotiation, participation and engagement in a network, students will become incorporated in the exchange of cultural capital with teachers, other students and institutions and thus students' and teachers' habitus can be seen to operate in the field of exchange as an EPS.

As the commenting, assigning of keywords and survey rating processes are taking place on the system the student and teacher can be in conversation about the piece of work via the internal email or private chat facility in the system. The teacher can provide feedback and pose questions, share "learning intentions, expectations, objectives, goals, targets and success criteria" (James, et al., 2007, p. 9), as well as encouraging and developing practices of peer and self-assessment.

The piece of work discussed here has been identified as a piece of music/video, but the system would work in the same manner for a piece of writing, a scientific project (experiment etc.), a mathematical exercise, or indeed a sports or performance event video or other descriptive record.

When the teacher and student have together agreed that the piece of work is of a suitable standard it can be posted on the public section of the webpage, a section of the system that any net users have access to and a front end page for the EREAFLCN. The piece of work can also be included into resumes or reports in various formats and used as evidence of work in job or further education applications. Through an accumulation of artefacts, reports and credentials in an eportfolio section of the system a student can build a specific resume which can be printed or made available online for prospective employers or educational institutions.

The EPS being developed for this project has been described as a *tool* (Engstrom & Cole, 1997) that will provide an opportunity for the creation and maintenance of an electronic space or zone, or what Bourdieu (1993b) refers to as a field. It is argued that an assessment for learning approach (Black & Wiliam, 1998) will be incorporated in the electronic field, or efield, and that through student and staff communication, participation and negotiation students' cultural capital will be developed and exchanged. This is innovative and functional research aimed at delivering visibility, agency and recognition to a cohort of students who are marginalised through differences and labelled as *at risk* by governments and society. The research aims to develop an instrument that can provide accreditation for these young people and shift the paradigm for assessment in a creative world.

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