

TABLE OF CONTENTS

Multicultural Learning Partnerships in <i>The Café</i> : Integrating ICT into Transnational Tertiary Education in Australia Using the Collaborative Application for Education	JOSH MCCARTHY <i>UNIVERSITY OF SOUTH AUSTRALIA</i>	Pg. 173-184
The Challenge of Comparing Fluid Categories: Race and Class in Educational Research	LIZ JACKSON <i>UNIVERSITY OF HONG KONG</i>	Pg. 185-198
Education for Sustainable Development in Malaysia's National Curriculum Reformation: A Theoretical Exploration	AAI SHEAU YEAN <i>UNIVERSITY OF BRISTOL</i>	Pg. 199-212
Advancing Life Projects: South African Students Explain Why They Come to FET Colleges	LESLEY POWELL & SIMON MCGRATH <i>UNIVERSITY OF NOTTINGHAM</i>	Pg. 213-226
<i>Book Review</i> : Comparative Education Research: Approaches and Methods (2 nd edition)	NOEL MCGINN <i>HARVARD UNIVERSITY GRADUATE SCHOOL OF EDUCATION</i>	Pg.227-228

MULTICULTURAL LEARNING PARTNERSHIPS IN *THE CAFÉ*: INTEGRATING ICT INTO TRANSNATIONAL TERTIARY EDUCATION IN AUSTRALIA USING THE COLLABORATIVE APPLICATION FOR EDUCATION¹

Josh McCarthy^a

University of South Australia

ABSTRACT: *This paper reports on using the Café: the Collaborative Application for Education as an online learning environment within the Facebook framework, for integrating international students into first year university in Australia. The Café, a new e-learning application, has been designed and developed not only to take advantage of Facebook's popularity and social qualities, but also to provide institutions with a dedicated e-learning environment that meets the needs of modern-day tertiary students and teaching staff. During two courses in 2013, 91 first year design students, including 24 international students participated within the e-learning environment in combination with traditional face-to-face classes. Students submitted work-in-progress imagery related to assignments, and provided critiques to their peers. The evaluation process of the e-learning application involved pre and post semester surveys providing participating students with the opportunity to critically reflect on the experience during the year. The findings of the study are discussed in light of the growing use of social media within learning and teaching in tertiary education, and the importance of providing first year students, particularly international students, with multiple means of communication with staff and peers.*

KEYWORDS: *Facebook, international student experience, online learning, collaborative learning, first year experience, transnational education.*

Introduction

In 2007 a national study was conducted by Sawir, Marginson, Deumert, Nyland and Ramia (2008), analyzing the university experience of international students in Australia. The study highlighted various issues confronting international students studying in Australia. They note that international students plunge suddenly upon arrival at their chosen institutions into a challenging new study setting, with up to 65 percent experiencing 'relational deficit' and isolation at a time when in need of greatest support. Their loneliness is often acute, separated as they are from Australian students by language and cultural barriers. They no longer belong to the world they left behind, but in first year, do not yet belong to the world they have entered. The immense popularity of web 2.0 technologies however, offers potential solutions to such learning problems. The virtual environment and accessibility of social network sites (SNSs), such as *Facebook*, *YouTube* and *Flickr*, are highly effective for developing 'preliminary' relationships between local and international students as they negate key loneliness triggers such as language barriers and social inhibitions. Students can communicate at their own pace and contemplate discussion and responses, rather than being 'put on the spot' in the physical classroom.

Loneliness is most likely to occur within situations such as a lengthy absence from home or the loss of a significant other (Sawir et al, 2008), two situations students face when they study abroad. The literature on loneliness indicates personality and a loss of social networks as influencing factors,

^a Correspondence can be directed to: Josh.McCarthy@unisa.edu.au

however there are many other factors that can contribute to a student's isolation. Weiss (1973) distinguishes 'personal loneliness' and 'social loneliness'. According to Weiss, personal loneliness can be seen as the loss or lack of a truly intimate tie such as that with a parent, child or lover, and is characterized by anxiety and apprehension. International students experience personal loneliness because of the sudden loss of contact with their families. Personal loneliness can often be resolved by the instalment of an 'attachment' relationship to a significant other. Students experience social loneliness because of the sudden loss of existing social and academic networks, and is characterized by boredom and a sense of exclusion. Social loneliness can be resolved through immersion into an existing or newly formed social network, as Weiss (1973, p150) notes:

Social networks provide a pool of others among whom one can find companions for an evening's conversation or for some portion of the daily round. Social isolation removes these gratifications; it directly impoverishes life.

Osterman (2000), states that being accepted, included or welcomed leads to positive emotions such as happiness, elation, commitment and calm; however being rejected, excluded or ignored leads to often intense negative feelings of anxiety, depression, grief, jealousy and loneliness. People who are very prone to loneliness are often shy, introverted, and less willing to take social risks (Hojat 1982; Stokes, 1985), and as such international students, simultaneously experiencing a new culture, environment and other learning hurdles, are most at risk. Language competence is a key factor. For students just arrived in the country this is a huge barrier, and it is crucial for universities to explore means of tackling such issues. Being able to respond to a question online, in a written manner, over a period of time, rather than verbally on the spot in the classroom, is of great benefit to commencing international students. It should also be acknowledged that international students are coming from many different cultures and backgrounds, and as such may not have many, if any, peers from their own country. Indeed some international students find themselves isolated within an already distanced group (McCarthy, 2012). Triggers for loneliness and feelings of isolation are common within both commencing and continuing international students and the results can be devastating. The experience of loneliness can trigger a withdrawal from social relationships in an effort to contain the pain, reinforcing and exacerbating social isolation. Cultural factors are often responsible for triggering loneliness and can affect international students in two distinct ways. Firstly students often miss their own cultural and linguistic setting, and being placed in an unfamiliar environment can be completely overwhelming. Secondly, while many students may find themselves in cross-cultural relationships, they are often at a lower level of empathy than same-culture relationships. More specifically, international students are disappointed by the underdevelopment of relationships with local students, and can be affected by weak institutional relationships, including the exchange in classrooms with peers, and student-teacher connections (Sawir et al, 2008).

One remedy, for loneliness within international students, is integration into an existing or newly formed social network. This enables students to interact with peers and engage with their learning. The two variables that correlate most significantly with loneliness are density and quality. Denser networks enhance a sense of belonging and reduce loneliness. The larger the network, the higher the chances of students finding like-minded peers with whom to interact. Similarly, if the network contains students of similar interests, relational goals and age brackets, the *quality* of the network is increased. At a first year level it is crucial to promote connections with both peers and academic staff, and to do so through fostering an environment in which students participate actively and develop a sense of belonging in both small and large group settings (Krause, 2006). Opportunities to ask questions and contribute to group discussion are particularly conducive to engagement. Organizing peer learning and study groups that extend interactions beyond classroom walls and using online resources, such as forums, social networking tools, wikis and blogs, all lead to student engagement. The goal is to build student independence and support networks as part of an integrated academic and social transition experience. From an international student perspective, developing a sense of

belonging in the academic community is critical in supporting the adjustment to university culture in Australia, more specifically, building cross-cultural connections with local students (McCarthy, 2009). Good networks help students to feel supported and more in control (Sarason, Sarason, Gurang, 1997), and friends, both local and foreign, are the most preferred source of help for international students (Baloglu, 2000). As many commencing international students lack any close friends, it is crucial to initiate connections with their peers immediately, to foster collaborative learning and a sense of belonging in the academic community.

Online Learning Environments in *Facebook*

Since 2007 many SNSs have been formally and informally utilised within tertiary education, including *Facebook*, image-host sites *Flickr* and *DeviantArt*, video-hosting sites *YouTube* and *Vimeo*, microblogging site *Twitter*, and visual discovery tools *Pinterest* and *Clipix*. *Flickr* is an image hosting website which allows users to share photographs, and host images that they embed in other SNSs. Accessibility to *Flickr* has improved with the advent of an application that can be used on smart devices. *YouTube* is a video sharing website in which users can upload, view, rate and comment on videos. Registered users can access and analyse data regarding uploads, including number of views, peaks and valleys of view times, as well as generic user demographics. Like *Flickr*, *YouTube* can be accessed via phone or tablet through a standalone application, ensuring high availability to content. The ability to embed videos in other sites, as well as the rank and comment features, provides a strong basis for peer-to-peer learning. *Pinterest* is a SNS which allows users to collate media and categorise content based on specific interests. The site allows users to store images, links and videos and sort them on different pinboards.

Facebook is predominantly known as a hub of social networking activity; however it is quickly being recognised as a reputable and popular e-learning platform (Bosch, 2009; McCarthy, 2012). Since 2008, *Facebook* has been successfully implemented as an online learning environment within tertiary education case studies around the world (Irwin, Ball, Desbrow and Leveritt, 2012; Kenney, Kumar and Hart, 2013; Kurtz, 2013; McCarthy, 2009, 2010, 2012, 2013a; Rambe, 2012; Ritter and Delen, 2013; Shih, 2011). In a 2010 case study involving 450 first year students at an English-speaking university in South Africa, it was found that *Facebook* could be used to overcome a first year student's sense of psychological powerlessness, by providing students with a voice (Rambe, 2012). A key factor behind this revolution is *Facebook's* immense popularity. *Facebook* is a familiar tool, and often a part of students' daily lives (Duffy, 2011; McCarthy, 2012, 2013a, 2013b). At the time of this writing *Facebook* has 1.31 billion monthly active users (Statistics Brain, 2014). In a 2011 case study involving 253 students over several year levels at Griffith University in Australia, *Facebook* was used as an online learning environment, allowing students to interact with peers and staff to post content related to associated courses. A pre-semester survey indicated that 93 percent of participants were existing *Facebook* users and that 78 percent anticipated *Facebook* would facilitate their learning. The study found that the majority of participants visited the associated page at least once a week; the page enhanced communication and interaction between students and the course instructors; interaction with the *Facebook* page was easy as students were familiar with the interface; and that students were able to receive updates and information which may have been missed via other forms of communications (Irwin et al, 2012). Furthermore students can access the site using a range of devices from anywhere in the world. It is also free to use, ensuring students can connect with anyone, including global peers and industry leaders, at any time. This accessibility is often perceived by students as a significant benefit as it can allow increased communication with staff and peers, greater access to course material, connections to industry, and access to collaborative learning partners (Irwin et al, 2012; McCarthy, 2012, 2013a; Bosch, 2009). In a 2010 case study *Facebook* hosted an online mentor scheme for digital media students at the University of Adelaide in Australia. Throughout the semester, students posted work-in-progress imagery related to their projects and received feedback and critiques from a range of local and national industry mentors. This online learning experience

facilitated interaction between students and industry leaders and it also provided students with the opportunity to gain insight into various digital media professions while they were still studying by forging connections with potential future employers (McCarthy, 2010). While *Facebook* has the potential to promote collaborative learning and interaction, outside of the immediate student cohort, traditional university online learning environments, such as learning management systems (LMSs), negate such action through their closed-system format (Wang, et.al, 2012). Students must be enrolled within the specific course in order to access the learning environment, and while this structure is well suited to housing course material, such as lecture notes and tutorials; and managing course related issues, such as assignment submissions, extension requests and course evaluations, it does not accommodate the beneficial social qualities found in *Facebook* (Deng and Tavares, 2013; McCarthy, 2013a). Students cannot use their LMS to interact with their global peers, or receive feedback from industry mentors, as these potential partners are not authorised to access it (McCarthy, 2010). LMSs often lack social connectivity and the personal profile spaces which today's students are familiar with (Mazman and Usluel, 2010). In contrast, students see *Facebook* as a self-regulated space for individual expression and collaborative learning (Rambe, 2012), and a more conducive environment for communication with staff and peers (Wang et al, 2012). The primary benefits of *Facebook* as a learning tool arise from its ability to enable participants, both students and staff, to share information, knowledge, and artefacts within a community (McCarthy, 2012). The ability to post content and receive feedback from a wide range of collaborators stands as one of the primary educational benefits of the site (Duffy, 2011; Richardson, 2006; McCarthy, 2013a).

There are however considerable deficiencies, both pedagogical and technical, within learning environments in *Facebook*, which need to be addressed. Online learning environments within *Facebook* are commonly created using the 'group', 'page', or 'event' applications, or a combination of the three. These applications have not been designed or created specifically to use for e-learning; they have been created to facilitate interaction between social networks, and to act as marketing tools for institutions, businesses and celebrities (McCarthy, 2013a). Furthermore, *Facebook* developers have consistently reshaped these applications in terms of their functionality and design, resulting in a complete lack of control over the look and operation of any potential learning environment within the site (McCarthy, 2013a). Analysis of previous case studies using *Facebook* as a learning environment has also indicated that students' academic activities need to be isolated from their social activities. Often, when students submit work, such as comments, images or videos, to a learning environment in *Facebook*, these posts will appear on their friends' news feed prompting social commentary from users outside of the student cohort (McCarthy, 2013a). This is a significant problem in using *Facebook* as an educational tool, as it can impact on a student's willingness to participate and as a result, can impact on their performance within the learning environment (Wang et al, 2012; McCarthy, 2012). These factors highlight the need for a dedicated e-learning application within the social networking site. *Facebook's* popularity, social qualities and intuitive interface make it the perfect host site for online learning, while its open accessibility ensures it has the capacity to host national and international collaborative learning partnerships. However the inconsistent functionality and poor design of its in-built tools negatively affects the overall quality of the learning environment, and as a result can weaken the student experience (McCarthy, 2012, 2013b). In 2012 a learning environment in *Facebook*, '*The collaborative animation forum*', linked student cohorts from the University of South Australia in Australia, Nanyang Technological University in Singapore, and Penn State University in the United States. Students from the three institutions were able to post their work, critique their peers, and share ideas and techniques in animation production with their global peers. While the learning experience was predominantly well received by participants from the three institutions, some students suggested that the standard *Facebook* applications could be improved upon in regards to their design and performance, as one noted:

It would be good if it was more tailored to education. The idea was great but the actual Facebook page was a bit average in the layout and operation. (University of South Australia student, male, local)

Research Aims

While the afore mentioned SNSs provide opportunities for e-learning, none provide a complete online learning environment, and there is a need for an e-learning application that takes advantage of the popularity and social qualities of *Facebook*, as well as the content sharing qualities of *Flickr*, *YouTube*, *Vimeo* and *Pinterest*. This application should be structured and designed specifically for e-learning; it should incorporate the interactive and community-minded aspects of other successful SNSs; it should negate the 'closed-system' format of LMSs; and it should allow participants to separate their academic and social activities should they wish. In response to these factors, as well as the pedagogical concerns of the design of standard *Facebook pages*, *events* and *groups*, and the continuing lack of control over their operation, a custom *Facebook* application - *the Café: the collaborative application for education* – has been designed, developed and pilot tested. This paper reports on the pilot testing of *the Café* used as an e-learning environment for two student cohorts from the University of South Australia in Australia in 2013. The principle aim of this paper was to assess *the Café's* effectiveness for providing international students with an online environment within which to interact with peers and further their understanding of course material.

The Café

'The Café' can be accessed through both *Facebook* and its dedicated website www.thecafeapp.com/app, and can be used on a range of devices. *The Café* allows a user to establish an online learning environment in the form of a 'forum' and invite participants to join. A forum can be both open and closed format, at the discretion of the forum manager, enabling the creation of both private and public online spaces. The forum manager can also change this setting at any stage, allowing open access or closed access to forums at different times. Within the forum there are four key areas: the 'pinboard', 'galleries', 'Q and A', and 'MyCafe'. The pinboard acts as the home page for the forum. On the pinboard participants are able to pin images, videos, comments and links, relevant to the forum. All image, video and link-based posts contain imagery to create a more visually engaging online space, while a 'live-feed' tracks all submissions within the entire forum in real time. The galleries allow the forum manager to establish virtual gallery spaces - content pages for student submissions. Forum managers can outline the details of a gallery, such as opening and closing times, and content descriptions. Participants can then submit content, be it image, video, text or link-based. Once content is submitted to a gallery, participants can comment on, 'like' or add the submission to their personal space within the forum in 'myCafe'. The 'Q and A' page acts as a discussion board for the forum, and provides participants with the opportunity to ask questions and provide responses. The final section within the application is 'myCafe'. This acts as the participants' personal space within *the Café*. Participants are able to collate all of their submissions within the forum. They are also able to collate, and organise into categories, submissions from other participants within the forum, as well as submissions they comment on. This supports the student by (a) facilitating personal reflection on their work; and (b) helping them to prepare for exams. It also allows the student to develop an online collection of precedents and examples to enhance their broader knowledge of the topics delivered within a course. Lastly it makes assessing the student's performance, interaction and engagement within the online learning environment much easier for associated staff by collating all of their submissions in one place.

The Pilot Studies

In 2013, 91 students from two first year courses in the Bachelor of Media Arts program at the University of South Australia participated in the pilot studies. In the first lecture of the semester, students were introduced to the e-learning environment in *the Café*, and shown how to access, install and use the application. Following this introduction, students were given the opportunity to take part in an anonymous pre-semester survey, hosted via *Survey Monkey*, to determine their

expectations of the learning experience ahead. Students were invited to take part in the survey via *the Café* application and also via email. The survey remained open for a period of one week. The survey included three broad types of measures: demographic data; students' attitudes towards online learning environments in *Facebook*; and students' attitudes towards in class and online participation. In total 70 students participated in the survey, a response rate of 77 percent. The breakdown of student demographics within the cohort is outlined in Table 1.

Table 1. The breakdown of student demographics within the two cohorts.

Demographic	Local Students	International Students	All respondents
Number of respondents	55	15	70
<i>Gender</i>			
Male	30	8	38
Female	25	7	32
<i>Age</i>			
17-18	7	2	9
19-24	32	13	45
25-34	9	0	9
35+	7	0	7

The survey contained statements towards online learning environments in *Facebook* and questions related to online and in class interaction with peers and teachers. Student responses and broad agreement data are collated in Table 2 and Table 3. The data shows that participating international students much prefer to engage in academic exercises online rather than in class, with 93 percent preferring to critique their classmates' work online, 85 percent preferring to engage in academic discussions online, and 73 percent preferring to ask questions online.

Table 2. Student responses to questions and statements.

Topic	Local Students		International Students		All Students	
	Yes	No	Yes	No	Yes	No
Have you used <i>Facebook</i> for any form of online or collaborative learning in the past?	42%	67%	33%	67%	40%	60%
Topic	In Class	Online	In Class	Online	In Class	Online
I prefer asking questions	44%	56%	27%	73%	40%	60%
I prefer critiquing my classmates' work	18%	82%	7%	93%	16%	84%
Engaging in academic discussions	49%	51%	15%	85%	41%	59%

The participating international students also responded positively towards the idea of using *Facebook* as host site for an online learning environment. All international students were looking forward to using *the Café* learning environment prior to the start of the semester, while 80 percent believed *Facebook* was an effective host site.

During the semester students were required to regularly submit work-in-progress imagery related to major assignments, and provide feedback and critiques to their peers. Participation within *the Café* was worth 15 percent of the final grade for the course, and students were assessed on three key components: (a) the quality of the submitted imagery;(b) the descriptions that accompanied

the submitted imagery; and (c) the quality and consistency of their peer critiques. Figure 1 (left) shows a screen capture from the forum's pinboard, accessed in October 2013. The screen capture shows a custom banner at the top of the page, created by a student as part of a design competition within the course, under which is the forum navigation. Below that is the live-feed showing forum activity in real time. Posts from participants are stored at the bottom of the page in three columns. Posts move left to right and top to bottom, as new content is submitted. This ensures new content is always at the top of the pinboard. Figure 1 (right) depicts a screen capture from a forum gallery. The screen capture shows the gallery profile image and description at the top of the page, followed by thumbnail previews of student submissions. Individual submissions can be viewed in full screen, and can be 'liked', commented on, and added to 'myCafe'.

Table 3. Student responses to questions and statements. The survey used a 5-point Likert scale from 1 (strongly disagree), to 3 (undecided), to 5 (strongly agree); BA = broad agreement.

	Local Students	International Students	All Students
Topic	BA	BA	BA
I believe <i>Facebook</i> is an effective host site for an online and collaborative learning environment.	73%	80%	74%
I believe academic and personal activities in <i>Facebook</i> should be kept separate.	67%	73%	68%
I am looking forward to using <i>the Café</i> learning environment within <i>Facebook</i> this semester.	72%	100%	75%



Figure 1. Left) a screen capture of the forum pinboard. Right) a screen capture of a forum gallery.

Figure 2 (left) shows a screen capture from the forum's Q & A page. The screen capture shows a list of questions asked by participants in reverse chronological order, ensuring new questions are

at the top of the page. Any participant can provide a response to a question. Figure 2 (right) shows a screen capture from a student’s myCafe page. Content within the ‘myCafe’ page is arranged in three columns: ‘my posts’ – every post made by the participant; ‘commented posts’ – every post which the participant has commented on; and ‘added posts’ – every post which the participant has chosen to ‘add’ to ‘myCafe’.



Figure 2. Left) a screen capture of the Q & A page. Right) a screen capture of a student’s myCafe page.

The student experience during the two studies was evaluated through an online, ten-question, post semester survey. The post semester questionnaire addressed the design and functionality of the application; the perceived effectiveness of the learning environment; and the students’ experiences throughout the semester. Students were invited to participate in the survey via *the Café* application and also via email. The survey remained open for a period of three weeks. Seventy students participated in the survey, again a response rate of 77 percent. Participants were given the opportunity to assess the learning experience in the form of likert-scale statements and open-ended questions. Broad agreement statistics, related to the six likert-scale statements are shown in Table 4.

Table 4. Student responses to questions and statements from the post-semester survey; BA = broad agreement.

	Local Students	International Students	All Students
Topic	BA	BA	BA
I would like to use <i>the Café</i> as an online learning environment again in future courses.	93%	100%	94%
During the semester <i>the Café</i> promoted interaction with peers.	91%	100%	93%
During the semester I received beneficial feedback through <i>the Café</i> galleries.	84%	93%	85%
Having all of my posts collated in myCafe was beneficial.	84%	87%	85%
During the semester <i>the Café</i> generated rewarding academic discussions.	78%	93%	80%
The ability to collate and categorise other students’ posts in myCafe was beneficial.	75%	80%	76%

The questionnaire outlined student reactions towards the online learning environment in *the Café*. 85 percent of all participants indicated they received beneficial feedback from their peers during the semester while 80 percent noted the learning environment generated rewarding academic discussions. Responses included:

The Café is a great environment for promoting student discussion and sharing of ideas and thoughts on other students' work. It was good to hear different perspectives on the work I uploaded and to be able to provide feedback for other students, as well. (Local student).

Yes, I received many comments on my work from other students which was really great and helped me in my design work. (International student).

I really enjoyed being able to watch everyone's progress and abilities develop over the time of the course. (International student).

The majority of students, 93 percent, indicated *the Café* promoted interaction with their peers, by providing students with a familiar and accessible online environment:

Without the Café app, there would probably be less natural inclination among the students to discuss each other's work, but because the Café operates through Facebook, which is an environment that a lot of people are familiar with, I think people felt more comfortable with discussing their thoughts and ideas with each other. (Local student).

Providing students with design activities beyond the course assessment was also instrumental in promoting interaction between peers online:

The banner contest and 50 word comment rule are very peer interactive. There was always something to do or discuss during the semester on the Café. (International student).

Many participants responded positively towards myCafe, the personalised space within *the Café*, citing the ability to collate both posts from the pinboard, their own work and also peers' posts from the galleries:

It was helpful to collect the posts from the pinboard - images and videos related to assignments or lectures. (International student).

The Café proved to be popular with participants as 94 percent indicated they wanted to use the online learning environment again in the future, referring to the application's ability to generate peer discussions, to learn about design, and to promote group learning:

I really like the way our course interacted with the Café, it's nice to see the uni using available technologies. (Local student).

Definitely - this was a good way to get everyone learning together. (International student).

A large number of students, predominantly international students, noted that the online environment gave them more time to think and react, as opposed to a traditional classroom:

As an international student it is hard sometimes to discuss in class. It is great to get so many comments from other students and staff. (International student).

The Café is excellent because we have our critiques written down, and we can read through and comment at our own pace. (International student).

Many participants responded positively when asked about the design, layout and navigation of *the Café*:

Great, simple to navigate and understand. A good layout. A great tool to see peers' work. (International student).

The Café is easy to navigate through and that is credited to the simple design layout. (Local student).

While the majority of students enjoyed participating in the online environment, and believed they benefitted from doing so, there was a small number of students who simply did not. When asked to provide details on any problem areas, concerns, or room for improvement in the design and functionality of *the Café*, students noted loading times and upload errors related to specific video types as key issues:

The only problem would be sometimes there are issues with uploading videos and sometimes uploaded videos wouldn't play straight away. (Local student).

Sometimes the pages took a while to load because they contained large files. (International student).

The only thing that I find annoying is that I have to enter the DLMA [the course: Design Language in Media Arts] forum when I launch the Café instead of it taking me straight there. (Local student).

Final reflections on the learning experience provided insight into how *the Café* could grow in the future:

The Café allows me to be inspired by some really creative works. (International student).

At the start of the semester I was very sceptical in regards to the whole 'Facebook idea', but it actually worked really well. It is almost surprising for someone like me who still uses a very old Nokia without internet! (International student).

Discussion

The majority of participants responded positively towards the learning experience within *the Café* at the conclusion of the pilot studies. The international student respondents were particularly positive towards the experience, as outlined in Table 4, noting the professional design and simple navigation as two key features of the application, while its accessibility (via *Facebook*) and interactivity (through posting, commenting on, and collating content) were also important in providing a platform for discussing their design work and interacting with peers, especially local students. This online interaction helped the development of cross-cultural relationships. Such relationships are particularly important for commencing international students, who can struggle to develop meaningful connections with local students, often due to language barriers. The addition of a virtual environment enabled international students to formulate meaningful comments and critiques, as opposed to rushing immediate responses under pressure in the classroom.

Transnational education has grown rapidly in recent years, both in Australia and around the world. In 2009, almost 3.7 million tertiary students were enrolled to study outside their country of citizenship, increasing four fold from 0.8 million in 1975 (OECD, 2014). Furthermore, in 2009, more than one in five (22 percent) tertiary education students in Australia were international students (OECD, 2014). This is the highest proportion of international students in all countries within the

Organisation for Economic Co-operation and Development (OECD) followed by the United Kingdom (15 percent) and Austria (15 percent). Australia's share of the international student market increased from 5.1 percent in 2000 to 7.0 percent in 2009, (OECD, 2014) making Australia the third largest provider of international education services in 2009, behind the United States (18 percent), and the United Kingdom (10 percent). Considering the relative size of Australia's population, such high representation amongst the international student market is indicative of the ongoing importance of this sector to Australia, both economically and for communities (ABS, 2014).

Given the important contribution the international student sector makes to Australia's economy and society, ensuring the future strength of the industry is an ongoing priority for government (ABS, 2014). Information and Communication Technologies (ICT), such as *the Café*, have the capacity to improve the learning experience of international students by providing a platform for academic and social interaction with peers, staff and mentors. Such interactions are crucial in ensuring a successful and enjoyable student experience and are aligned with the 'quality of education' action area within the Council of Australian Government's (COAG) International Students Strategy for Australia (2010–2014) (COAG, 2014).

Research and development of *the Café* will continue in the future and forthcoming publications will focus on revisions to the design and operation of the application, as well as additional case studies using it as an e-learning environment. Collaborative learning partnerships in *the Café* will continue in the future including student cohorts from the University of South Australia, Swinburne University and Queensland University of Technology, participating in a joint learning forum.

Notes

¹ A shorter version of this paper was presented as a background paper at the 2014 Global Conference for Teaching and Learning with Technology, July 9-10, Singapore, 2014.

References

- ABS, (2014). *Australian Social Trends*. Available at: <http://www.abs.gov.au> [Accessed 30 June 2014].
- Baloglu, M. (2000). *Expectations of international students from counseling services*. Paper presented at the Annual Conference on the American Psychological Association, Washington DC, USA.
- Bosch, T. E. (2009) Using online social networking for teaching and learning: *Facebook* use at the University of Cape Town. *Communication: South African Journal for Communication Theory and Research*, 35 (2), 185-200.
- Council of Australian Governments (COAG) (2014). *International Students Strategy for Australia*. Available at <http://coag.gov.au> [Accessed 30 June 2014].
- Deng, L., & Taveres, N. (2013). From Moodle to Facebook: Exploring students' motivation and experiences in online communities. *Computers & Education*. 68, 167-176.
- Duffy, P. (2011) Facebook or faceblock. In C. McLoughlin & M. Lee (Eds.). *Web 2.0 Based e-learning: Applying Social Informatics for Tertiary Teaching*, pp.284-300.
- Hojat, M. (1982). Loneliness as a function of selected personality variables. *Journal of Clinical Psychology*, 38 (1), 137-141.
- Irwin, C., Ball, L., Desbrow, B. and Leveritt, M. (2012) Students' perceptions of using *Facebook* as an interactive learning resource at university. *Australasian Journal of Educational Technology*, 27 (8), 1221-1232.
- Kenney, J, Kumar, S, and Hart, M., (2013). *Facebook* group as a space for interactive and collaborative learning. *International Journal of Social Media and Interactive Learning Environments*, 1(4), 355-369.
- Krause, K., (2006). *Making connections in the First Year: The key to Success in An Age on Unreason*, Keynote paper presented at the Nineteenth International Conference on The First-Year Experience, Toronto, Ontario, Canada.

- Kurtz, G., (2013). *Facebook group as a space for interactive and collaborative learning. International Journal of Social Media and Interactive Learning Environments*, 1(4), 406-418.
- Mazman, S. G. and Usluel, Y. K. (2010) Modeling educational usage of *Facebook. Computers and Education*, 55(2), 444-453.
- McCarthy, J. (2009) Utilising Facebook: immersing Generation-Y students into first year university, *Journal of the Education Research Group of Adelaide*, 1(2), 39-49.
- McCarthy, J. (2010) Blended learning environments: Using social networking sites to enhance the first year experience. *Australasian Journal of Educational Technology*, 26(6), 729-740.
- McCarthy, J. (2012). Online networking: integrating international students into first year university, in F. Jose Garcia (Ed.) *Multiculturalism in Technology-Based Education: Case Studies on ICT-Supported Approaches*, Hershey, PA: IGI Global, pp189-210
- McCarthy, J., (2013a). Learning in *Facebook*: First year tertiary student reflections from 2008 to 2011. *Australasian Journal of Educational Technology*, 29(3), 337-356.
- McCarthy, J., (2013b). *The Café*: creating the ‘collaborative application for education’; a dedicated e-learning environment in *Facebook. International Journal of Social Media and Interactive Learning Environments*, 1(4), 419-438.
- OECD (2014). *Who Studies Abroad and Where*. Available at <http://oecd.org>. [Accessed 30 June 2014].
- Osterman K.F. (2000) Student’s Need for belonging in the School’s Community. *Review of Educational Research*, 70 (3), 323-367.
- Rambe, P. (2012) Critical discourse analysis of collaborative engagement in *Facebook* postings. *Australasian Journal of Educational Technology*, 28 (2), 295-314.
- Richardson, W. (2006) *Blogs, Wikis, Podcasts, and Other Powerful Tools for Classrooms*. Thousand Oaks, CA: Sage.
- Ritter, N, and Delen, E., (2013). Undergraduates’ Facebook use: evidence-based practice to implement social media in education. *International Journal of Social Media and Interactive Learning Environments*, 1(4), 387-405.
- Sarason, B., Sarason, I., & Gurung, R. (1997). Close personal relationships and health outcomes: A key to the role of social support. In S. W. Duck (Ed.), *Handbook of personal relationships: Theory, research and intervention (2nd ed)*. Chicester, UK: Wiley, pp.547-573
- Sawir, E., Marginson, S., Deumert, A., Nyland, C., & Ramia, G. (2008). Loneliness and international students: An Australian study. *Journal of Studies in International Education*. 12 (2), 148-180.
- Shih, R.-C. (2011) Can Web 2.0 technology assist college students in learning English writing?. *Australasian Journal of Educational Technology*, 27(5), 829-845.
- Statistics Brain (2014). *Facebook Statistics*. Available at: <http://www.statisticsbrain.com> [Accessed 30 June 2014].
- Stokes, J. (1985). The relation of social network and individual difference variables to loneliness. *Journal Personality and Social Psychology*, 48(4), 981-990.
- Wang, Q.Y., Woo, H.L., Quek, C.L., Yang, Y.Q., and Liu, M. (2012) Using the Facebook group as a learning management system: An exploratory study. *British Journal of Educational Technology*, 43(3),428-438.
- Weiss, R. (1973). *Loneliness: The experience of emotional and social isolation*. Cambridge, MA: MIT Press.

THE CHALLENGE OF COMPARING FLUID CATEGORIES: RACE AND CLASS IN EDUCATIONAL RESEARCH

Liz Jackson^a

University of Hong Kong

ABSTRACT: *Race and class are two of the most significant factors associated with educational inequality within and across societies. However, their definitions and significance vary over time, and from one place to another. As subjective factors related to identity, they also impact on one another in their effects on educational access and equity. These issues create challenges for conducting comparative educational research that effectively explores one or both of these factors. This essay examines challenges employing race and class in comparative educational research. Race and class are analysed separately, illustrating that ethical and political issues, not just conceptual miscommunications, are at stake in defining and using these categories. The geographical and political complexity of using race and class are also reflected on more generally, and the argument is put forward that analytic and self-reflexive understanding of diversity is needed for the development of fruitful understanding of the relationship between race and class and educational equity and justice.*

KEYWORDS: *race, class, educational research, social justice, equality, inequality*

Introduction

Among various factors associated with educational inequality within and across societies, race and class are two of the most common and significant. However, their definitions and significance vary over time, and from one place to another. As subjective factors related to identity—another fluid concept—they rarely can be seen as functioning independently from one another, but instead impact on one another in their effects on educational access and equity. These issues create challenges for conducting comparative educational research that effectively explores one or both of these factors, and should be considered by researchers who are concerned with social inequality in education.

This essay examines challenges involved with employing race and class in comparative educational research. In what follows, I first analyse race and class separately, giving a historical overview of each that highlights the way that race and class must be defined within a particular social and cultural context before it can be applied as a factor in educational research. As each section also illustrates, ethical and political issues, not just conceptual miscommunications, are at stake in defining and using categories of race and class to understand the social world. Therefore educational researchers bear responsibility to be critical and analytic when using these categories, not aiming at the attainment of universalistic claims about their findings. In the last section the geographical and political complexity of using categories of race and class in comparative educational research will be reflected on more generally, and the argument will be put forward that analytic and self-reflexive understanding of diversity is needed by those working in this field if we are to develop fruitful understanding of the relationship between such identity factors and the demands of educational equity and justice.

Race

The indigene is a semiotic pawn on a chess board under the control of the white signmaker. Whether the context is Canada, New Zealand, or Australia becomes a minor issue since the

^a Correspondence can be directed to: lizjackson@hku.hk

game, the signmaking is all happening on one form of board, within one field of discourse, that of British imperialism. Terms such as “war-dance,” “war-whoop,” “tomahawk,” and “dusky” are immediately suggestive everywhere of the indigene. To a North American, at least the first three would seem to be obvious Indianisms, but they are immediately suggestive everywhere of the indigene (Goldie, 1989, p.232).

The perception of the other as alien, and (typically) inferior, seems to be nearly universal within human communities throughout history. The other has been defined within a society as an other of religion, cult, gender, caste, and so on (Sollors, 1986). When geographically separate groups encounter each other in history, their observations almost invariably focus on so called ‘essential’ differences between themselves and the *others*. In such contexts, race and ethnicity are major categories for conceiving these differences.

Historically, modern racial classifications of humankind emerged in the 1600s (Keevak, 2011). Early social scientists elaborated perceived physical and apparently intellectual differences between groups, likening race to specie, under *essentialist racism*: “the belief that there are *essential* qualitative, biological differences between different races” (Kincheloe & Steinberg, 1997, p.170). Western Europeans tested, defined and redefined these conceptions from the seventeenth to the twentieth centuries. Though they saw their research as rigorous and objective, their studies enabled unequal treatment of individuals within and across societies, as their categorisations were hierarchical (Keevak, 2011). Social Darwinism of the late-nineteenth and early-twentieth centuries depicted race groups as evolving in parallel on one playing field, with ‘whites’ overtaking ‘black,’ ‘red,’ ‘yellow’ and ‘brown’ groups. Such racial lenses fuelled ghastly events across the world: eugenics in the United States, the Nazi German Holocaust, and Apartheid in South Africa, where a pencil would be placed in children’s hair to judge its thickness, thereby determining their race and the schools they would attend—regardless of their achievement, neighbourhood or preference.

Whether race should be seen as a valid genetic category remains controversial. However, since the mid-twentieth century, social scientists have increasingly portrayed race as a social construction, rather than a biological trait. From a cross-cultural view, it is hard to deny that race is socially constructed, given the myriad definitions of it across societies. For instance, to be ‘black’ or ‘colored’ in early United States history meant to have ‘one drop’ of ‘black blood’—any semblance of African descent—while in Apartheid South Africa, blackness was defined exclusively, with ‘one drop’ of ‘white blood’—any ‘white’ characteristics—marking one as ‘colored,’ distinct there from ‘black.’ Early on, Europeans described Asians as “white, like ourselves,” casting Asians as ‘yellow’ only as racial categorisations became popular in the 1600s (Keevak, 2011).

Against this backdrop some argue that race should no longer be treated as a serious category by researchers, particularly in the social sciences. As Ravitch has argued, “No serious scholar would claim that all Europeans and white Americans are part of the same culture, or that all Asians are part of the same culture...Any categorization this broad is essentially meaningless and useless” (1990, p.342). Because individual identity is fluid, impacted by many factors beyond race (such as gender, religion and even height and weight), some find race-related thought divisive and unnecessary, as racist expressions and practices have become taboo across many societies across the globe. However, others argue that race continues to matter today as a factor impacting on individual opportunity, despite increased awareness of its social construction.

Critical race theorists elaborate *institutional racism* as a remaining hurdle to equality and equity across societies. First, there is a kind of networking effect, as Kincheloe and Steinberg (1997, p.174) describe:

Most institutions develop informal cultural practices that are internalized by their members. Such institutional cultures are diverse in their expression and specific to particular organizations; but they do tend to be white...The organization “thinks” and carries on its

business in a white manner. White people via their cultural experiences are perceived to be better suited for inclusion in these cultures, though class and gender issues obviously affect dimensions of “suitability” as well.

In relation, Padilla (1997) elaborates a “multiplier effect” (quoted in Jackson, 2008, p.22) impacting on groups differently at the individual level:

[A group member’s] rise may benefit members of her group and may reduce outsiders’ prejudice against group members. Her material success may enable her to support group related institutions. Her access to power may enable her to promote or protect the interests of other group members. She may serve as an example or inspiration for young members and thus encourage their pursuit of higher education and professional career paths.

Others speak of an “invisible knapsack” of privileges those cast as white in a society possess: benefits they receive from race, despite *de jure* racial equality in many societies today. McIntosh (1990) lists numerous privileges white people enjoy in daily life: from not being harassed while shopping for jewellery, to finding bandages that match one’s skin colour. A wide variety of evidence from personal experience (hooks, 1994; Ladson-Billings, 1998), to qualitative discourse analysis (McCarthy, 2003), to statistical data suggest that race impacts life experiences and opportunities from birth, despite its socially constructed, fluid status. Relatedly, Leonardo describes *postmodern racism* as a perceived discomfort and inability among many white people to recognize the power of race, given their “fragmented understanding of the world as it is racially structured” (2004, p.125).

These issues can be seen to impact on comparative social science research in significant ways. Foster (1999) describes “epistemological racism” in educational research today that stems from the fact that, “the social and behavioral science on which educational research has traditionally rested has been grounded in psychology, a field that has measured persons of color, women, and those from working class against a standard of White middle-class males” (pp.78-79). As critical race theorists argue, for centuries racial groups have been compared quantitatively in ways that enabled essentialist racism and white supremacy. The Scholastic Aptitude Test (SAT), widely used in the United States to measure preparedness for higher education, was modelled after intelligence tests designed “to argue for the inferiority of blacks (and relative inferiority of Southern and Eastern Europeans)” (Jackson, 2008; Roithmayr, 1998). Its author believed the test “proved the superiority of ‘Nordic’ races” (Jackson, 2008). Today, networking and multiplier effects make it difficult for scholars of colour to change conceptions of normal achievement or performance in order to not segregate racial minorities as others and outliers, as they remain themselves as a small minority in the research field (Foster, 1999).

A more extreme contemporary case is that of *neo-scientific racism*, wherein scholars continue to attribute differences in educational achievement to race, rather than institutional racism, the historical legacy of unequal education in many societies, or other factors (Kincheloe & Steinberg, 1997, p.185). In 1994, Herrnstein and Murray published *The Bell Curve*, which suggested intelligence was race-based. As Kincheloe and Steinberg (1997, p.185, emphasis added) note, the book discounted important factors related to race and uneven academic achievement, including family background and socioeconomic status, home environment, and educational and other social experience:

One of the most important distortions of *The Bell Curve* involves the author’s analysis of the Minnesota Transracial Adoption Study, in which 100 children from varying ethnic backgrounds were adopted by white parents. By the age of seven the non-white adoptees scored an average of 106 on intelligence tests...By the time the adoptees were sixteen, researchers Sandra Scarr and Richard Weinberg discovered that the non-white children’s IQ scores had dropped an average of 17 points to 89...Scarr and Weinberg concluded that racial prejudice and discrimination at school had effected the 17-point decline. Other researchers agreed...when

non-white children are raised in poor, slum-like conditions their IQ scores will be significantly lower...Despite such evidence and generally agreed upon interpretations, Herrnstein and Murray maintain [the study] revealed little environmental impact on cognitive ability.

Given this tense historical foundation and the controversial nature of identity politics today, race discourse itself has become taboo in many informal and formal (i.e., demographic) contexts. As Hollinger (2005, pp.225-226) observes,

Almost everyone agrees that races do not exist in the sense so long assumed—biological entities carrying vastly different potentials for intelligence and social behavior, justifying the invidious treatment of inferior races—and almost everyone agrees, further, that the “racializing” of human beings, entailing their being treated differently on account of their perceived marks of descent, continues on a large scale. Yet some say that it is proper to denote as a “race” the people who have been racialized while others say not. To continue to speak of “races”...perpetuates unintentionally too many of the old racist connotations. Better to speak of “racialized persons” or to diminish the invidiousness of *race* by speaking of *ethnoracial groups*.

Ethnicity approximates the concept of race, while aiming to acknowledge “the place of history, language and culture in the construction of subjectivity and identity, as well as the fact that all discourse is placed, positioned, situated, and all knowledge is contextual” (Hall, 1989, p.226). Ethnicity is used in addition to race in places such as the United States, where a racial binary of black/white fails to include or effectively describe and classify—for research or other purposes—different social groups, such as Asians and Latinos. Like race, ethnic categories change over time. For instance, ‘Asian American’ is increasingly broken down into categories such as ‘East Asian,’ ‘Indian’ and ‘Pacific Islander.’ Thus, ethnicity too must be seen as a fluid, context-based, social category. In the United States today, race, ethnicity and descent (as Latino or not Latino) are all currently considered in census data. ‘Persons of colour’ is also used to describe people not cast as *white* within or across societies, regardless of their racial or ethnic identity, though some feel this obscures the greater challenges black people have faced in some societies compared to ethnic minority groups (Hacker, 1992). As mentioned above, Hollinger favours “ethnoracial” (2005, p.228), but Leistnya favours “racenicity,” to highlight the historical equation of “race and ethnicity within unsubstantiated claims that biological characteristics result in predisposed psychological, intellectual, and social behavior” (2001, p.425).

In other contexts, such as in Asian societies like China, ethnicity is used similarly to race, as the major or primary categorisation for internal social differences related to geographic, cultural or linguistic descent. As Shih notes, in China, “ethnicity is defined in terms of blood, religion, language, and cultural proximity to the Han. It is useful to those in the category to develop responses to their identity specification” (2002, pp.13; 24). Race and ethnicity are similarly conflated in Singapore (Bakar, 2009), and Japan (Hirasawa, 2009; Lee, 2011). ‘Race’ comes up more often in these settings when discussing groups regarded as outsiders to the national community; for instance ‘White’ and ‘Chinese’ may be considered as races in Hong Kong, with various ethnicities also held as important to identity among ethnic-Chinese people. In Indonesia, under Dutch colonialism, races were given as European, Malay and Chinese; within the Malay group, ethnicities were ascribed (Kuipers & Yulaelawati, 2009, p.451). Today, Chinese Indonesians can also identify as ethnically Chinese (Kuipers & Yulaelawati, 2009, p.456).

Clearly, race and ethnicity continue to be important factors related to equality and equity in many societies, which “sculpt the extant terrain of possibilities even when other possibilities exist” (Ladson-Billings, 1998, p.50). Educational achievement is compared by racial categories in quantitative research today which aims to document institutional racism, tracking racialisation as a factor related to educational equity. The unequal distribution of educational resources across race lines is one point of comparison. Much research compares government and/or other spending on schools predominantly attended by different racialised groups within a society, considering educational

finance as important to achievement. For instance, Meek and Meek's (2008) study of South Africa compares per capita expenditure on education by race before and during Apartheid (p.519).

The World Inequality Database on Education (WIDE) by UNESCO offers data of educational achievement by ethnicity (among other indicators) in over 60 developing countries. It also enables studies of educational achievements by ethnicity over time, which can be used to examine progress or possible outcomes of educational interventions for increasing equality. One should use caution in conducting large-scale comparison over time, however, as racial and ethnic definitions can vary even at one site. Additionally, while synchronic analyses can capture before/after situations, it can be hard to interpret correlations as causal relationships—for instance, between an educational intervention, and an outcome—given the complexities involved with historical social science research in general.

Though race and ethnicity undoubtedly impact on educational equality and equity around the world, comparing racialised and ethnic-identity groups across countries is difficult. Contemporary definitions and categorisations of race and ethnicity vary in relation to societies' unique historical and demographic contexts. WIDE provides data on educational achievement according to ethnic groups, but these are classified as understood within countries, precluding straightforward international comparisons. Additionally, some countries do not track data on race or ethnicity and education today, including France, where neither race nor ethnicity is recognized as "a valid way of categorizing a population" (Deer, 2008, p.337). Thus, UNESCO's Education for All (EFA) Global Monitoring Report (2012a) does not systematically compare ethnicity and educational equality or equity across societies, though it identifies numerous instances where ethnicity is significant in both rich and low-income countries.

Comparisons of educational data by race and/or ethnicity across states, provinces, cities or school districts in one country are more common, and can clarify educational issues glossed over in country-level analyses. However, as Manzon writes (2007, p.105), "intranational diversity exists at the level of sub-regions and states in each country, as evidenced by statistics on demography, racial mix, and education." One should not presume that across a country racial or ethnic composition is uniform, or that local histories and political economies are equivalent. Rather, differences between locales should be examined while like groups are compared, to avoid oversimplification of findings. Recently the United States National Opportunity to Learn Campaign (2013) compared how school closures in Chicago, New York City, and Philadelphia impacted on black, Latino and white students, also comparing the percentages of students in these groups with their representation in the cities overall. Such analyses can elucidate trends and disparities across sites.

Ethnographic approaches to comparing race focus on contextual issues impacting on educational equity, through qualitative and interpretive studies. Heath's (1983) foundational study of "Roadville" and "Trackton" tracked children's school- and community-based language learning across two racially divided communities, showing how unequal access to resources (such as books) and different styles of communication at home influence teacher effectiveness and educational achievement at the individual level. Other ethnographic research in the United States has suggested that "current instructional strategies presume that African American students are deficient," often seen by white teachers as problems (Ladson-Billings, 1998, p.61). One's choice of focus can be contentious in this field, where the idea of the neutral, objective researcher is challenged, however. For instance Villegas (1988) argues that focusing on teachers' practices diverts attention from structural inequalities "that sustain the widespread academic failure of minority students," such as unequal distribution of educational resources across communities, and other factors of institutional racism discussed previously (p.253).

Additionally, the relationship of race and racism to educational achievement among other factors, such as gender and class, can be difficult to uncover. For example, in Lamontagne's study of minority education in China (1999) he observes that "the relative importance of the variables of *ethnic group* and *territory* concerning the degree of educational development" cannot be easily generalized across Chinese provinces and counties (p.149). Lamontagne found that gender disparities in China varied substantially by location and ethnicity, such that race at the individual level often

mattered less than gender when he examined both simultaneously. Indeed, in any study on race, one must be careful to not ignore other important possible compounding or complicating factors. I now turn to considering class, as understood broadly in social science and more specifically, within contemporary comparative educational research.

Class

As with race and ethnicity, all societies have some conception of class or socioeconomic status (SES), reflective of disparate relationships of individuals to income, wealth and political-economic opportunity. And again, as with race, definitions of class and SES vary by place and time, and in relation to a society's make-up, economic dynamics, and values. Likewise, while research focusing on the relationship between education and class is increasing today in line with social justice commitments to alleviating child poverty and expanding educational equity worldwide, the socially constructed aspects of class also make it difficult to coherently use across locations, and particularly across time, as indicators continually shift.

Many historically influential theoretical frameworks have elaborated the nature of class or socioeconomic status and the relationship of individuals to resources and wealth. On one hand are those theorists in economics and sociology who favour functional, hierarchical perspectives of class, defining it as natural, necessary financial and occupational inequality resulting from progress and differentiation within a capitalist society. Durkheim (1984) is known for this view of social diversity and inequality as functional, though it also "has roots in Platonic epistemology, where intelligence is viewed as naturally and unevenly distributed" (Malott, 2009, p.285). Such views of inequality as natural or possibly good for all members of society are partly echoed by contemporary neoconservative ideologies which, for example, prioritize decreasing public expenditures on education (and other social services) over heavily taxing wealthy individuals (Malott, 2009, p.288).

Many disagree with this way of framing class, however, in sight of grave inequalities in diverse societies, which are often clearly given by birth. At the opposite extreme, Marxist theorists understand "class as a binary relation to the means of production," recognizing two classes within capitalistic (private-ownership) economic systems: those who own the means of production (*bourgeoisie*)—factories, equipment, knowledge and so on—and those who do not (*proletariat*). Within this framework the need for skilled labour for factories is highlighted as an original aim of universal education (common schools) in United States history. As Althusser (1971, p.132) argued, "the education system reproduces class by teaching "submission to the ruling ideology for the workers, and ... the ability to manipulate the ruling ideology correctly for the ... ruling class." In other words, "the education system is part of a state apparatus that *cannot do otherwise* than work in the interest of capital...One effect of this is that education systems of capitalist societies become inherently hierarchical and elitist" (Hill et al., 2008, p.70). Within such views ameliorating capitalism's impact on education is critical for equity.

Many contemporary sociologists of education concerned with the relationship of individuals to resources follow 'second-wave' Marxism, or 'neo-Marxism,' broadening the view of class to be constituted by interrelated cultural and material aspects. Within such theories the relationship between culture and material (economic) resources is complex and difficult to specify, as values assigned to many resources (for instance, money) are socially constructed. As Mason writes (2007, p.169), culture is "not a fixed entity [but] a dialectical process between people and their social environments," changing over time within communities. Different class-based communities can thus develop distinct orientations and values within a society. In this context Bourdieu (1968) described 'cultural capital' as empowering cultural attitudes disseminated within elite networks: "constellations...linked to the level of education, so that a typical structure of preferences in painting is most likely to be linked to a structure of preferences...in music or literature," without explicit instruction or socialization (p.210).

Thus, as Kincheloe and Steinberg (1997) write, “economic and occupational location in a social order is one of many factors that help to construct consciousness, perception of others, and relation to power” (p.106). For example, teachers are viewed as more professional, and as part of a higher class, in some societies than in others. This impacts on their identity and outlook on life. Given the relationship of identity to class, educational sociologists examining class often focus on the way teachers treat students based on class indications, which can in turn help shape students’ behaviour, achievement and sense of self (Kincheloe & Steinberg, 1997). Some additionally argue that, at a larger scale, “even the kind of education that a student experiences is shaped by the policies and practices that favor certain ways of being and knowing...How knowledge is structured, how students learn, and what students learn reflect a process that allows some groups to organize social life to their own advantage” (Grinberg et al., 2009, p.271).

In an attempt to disaggregate cultural and ideological factors from economic ones, some favour using ‘socioeconomic status’ (SES) instead of class. Jacob and Holsinger distinguish class as a traditional ascribed characteristic, apart from socioeconomic status, which “can be lost, gained, or modified,” through individual experiences (2008, p.14). Still, socioeconomic status remains hard to define. Occupation, education, income and wealth are four common determinants; however “they are intrinsically dependent on each other and should be analyzed together for a broader understanding of class. Moreover, these elements perhaps focus on measurable indicators that overshadow other subtle and important factors” (Grinberg et al., 2009, p.270). Additionally, such a conception of SES is also quite dynamic. For instance, “a student from a middle class background might be working his or her way through college by working at a job in the fast food industry. Does having this job make the person working class” (Grinberg et al., 2009, p.270)? One’s occupation, education, income and wealth may not all fit into a single classification.

On the other hand, Savage et al. (2013) argue that frameworks which view class primarily as “features of employment relations” fail to adequately elaborate phenomena related to social mobility within particular settings, as they obscure “complex ways that class operates symbolically and culturally” (p.4). They therefore reconceive class as three-pronged within contemporary British society, consisting of ‘economic capital’ (income and wealth), ‘cultural capital’ (echoing Bourdieu), as interests and activities, and ‘social capital,’ as the make-up of one’s social network. Using this framing they identify seven social classes in the United Kingdom, identifying distinct “new social formations...out of the tendrils of the traditional working class,” which has typically been seen as rather homogenous, stable and relatively immobile (Savage et al., 2013, p.28).

While useful for understanding how class operates in the particular context of the United Kingdom today, it would be difficult to export this model to make international comparisons, however. As Ali and Dadush (2012) argue, for purposes of international comparison most categorisations of class are unhelpful, owing to variations in socioeconomic and cultural contexts across the world, as well as methodological challenges in gaining accurate data. They propose car ownership as a possible measure of membership in the middle–class or higher class levels, as “an unambiguous indication of the ability to purchase other luxury goods.” However, one only need think of Hong Kong, where car taxes can be up to 100% of a car’s value—or wide variability in quality and access of public transportation across societies—to recognize this is also a subjective, value-laden measure of political-economic status across societies.

In quantitative educational research, class or SES is often conceived in terms of “family background,” which focuses on the education, wealth, income, occupation of parents and/or other aspects related to family structure (number of the children in the family, among others). Due to complications labelling people according to these possibly divergent indicators, educational researchers may favour studying one or more of these variables independently—for instance, comparing educational achievement with family income, father’s educational background and mother’s educational background, as in one recent study of Taiwanese educational inequality (Hung & Cheng, 2008). Alternatively class can be understood in terms of access to a computer at home,

or eligibility for free school lunch or reduced tuition (Grinberg et al. 2009), though such factors are of course context-specific.

Two quantitative tools developed specifically for studying class in educational research include the PISA index of economic, social and cultural status (ESCS), and the education Gini coefficient. The ESCS is a measure of individual status (OECD, 2009) based upon the highest occupational status of parents from an international socioeconomic index, the highest educational level of parents and highest educational level of parents and index of home possessions (e.g. a quiet place to study, a link to the Internet, their own calculator, among others).

Such data can be difficult to gather, however, as it requires interviewing or surveying—additionally, how to weight items for international comparison would remain challenging.

The education Gini coefficient is based on the original Gini coefficient, a commonly-used measure of income distribution and inequality within a country, developed in the early-twentieth century by sociologist Corrado Gini (Burt & Park, 2008). The education Gini is an equation based on distribution of educational attainment and average years of schooling for a population, proportion of the population with given levels of schooling and the number of years of schooling at each of the different educational levels (Burt & Park, 2008). As with the original Gini coefficient, the education Gini can be used to compare populations across places and time periods, but does not “specify the location of inequality within the distribution of the measured variable” (Burt & Park, 2008, p.264). Interestingly, while many Marxist-influenced sociologists of education argue that capitalism creates or exacerbates educational inequality (e.g., Hill et al., 2008; Malott, 2009), the education Gini has been positively correlated with capital/income across countries in recent decades (Jacob & Holsinger, 2008, pp.10-12).

In comparative educational research, multiple methods of analysis can be used to explain class, depending upon context, units of comparison and research questions. Many studies compare educational equity by class or socioeconomic status within a national, regional, or local context. Depending upon the focus for comparison, a qualitative, quantitative or hybrid methodology may be preferred. Quantitative approaches can compare educational achievements (i.e. years of education or graduation rates) of students of different socioeconomic statuses (or ESCS). UNESCO/WIDE data enables comparison of educational achievements from the poorest 20 percent to the wealthiest 20 percent and groups in-between within developing countries, while the OECD compares educational achievements within countries with father’s educational level (2007). Such approaches can yield relational data between factors related to class and educational equality, and commonly reflect a strong relationship between the two.

It can be difficult to decide which measures to use in such quantitative research, however, as common factors may be proxies for more particular, explanatory data. Thus multilevel or meta-analyses complementing quantitative data with qualitative findings can be included to help substantiate claims. In McInerney’s (2010) study of Hong Kong, socioeconomic status, family background and family income are correlated with educational achievement; he uses related research to illustrate (p.9) how these are causally related:

Family income matters in terms of providing access to more expensive, higher-quality secondary schools and to extra tutorial support, enhancing the opportunity of students(...) Among the potential liabilities of coming from low SES background are more limited choice of schools, limited opportunity for tuition owing to costs, poorer provision of educational resources, less supervision of study time because parents work long hours, financial stress that might provide a non-conducive learning environment at home.

Likewise, Manzon (2007, p.105) describes a multilevel analysis juxtaposing national cultural differences with ethnographic student reports across England and France to relate “findings at the lower level of the student and classroom to the higher level of cross-cultural differences and teaching

traditions,” combining qualitative and quantitative approaches in studying class and educational inequality. A blend of philosophical-analytic, ethnographic and statistical analysis helps present a more holistic picture of such complex, contextual phenomenon.

Data such as WIDE can also demonstrate how class factors relate to educational equity within communities or societies over time. However, it can be difficult to identify how changes in the economy and/or in the value of currency or other educational resources interact with class factors in time-based comparison. For instance, the gap in educational achievements between the poorest and wealthiest 20 percent within a society may decrease—yet this would not necessarily indicate that educational achievements are increasing on the whole. Research in Britain recently showed that “poorer students are more likely to go into higher education than they were in the past,” though “the likelihood of them doing so relative to their richer peers is actually lower” (Hill et al., 2008, p.77). The policy implications of considering only one of these findings apart from the other could be quite different. Similarly Hill et al. (2008) take issue with the World Bank’s report that private education can benefit the lowest socioeconomic groups by “siphoning off ‘educational investments’ from wealthier pupils,” without attending to other factors of inequality such as students’ disparate cultural and social capital (p.78). The politics of understanding and defining class relations in research remains contentious today, though the topic is not so taboo as race and ethnicity.

Additionally, definitions of terms, such as ‘poverty,’ and relevant classifications of attainment are fluid over time. Burt and Park’s (2008) comparison of the education Gini over four decades in Korea used different categories for educational achievement based on the data available, which reflected different norms in achievement during the timeframe. For instance, in the 1970s and 1980s, categories were “graduated,” “not completed” and “never attended,” whereas in the 1990s “general high school” and “vocation high school” were split; in 2000, “graduated” was split from “completed,” while “graduated master’s course,” “graduated doctor’s course,” “dropped out of master’s course” and “dropped out of doctor’s course,” were added (pp.264-265). Deciding how to deal with such shifts is not often straight-forward.

Many studies compare education Gini coefficients, or the correlation between class indicators such as ESCS, family background, wealth, among others, to educational achievements, across intra-national regions or countries. The education Gini has been used to compare inequity across different regions within a country, such as Korea (Burt & Park, 2008), or internationally (Jacob & Holsinger, 2009; Thomas & Wang, 2008). Additionally, it can be correlated to indicators of national wealth such as Gross Domestic Product (GDP) (Jacob & Holsinger, 2008). WIDE/UNESCO data enables comparison across percentiles of wealth across countries, though with such data sets it may be difficult to ensure the information is accurate, or collected from the same time period: for instance, a 2010 UNESCO report compares educational achievement to wealth across several countries, using data from 2000 for Gabon and from 2007 in the Democratic Republic of Congo (p.140). Such representations better portray broad themes across a wide variety of countries than they reveal the results of inputs, or enable direct comparisons.

Qualitative researchers examine social reproduction of inequality through teacher-student interaction in schools, as mentioned previously. For instance, researchers might compare pedagogical strategies used in one school across classrooms made up of poor students and middle-class students; indeed, research conducted along these lines has identified that teachers often regard economically disadvantaged students in “cold, impersonal ways” (Kincheloe & Steinberg, 1997, p.128). Oakes’ (1985) foundational work on tracking (streaming) in education found that often students are socialized differently through their educational experiences in ways echoing Marxist theorists’ concerns with education as class reproduction. Curricula can also be examined for overt or subtle messages in textbooks or lessons which suggest particular orientations to social inequality. Of course, race and gender (among other factors) can also quickly become apparent in such analyses, disabling reflexive researchers from attaining a universalistic understanding of class or SES when analysing dynamic educational contexts where student identities are informed by class, race, and more.

Discussion

As discussed here, structural inequalities shape educational opportunities by race and ethnicity across diverse societies, in relation to factors such as educator or societal prejudice, multiplier and networking effects, the ‘invisible knapsack’ and so on. Class also impacts on educational equity, as youth have differential advantages and disadvantages related to family background, culture, and income, all of which have a clear facilitative role in enabling student educational achievement across societies. Nonetheless, as this exploration shows, what race/ethnicity and class mean in the development and design of instruments and tools that isolate factors for research to ameliorate educational injustice cannot be prescribed in comparative studies, but must always be analysed within distinct social contexts. This requirement makes comparative educational work especially difficult, given the fluidity and different understandings of these terms and their significance, even in one site over time, or across seemingly like locations.

I have focused on race and class separately here, to expose challenges for focusing on either category in relation to educational inequality. However, arguably no research should be conducted without additional attention to how race and class impact on one another—as well as other critical factors, particularly gender. In contrast with race and class, gender is a straightforward category to use. As Airton notes (2009, pp.223-224) few studies “even define the terms sex, gender, boy, girl, male female, etc.” Some may feel gender is less important than race or class, particularly when working in the context of modern Western societies: Globally, women have reached parity with men in earning bachelor’s degrees, and “have an edge over men of 56 to 44 percent in master’s degrees” (UNESCO, 2012b, p.80). However, research across diverse societies, including those known for gender equality, nonetheless continues to demonstrate that gender impacts educational expectations, socialising boys and girls differently in schools (Gordon et al., 2000) and influencing trends in educational attainment (Hyer et al., 2008). In most societies women remain underrepresented in fields with clear vocational tracks (such as university-facilitated paid apprenticeships), in mathematics and science, and at the PhD level (UNESCO, 2012b)—as well as in employment worldwide. Gender also remains a vital factor barring girls’ access to education across many developing countries (Unterhalter & Oommen, 2008), in relation to race, ethnicity, and class.

As the inquiry here into the meaning, definition, and significance of race and class reveals, the importance of race and class (and gender) are highly dependent on social context, as are the impacts of each on one another as complex compounding forces. Race, class, and gender disadvantages (and advantages) build onto one another in ways that change individuals’ experiences qualitatively, not merely adding more hurdles (all of similar height), but rather impacting on hurdles’ heights and locations, changing the playing field for individuals based on their particular identity construction, which may also vary as one moves from the suburbs to the city (or vice versa), from primary to secondary school, and so on. Thus, without considering the particular ways race and class (and gender) interact in specific contexts, is it difficult to understand and ameliorate real-life educational inequality.

For example, ‘affirmative action’ enabling more equal higher education admission of prepared candidates by race as a means to ameliorate African American disadvantage in the United States is held by many as a failure, as most people who gain from such programmes are among the wealthiest groups in the society (Jackson, 2008). Though some socioeconomically disadvantaged African Americans have gained greater access to university entrance through such programmes, substantial numbers within this group fail to attain their degrees, due to disadvantages in preparedness and/or means to continued success, which come with class inequality, rather than racial inequality. Without attention to the relation between race and class in individual’s lives and in specific communities, such policies and programmes are unlikely to succeed, owing to simplistic understanding of these factors’ roles in educational inequality. The use of large-scale quantitative approaches may be particularly ill-advised for understanding such important cases and responding to them effectively, as parsing out the factors of race and class in studying large-scale populations remains challenging.

Finally, one must be diligent in examining such politically contentious and conceptually fluid factors that they do not allow assumptions about the way the factors operate and interact to bias their analyses. As Fairbrother cautions, given comparative education's aim to "seek global solutions to global problems...effort must be made to become conscious of biases and to question one's own assumptions while trying to understand the assumptions underlying the societies and cultures which are the targets of the research" (2007, p.48). Querying assumptions about race and class gained even from one's academic or professional context can be important to ensure one does not make assumptions about issues and contexts that require critical investigation, not borrowing principles and theories of race and class from one time or place to another simplistically. In other words, as race and class are conceived in different ways across contemporary contexts, their force and the nature of their interrelationships should not be presumed in comparative education, given the complex ways these factors are understood to continue to impact on educational attainment today.

Conclusion

Though race and class are two of the most significant social categories seen to underpin and organize educational inequality and inequity across world regions, their complex interplay, dynamic meanings and structural nature make them difficult to use in comparative education. They are challenging to categorize and thus to use effectively across different social contexts. Furthermore, as structural factors, race and class (and gender) can be seen to impact on each other in particular ways that do not lend themselves to generalizability, creating new hurdles for comparative educational research seeking answers to large-scale or global questions related to educational equality. Additional compounding features, such as language, religion, ability and so on, can also have a significant role in shaping educational opportunity and achievement, and one or more of these may also be found as crucial components in educational inequality depending on the social context of research.

As Mason writes, "educational research yields the most worthwhile results, at least with respect to [the goals of] equality and equity, when researchers attempt, from the very conceptualization of their projects, to identify the axes along which educational and other goods are differentially distributed, and to disaggregate their object of study along those axes" (2007, p.196). Comparative educational research on race and class (and other personal identity characteristics, such as gender, ability, religion, language and so on) has a challenging task, to compare categories within and across often-diverse schools and societies, without framing categories used as homogenous social groups, attending to complex interrelation and the compounding impacts of these categories in shaping educational opportunity and achievement. Conceiving comparative education as Mason does, "as a critical social science, incorporating an emancipatory interest focused on the distribution of power and its associated attributes" (2007, p.196), comparative researchers should continually query the meaning and significance of race and class as distinct but qualitatively compounding impacts on individual access and achievement, comparing contexts as well as social groups, to illustrate rather than obscure the difference these factors can make in shaping people's lives.

References

- Airton, L. (2009). Untangling 'gender diversity': Genderism and its discontents (i.e., everyone). In Steinberg, S. R. (Ed.), *Diversity and Multiculturalism: A Reader*. New York: Peter Lang, pp.223-246.
- Ali, S. S. & Dadush, U. (2012). The global middle class is bigger than we thought: A new way of measuring prosperity has enormous implications for geopolitics and economics. *Foreign Policy*, 24 May.
- Althusser, L. (1971). *Lenin and Philosophy, and Other Essays*, trans. London: New Left Books.

- Bakar, M. A. (2009). Islamic religious education and Muslim religiosity in Singapore. In J. Banks (Ed.), *The Routledge International Companion to Multicultural Education*. New York: Routledge, pp.437-448.
- Bourdieu, P. (1968). Outline of a theory of art perception. *International Social Science Journal*, 2(4), 589-612.
- Burt, M. E. & Park, N. (2008). Education inequality in the Republic of Korea: Measurement and causes. In D.B. Holsinger & W. Jacob (Eds.), *Inequality in Education: Comparative and International Perspectives*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.261-289.
- Deer, C. (2008). Different paths, similar effects: Persistent inequalities and their sources in European higher education. In D. B. Holsinger & W. Jacob (Eds.), *Inequality in Education: Comparative and International Perspectives*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.324-347.
- Durkheim, E. (1893/1984). *The Division of Labor in Society*. New York: Free Press.
- Fairbrother, G. P. (2007). Quantitative and qualitative approaches to comparative education. In M. Bray, B. Adamson, & M. Mason (Eds.), *Comparative Education Research: Approaches and Methods*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.39-62.
- Foster, M. (1999). Race, class, and gender in education research: Surveying the political terrain. *Educational Policy*, 13(1), pp.77-85.
- Goldie, T. (1989). The representation of the Indigene. In Ashcroft, B., Griffiths, G. & Tiffin, H. (Eds.), *The Post-Colonial Reader*. New York: Routledge, pp.232-236.
- Gordon, T., Holland, J. & Lahelma, E. (2000). From pupil to citizen: A gendered route. In Arnot, M. & Dillabough, J. (Eds.), *Challenging Democracy: International Perspectives on Gender, Education and Citizenship*. London: RoutledgeFalmer, pp.187-202.
- Grinberg, J., Price, J. & Naiditch, F. (2009). Schooling and social class. In S. Steinberg (Ed.), *Diversity and Multiculturalism: A Reader*. New York: Peter Lang, pp.265-278.
- Hacker, A. (1992). *Two Nations: Black and White, Separate, Hostile, Unequal*. New York: Scribner.
- Hall, S. (1989/1995). New ethnicities. In B. Ashcroft, G. Griffiths & H. Tiffin (Eds.), *The Post-Colonial Studies Reader*. New York: Routledge, pp.223-227.
- Heath, S. B. (1983). *Ways with Words: Language, Life, and Work in Communities and Classrooms*. Cambridge: Cambridge University Press.
- Herrnstein, R. J. & Murray, C. (1994). *The Bell Curve: Intelligence and Class Structure in American Life*. New York: Free Press.
- Hill, D., Greaves, N. M. & Maisuria, A. (2008). Does capitalism inevitably increase inequality? In D. B. Holsinger & W. Jacob (Eds.), *Inequality in Education: Comparative and International Perspectives*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.59-85.
- Hirasawa, Y. (2009). Multicultural education in Japan. In J. Banks (Ed.), *The Routledge International Companion to Multicultural Education*. New York: Routledge, pp.159-170.
- Hollinger, D. A. (2005). *Postethnic America: Beyond Multiculturalism*. New York: Perseus.
- hooks, b. (1994). *Teaching to Transgress: Education as the Practice of Freedom*. New York: Routledge.
- Hung, C. C. & Cheng, S. Y. (2008). Access and equity: Who are the students at Taiwan's top universities? In D.B. Holsinger & W. Jacob (Eds.), *Inequality in Education: Comparative and International Perspectives*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.290-306.
- Hyer, K. E., Ballif-Spanvill, B., Peters, S. J., Solomon, Y., Thomas, H. & Ward, C. (2008). Gender inequalities in educational participation. In D.B. Holsinger & W. Jacob (Eds.), *Inequality in Education: Comparative and International Perspectives*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.128-148.
- Jackson, L. (2008). Reconsidering affirmative action in education as a good for the disadvantaged. *Journal for Critical Educational Policy Studies*, 6(1), 1-15.

- Jacob, W. J. & Holsinger, D. B. (2008). Inequality in education: A critical analysis. In D.B. Holsinger, & W. Jacob (Eds.), *Inequality in Education: Comparative and International Perspectives*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.1-33.
- Keevak, M. (2011). *Becoming Yellow: A Short History of Racial Thinking*. Princeton: Princeton University Press.
- Kincheloe, J. L. & Steinberg, S. R. (1997). *Changing Multiculturalism*. Buckingham: Open University Press.
- Kuipers, J. C. & Yulaelawati, E. (2009). Religion, ethnicity, and identity in Indonesian education. In J. Banks (Ed.), *The Routledge International Companion to Multicultural Education*. New York: Routledge, pp.449-460.
- Ladson-Billings, G. (1998). Just what is Critical Race Theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education*, 11(1), 7-24.
- Lamontagne, J. (1999). National minority education in China: A nationwide survey across counties. In G. Postiglione (Ed.), *China's National Minority Education: Culture, Schooling, and Development*. New York: Falmer.
- Lee, S. Y. (2011). Changing faces: Colonial rule in Korea and ethnic characterizations. In Y. Takezawa (Ed.), *Racial Representations in Asia*. Kyoto: Kyoto University Press, pp.53-74.
- Leonardo, Z. (2004). The souls of white folk: Critical pedagogy, Whiteness Studies, and globalization discourse. In D. Gillborn & G. Ladson-Billings (Eds.), *The RoutledgeFalmer Reader in Multicultural Education*. London: RoutledgeFalmer, pp.117-136.
- Leistyna, P. (2001). Racenicity: Understanding racialized ethnic identities. In S. Steinberg (Ed.), *Multi/Intercultural Conversations: A Reader*. New York : Peter Lang, pp.423-462.
- Malott, C. S. (2009). An introduction to social class and the division of labor. In S. Steinberg (Ed.), *Diversity and Multiculturalism: A Reader*. New York: Peter Lang, pp.279-296.
- Manzon, M. (2007). Comparing places. In M. Bray, B. Adamson & M. Mason (Eds.), *Comparative Education Research: Approaches and Methods*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.85-122.
- Mason, M. (2007). Comparing cultures. In M. Bray, B. Adamson, & M. Mason (Eds.), *Comparative Education Research: Approaches and Methods*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.165-196.
- McCarthy, C. (2003). After the canon: Knowledge and ideological representation in the multicultural discourse on curriculum reform. In C. McCarthy & W. Crichlow (Eds.), *Race, Identity, and Representation in Education*. New York: Routledge.
- McInerney, D. M. (2010). *The Role of Sociocultural Factors in Shaping Student Engagement in Hong Kong: An Ethnic Minority Perspective*. Hong Kong: Hong Kong Institute of Education.
- McIntosh, P. (1990). White privilege: Unpacking the invisible knapsack. *Independent School*, Winter, 31-36.
- Meek, C. B. & Meek, J. Y. (2008). The history and devolution of education in South Africa. In D.B. Holsinger & W. Jacob (Eds.), *Inequality in Education: Comparative and International Perspectives*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.506-537.
- Oakes, J. (1985). *Keeping Track: How Schools Structure Inequality*. New Haven: Yale University Press.
- OECD (2007). *Education at a Glance 2007*. Paris: Organisation for Economic Co-operation and Development (OECD).
- OECD (2009). *Equally Prepared for Life? How 15-Year-Old Boys and Girls Perform in School*. Paris: Organisation for Economic Co-operation and Development (OECD).
- Omi, M. & Winant, H. (1993). On the theoretical status of the concept of race. In C. McCarthy & W. Crichlow (Eds.), *Race, Identity, and Representation in Education*. New York: Routledge, pp.3-10.
- Padilla, L. M. (1997). Intersectionality and positionality: Situating women of color in the affirmative action dialogue. *Fordham Law Review*, December, .843,853-885.
- Ravitch, D. (1990). Multiculturalism: E Pluribus Plures. *The American Scholar*, 59(3), 337-354.

- Roithmayr, D. (1998). Deconstructing the distinction between bias and merit. *La Raza Law Journal*, 10, 363-421.
- Savage, M., Devine, F., Cunningham, N., Taylor, M., Li, Y., Hjellbrekke, J., Le Roux, B., Friedman, S., & Miles, A. (2013). A new model of social class: Findings from the BBC's Great British Class Survey Experiment. *Sociology*, 47(2), 219-250.
- Shih, C. (2002). *Negotiating Ethnicity in China: Citizenship as a Response to the State*. New York: Routledge.
- Sollors, W. (1986). Who is ethnic? In B. Ashcroft, G. Griffiths & H. Tiffin (Eds.), *The Post-Colonial Reader*. New York: Routledge, pp.219-222.
- Takezawa, Y. (2011). *Racial Representations in Asia*. Kyoto: Kyoto University Press.
- Thomas, V. & Wang, Y. (2008). Distribution of opportunities key to development. In D.B. Holsinger, & W. J. Jacob (Eds.), *Inequality in Education: Comparative and International Perspectives*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.34-58.
- Unterhalter, E. & Oommen, M. (2008). Measuring education inequalities in commonwealth countries in Africa. In D.B. Holsinger & W. Jacob (Eds.), *Inequality in Education: Comparative and International Perspectives*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer, pp.506-537.
- UNESCO (2010). *Reaching the Marginalized: Education for All Global Monitoring Report 2010*. Paris: UNESCO.
- UNESCO (2012a). *Youth and Skills – Putting Education to Work: Education for All Global Monitoring Report 2012*. Paris: UNESCO.
- UNESCO (2012b). *World Atlas of Gender Equality in Education*. Paris: UNESCO.
- UNESCO (2013). *World Inequality Database on Education*. Available at: <http://www.education-inequalities.org> [Accessed 28 May 2014]
- United States National Opportunity to Learn Campaign (2013). *The Color of School Closures*. Available at: <http://www.otlcampaign.org/blog/2013/04/05/color-school-closures> [Accessed 28 May 2014]
- Villegas, A. M. (1988). School failure and cultural mismatch: Another view. *Urban Review*, 20, 253-265.

EDUCATION FOR SUSTAINABLE DEVELOPMENT IN MALAYSIA'S NATIONAL CURRICULUM REFORMATION: A THEORETICAL EXPLORATION

Aai Sheau Yean^a
University of Bristol

ABSTRACT: *This article aims to examine the feasibility and potential of including appropriate Education for Sustainable Development (ESD) elements in the National Curriculum Reformation of Malaysia that is set to be introduced in the year 2017. This is done through the proposal of a theoretical approach for understanding ESD fit for Malaysia from an environmental epistemology. To start with, this article outlines dominant ideologies and epistemologies revolving around the concept of Sustainable Development (SD) and focuses on critiquing the underlying anthropocentric tendencies found within. Drawing principally from the ideas of Schumacher (1973), Orr (2004), and Sterling (1992), the article then sets out to examine the ideologies and epistemologies needed to support education reformation that are more environmentally sensitive in nature.*

KEY WORDS: *Education for Sustainable Development, Malaysia Education Blueprint, environmental epistemology, environmental empathy, and environmental equity*

Introduction

If today is a typical day on planet earth, we will lose 116 square miles of rainforests, or about an acre a second. We will lose another 72 square miles to encroaching deserts ... 40 to 250 species ... the human population will ... add 2,700 tons of chlorofluorocarbons and 15 million tons of carbon dioxide to the atmosphere (Orr, 2004, p.7)

The statement above is merely one of the many versions and variations of the same message about the impending environmental crisis that we have heard throughout most of the 20th century, and while we are celebrating our progress in the 21st century. Regardless of how it is worded, the impact of such an occurrence happening on a daily basis is without a doubt, a threat to the survival of all species on earth. It is an act that has placed the future of all in jeopardy, and a problem that is imperative to be addressed right now. In an attempt to address this problem, developmental experts, educationists, politicians, and concerned individuals have, in one way or another, looked to education and its influence in a community to derive a solution. Although it would be naïve to assume that education could solve this predicament that humans old and young, past and present, have contributed to, it is nonetheless one of the means by which a possibility of reversing or ceasing the damage done may be achieved (see Sterling, 2011 and 1992; Tilbury, 2012, for example). Education on its own may not be able to achieve much, but without it, change would not have any hopes of spreading far and wide, nor would there be a chance for it to sustain for more than a few months at best.

Sterling (2011), while devising a way to counter the widespread neoliberalism and unsustainable practice held by society at large, argues for the reformation of education revolving around the idea of infusing sustaining, healthy, tenable, and durable elements into the school curriculum. Similar sentiments may be found in the writings of authors such as Schumacher (1973), Orr (2004), and Khan (2010); all of whom in their own way assert that 'the kind of education we need begins

^a Correspondence can be directed to: syean.aai.2012@my.bristol.ac.uk

with the recognition that the crisis of global ecology is first and foremost a crisis of values, ideas, perspectives, and knowledge, which makes it a crisis *of* education, not one *in* education' (Orr, 2004, p.126). In other words, minor structural changes and changes in practice will not fix the problem; what is needed is nothing short of an epistemological change with regards to knowledge, economy, and the environment.

This would in turn brings us to a preliminary discussion of Malaysia's National Curriculum, which is similarly devoid of concern for environmental health in its attempt to prepare the nation to be 'knowledge-economy ready' (Symaco, 2012, p.40). However, to ensure that Malaysians would not end up exacerbating the situation that leads to total environmental annihilation, as Schumacher (1973) dubs it, this article starts by arguing that there is a need for a change in the way Malaysia approaches education. As a developing country trying to progress amidst a stressed environment (Mat Said, et. al., 2003), there is a need to prepare for a future with an educational response that will answer the call of this crisis with the appropriate theoretical framework, knowledge, and skills. As such this article aims to examine the possibility of incorporating Sustainable Development (SD) ideologies and epistemologies that would be appropriate for the Malaysian context into the National Curriculum that is being reformed, and is scheduled to be introduced in the year 2017. By doing so, it is hope that this article may contribute to the international discourse on Education for Sustainable Development (ESD) through exemplifying the feasibility of an 'alternative educational paradigm' (Sterling, 1992, p.10).

Education for Sustainable Development (ESD): Anthropocentric or Bio-centric?

Schumacher (1973), in his book entitled *Small is Beautiful*, began his proposition for a moderate and environmentally friendly version of technology development, and economy, with a critique of society's approach to the environment:

We are not the least concerned with conservation: we are maximizing, instead of minimizing, the current role of use... we happily talk of unlimited progress along the beaten track (p.12).

It is interesting to think about what brought us to where we are — that is figuratively speaking — charging towards the 'collision course' (Schumacher, 1973). It is safe to say, many find that part of the problem lies in education (for example, see Khan 2010, Sterling 2012, and Bangay & Blum 2010). Stevenson (2007) elaborates on this point by stating that 'historically, schools were not intended to develop critical thinkers, social inquirers and problem solvers, or active participants in environmental and political (or even educational) decision making' (p.144). The problems embedded in education brought about a situation where learners were 'alienated from life' (Orr, 2004, p.3), environmentally illiterate (Khan, 2012), and entirely too anthropocentric (Garrad, 2012). Although these comments do not in any way paint a full picture of the problems perplexing the current education systems and the learners it produce, it is nonetheless sufficient in directing us to perceive the tip of the environmental iceberg into which the current population is boarding seem to be heading.

ESD: Historical Background and Current Crisis

According to Puteh (2011) education for the masses under the British Empire was meant to increase the efficiency of performance amongst the peasants whilst education for the elites (the Malay royalties) centred on knowledge of governance as per the British ideology. As Schumacher (1973) suggests, education is the most vital of all resources, hence as developmental efforts in the South gained momentum, so did the indoctrination of Western knowledge. Often, in the form of providing education as resources and infusing the ideologies of the West into the minds of the South in the process; especially ideologies of neo-liberal origin that championed economic progress at the expense of environmental health and social justice. As the neo-liberal model was stretched to

its limits trying to accommodate the world's population, there has been a growing dichotomy of opinions following the increasingly worrisome financial crises that governments worldwide have struggled to recover from.

Regardless of the dichotomy, it is unfortunate that education provisions are still being treated as a business with measureable cost and benefits. Orr (2004) goes one step further by stating that although various education reformations are underway, they have 'even less to do with the great issues of how we might live within the limits of the Earth' (p.16). Additionally, he argues that the reformation as a whole aims to produce learners whose sole purpose and outlook in life seems to be narrowly economic and self-centred, not to cultivate learners into being socially responsible citizens and certainly not 'citizens of a biotic community' (ibid). It seems disconcerting to see obvious signs indicating that we are marching blindly into an uncharted future with an increasingly volatile natural environment, threatening the world as we know now, while the supposedly rich and powerful deemed responsible for the masses' livelihood is unable to see past the transient riches. Indeed, echoing the sentiment of Schumacher (1973) voiced a few decades ago, it seems that as time progress, 'our reason has become [increasingly] beclouded by an extraordinary, blind, and unreasonable faith in a set of fantastic and life-destroying ideas inherited from the 19th century' (p.76). To make matters worse, we are nowhere near the discovery of a solution to this predicament that we have allowed ourselves, and the earth, to fall into. Malaysia's disposition is similar, as there seems to be no concrete measures in place that may serve as a response to the changing social, political, economic, and environmental climate.

Arguing against the life-destroying neo-liberal 'black box' notion of how education should be provided, Rose (2006) calls for a more holistic view of education by seeing it as 'a system of provision' and recognize the education system 'as an outcome of historically and socially evolved socio-economic practices [that is] specific to the particular country in which it is located' (p.179). Although I am inclined to agree with the need for context-specific education and the argument that education is more than the monetary benefits it might provide, there is also a need to view education beyond this lens, especially in this time of environmental crisis. For curriculum, this means reinventing the educational experience (Bourassa, 2011).

As we move towards the post-2015 era where the direction of development is one of complexity and uncertainty (if the current debate on it is to be believed), growing concern is voiced by environmentalists, educationists, economists, and politician alike on whether we can make it into the far future with sustained development, or would we meet with a series of crises one after another unlike anything we are capable of dealing with adequately¹? Even though attempts had been on-going since the Brundtland Commission in 1987 to address global issues related to sustainability (Dobson & Tomkinson, 2012), little effort has been made to link this issue with formal education until the world summit on SD was organised in 2002. The summit gave rise to the United Nation's (UN) decision to declare that there will be a decade of ESD (2005-2014) (Crossley & Sprague, 2013). It is the intention of this movement to mobilise global education resources to create a more sustainable future (UNESCO, 2012). It was explicitly stated during the declaration that although 'education alone cannot achieve a more sustainable future, without education and learning for sustainable development, we will not be able to reach that goal' (ibid). As much as I would like to agree with the rationale for a greater emphasis in ESD, there is a need to be cautious of the various differing epistemology and ideologies under the umbrella of ESD, environmental education, and SD. Resonating with this notion are Bangay and Blum (2010), who assert that 'educationists must recognize the dangers of labelling, and the preconception or misconceptions that often arise when using terms such as "environmental education" or "education for sustainable development"' (p.359). Selby (2008) too, resonates this by voicing the lack of 'thematic and epistemological breadth' (p.66) in ESD. Examination of the validity of these statements will bring us to the discussion of epistemology and ideologies revolving around ESD in the next section. It is hoped that this would aid the development of a curriculum based on a better understanding of ESD fit for various local context.

Epistemologies and Ideologies Revolving Around ESD

Ideologies

Stevenson (2007) points out that there are 'different ideologies underlying different visions of, and means to, environmental improvement' (p.142) and more often than not, they run in contradiction with each other. On one hand, there are two types of conservative reform, striving for minor changes within current system of governance, education, and economic activities. While on the other hand, activists propose two types of radical reform to the present system. In simple terms, for the conservatives, SD revolves around the continuance of financial sustainability and economic growth (King & Palmers, 2009), and the relative 'health' of the environment essential for the growth of their portfolio. Crossley and Sprague (2013) comments on the superficial commitments of governments, multilateral agencies, private sectors, and non-governmental agencies on the idea of SD from an environmental point of view by stressing that their practice run contrary to environmental health and their central focus is the 'ever increasing economic growth and consumption in both the conception and practice of development' (p.2). However, for others, SD is interwoven with concerns about the health of the environment. As a proponent of this ideology, Orr (2004) is adamant that:

All of us are joined in one fragile experiment, vulnerable to happenstance, bad judgment, and malice. If we hope to be safe and prosperous while drawing down the habitability of the Earth, we are hoping for what never has been and never can be (p. xiii).

His point is similar to that of Schumacher (1973) who passionately argue against our blissful ignorance of environmental crises and our lack of environmental sensitivity, as quoted in the beginning of this section. Being an educationist concerned with the welfare of the environment and the future of the current generation (not to mention those yet to come of all species), I have to agree that concern for, and careful consideration of, the environmental welfare is essential in the talk of the future in light of ESD's development.

To conclude on the differing ideologies present and to draw forth its relation to education, we are currently 'in a race between education and catastrophe. That race will be decided in the classroom around the world — and in all of the places that foster intelligence, thought, and good heart' (Orr, 2004, p.xiv). There needs to be flexibility in the embrace to ideologies instead of a dichotomous approach as currently adopted by many, there will definitely be numerous possibilities where an approach or a combination of them may be tailored for the purpose of SD in a given context. Therefore, the role of education in this sense is to expose its learners to the numerous approaches and ideologies revolving around SD in order to stimulate the awareness that as humans 'our organic relationship with earth is also intimately tied to our struggles for cultural self- determination, environmental sustainability, social, and material justice, as well as global peace' (Darder, 2012, cited in Khan, 2010, p.xii).

Epistemologies

Tilbury (2012) in a reflective piece on her personal learning through the journey of discovery along the ESD pathway concludes:

Themes come and go, but the global indicators for SD remain the same and point to accelerating levels of poverty, inequality, and environmental deterioration. Those engaged in education must help people connect the dots and see how their own realities contribute to, or detract from more sustainable futures for all ... [we must] challenge the silo mentality that undermines any progress towards SD. Learning to connect is becoming increasingly critical to the future of [the] people and planet (p.62).

While contemplating on the epistemology of SD which serves to inform ESD, Tilbury's (2012) statement is immensely useful in highlighting the vision for a sustainable future where economic health (an indicator of poverty levels), social justice (which represents the levels of inequality), and environmental health (reflecting the levels of environmental deterioration) are prioritized. At the same time, the statement beautifully underlines the contending relationships between these three elements while simultaneously presenting an endless possibility for the interpretation of relationships between them and the realities they may be translated into. It serves to bring forth various questions concerning epistemology; among them are two questions, which I believe to be particularly relevant to the discussion of ESD in this paper: (1) Shall we view the society and its economic health as a subset of the concern for overall environmental welfare, an epistemology that is more bio-centric, where environment's health is emphasized above all else (as shown in Figure 1)? Or (2) shall we view all three elements on an equal footing, an anthropocentric view emphasizing the need for each to complement and support the other for the ensured survival of human beings (as shown in Figure 2)?

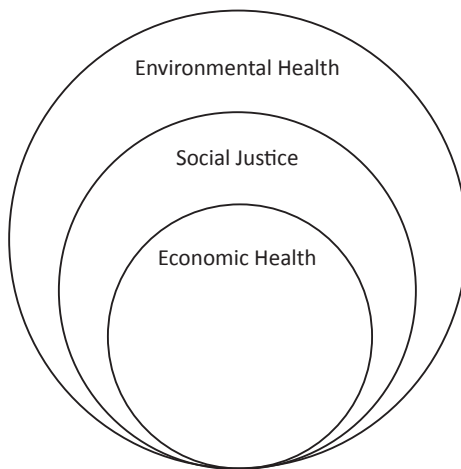


Figure 1: Environmental Epistemology (adapted from Strachan, 2012)

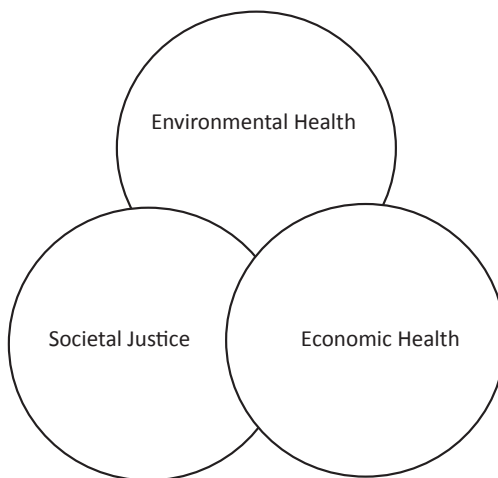


Figure 2: Balanced or 'Trade-Off' Epistemology (Strachan, 2012)

In an attempt at evaluating the merits of each framework, it is useful to perceive them from an ethics point of view. Through the evaluation of the ethical underpinnings surrounding the framework, answers on the concerns, conflicts, strengths, and drawbacks of each epistemology may be better understood. Before proceeding with the evaluation, it is prudent to address the questions as to why there is a need to examine the ethical underpinnings surrounding the framework. The answer lies in the preamble of the 2010 Earth Charter (ECI Secretariat, 2010) which is quoted below:

We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and promise. To move forward, we must recognise that in the midst of the magnificent diversity of cultures and life forms, we are one human family and one earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the people of Earth declare our responsibility to one another, to the greater community of life, and the future generations (Sarabhai, 2010, p.156).

The ethical considerations and implications embedded in the preamble may be divided into three interrelated and converging parts. These are:

- (1) The ethicality of perceiving humans as the carers of Earth;
- (2) The ethicality of perceiving needs for universal rights, economic justice, and environmental health as equivalent and complementary; and
- (3) The ethicality of envisioning a sustainable future.

Garrad (2012) provides a compelling argument in favour of Figure 1, on the ethicality of our anthropocentric, human-centred, view on this world. He did so by reminding us of our insignificant presence on Earth, an Earth which had been in existence millions of years before our 'creation' (in a religious view), and 'presence or evolved existence' (in an evolutionary biology standpoint); an Earth which would undoubtedly continue existing past human's probable extinction. Our trivial ability in caring for the majestic ecology aside, we have not managed to properly care for our fellow human counterparts and the welfare of the future generation either. As evident by the constant political, social, and economical peril we have experienced throughout the history of mankind. Amidst all these big and small conflicts, valuable resources on earth are steadily depleted for various developmental purposes, prompting scientists to raise the red flag regarding the worrisome signs that our planetary boundaries are being stretched beyond the limits (Rockstrom, et. al., 2009). In this way, I would like to press for an Environmental Epistemology (as shown in Figure 1) by raising the question: What rights do humans have in claiming the responsibility to care for the greater community of life, one another, and the future generations when all signs point towards our failure to do so? Supplanting this question with a possible answer, Houghton (1999) asserts that nature has certain rights, while humans, as the Earth's steward have 'obligations to nature and to each other' (p.237) in ensuring that all species on earth and the ecosystem that surrounds us are not degraded beyond the point of sustainability.

Although it might be preposterous to assume that it is possible to arrive at one 'right' answer regarding rights, it is nonetheless the intention of this article to start the ball rolling so that here will be awareness regarding the underlying tensions between our anthropocentric epistemology and the call for environmental health. It is only when there is awareness, would we then be able to start the conversation on a future for education with the planet in mind.

What sort of epistemology then would be able to help us in envisioning a sustainable future and in guiding the development of education that can support such notion? Jucker (2012) in his review of a book on sustainable self, opines that it is precisely 'the very idea that we are autonomous individuals' that had landed all of us in this unsustainable state of the present, the very idea of being a sustainable self 'blinds us to the fact that we are not independent of the world, people, and nature around us, but indeed utterly dependent on them' (p.158). Houghton (1999) further supplants this notion by asserting that 'moving towards SD requires economic and social systems that encourage

the environmental stewardship of resources for the long-term, acknowledging the interdependency of social justice, economic well-being, and environmental stewardship' (p.234). Being in agreement with both, I would like to suggest that we would not be able to envision a sustainable future without considering the complex interplay between the environment, economy, and society. However, this does not in any way translate into the idea that these three elements are of equal importance. Emphasising the importance of the environment over economic health and the society, Schumacher (1973) passionately highlights that 'if we squander our fossil fuel, we threaten civilisation; but if we squander the capital represented by living nature, we threaten life itself' (p.13). Similarly, Orr (2004) asserts that the reason for today's ecological crisis may be traced back to our 'failure to comprehend our citizenship in the biotic community ... we cannot see clearly how utterly dependent we are on the "services of nature" and on the wider community of life' (p.23). This is a point which I would like to further elaborate by highlighting that as humans, we are dependent upon the blessing given to us by nature, not the other way round — a misnomer which some are inclined to believe in (Weesie & Andel, 2008). In the words of Garrad (2012),

the planet, in any meaningfully complete sense, is beyond our capacity to 'destroy'. We can disrupt the climate, wrecking large-scale human civilizations and annihilating thousands of other species, but life — the vast majority of its microscopic — will go on (p.23)

Following this line of thought, I would like to argue for the adoption of the Environmental Epistemology (as shown in Figure 1) in this article to reflect the notion that our existence depends on how well humans are able to consider its importance preceding economic development and social justice. It is time for us to acknowledge that we are not the masters of this Earth, but merely its steward. Our survival and wellbeing depends on the flourishing of nature, while nature would be able to flourish without our existence. With the environmental epistemology that calls for a more biocentric notion in mind, it is prudent to turn our attention to the next part of the discussion, the question on what should we (as educators) do so that we may start to make amends for the damage that we (as humans) have done.

Context for ESD in Malaysia

While contemplating on how to go about initiating change, Katzchner's (2011) warning that 'the absence of a clear view on what "environment" really is renders it open to all manners of interpretation and legitimization' (p.161) is pertinent. Hence for this paper, the 'environment' would be envisioned with Malaysia and its majestic rainforests. In the 19th century, Malaysia² was covered in a sea of green with area of peat and mangroves in some of the lowland and coastal areas (Aiken & Moss, 1975). At that time, it was claimed that 'except for scattered coastal and riverine settlements and a few aboriginal clearings in the interior, man had made little impact on the rainforests [of Malaysia]' (ibid, p.213). Particularly in Sarawak, Malaysia, where the majority of the rainforests is located, is home to some of the rarest and most important species of flora and fauna on Earth (Primark & Hall, 1992). However, as time progress, it seems that the majestic environment that should be cherished and valued had been slowly encroached upon by developments. As a result, the 'environment' as we see it today is only made up of the 3820ha of primary rainforests and 15,497ha of secondary forests (Koh, 2007) that still remains in Malaysia.

Approximately two decades ago, signs of a 'tremendous increase in the impact of human-induced change on the composition of rainforest' (Primark & Hall, 1992, p.829) emerged as Sarawak actively markets itself as a 'leading exporter of tropical logs' (ibid, p.830). This led to a situation in which the authors prior mentioned conclude that the logging practices in Sarawak is highly unsustainable. A study by German biologists a decade later in Sabah revealed a similarly desolating picture of biodiversity and ecosystem loss in Malaysia, he concluded that 'primary lowland rainforest in Sabah, Malaysia, has been largely reduced to, small- to medium-sized, often isolated forest islands surrounded by a highly altered agricultural landscapes ... species number and diversity in the forest

isolates were significantly lower' (Bhrül, et. al., 2003, p.1385). Similarly Koh (2007), an American scientist, asserts that out of all the developing South-East Asian countries³ Malaysia experiences the highest rate (up to 2.6-fold) of deforestation between 1990 to 2005. Agriculture, it seems, is the primary reason for the clearing of our primary rainforests (Sodhi, et. al., 2010).

Unsurprisingly, the negative implication of this ecological deterioration is not merely confined to its immediate surroundings. The biodiversity of rainforests is completely compromised as most of the land is converted into palm oil plantations (Danielsen, et. al., 2009). Specifically in Malaysia, the conversion of forests into palm oil plantations is linked to the dwindling amount of bees, known for their importance in pollination (Liow, et. al., 2001), and this does not bode well for the already dire colony collapse disorder afflicting most countries worldwide.⁴ Similarly desolating is the fact that the carbon capturing ability of rainforests is vanquished following its disappearance, a loss which would take normal agricultural plantations at least 86 years to repay (Fargione, et. al., 2008). Noting the importance of rainforests in capturing and balancing the world's carbon emission, Fargione, et. al. (2008) further asserts that biofuels 'need to be produced with little reduction of the storehouses of organic carbon in the soils and vegetation of natural and managed ecosystem' (p.1237). This in turn validates the need for an environmental epistemology (as shown in Figure 1) to be used as a basis for all initiatives. It is only through the conscious awareness that consideration for the environment should precede all actions and decisions that we would be able to start moderating and possibly minimising humans' destructive impacts on earth. To ensure that hope remains for the rainforests in Malaysia, I would like to proceed with the discussion of SD in the country and the reason why it should be made central in the on-going curriculum reformation. I believe it is only by ensuring the education in Malaysia provides its learners with knowledge of the 'biological and ecological conditions in which we lived and what these require of us' (Orr, 2004, p.157) that there will be hope for the continuance of biodiversity and ecosystem in Malaysia's rainforests.

Environmental Awareness and Concept of Sustainable Development in Malaysia

As an upper-middle income country (The World Bank Group, 2013), Malaysia is facing 'tremendous challenge' (Mat Said, et. al., 2003, p.306) in ensuring that its development towards being a high income country is sustainable. In the attempt to examine the state of environmental awareness amongst public school educators of primary and secondary level, the researchers ended up revealing a less than optimistic picture of the variable measured from the targeted population. If this study is meant to represent the 'environmental sensitivity and empathy' (Marcinkowski, et. al., 1990, p.180) of the teaching population in Malaysia as a whole, there is indeed a trying task ahead for those of us who are determined to fight for ESD in Malaysia.

Although the initiative of Mat Said et. al. (2003) in contributing to the literature of ESD in the education arena in Malaysia is commendable; the study would have been more informative if:

- (1) An indication of their ideologies and epistemologies on SD is explicitly stated and,
- (2) An explanation is provided as to why they have focused on consumer behaviour as a determinant of the participants' environmental concerns and awareness.

The anthropocentric nature of ESD in Malaysia, and a lack of breadth and depth where its epistemology is concerned seem to represent the state of SD in Malaysia at the moment. Hezri and Dovers (2013) went a step further by commenting that for Malaysia to move towards a sustainable future, it would require a policy shift from that dealt out on an ad-hoc basis (in accordance to a narrowly defined concept of environment) to one which is more holistic in view of long-term sustainability.

In defence of the incumbent government's approach to environmental sustainability, Foo (2013) asserts that Malaysia, as a developing country, had been an active participant to the global endeavour to build a sustainable future since the 1970s. It is claimed that this was done through the introduction of various regulatory measures to balance the country's economic development

and its environmental health. According to Foo (2013), prime examples of this 'regulatory measures' may be found in the Outline Perspective Plan and the Malaysian Vision 2020 'which called for a comprehensive quantum leap towards a knowledge-based society' (p.8). It is disappointing to note that the author had equate the country's emphasis on being 'a knowledge-based society', which is closely related to the World Bank's push for knowledge economy, to the endeavour to be truly environmentally sustainable. This again, points to a lack of breadth and depth where the epistemology and ideologies of SD in Malaysia is concerned.

To further supplant my argument, Malaysia, though claimed to be an active participant of the global endeavour to build a sustainable future, was reportedly performing abysmally on a study of Global Environmental Sustainability Index done in 2005. According to Hezri and Dovers (2013) Malaysia ranked thirty-eighth out of the 146 countries studied due to the 'substantial pollution stresses associated with rapid industrialisation' (p.283). This ranking is not particularly encouraging considering the fact that all other members of the 12 mega-(bio)diverse nations ranked comparatively higher on the index. Furthermore, Hezri and Dovers (2013) supplants that Malaysia ranked 56th out of 163 in the 2010 Environmental Performance Index, and the country appeared in the bottom-ranked group, along with countries like the Unites States, on the 2010 Climate Change Performance Index. Looking at the dwindling environmental health of Malaysia, it is my hope that the future would bode a more holistic picture of environmental stewardship, preferably with a greater inclination for an environmental epistemology, or a bio-centric worldview, with the help of more articles examining ESD.

ESD and its Centrality to Malaysia's Curriculum Reformation in 2017

In the latest attempt by the government to reform Malaysia's contested and faulty education system which seems to educate its learners out of critical thinking (Brown, 2007; Sarjit-Singh & Mukherjee, 1993), the Malaysia Education Blueprint was produced. For the first time in Malaysia's history of education policy construction, public opinion was obtained in the form of town hall meetings organised in every state, in addition to the standard consultation of expert opinions from international organisations and local universities (MOE, 2012). The year-long consultation resulted in the culmination of an ambitious 12 year plan in which a reformation of the entire education system from pre-school to high-school, from the curriculum to infrastructure, were all targeted for change. While not without some degree of ambiguity, it is possible to cover this Blueprint in brief as it has been comprehensively covered in the actual document (See MOE 2012). Instead, I would like to focus primarily on the proposed curriculum reformation that is scheduled to be introduced in 2017, and evaluate it against the concept of SD. According to the Blueprint, the curriculum reformation would be:

In line with the National Philosophy of Education (NPE) [which was introduced in 1988], the Ministry's approach is focused on developing student holistically. This means, the education system addresses intellectual, spiritual, emotional, and physical development, alongside a strong sense of national identity (MOE, 2012, p.4-2).

Disregarding the fact that the NPE which has not been changed for over two decades (making it less compatible with the education environment of this dynamic time and age), I find it disappointing that the concerns of Malaysia's rapidly degrading environment is conveniently absent. It causes one to wonder whether the past criticism of international environmentalists on the stance of Malaysia on conservation still holds true; that is, criticism of the Malaysian government's denial regarding negative environmental effects, and the insistence that overall economic activities at the expense of the environment is justifiable, not to mention positive (Primark & Hall, 1992). According to Yieng and Hamzah (2012) the emphasis of NPE is a two-fold attempt at developing an individual for the benefit of oneself, and the larger community. In line with the anthropocentrism of NPE, the perspective adopted for curriculum reformation concentrates on 'giv[ing] Malaysian students an internationally

competitive edge’ (MOE, 2012, p.4-2), and on ‘creat[ing] Malaysian students that are balanced, resilient, inquisitive, principled, informed, caring, patriotic, therefore being an effective thinker, communicator, and team player’ (ibid). This is all done with the intention of ‘produc[ing] globally competitive citizens’ (MOE, 2012, p.4-4) or in the words of Symaco (2012) ‘knowledge economy ready’ (p.40) learners. The main features of the ‘improved’ curriculum may be found in Figure 3. In this era of globalisation, where knowledge is power, it is of course understandable that a country is focused on producing globally competitive citizens in order to stay developed, or in Malaysia’s case, advance towards a developed status. That being said, in the face of an ecological degradation, focusing on being knowledge economy ready while missing the bigger picture of educating learners with the earth in mind is as if we are encouraging a life ‘estranged from reality’ (Schumacher, 1973, p.11); a life where nature is neither entwined with our life nor part of it.

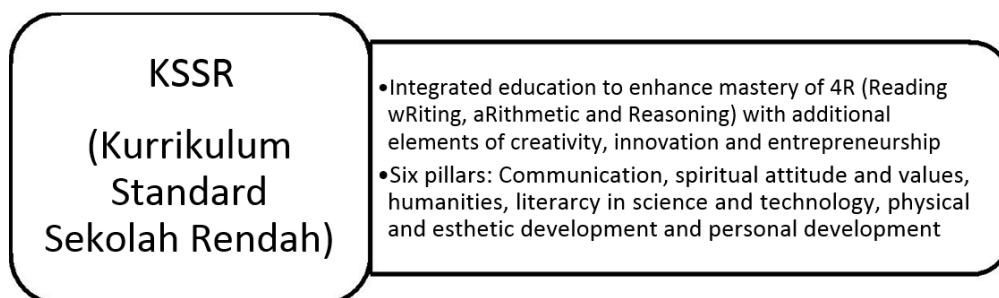


Figure 3: Standard Curriculum For Primary Education (MOE, 2012)⁵

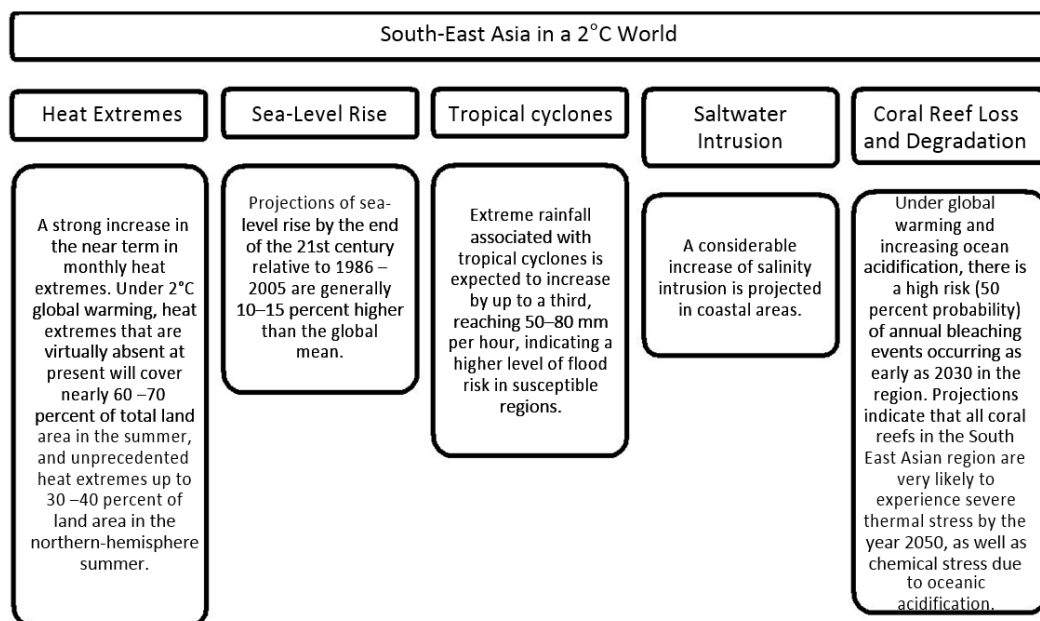


Figure 4: Projections of Global Warming and its Effects in the South East Asia Region

(Adapted from World Bank, 2013b)

Having established SD's state in Malaysia (or the lack thereof), and the curriculum reformation bereft of any hints on ESD, I am inclined to agree with Orr's (2004) stance that education reformations have generally been geared towards the neo-liberal epistemology rather than being biocentric. As seen in figure 3, the adaptation and mitigation measures of climate change and its effect towards Malaysia has not been taken into consideration in relation to education development, thus even less can be said about the embrace of environmental epistemology where education in Malaysia is concerned. It seems this orientation towards a mechanistic and knowledge economy discourse in education is not confined to Malaysia. Chapman (2004) highlights the same problem while discussing the curriculum development in New South Wales by noting that 'potentially significant environmental education initiative [is ignored] in favour of the more conventional and politically attractive rhetoric of 'raising standards'' (p.28). Similarly, Scotland seems to be facing the same problem, prompting McNaughton (2007) to liken the state of ESD there to Sleeping Beauty, where it emerge in the education arena in 1993, and has since been sleeping in the background before re-emerging again as an idea in 2007. Its re-emergence after an extended slumber was treated with scepticism, and the author can only hope that this time around, its presence will persist. Similarities with western countries aside, if the World Bank's report on climate change and its effect on South-East Asia is to be believed (as shown in Figure 4), there is a need to educate Malaysian learners beyond merely being ready for the knowledge economy and instead for life as the Earth's steward.

Conclusions

To conclude, I would like to reiterate the essence of my arguments laid out along the sections of this article. Firstly, although there seems to be various interpretations of ESD based on different ideologies (Selby, 2008) which might appear frustrating, there is nonetheless, as Wals and Bawden (2000) asserts a wealth of opportunities in this vagueness presented in ESD. To echo their statement, this ambiguity:

has an enormous canvassing and heuristic capacity if it is systematically [and wisely] used as a starting point or operational device to exchange views and ideas. These on-going discussions may generate fruitful working hypotheses for the concrete formulation of curricula ... (p.38)

Embedded in this statement is a call for educators and policy makers to be comfortable in the face of ambiguities and uncertainties. It is only then, would there be a possibility of painting a broader picture of education and knowledge that goes beyond scientific facts and to embrace traditional, indigenous, and local knowledge. This would in turn give rise to the opportunity for us to truly examine the issues revolving around Geographical equity, Inter-species equity (Houghton, 1999), and Environmental Justice (Thompson, 2008). Through the examination of the issues mentioned prior, it is hoped that we would be able to advance one step further towards the direction of answering questions such as

- (1) How do we decide what is the knowledge of environment?;
- (2) Who should we take as the authority on the environment (or should there be one?);
- (3) Whose knowledge counts?; and
- (4) Whose rights prevail?

While acknowledging that the answers to these questions vary based on our values, beliefs, and worldviews, nonetheless, it is necessary. To advance towards the embrace of an environmental epistemology, we need to start by examining our anthropocentric worldviews, which calls for the need to evaluate our assumptions on rights, the rights of other species, and those yet to be born. In doing so, we will be able to challenge ourselves with the task of finding a more appropriate answer to the questions on what sustainable development entails.

Notes

- ¹ For example, see Grundwald (2007), Al Gore (2010), and Selby (2008).
- ² Known as the Malay Peninsula at that time
- ³ With the exception of Singapore as it is a developed country with little to none primary forest areas remaining.
- ⁴ See Cox-Foster, et. al. (2007)
- ⁵ The KSSR stands for Standard Curriculum for Primary Education. An experimental version of this new curriculum has been rolled out in 2010 and the improved version is set to be introduced to primary one students in 2017. Likewise in the secondary section, a new curriculum reflecting the features of KSSR will also be introduced in 2017.

References

- Bangay, C. & Blum, N. (2010). Education responses to climate change and quality: Two parts of the same agenda? *International Journal of Educational Development*, 30(4), 335-450.
- Bourassa, G. (2011). Rethinking the curricular imagination: Curriculum and biopolitics in the age of neoliberalism. *Curriculum Inquiry*, 41(1), 5-16.
- Brown, G. (2007). Making ethnic citizens: The politics and practice of education in Malaysia. *International Journal of Educational Development*, 27(3), 318-330.
- Brühl, C. A., Eltz, T., & Linsenmair, K. E. (2003). Size does matter—effects of tropical rainforest fragmentation on the leaf litter ant community in Sabah, Malaysia. *Biodiversity & Conservation*, 12(7), 1371-1389.
- Chapman, D. (2004). Environmental education and politics: Snakes And ladders revisited. *Australian Journal of Environmental Education*, 20(2), 23-30.
- Cox-Foster, D. et al. (2007). A metagenomic survey of microbes in honey bee colony collapse disorder. *Science*, 318(5848), 283-287.
- Crossley, M. & Sprague, T. (2013). Education for sustainable development: Implications for small island developing states (SIDS). *International Journal of Educational Development*, 35, 86-95.
- Danielsen, F. et al. (2009). Biofuel plantations on forested lands: double jeopardy for biodiversity and climate. *Conservation Biology*, 23(2), 348-358.
- Dobson, H. & Tomkinson, C. (2012). Creating sustainable development change agents through problem-based learning: Designing appropriate student PBL projects. *International Journal of Sustainability in Higher Education*, 13(3) 263-278.
- Fargione, J., Hill, J., Tilman, D., Polasky, S., Hawthorne, P. (2008). Land clearing and the biofuel carbon debt. *Science*, 319(5867), 1235-1238.
- Foo, K. Y. (2013). A vision on the role of environmental higher education contributing to the sustainable development in Malaysia. *Journal of Cleaner Production*, 61, 6-12.
- Garrad, G. (2012). Ecocriticism: the ability to investigate cultural artefacts from an ecological perspective . In: A. Stibbe (Ed.) *The Handbook of Sustainability Literacy: Skills for a changing world*. Cornwall: TJ International, pp. 19-25.
- Giam, X.L., Clements, G.R., Aziz, S.A., Chong, K.Y., Miettinen, J. (2011). Rethinking the 'back to wilderness' concept for Sundaland's forests. *Biological Conservation*, 144(12), 3149-3145.
- Gore, A., 2010. The crisis comes ashore: Why the oil spill could change everything. *The New Republic*, 10 June, pp. 10-12.
- Grunwald, A. (2007). Working towards sustainable development in the face of uncertainty and incomplete knowledge. *Journal of Environmental Policy & Planning*, 9(3-4), 245-262.
- Hammes, T. (2006). *The Sling and The Stone: On War in 21st Century*. New York: Zenith Imprint.
- Harper, G. (2012). Technology appraisal: The ability to evaluate technological innovations. In: Stibbe (Ed.) *The Handbook of Sustainability Literacy: Skills For A Changing World*. Cornwall: T.J. International, pp. 150-156.
- Hezri, A.A. & Dovers, S.R. (2013). Shifting the policy goal from environment to sustainable development. In: Hill, H., Tham, S.Y., Zin, R.H.M. (Eds). *Malaysia's Development Challenges: Graduating from the Middle*. London/New York: Routledge, pp. 276-295.
- Houghton, G. (1999). Environmental justice and the sustainable city. *Journal of Planning Education and Research*, 18(3), 233-243.

- Jucker, R. (2012). The sustainable self: A personal approach to sustainability education. *Journal of Education for Sustainable Development*, 6(1), 157-158.
- Katzschner, T. (2011). ESD to ESF (Education for Sustainable Development to Education For A Sustainable Future). In: J. Newman & P. Robbins (Eds.) *Green Education: An A-Z Guide*. California: Sage, pp. 160-166.
- Keegan, J. (2011). *The First World War*. Kent: Random House.
- Khan, R. (2010). *Critical Pedagogy, Ecoliteracy, & Planetary Crisis: The Ecopedagogy Movement*. New York: Peter Lang .
- King, K. & Palmers, R. (2009). Introduction. *International Journal of Educational Development*, 29, 115-116.
- Koh, L. (2007). Impending disaster or sliver of hope for Southeast Asian forests? The devil may lie in the details. *Biodiversity Conservation*, 16, 3935-3938.
- Liow, L., Sodhi, N. & Elmqvist, T. (2001). Bee diversity along a disturbance gradient in tropical lowland forests of South-East Asia. *Journal of Applied Ecology*, 38(1), 180-192.
- Maiteny, P. (2012). Finding meaning without consuming: the ability to experience meaning, purpose and satisfaction through non-material wealth. In: A. Stibbe (Ed.) *The Handbook for Sustainability Literacy: Skills for a Changing World*. Cornwall: TJ International, pp. 178-185.
- McNaughton, M. (2007). Sustainable development education in Scottish Schools: The sleeping beauty syndrome. *Environmental Education Research*, 13(5), 621-638.
- Marcinkowski, T., Hungerford, H. & Volk, T. (1990). *A Prototype Environmental Education Curriculum For The Middle School. A Discussion Guide For UNESCO Training Seminars On Environmental Education*. Available at: http://www.unesco.org/education/information/pdf/333_52.pdf [Accessed 28 July 2013].
- Mat Said, A., Ahmadun, F., Paim, L. H. & Masud, J. (2003). Environmental concerns, knowledge and practices gap among Malaysian teachers. *Environmental Concerns*, 4(4), 305-313.
- Ministry of Education Malaysia (MOE). (2012). *The Malaysia Education Blueprint*. Malaysia: Ministry of Education Malaysia. Available at: <http://www.moe.gov.my/jpnSarawak/v2/index.php/en/policies/malaysia-education-blueprint-2013-2025> [Accessed 30 July 2013]
- Naish, J. (2012). Optimisation: the art of personal sufficiency. In: A. Stibbe (Ed.) *The Handbook of Sustainability Literacy: Skills of a changing world*. Cornwall: TJ International, pp. 25-30.
- Nikle, J. & Lowe, J. (2010). Talking of fabric: a multi-dimensional model of quality in education. *Compare: A Journal of Comparative and International Education*, 40(5), 589-605.
- Orr, D. (2004). *Earth in Mind: On Education, Environment, and the Human Prospect*. 10th ed. Washington: Island Press.
- Parker, J. & Wade, R. (2012). EFA and ESD synergy: Taking forward the dialogues. In: J. R. Guevara, N. Yoshiyuki & S. Tomoko (Eds.) *Tales of HOPE III: EFA-ESD Linkages and Synergies*. Tokyo: Asia-Pacific Cultural Centre for UNESCO (ACCU), pp. 3-23.
- Primark, R. & Hall, P. (1992). Biodiversity and forest change in Malaysian Borneo. *BioScience*, 42(11), 829-837.
- Puteh, A. (2011). Education policy for globalization and multicultural society: The Malaysian experiences. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(5), 388-394.
- Quilley, S. (2012). Transition skills: Skills for transition to a post-fossil-fuel age. In: *The Handbook of Sustainability Literacy: Skills for a Changing World*. Cornwall: TJ International, pp. 43-51.
- Robertson, S. et al. (2007). *Globalisation, Education and Development: Ideas, Actors and Dynamics*. Available at: <http://www.dvv-international.de/files/aaaglobal-education-dev-68.pdf> [Accessed 21 May 2013].
- Rockström, J. et. al (2009). Planetary boundaries:exploring the safe operating space for humanity. *Ecology and Society* 14(2), 1-32.
- Rose, P. (2006). From Washington to Post-Washington consensus: The triumph of human capital. In: K. Jomo & B. Fine (Eds.) *The New Development Economics: After the Washington Consensus*. London: Zed Books, pp. 162-183.

- Sarabhai, K. (2010). An ethical framework for a sustainable world. *Journal of Education for Sustainable Development*, 4(2), 155-156.
- Sarjit-Singh, J. & Mukherjee, H. (1993). Education and national integration in Malaysia: Stocktaking thirty years after independence. *International Journal of Educational Development*, 13(2), 89-102.
- Schumacher, E. F. (1973). *Small is Beautiful: Economics As If People Mattered*. Michigan: Blond and Briggs .
- Selby, D. (2008). The firm and shaky ground of education for sustainable development. In: J. Gray-Donald & D. Selby (Eds.) *Green Frontiers: Environmental Educators Dancing Away From Mechanism*. Rotterdam: Sense, pp. 59-77.
- Sodhi, N. S. et al. (2010). Conserving Southeast Asian forest biodiversity in human-modified landscapes. *Biological Conservation*, Volume 143, 2375-2384.
- Steen, S. (2008). Bastions of mechanism- castles built on sand: A critique of schooling from an ecological perspective. In: J. Gray-Donald & D. Selby (Eds.) *Green Frontiers*. Rotterdam: Sense, pp. 228-241.
- Sterling, S. (1992). *Sustainable Education: Revisioning Learning and Change*. Bristol: J.W.Arrowsmith.
- Sterling, S. (2011). *Sustainable Education: Putting Relationship Back Into Education*. Available at: http://ecommunities.tafensw.edu.au/pluginfile.php/12139/mod_page/content/145/Stephen%20Stirling%20article.pdf [Accessed 12 July 2013].
- Stevenson, R. (2007). Schooling and environmental education: contradictions in purpose and practice. *Environmental Education Research*, 13(2), 139-153.
- Strachan, G. (2012). Systems thinking: the ability to recognise and analyse . In: A. Stibbe (Ed.) *The Handbook for Sustainability Literacy: Skills for a changing world*. Cornwall: TJ International, pp. 84-89.
- Symaco, L.P. (2012). Higher education in the Philippines and Malaysia: The learning region in the age of knowledge based societies. *Journal of International and Comparative Education*, 1(1), 40-51.
- The World Bank Group. (2013a). *Malaysia*. Available at: <http://data.worldbank.org/country/malaysia> [Accessed 20 July 2013].
- The World Bank Group. (2013b). *Turn Down the Heat: Climate Extremes, Regional Impacts, and The Case of Resilience*. Available at: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/06/14/000333037_20130614104_709/Rendered/PDF/784220WP0EnglI0D0CONF0to0June019090.pdf [Accessed 20 July 2013].
- Thompson, S. (2008). Environmental justice in education: drinking deeply from the well of sustainability. In: J. Gray-Donald & D. Selby (Eds.). *Green Frontiers: Environmental Educators Dancing Away From Mechanism*. Rotterdam: Sense, pp. 36-59.
- Tilbury, D. (2012). Learning to connect : reflections along a personal journey of education and learning for a sustainable future in the context of Rio + 20. *Journal of Education for Sustainable Development*, 6(1), 59-62.
- UNESCO. (2012). *Education for Sustainable Development: Mission*. Available at: <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/mission/> [Accessed 20 July 2013]
- Wals, A. & Bawden, R. (2000). *Integrating Sustainability Into Agricultural Education: Dealing With Complexity, Uncertainty and Diverging Worldviews*. Gent: University of Gent .
- Weesie, P. & Andel, J. (2008). An integrated framework for the instrumental valuation of nature. *The Journal of The Society For Ecological Restoration International*, 16(1), 1-4.
- Yieng, Y. & Hamzah, R. (2012). Intergrasi peranan falsafah pendidikan kebangsaan dalam pendidikan teknik dan vokasional ke arah memantapkan persiapan kerjaya (The role of national education policy in technical and vocation education for career preparation). *Journal of Technical, Vocational & Engineering Education*, Volume 5, 35-40.

ADVANCING LIFE PROJECTS: SOUTH AFRICAN STUDENTS EXPLAIN WHY THEY COME TO FET COLLEGES

Lesley Powell^a

Simon McGrath

University of Nottingham

ABSTRACT: Vocational Education and Training (VET) policy in South Africa is based on a narrow set of assumptions regarding the identity of learners and the reasons that they are in public further education and training (FET) colleges. These assumptions reflect an international orthodoxy about the centrality of employability that is located within what Giddens (1994) has described as “productivism”, a view that reduces life to the economic sphere. Through exploring the stories of a group of South African public FET college learners’ regarding their reasons for choosing FET colleges, this paper shows that VET is valued by these students for a range of reasons. These include preparation for the world of work, but also a desire to improve their ability to contribute to their communities and families; raise their self-esteem; and expand their future life possibilities. Thus, the paper advances the largely hitherto theoretical critique of productivist VET accounts by offering empirical evidence of counter-narratives.

KEYWORDS: Vocational Education and Training, South Africa, Further Education and Training colleges, employability

Introduction

The last decade has seen Vocational Education and Training (VET) moving to the centre of policies that aim to reduce unemployment and support social and economic development goals. As researchers and policy actors, we welcome this heightened interest in VET. However, we are also concerned that this new wave of interest in and optimism regarding VET is underpinned by a flawed theoretical understanding of VET’s purpose and value, particularly in developing contexts. Anderson (2003, 2009) describes the shared paradigm that dominates VET policy and practice internationally as “productivism”. Building on Giddens’ (1994) development of this concept, he argues that this paradigm is built on two interrelated assumptions: the first being that “training leads to productivity, [which] leads to economic growth (training-for-growth)”; and the second being that “skills lead to employability [which] leads to jobs (skills-for-work)” and thereby reducing poverty and unemployment (McGrath, 2012b, p. 624). Both these assumptions are challenged by a growing body of literature that highlights the problems with these accounts for human well-being (McGrath, 2012b; Powell, 2012). Indeed, this is a major thrust of UNESCO’s World TVET Report (UNESCO, 2013), which calls for a transformative approach to VET, that builds on but goes far beyond economic rationales.

Despite this, South African Further Education and Training (FET) college legislation, in line with VET policies internationally, is littered with the language of productivism. The FET Green Paper contains the word employment 26 times, whilst the word human potential or anything similar in meaning is mentioned briefly, and only once in the introduction. Terms such as “prepar[ing] learners adequately ... for productive employment” (DoE, 1998a), and ensuring that college learners “are provided with the skills they need to be productive” (DHET, 2012) abound in key policy texts.

^a Correspondence can be directed to: ttzlp@nottingham.ac.uk

As with other middle income countries, the South African policy narrative for FET colleges, which are institutions located at the crossroads between school and the world of work, is that they are to fuel economic development by providing the intermediate to higher level skills needs of industry. The Green Paper on Further Education and Training 1998 provided the central purpose of FET colleges as “contribut[ing] to the envisaged economic growth of the country” (Department of Education, 1998b, p.2). More recently, the 2012 Green Paper for Post School Education and Training, talked of expanding participation in order that “those entering the labour market are qualified and competent to take up the employment and income generating opportunities that exist and that will exist as the economy grows and changes in the future” (DHET, 2011, p. viii). While this is softened in later pages by the recognition of “other developmental and transformative goals”, the overall emphasis of South African FET policy is on preparing learners for employability by developing an education and training system that is responsive to “the needs of both employers and learners in a fast-changing economic and industrial environment” (DHET, 2012, p.7).

Simultaneously, the FET colleges are to address increasing levels of unemployment, particularly youth unemployment and growing poverty by expanding access to relevant and high quality education and training that prepares learners for employability. This has led to a focus on expanding participation in public FET colleges, from the current 300 000 to 1.4 million learners by 2014, and 4 million by 2030 (DHET, 2012). As part of the drive to increased enrolment, concerns about colleges’ unattractiveness, and a desire to make public FET colleges ‘institutions of first choice’ (DoE, 2007) have become paramount.

Yet, very little is known about why students enrol at these colleges and even less from the perspective of learners. It is assumed that learner voices are not important as it is “obvious” what learners want – jobs now. This article problematises both the assumptions of South African policy and the dominant academic literature by taking the time to listen to the reasons given by South African FET college learners for their participation in FET colleges. This is not a story of choice, as is commonly portrayed in the literature as deciding between different pathways or institutions. Rather, it is about how they conceive of VET as a way of advancing their “life projects” (Archer, 2003). This process of listening to the learners uncovers a tension between their accounts and the orthodox productivist account. In critiquing the latter, we follow Anderson in noting that productivism has served to separate “work as the principal, if not exclusive, source of meanings and measure of value for human beings” (2003, p. 4) from other domains constitutive of human well-being and a valuable life (cf. Unwin, 2004; McGrath, 2012b). When the productivist logic is extended to VET, it assumes that students participate in VET purely to achieve the aptitudes and attitudes required for work. This generates a singular emphasis on a narrow “initiative” version of employability (Gazier and Houneman, 1999), which leaves little room for the role that education and training plays in preparing young people for the challenges and opportunities that they will face in their families, their communities and their workplaces.

Reviews of the research literature on South African FET colleges note that students have been much neglected (Powell, 2013; Wedekind, 2009). Students have largely been spoken for by large quantitative studies that focus on aggregate patterns of student enrolment (Powell and Hall, 2000, 2002, 2004; Cosser et al, 2011) or graduate employment (Cosser, 2003; Gewer, 2009). One exception is the qualitative studies undertaken under the auspices of the Colleges Collaboration Fund (CCF) in the late 1990s and early 2000s that drew on focus group interviews to determine the institutional capacity for transformation (Fisher et al., 1998; Jaff 2000). Another study, albeit an exception by default, were the letters received by the Human Sciences Research Council (HSRC) during a study surveying student destinations. In that study, students were asked to return their survey to the HSRC, and a few students took it upon themselves to include a letter providing further explanation of their experience in FET, and their opinions of the labour market (Cosser, 2003, p.102). “Please Mr Cosser”, wrote one of these students, “help us to be heard because we (college students) are just whispering and searching in the dark” (Cosser, 2003, p.90). The letters submitted by these students were not a

designed aspect of the project, but an unintended consequence thereof. Nonetheless, they express poignantly the deep desire by the learners 'to be heard', a desire to which this paper responds.

This need for learners to be heard is not just a South African issue, but one that relates to a wider international tendency in the academic as well as policy literature. Only a small body of international literatures exist that draws on students' perspectives. These include a literature on (1) pathways into, through, and out of VET (e.g., Hodgkinson, 1997, 1999; Ball, Maguire and Macrae, 2000; Harris and Ramos, 2012); (2) students' perspectives on policy (e.g., Avis, Bathmaker and Parsons, 2002; Bidgood, Saebi and May 2006; Tanggaard, 2013); and (3) students' constructions of themselves (e.g., Colley et al., 2003). However, none of these literatures have explicitly sought to understand students' motives in terms of the broader life projects that students believe their participation in VET will serve to further. Moreover, African literatures of this kind are missing.

The predominantly quantitative literature on South African FET colleges offers three characteristics. The first is that FET college learners come from 'poverty-stricken family environments' (Gewe, 2009, p.x). Within this construct, the poverty experienced by many vocational learners; their limited social, economic and educational resources; and the social stratifying effects of the academic-vocational divide, are all equally important. However, with this construct comes a tendency to downplay the agency of learners who manoeuvre, consciously deliberate and negotiate, both within themselves and together with others, the best option forward. Whilst accepting the impact of structural effects, we followed Ball, Maguire and Macrae (2000, p.18) in seeking to "avoid portraying the[se] young people as simply victims of their circumstances or pathologising – 'othering' – them".

The second characteristic is the assumed poor academic performance of the learners, reinforced by the assumption that these students have comparatively lower intellect as compared to those who have gone on an academic track. The South African version of this international phenomenon was strongly shaped by the history of colonialism and Apartheid which linked VET "with issues related to indigence, social and educational inferiority, and mental backwardness" (Badroodien, 2004, p.21). Rather than emphasising in VET "the importance of individual development and the ability to choose a satisfying occupation" (Winch, 2000, p.31), it has been perceived as providing instrumental training for lower paid and lower skilled work. Although we acknowledge the real and perceived structuring effects of VET, following Rose (2004, p.xviii), we argue that "the way we talk about it [intelligence and work] matters" as it shapes "the way people are defined and treated in the classroom, the workplace, and in the public sphere" (2004, pp.xiii-xvii).

A third characteristic of VET learners, dominant in the wider African VET literature, is that learners avoid VET in favour of an academic education (Foster 1965a, b). This tradition, based on surveys done by Foster in the late 1950s, argues that parents and students regarded VET as terminal in nature and that it prepares learners for unemployment or for work that is repetitive, boring and underpaid. This assertion is bolstered by rates of return analysis (e.g., Psacharopoulos, 1991) that purport to show that these attitudes are not prejudices but a rational economic reading of the returns to vocational as opposed to academic education. Whilst such data is hugely outdated and has been subjected to widespread critique, the reality appears to matter very little. What is clear is that the perception of a "parity of esteem" issue continued to be widespread (see Minister Nzimande, 2009).

Besides the dominant strands of literature on learners mentioned above, another strand of South African writing related to FET colleges exists, but this too does not engage with student voices. Rather, it is a political economy account of the way that policies and practices fail to make a meaningful difference in a context of major structural effects (e.g., McGrath, 2004; Kraak, 2008; Allais, 2012). We are very aware of the ways in which the histories of colonialism and Apartheid and the historical processes of engagement with, and disengagement from, global capitalism have shaped the South African labour market and, hence, skills development. However, our purpose here is to go beyond this literature, which is limited in its sense of the possible ways in which learners understand these structural obstacles and the ways in which they seek to make agentic moves that tie into their aspirations for a better life.

The dominating effect of the combined quantitative and political economy accounts has restrained South African VET researchers from grappling with the complexity inherent in the choices that learners actively make to participate in public FET. The result is that we have almost no understanding – and none from the lived experience of students – of why students are in FET. In starting to develop such an understanding, this paper breaks significant new ground, not just in the specific context of South Africa but in the wider context of debates about VET and development. It complements the theoretical arguments of recent articles (McGrath, 2012b; Powell 2012) and the transformative thrust for VET policy advocated by UNESCO, but this paper goes a step further by engaging seriously with learners' voices.

To do this, the article draws on one strand of a series of repeat interviews with 20 students and graduates drawn from various programmes and campuses of one public South African FET college, undertaken for Powell's doctorate. The study did not attempt to achieve representivity. Rather it drew on a wide cross section of students across ten programmes who after being presented with the details of the study elected to participate. As a part of the first interview session, students were asked to reflect on their reasons for enrolling at the college. We were interested in finding out what was important to them and how they believed enrolling at the college and in the specific programme area would help them achieve their life project(s). Here we follow Archer in seeing a life project as "an end that is desired, however tentatively and nebulous, and some notion, however imprecise, of the course of action through which to accomplish it" (2003, p.6). We were aware that structural constraints impacted on the lives of these learners but wanted to move beyond the over-structured stereotypes of learners presented above which tended to deprive students of agency and ignored the practical projects that individuals subjectively define in relation to their structural circumstances. In reflecting on why students elected to enrol at the FET college, we know that their choices were often fallible and their agency constrained. However, these are not our prime concern. Rather, we wanted to acknowledge students' individual and highly subjective 'constellation of concerns' (Archer, 2003) and the specific life projects that led them to see public FET colleges as a viable route for them.

In what follows, we do not seek to offer a richly theoretical account. Though Powell's thesis suggests how critical realism and the capabilities approach can offer a valuable new way of thinking about VET (Powell, 2014), our intention here is to offer stories that implicitly talk back to the dominant account, but to do so by privileging learner voices over theoretical debates. Nonetheless, we will come back to the theoretical significance of the article in the final section.

Public FET Colleges Advancing Individual Life Projects

All respondents shared the overriding hope that enrolling at the college would provide the education and training (or at least a part thereof) required to live a good life. Respondents differed though on what they considered this 'good life' to be. Rewarding and fulfilling employment was seen by all the respondents as fundamental to achieving this good life and was common to all their motives for enrolment. However, 'rewarding' and 'fulfilling' was conceptualised variably as: (1) the ability to work in an area in which they excelled; (2) contributing to their community; (3) being self-employed; and (4) securing work in a large corporation. Beyond the need to learn and to study further, students provided eight reasons for their college enrolment, five of which are emphasised for discussion in this paper. These reasons were complexly arranged. Some stressed multiple and equally important reasons; others a sole reason; whilst others still clearly ranked various reasons. In exploring this complexity, we have attempted to draw on students' voices as much as possible. However, it is important to note that the use of quotations and biographical details from any particular learner under certain headings neither denotes it as their sole reason for enrolment, nor does it signify that it may not be a shared sentiment among the learners.

“A lot more hands on”: College as Offering a Better Learning Model

At 18, Sinazo (all names are pseudonyms) has passed her National Certificate Vocational (NCV) level 4 in Business Management at the FET college and was enrolled, at the college, for a Nated programme in Finance, Economics and Accounting. Sinazo was encouraged to enrol at the FET college by a college recruiter who visited her school. At that time she attended a highly rated school but was attracted by the idea of a programme that mixed theory and practice and that was “a lot more hands on” than school. Sinazo’s mother, a domestic worker who had not completed high school herself, agreed to her enrolment only after being assured that this would not limit Sinazo’s ability to enrol for university study in the future.

Sinazo’s attraction to the hands-on aspect of college programmes was driven by her desire to work in the finance sector, preferably in a large company, and to be financially independent in the future. Her life project is to “have my own house ... not sure where, but somewhere peaceful” and to “live together with my mother”. Like most other students in the sample, Sinazo was raised in a single parent household and feels strongly that she would “love [for her] mother to come and live with [her]” so that she can “take care of her” when she is old.

Like Sinazo, Andile decided to attend the college after a college recruiter visited his school. Without parents to consult, he sought guidance from a school teacher who advised him that going to the college is a chance “to start now for [your] dreams” rather than defer this to after Grade 12. Based on the information provided by the college recruiter and his teacher’s guidance, Andile decided to leave school after Grade 9 and to enrol at the college for the NCV in Mechanical Engineering. Andile believed that the combination of theory and practice offered at the college would help him achieve his ambition of being accepted for, and then successfully completing Mechanical Engineering at a local technical university.

Sinazo’s and Andile’s cases contradicted the impression that FET college students would rather have an academic education. There were no social, economic or academic push factors prompting either Andile or Sinazo to leave school. In fact, Sinazo left school to enrol at the college despite her mother’s initial opposition. In fact, in terms of academic performance, both students reported doing reasonably well at school. While on average, Sinazo scored Cs for all her subjects, Andile scored an average of a C+ with an occasional B, particularly in pure maths and physical science.

For both these students, the movement to the FET college was a calculated and strategic decision designed to take their respective life projects forward more effectively than attending school would have been able to. Sinazo’s life project was that it would enable her to move into a business context with the ‘hands on’ experience required to succeed therein, whilst protecting her long term ambitions for university. As for Andile, he aspires to enrol and succeed in a mechanical engineering degree.

“I went with the wrong crowds”: College as a Space for Rehabilitation

Unlike Sinazo and Andile, who were pulled into college, Francois and Aisha were pushed into college to get away from the negative influence of peers. Aisha described herself as becoming delinquent by mixing “with the wrong crowds”. Hearing about the college from a family member, Aisha’s mother brought her to the college to have a look around. At first glance Aisha was unconvinced and “told [her] mommy, ‘no matter how nice the college looks I’m still not going to attend it because I want to be at [my old] school’”. But upon further inspection and interaction with the college staff members, “it got [her] thinking”. In light of the high numbers of unemployed school and university leavers, she decided that college might be a practical choice for her as it would allow her to study masonry which, in turn, would make it possible for her to “hook into a job [with her] aunty and them [who] have their own company”.

In another case, Francois was addicted to 'tik' (crystal methamphetamine). His enrolment was prompted by his need to get away from his drug using peer group. He was one of the four students (25%) who spoke of the effect of personal drug or alcohol use, and one of 14 who live in or near areas severely affected by drugs and gangsterism. As said by Francois, "the only people that I knew were those people, because there weren't really much other people. Then I started hanging out with them and then I got influenced". After spending time in rehab he decided that it would be best to not return to the school again:

Using drugs ...that became a big mistake in my life because due to that, that's also why I failed at school. I failed one of my grades. That was grade nine. Then I went back and redid it, but it was quite challenging for me because everybody that I used to know were still at the school. So, I had to totally block myself from everybody.

Francois has now graduated from the NCV programme, been drug free for over three years, and is happily in full-time employment doing work that he finds rewarding. He is currently enrolled part-time on a N5 programme at the college in the same discipline with financial support from his company.

For both Aisha and Francois, the need to distance themselves from their delinquency had important consequences for their educational path, and the choices they made therein. In both cases the FET college provided them with a viable route forward.

"I like to work with my hands": College as a Route to Artisanal Work

Thomas was the only white student who participated in the study. 30 years ago the campus site at which Thomas is currently enrolled catered mainly for young white South African men who had completed their military service. Like the rest of the FET college sector in South Africa, black students are now the majority on campus.

However, for Thomas coming to the college was a personal choice as his father trained to be a fitter and turner at the same campus 45 years ago. Thomas came to the college after completing his Grade 9 as he "wanted a technical matric". Following in his father's footsteps, he enrolled for a NCV in Fitting and Turning. Thomas's sees his father's life as an artisan as having been successful as he progressed to management level in a large company, enabling him to secure a middle class life for his family. Thomas aspires to the same trajectory of work and life. He described the college as "the best place for me" as it "works at my pace and it just works out for me".

Similarly, Jorge decided prior to enrolling at the college that he would like to be a mechanical engineer. He represents one of five students in this study (25%) who came to the college because they decided to work in a particular trade. Jorge's decision was influenced by his grandfather and step-father.

My grandfather, he used to work on cars, so that inspired me a lot as well and my step dad as well. He's a technician. So he showed me all the things I need to know about the computers, software and everything. So then I got more pleasure from that so I said, 'okay this is the field that I want to go into'.

Previously Jorge was studying at a highly rated school and enjoyed the sporting facilities at the school, particularly for playing rugby and soccer. He indicated that his real ambition had been to pursue a career in professional sports, but his family was against the idea so he opted for mechanical engineering instead. His long-term goal is to work offshore on a rig working on large machinery. Jorge described his school grades as "good, it was just my Afrikaans wasn't so good but my grades were really good". He has successfully completed his NCV in Mechanical Engineering, and is now employed full-time while being enrolled part-time at a different college for his N5 in Mechanical

Engineering. Having discovered that these programmes were not discontinued, as he was informed, he regrets in retrospect that he did not complete Grade 12 and says that, “if [he] knew [that he] would have just finished that one year and then gone on to do my N4”.

In support of employability accounts, both these learners shared a common desire to obtain the education and training needed to access suitable work in their chosen fields. For them, VET can advance their life projects, as it is the route to their chosen occupations.

“I was getting paid as a boy”: College as a Route to Career Mobility

Seven years after Jacob left high school he returned to full time education at the college for a NCV in Electrical Infrastructure Construction. Contrary to the findings of Middleton, Ziderman and Adams (1993) who argue that youth do not aspire to VET, the opportunity to study at the college was “a dream come true” for Jacob. In his early years, he lived in an area that Lemanski (2009) describes as “virtually derelict”, which was occupied by people “squatting in the non-serviced informal settlement” and those who are homeless (2009, p.10). At that time, he regularly travelled past the college which during Apartheid excluded black students and catered then only for white students and decided that “[he is] going to come to this college” one day. The historical exclusion under apartheid of black students from technical training made this a college to which he aspired to be in.

Jacob’s decision to study at the college was prompted by his experience in a big company that he worked in prior to enrolling at the college. He worked as a senior technician, but did not earn a commensurate salary, nor enjoy the appropriate status. After three years at the company and having a salary increment and an advance in job title only once over his three years tenure, he realised that he would need to study further in order to progress beyond “getting paid as a boy”, as he put it. Realising that “it [was] either working for this company for the rest of [his] life, slowly growing or [leaving and going to study and] growing at a decent pace”, he gave his notice and enrolled at the FET college.

Similarly, Alfred was triggered to enrol by the way that he was treated in his job. As an assistant chef in a large catering company prior to enrolling, he felt that he was being treated as “just a boy” by his supervisor.

My one supervisor, this lady was, she’s also, ok, I don’t want to be racist, but she is also white and she was the head-chef in the kitchen. She was like treating me also like, okay, you just working here, you’re just a boy. You must just do this and do that. And I didn’t really like it, but I had to do it... that was all things that made me realize that I need to come to FET or somewhere. I need to go and study, doing this course ... this hospitality course.

Both came into the college with a sense of vocational aspiration and a need to develop their identity. Alfred had studied hospitality at a high school where catering talent competitions were held. His initial plan was to complete Grade 12 and then to enrol in the Professional Cookery skills course offered at the college, but he was forced to drop out of school due to his father’s demise. As said by Alfred,

[I had to leave school] because my dad died, nobody had work. My mom was the only person that could work, and I had a small brother that time, so I had to go look after him, take care of him. So that’s why [I left school].

When he first tried to enrol in the hospitality programme, he was initially unsuccessful as it was already full. Rather than undertake a different programme, he waited for another year and was successfully admitted. Conversely, Jacob’s decision to enrol in the NCV for Electrical Infrastructure Construction was shaped by his experience with electrical work which was introduced to him by his uncle, a line of work which he soon “started to love”. He regards himself as having a special talent for fixing things, a talent that was recognised and acknowledged by his family members.

I love messing with electrical equipment ... anything that I can fix, I fixed. I try to. I still do it at home. My aunt or my mom them bring something and only if I can't fix it then they declare it broken.

Both Alfred and Jacob had to weigh up the benefits of leaving paid employment to enrol in full-time study. Applying their human powers of reflexivity, they deliberated and reflected on the circumstances of their work environment and decided that the work that they were doing was under-paid and under-valued. Most importantly, they “figured that this is how it is if you don't have papers [qualifications]”. As said by Alfred,

I realised that if I'm not that qualified, this is what I'm gonna do and this is how I'm gonna suffocate. ... people treat you like they want to, you must do this, you must do that, go there, go here, do this, do that. You must be satisfied if you're not qualified and you want to work.

The decision to leave work for study was not an easy one for both learners. Jacob had left home at a young age and was at the time of the interview living on his own and had to be self-sufficient. Alfred, who lives in a family vulnerable to poverty, faced similar concerns as leaving full-time employment would mean sacrificing an income for the household and, in doing so increasing the risk of dire poverty for the entire family.

Deviating from Jacob who was encouraged by his fiancé to take the leap, Alfred grappled internally with the problem in the initial stages. As he said, “I realised I need to go and study further and that was always a thing in the back of my mind ... you need to go, you need to go” and he kept asking himself in light of the structural constraints affecting him and his family, “So how am I gonna do it?”. After discussing the problem with a friend, he was encouraged to “go and do [his] studies” despite the opportunity risks discussed above. This became an event which Alfred denoted as a turning point in his life.

In both cases, strong structural circumstances shaped these students' lives prior to their enrolment in the FET college. For one, both grew up in poverty and in single parent households. In addition, both experienced difficulties completing their schooling. Jacob attempted to make up for this by completing his schooling part-time and prior to enrolling at the college by enrolling in another short course. However, despite their circumstances, both these young men have managed to go beyond the education level of their families and communities. As said by Jacob, “I'm the first one out of the lot who is studying, either side, from my mom's family and my dad's family”. In doing so, both these young men are trying to circumvent the structural constraints in which they grew up in. Having left employment to enrol at the college, they are aware of the risk at which they have placed their families and themselves in, yet it is a risk they deem worthy of undertaking. As said by Alfred,

People know ... if you live ... in xxx, where I live, people normally don't see you come out on the top standard ... our environment where we live, isn't such a good environment.

Against the backdrop of a racially defined labour market, both Jacob and Alfred are concerned not only with employment that is sustainable and that pays a decent salary, as employability accounts would have, but also with working in environments that are respectful. But they are also both ambitious and concerned to make a wider contribution. Alfred aspired to becoming one of the top pastry chefs in his area. But another, and equally important aspect for him, is to become “something in life”, and getting “qualified to become something in this country also, [so that you can have the ability] to contribute”.

Additionally, they were committed to helping their families. Jacob indicated that, “[he] want to make sure that [his] kids or the kids of the next generation would have an easier life or better

life to what I have”, while Alfred spoke of supporting his younger sibling with his education. Beyond that, both were committed to wider social responsibility. As said by Alfred,

[I want] to help people with their struggles and to encourage people. They need to know that they are not the only persons who always have problems and that other people also have problems and they can do it [educate themselves], because I did it.

Similarly, Jacob echoed these sentiments by saying,

I don't want to be rich, I don't want to be. I just want to be healthy and wealthy enough to take care of myself and my family. I'm not a greedy person I don't want everything in the world. But I want to know that I can bring to my country or to my place of work, I can bring with me energy, I can bring with me ideas of how to change.

“I had to take responsibility and upgrade myself”: College as a Vehicle for Meeting Familial and Community Responsibilities

At 38, Daphne is the oldest student in the college’s NCV Business Management programme. Regretting her decision to “drop out [of] school at a young age”, her decision to enrol was part of a long-term commitment to her education. It began when she strived to complete her schooling part-time while looking after her three children.

After being a housewife for over a decade, there were two key factors that prompted her to enrol at the college. Firstly, her husband was unemployed and the family was struggling financially with the absence of a breadwinner in the family. Secondly, her daughter had failed her Grade 12 examination and, having become a young mother at the same time, was demoralised about returning to education and about the possibility of making a success of her life. Under these circumstances, Daphne wanted to set an example for her daughter and husband and at the same time was hoping to re-enter the labour market, an act that would allow her to contribute financially to her family. As Daphne mentioned, when talking about her daughter,

I can be big example for her because she can see like I was, dropped out at like a young age. And here I am trying again.

Daphne indicated that one of her biggest challenge in life was her low self-esteem, which was described as a result of “the way we’re brought up ... the [physical] ... and alcohol abuse at home”. Besides encouraging her husband and daughter, enrolling at the college was an enormous opportunity for her to develop her self-esteem. As shown below, it provided a special opportunity for her to transform her own life;

I had like a low image of myself ... I was like, I can do nothing ... I can just be a housewife. But everything changed, the day I believed in myself, accepted myself, everything changed.

Daphne believed that having a low self-esteem is common amongst black women who “think they cannot do it, [in terms of their education] and that they cannot do something for themselves”. She is hoping that the business management skills gleaned from her NCV programme will prepare her for employment in a position that would enable her to encourage other women facing similar financial constraints. More importantly, and with her family on the verge of destitution, she is hoping that her achievements will encourage her family to be more positive about their outlook in life.

In another case, Lubabalo was also prompted to enrol due to his desire to be a better parent and to transform his life. Previously he had worked as an unqualified assistant to a cabinet maker,

but when he became a father he was prompted to “make a change” in his life. He realised that he “would have to take [up] a career”:

I reached a point in my life whereby I wanted to make a change and I realised in order for me to make a change, I must undergo some training in what I enjoy doing, which is working with my hands. I had to take responsibility and upgrade myself.

Lubabalo has made a conscious choice to work with his hands, driven by his religious views. He argued that working with your hands is not only spiritually fulfilling, but it assures that you’ll always have work as others prefer to “sit behind a desk and do this and press that and answer the phone” rather than “build the building to work in, or make the table to work on”.

Initially, Lubabalo’s preference was to enrol in a boat-making programme offered at another campus, but he was deterred by the additional daily travel costs. Therefore, he chose to enrol in an alternate course, that is, the NCV Engineering & Related Design: Fitting. As was the case with Daphne, Lubabalo’s aim was broader than accessing the skills required for employment. In both cases, it was evident that the need to set an example for others, particularly their children, became a big motivating factor that triggered their enrolment. Lubabalo realised that, as a father, he would need to set an example and provide for his son. While for Daphne, being confronted with her husband’s and daughter’s loss of confidence, had prompted her into action in the attempt to them that it is possible to pick your life up at any point and transform it for the better. While productivist thinking focuses on the skills needed for economic growth, and on the importance of employment, Daphne’s motive are focused on her family and on community development.

In a related case, Makukhanye’s motivation for enrolling at the college was to be prepared for work through the adoption of the shortest and most secure route. Reading about the college for the first time from a magazine, he decided that it would be better for him to leave high school and to enrol at the college for a NCV in Finance, Economics and Accounting because “[he] thought that it will help [him get] ready for the workplace”.

However, Makukhanye’s aims are broader than accessing skills for employment. Rather, employment is a means to achieve “a better living standard” in order to help support his family:

I must do something to help as well, to help with the children, the schooling. I must give something back to them. I mean, they [his family] have not told me so, but I know that is how it goes. You can’t receive all the time and expecting and not giving anything out. It’s an inner thing, it is not supposed to be said to you, but it’s what you know [to be right].

“Here by default”: College as a Bounded Choice

The stories above give a sense of agency, even if this is profoundly shaped by past life histories and by socio-economic circumstances. However, for some of the learners in the sample, even this level of agency seemed unattainable. Whilst not the primary focus of this paper, we must acknowledge the realities of this group of interviewees.

In one case, we had Warren whose grades had allowed him to pass his school leaving examinations but not enough to get him into higher education. He spent a year “looking, looking, looking for work” and “got so frustrated” that his fiancée persuaded him to enrol. Encouraged by the fact that he can cook, they decided that he should enrol for catering. Along with Siyaya, another interviewee, who also completed his school leaving examinations with grades too low for higher education, they form part of an estimated half million young South Africans who had completed Grade 12 without having the grades or subjects required for higher education. Along with these half million youth, they are part of a larger group of 2.8 million young South Africans who policy makers have termed NEET (Not in Education, Employment or Training) (Cloete, 2009).

Apart from the reason above, there were others for whom the college was a bounded choice. Sharon and Carol both had the grades for university but couldn't afford the fees. Carol explained that she was at the college "by default" as she had left employment where she was hoping to save up the money for higher education study and lacking any other plan decided to enrol at the FET college. Whereas for Mulhim, a wheelchair user, the college was the most viable place for further learning, both in terms of its accessibility and its inclusive approach.

Conclusion

The findings of this article suggest that the orthodox position taken on why young people enter FET in South Africa (but also internationally) is profoundly limited. Drawing on the voices of students exhibited in the sections above, we see three messages emerging.

First, the findings challenge the stereotype prescribed to VET students that has dominated much of the literature. The idea that college students choose FET colleges because they recognise that they are unable to cope with the academic rigours of schooling was challenged by the experience of several students. Indeed, contrary to the literature that sees VET in Africa as second choice, and second best (Foster, 1965a and b; Psacharopoulos, 1991 and Oketch, 2007), half of this study's interviewees actively chose to leave 'academic education' to enrol at the FET college.

Second, the findings highlight the limitations of productivist accounts which portray these students as empty slates enrolling in FET colleges in the anxious hope that they will be filled with the skills needed to become productive future workers. While it is clear that learners seek to prepare themselves for the world of work, we are reminded that learners enrol in VET for much more complex and varied reasons than the orthodoxy acknowledges (cf. Unwin, 2004 in the British context). They come into VET as daughters wanting to financially support their families; as fathers wanting to be an example to their daughters; as workers wanting to upgrade their skills; as community members wanting to encourage other members of their community, and for other reasons besides.

Third, and most importantly for our immediate purposes, it shows that at least some FET students, in contrast to the orthodox account, are active and deliberately engaged in electing to study at a FET college. This is not an attempt to argue away the social constructs embedded within the curriculum, location and structure of FET or to deny the social constraints that face the learners and the communities in which they live. Rather, it is an attempt to highlight the agency of these learners and the manner in which learners experience, participate and respond to the structural circumstances of their lives. These students are enterprising in the face of structural circumstances. They are choosing between school and college; between staying at home and enrolling at the college. They are electing to leave employment in order to study at the college and then choosing for all the reasons that matter to them, the programme areas that they enrol in. In some cases, decisions appear to us to have been made fallibly, reflecting both misunderstandings of the complex policy changes and HE admission practices by learners and/or the college, and sometimes due to misinformation from the college. These learners are, as Bynner et al. (1977) argued, "getting on" and "getting by" and only the future will tell if they are getting somewhere or "going nowhere".

In this article, we have been determined to highlight learners' voice and agency. This is not an attempt to deny structural factors. Rather, our intention here is to deliberately challenge a limited orthodoxy that consistently underplays learner agency. This led us to the strategic decision to downplay structure's role, although we remain mindful of its power. Structure was present across the transcripts. The learners spoke of poverty, the persistence of race in labour market stratification, the effects of single parent families, inequalities in access to quality schooling, and the challenges of living in areas rife with drugs and gangsterism. Their lives are powerfully shaped by the legacies of an Apartheid-defined racial geography that forces many into a localism shaped by issues of cost, time and safety of travel (McQuaid, Green and Danson, 2005) that requires some to travel considerable distances to the college.

These college students are real people with real needs and aspirations. Many have been affected by poverty, have made poor choices, or have not realised their full educational and human potential. But they have made choices, often in thoughtful and principled ways, and according to life plans that they have reason to value. They do not conform to the stereotypes of the orthodox literature and we argue that VET theory, policy and practice should build from their lived experiences rather than on fallacies and two dimensional simplifications about them. As the Nigerian novelist, Adichie (2009) reminds us, there is a danger in a single account:

There is a danger in the single story ... a single story creates stereotypes, and the problem with stereotypes is not that they are untrue, but that they are incomplete. They make one story, become the only story.

By refusing the established single story, this article offers an important step towards a deeper account of why learners choose VET, for choose it many do. It adds empirical support, though from a limited sample from a specific context, to more theoretical and policy-oriented accounts that seek to stress that VET is, and must be seen as being about ways of building human well-being that incorporate but go far beyond employability and economic rationales.

Notes

Our gratitude goes to the principal and the staff of the college at which the study was based and to the students who shared so much of their lives.

References

- Adichie, C. (2009). *The Danger of a Single Story*. Available at: http://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story.html [Accessed 1 October 2009].
- Allais, S. (2012). Will skills save us? Rethinking the relationship between vocational education, skills policies, and social policy in South Africa. *International Journal of Educational Development*, 32 (5), 632-642.
- Anderson, D. (2003). Productivism, VET and ecological sustainability. Paper presented to The Changing Face of VET, 6th Annual Conference of the Australian VET Research Association, Australian Technology Park Conference Centre. 9-11 April, Sydney.
- Anderson, D. (2009). Productivism and ecologism: Changing discourses in TVET. In J. Fien, R. Maclean, & M. Park (Eds), *Learning and Sustainable Development: Opportunities and Challenges*. Bonn, Germany: Springer, pp.147-162.
- Archer, M. S. (2003). *Structure, Agency and the Internal Conversation*. Cambridge: Cambridge University Press.
- Avis, J., Bathmaker, A., & Parsons, J. (2002). Communities of practice and the construction of learners in post-compulsory education and training. *Journal of Vocational Education and Training*, 54(1), 27-50.
- Badroodien, A. (2004). Technical and vocational education provision in South Africa from 1920 to 1970. In S. McGrath, A. Badroodien, A. Kraak & L. Unwin (Eds.), *Shifting Understandings of Skills in South Africa Overcoming the Historical Imprint*. Pretoria: HSRC Press, pp.20-45.
- Ball, S., Maguire, M. & Macrae, S. (2000). *Choice, Pathways and Transitions Post-16: New youth, new economies in the global city*. London: Routledge Falmer.
- Bidgood, P., Saebi, N., & May, S. (2006). Influences on student withdrawal from further education: a case study. *Journal of Vocational Education and Training*, 58(2), 223-236.
- Bynner, J., Ferri, E., & Shepherd, P. (Eds.). (1977). *Twenty-Something in the 1990s*. Aldershot: Ashgate.
- Cloete, N. (2009). *Responding to the Education Needs of Post-School Youth*. Wynberg: Centre for Higher Education Transformation.

- Colley, H., James, D., Tedder, M., and Diment, K.. (2003). Learning as becoming in vocational education and training : class, gender and the role of vocational habitus. *Journal of Vocational Education and Training*, 55(4), 471-498.
- Cosser M, Kraak, A., Winnaar L., Reddy,V., Netshitangani T. and Twalo, T. (2011). *Further Education and Training (FET) Colleges at a Glance: FET Colleges Audit*. Pretoria: Human Sciences Research Council.
- Cosser, M. (2003). Graduate tracer study. In M. Cosser, S. McGrath, A. Badroodien, & B.Maja, (Eds.). *Technical College Responsiveness: Learner Destinations and Labour Market Environment in South Africa*. Cape Town: HSRC Press, pp.27-55.
- Department of Education. (1998a). *Further Education and Training Bill*. Pretoria: Department of South Africa.
- Department of Education. (1998b). *Green Paper on Further Education and Training: Preparing for the twenty-first century through education, training and work*. Pretoria: Department of Labour.
- Department of Education. (2007). *FET Colleges: Institutions of First Choice*. Pretoria: Department of Education.
- Department of Higher Education and Training. (2011). *Green Paper for Post School Education and Training*. Pretoria: Department of Higher Education and Training.
- Department of Higher Education and Training. (2012). *Green Paper for Post-Secondary Education and Training*. Pretoria: Department of Higher Education and Training.
- Fisher, G., Hall, G., & Jaff, R. (1998). *Knowledge and Skills for the Smart Province: An agenda for the new millennium*. Johannesburg: National Business Initiative.
- Foster, P. (1965a). *Education and Social Change in Ghana*. London: Routledge and Kegan Paul.
- Foster, P. (1965b). The vocational school fallacy in development planning. In C.Anderson & M.Bowman (Eds), *Education and Economic Development*. Chicago: Aldine.
- Gazier, B. &Houneman, S. (1999). Employability: an evolutionary notion, an interactive concept. In B. Gazier (Ed.), *Employability*. Berlin: European Employment Observatory Research Network, pp.3-23.
- Gewer, A. (2009). *Features of social capital that enhance the employment outcomes of FET college learners*. Unpublished PhD thesis. University of Witwatersrand.
- Giddens, A. (1994). *Beyond Left and Right*. Cambridge: Polity.
- Harris, R., & C. Ramos. (2012). The one less travelled: adult learners moving from the academic sector to the vocational sector in Singapore and Australia. *Journal of Vocational Education and Training*, 64(4), 387-402.
- Hodkinson, P. (1997). Contrasting models of young people's career progression. In J. McNielle (ed.) *Careers Guidance: Constructing the Future*. Richmond: Trotman/Institute of Careers Guidance, pp.3-13.
- Hodkinson, P. (1999). Use of habitus, capital and field in understanding young people's career decision making. In M. Grenfell & M. Kelly (Eds.), *Pierre Bourdieu: Language, Culture and Education*. Bern: Peter Lang. pp. 259-269.
- Jaff, R. (2000). *A Situational Analysis of FET Institutions*. Johannesburg: National Business Initiative.
- King, K. (2012). The geopolitics and meanings of India's massive skills development ambitions. *International Journal of Educational Development*, 32(5),665-673.
- Kraak, A. (2006). The challenge of the 'second economy' in South Africa: the contribution of skills development. *Journal of Vocational Education and Training*, 57 (4), 429-452.
- Kraak, A. (2008). A critical review of the National Skills Development Strategy in South Africa. *Journal of Vocational Education and Training*, 60 (1), 1-18.
- Lemanski, C. (2009). *Spaces of exclusivity or connection ? Linkages between a security village and its poorer neighbour in a Cape Town master plan development*. Cape Town: Islandla Institute.

- Lumby, J. (2000). Technical colleges in South Africa: planning for the future. *Journal of Vocational Education and Training*, 52(1), 101-118.
- McGrath, S. (1998). National policies and institutional practices: the credibility gap in South African education and training reform. *Journal of Vocational Education and Training*, 50 (4), 503-518.
- McGrath, S. (2004). Reviewing the development of South African Further Education and Training college sector ten years after the end of apartheid. *Journal of Vocational Education and Training*, 56 (1), 137-160.
- McGrath, S. (2012a). Building new approaches to thinking about vocational education and training and development: Policy, theory and evidence. *International Journal of Educational Development*, 32 (5), 619-622.
- McGrath, S. (2012b). Vocational education and training for development: a policy in need of a theory? *International Journal of Educational Development*, 32 (5), 623-631.
- McQuaid, R., Green, A. & Danson, M. (2005). Introducing employability. *Urban Studies* 42 (2), 191-195.
- Middleton, J., Ziderman, A. & Adams, A. (1993). *Skills for Productivity. Vocational Education and Training in Developing Countries*. New York: Oxford University Press, The World Bank.
- Nzimande, B. (2009). *Change views of FET, speech delivered to the South African Students Congress*. Available at: <http://www.news24.com/SouthAfrica/Politics/Nzimande-Change-view-of-FETs-20091207>. [Accessed on 25 June 2014]
- Oketch, M., (2007). To vocationalise or not to vocationalise? Perspectives on current trends and issues in technical and vocational education and training (TVET) in Africa. *International Journal of Educational Development*, 27 (2), 220-234.
- Powell, L. (2012). Reimagining the purpose of VET. Expanding the capability to aspire in South African further education and training students. *International Journal of Educational Development*, 32 (5): 643-653.
- Powell, L. (2013). A critical assessment of research on South African further education and training colleges. *Southern African Review of Education*, 19(1), 59–81.
- Powell, L. & G. Hall. (2000). *Quantitative Overview of South African Technical Colleges - 1998*. Johannesburg: National Business Initiative.
- Powell, L. & G. Hall. (2002). *Quantitative Overview of the Further Education and Training colleges - A sector in transition*. Johannesburg: National Business Initiative.
- Powell, L. & G. Hall. (2004). *Quantitative Overview of the Further Education and Training College Sector: The new landscape*. Pretoria: Department of Education.
- Powell, L. (forthcoming). *Reimagining the purpose of Vocational Education and Training: The perspectives of Further Education and Training College students in South Africa*. Unpublished PhD Thesis, University of Nottingham.
- Psacharopoulos, G. (1991). Vocational education theory, VOCED 101: Including hints for 'vocational planners'. *International Journal of Educational Development*, 11 (3), 193-199.
- Rose, M. (2004). *The Mind at Work: Valuing the Intelligence of the American Worker*. New York: Penguin Books.
- Tanggaard, L. (2013). An exploration of students' own explanations about dropout in vocational education in a Danish context. *Journal of Vocational Education and Training*, 65(3), 422–439.
- UNESCO. (2013). *World Report on Technical and Vocational Education and Training*. Paris: UNESCO.
- Unwin, L. (2004). Growing beans with Thoreau: rescuing skills and vocational education from the UK's deficit approach. *Oxford Review of Education*, 30 (1), 147-160.
- Wedekind, V. (2009). *Report on the Research on Further Education and Training (FET) Colleges in South Africa. Output of the England-Africa Partnerships in Higher Education*. Durban: University of Kwazulu Natal.
- Winch, C. (2000). *Education, Work and Social Capital: Towards a New Conception of Vocational Education*. London and New York: Routledge.

BOOK REVIEW

Comparative Education Research: Approaches and Methods (2nd edition)
By Mark Bray, Bob Adamson and Mark Mason (Eds.) (2014), 453p
ISBN: 978-988-17852-8-2, Hong Kong: Comparative Education
Research Centre and Springer

The first edition of this book was received with great acclaim. It has been widely reviewed, adopted as a basic instructional text in many universities, and translated into at least six languages. In the past seven years, however, we have seen an acceleration in the pace of internationalization of education, stimulated by increased comparison across countries. This trend has resurfaced arguments about whether, in fact, national education systems can be (or should be) compared given profound cultural differences across countries. Methodological advances have made clear the challenges in comparing systems on the basis of student performance affected by much more than schooling. Even as some degree of convergence has been noted in national systems, comparison has become more complex. Those new to comparative studies will find in this second edition a carefully structured guide to the field; more seasoned veterans will find a rich source of conceptual perspectives suggesting important research topics.

Rather than a collection of studies comparing countries, this book provides a variety of frameworks for understanding what comparison is and how it can provide valuable insights into education systems. Comparison of the utility of these different perspectives is improved by re-introduction of a complex categorical framework, the Bray-Thomas “cube” employing dimensions of content, levels and demographic groups.

The book opens with a review of historical perspectives, noting how changes in methods and perspectives have accompanied or been impacted by changes in political and economic systems as well as advances in academic disciplines. Education is a political and social instrument: systems vary widely in their purposes and systems of control; each discipline imposes a distinct framework; and a variety of analytic methods have been devised to fit the various approaches. Each of these chapters is well-structured and heavily documented including latest contributions. Even the expert in the field will find much of value in these chapters.

The second and major section of the book is 11 chapters each covering a particular focus of comparison. These include places, systems, times, demographic groups, cultures, policies, curricula, values, approaches to learning and to teaching, and measurement of outcomes. These are high quality state-of-the-art reviews of the literature that cover major perspectives, define unresolved issues and suggest possible solutions. There is relatively little overlap in the cited references, which may indicate that comparative education is experiencing the same evolution as other fields or disciplines before it, generating isolated specializations. Or it may reflect an explicit decision by the authors and editors to include as much of available literature as possible.

Each of the chapters demonstrates how comparison can be structured to reveal the impact of otherwise unnoticed factors on educational outcomes. In effect, comparative analysis reminds of the complexity that underlies most events. Even as we become increasingly aware of the universality of certain principles, there is also increasing evidence of the multiple ways to produce learning and of the advantages that can accrue to maintaining that diversity.

I found particularly enlightening the chapter about comparing curricula. Most empirical research addresses other aspects of education, limiting both conceptual development and my understanding of its issues. The authors provide a scheme for classifying curricula that links ideologies to content, method and assessment, implying a number of researchable hypotheses. In another scheme they differentiate between purpose, focus and manifestations; and then provide a set of specific questions

for each. They then suggest which research methods would be most appropriate for studying each of the combinations. In only 20 pages they provide a rich research agenda, as well as an extensive bibliography that provides examples. Other chapters are equally stimulating: the text has enough to support a year-long course on comparative research topics and methods.

The editors warn that the book is neither a research manual nor a meta-analysis of the comparative research literature (nor is it an encyclopedia of invidious comparisons). As well-explained in the final chapter, this marvelously coherent collection has been written in a meta-cognitive style: its objective is to raise researchers' awareness about how their decisions about foci and tools shape the reality their actions will affect. Had I taken a course which used this text as it should be, no doubt my career would have taken a different path.

*Noel McGinn
Emeritus Professor
Harvard University Graduate School of Education*