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# Going All the Way: A life history account focusing on a teacher's engagement with studies of Asia

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*What would prompt a primary school teacher in late career and from the Australian cultural mainstream to become interested in the societies and cultures of Asia and then to expand that interest into a personal and professional life focus? Through a life history approach, this paper recounts a teacher's journey from childhood, to becoming and working as a teacher, to initial inclusion in her late career of Asia-related aspects in her teaching and learning program, to extensive professional development in studies of Asia, culminating in a formal postgraduate study pathway. The teacher's story illustrates the complexity, the changing nature and uniqueness of individual teacher identity, thereby reinforcing Goodson's (1992a) view of a teacher as "an active agent making his or her own history". The story also demonstrates the value of the life history approach in showing how personal and professional influences interact to determine how teachers think, what they value, and what they choose to do at any given time – including why they actively engage with particular professional learning programs.*

Life history, teacher identity, studies of Asia

## INTRODUCTION

Beth Fox (not her real name) is a 57-year-old primary school teacher with over 30 years teaching experience. She currently teaches in a small primary school in an outer suburb of Adelaide. In terms of cultural background, she could be described as being from the Australian cultural mainstream and the student population of her school is largely monocultural. Yet, at this late stage of her career, when she might have been content to rest on her existing levels of knowledge and professional expertise and cultural comfort zone, Beth embarked on an extensive professional development pathway to increase her knowledge and teaching skills in relation to Asian societies and cultures – a pathway that consumed a great deal of her personal and professional time.

This study employs a life history approach as a means of elucidating the reasons underpinning Beth's decision to make such a significant commitment at this stage of her career. Beth's narrative is chronologically structured, commencing with her life prior to becoming a teacher, and then progressing through her early, middle and late teaching career, culminating in her completion of a Master of Education (Studies of Asia) in 2003. Across the various life and career phases, three main threads are pursued – a nature of teaching thread, a professional development thread, and a cross-cultural thread.

As Beth's story unfolds, the "confusions, contradictions, ambiguities, and transitions that are part of individuals' lived experiences" (James, 2002) become apparent. Beth's story illustrates how the combined impact of these lived experiences shapes individual teacher identity, with each teacher's identity being unique, complex and continually evolving. The story also provides an example to

support Goodson's (1992a) view that each teacher is "an active agent making his or her own history".

Through the study, the value of the life history approach becomes evident. The way teachers think, what they value, and how they act can all be shown to have multifaceted and interlinked origins. Beth's life history thus reveals that her decision to make a major, Asia-related professional development commitment in late career was no random whim, but in fact arose from a complex interplay of personal and professional influences extending far back into her life and career.

### **THE VALUE OF A LIFE HISTORY APPROACH**

Butt, Raymond, McCue and Yamagashi (1992) argue that the most effective way of understanding teacher knowledge, values and behaviours is by enabling the teacher's voice to be heard and the best way of achieving that is through biographical inquiry. They see teaching as being a praxis with both personal and professional dimensions shaped by current contexts and past experiences.

The form of education that stays with us and informs our subsequent choices and actions is that which results from experiences which have a telling impact on our person. (Butt et al. 1992, p. 58)

Beattie (1995) sees narrative inquiry as "validating the interconnectedness of the past, the present, the future, the personal and the professional in an educator's life". Although Dhunpath (2000) rightly cautions that narrative researchers need to ensure that they do not step beyond being biographers into the realms of "journalists or burglars", she makes the strong claim that "the life history approach is probably the only authentic means of understanding how motives and practices reflect the intimate intersection of institutional and individual experience in the postmodern world". In terms of professional development, allowing teachers to voice their stories offers opportunities for new perspectives to emerge that highlight the importance of placing the teacher at the centre of the process, as opposed to "an instrumental view of teachers, one in which they can be manipulated for particular ends" (Casey, 1992).

### **THE CENTRALITY OF IDENTITY**

Enabling the individual voice of the teacher to be heard, especially in relation to an issue like motivation, inevitably involves consideration of the person's perceived self identity. According to Goodson (1992b), an individual's sense of self is constructed by the individual on the basis of "life experiences and background". These experiences and background comprise both a personal dimension and a professional dimension. The two dimensions are not mutually exclusive. Rather, as Zembylas (2003) points out, "teachers invest their selves in their work and so they closely merge their sense of personal and professional identity" (p. 217). The powerful nature of the impact of the personal dimension on the professional dimension, for example, is highlighted by Raymond, Butt and Townsend (1992) when they emphasise the significant influence of "pre-training experiences", not just in determining how teachers think and act in the early stages of their careers but also as "lifelong references for teacher identity". Nias (1989) found that teachers themselves recognise the critical importance of identity. In his study of teacher commitment, one of the four key areas of response from teachers related to "developing and maintaining a personal identity".

Drawing on post-structuralist views of Foucault and Deleuze, Zembylas (2003) suggests that identities are not fixed but are continuously being redefined. Thus it is not so much a matter of 'who' a teacher is, but more a matter of 'when' (time context), 'where' (place context) and 'how' (psychological state) a teacher is. In understanding the 'how', Oosterhert and Vermunt (2003) stress that it is important to take cognisance of "self-esteem and emotion". Goodson (1992b) provides a timely reminder that identities are also shaped by cultural influences. This position is

made more explicit by Cope and Kalantzis (2000) when they assert that “identities are created in the multiple sites or cultures of belonging – ethnic, local, group affiliation and so on”.

Teachers’ perceived identities will thus underlie their views of the nature of teaching as a profession and the role of the teacher within that profession, which in turn will determine their priorities in terms of where and how they devote their energies – including the nature and type of professional development they will undertake. In *Motivating Teachers for Excellence* (Ellis, 1984), for example, the most satisfying elements of a teacher’s role are generalised as “reaching and affecting students, experiencing recognition and feeling responsible”. In Nias’ (1989) study, teachers commonly expressed the “pursuit of competence”, “career continuance” and “caring” as being fundamental elements of their role. However, the extent to which any of the elements is paramount in shaping any individual teacher’s approach to teaching at any given time varies considerably. Even within each of the elements, teachers can have a quite different focus. By way of example, the report *Australia’s Teachers: Australia’s Future* (Committee for the Review of Teaching and Teacher Education, 2003) shows that teachers can interpret “caring” in a variety of ways, ranging from wanting to help students “grow in self-confidence”, to “seeing students’ understanding grow over time”, to “seeing low achievers learn”, to feeling that they have “positively influenced a student’s chances in life”.

### CAREER CYCLES

The notion of constantly evolving and changing identities is closely linked to research into teacher career cycles. Day (1999), drawing on the ideas of Huberman, sees a teacher’s career as comprising a number of phases, each with its own characteristics. Accordingly, the first three years of a teacher’s career may be characterised as a “survival and discovery” phase, while the next three years are typically a time of “consolidation and emancipation”. By the time a teacher has been teaching for 20 to 30 years, he or she may have reached a professional plateau, characterised by feelings of ‘serenity’ on the one hand, but a ‘sense of mortality’ on the other.

The final phase, from 30 to 40 years’ teaching experience, is depicted as a period of increasing conservatism where change may be viewed with mounting scepticism and where there may be a “contraction of professional activity and interest”. The teacher, while still prepared to “work hard at core acts of teaching”, may be experiencing feelings of disenchantment, marginalisation, even bitterness, in relation to the system, or school administrators, or fellow teachers, or students, or all four combined. Where this is the case, the teacher may well exhibit “lessened emotional and intellectual commitment”. Huberman (1992) himself, however, provides a reminder that career phases are neither fixed nor universal. Rather than seeing the phases as sequential “stepping stones”, he offers “spirals” as a more accurate analogy.

### AVOIDING LATE CAREER DISENGAGEMENT

So what factors might have the potential to overcome a tendency for teachers to “close down rather than open up” in their late careers (Oosterhert and Vermunt, 2003)? Fessler and Christensen (1992) suggest teacher development is influenced by a combination of career cycle, personal environment and organisational environment. Huberman (1992) postulates that because many teachers tend to value highly certain kinds of “instructional mastery”, when they are provided with opportunities to achieve such mastery it can stave off late career disengagement and facilitate a process whereby teachers do not “end up uniquely tending their own gardens”. Goodson (1992b) raises the concept of ‘critical incidents’ that can occur at various points in a teacher’s life and career and that may “crucially affect perception and practice”. Nolder (1992) finds that these critical incidents or key events can occur “at any point in an individual’s life”, including late career, and usher in a period of “accelerated development”.

## **GENERAL FACTORS ATTRACTING TEACHERS TO PROFESSIONAL DEVELOPMENT**

In *Professional Development for the new Millennium* (Office of Leadership, Development and Enhancement, 2003), professional development is defined as “a growth promoting learning process that empowers stakeholders to improve the educational organisation”. Approaches to professional development of this sort, employing de-personalising corporate-speak and advocating the paramountcy of “the organisation” would appear to be fundamentally flawed. Guskey (2002) finds that most teachers look upon the purpose of professional development as being to provide “a pathway to increased competence and greater professional satisfaction”. This is in line with the view of Day (1999) that “teachers cannot be developed; they develop” – in other words, the professional development activities they seek and choose to engage with will arise from personal choice, as and when they are ready. Raymond, Butt and Townsend (1992) reinforce this view when they describe professional development as being “the result of dynamic interaction between context and personal biography”. Indeed, they go so far as to say that a teacher’s biography will be a substantial factor in determining which particular professional development opportunities teachers select to undertake.

### **Why university courses?**

Within teachers’ overall attitudes to professional development, are there any factors that might attract them to accredited university courses? One possibility lies in the very fact that university courses can lead to recognised academic awards and individual teachers may value such awards, for personal reasons, professional reasons, or both. Another, more pragmatic, possibility is that teachers may perceive that gaining formal postgraduate qualifications will advantage them in their careers. In Australia, however, there are currently few incentives at a systemic level, in terms of either salary or promotion, to undertake postgraduate study. It is interesting to note that in the United States, where incentives are provided in many states, about 45 per cent of public school teachers have a Master’s degree (Parsad, Lewis and Farris, 2002). By comparison, in Australia only around 8 to 10 per cent of Australian teachers have a Masters degree (generally in Education) (Dempster, 2001).

A third possibility relates to the area of quality. In *Professional Development for the new Millennium* (Office of Leadership Development and Enhancement, 2003), reference is made to the expectation that university courses for practising educators will “reflect the principles of excellence...”. Thus, teachers may perceive that university courses will be of the highest quality in terms of both pedagogy and content. In addition to quality-related issues, accredited university courses tend to be longer in duration, and Day (1999) observes that teacher participants in such courses generally value them for leading to “increased professional confidence and competence”, unlike many “short-burst” training activities that do not meet the “longer-term motivational and intellectual needs of teachers”. Day also suggests that partnerships between universities and teachers have strong potential for “enabling teachers to reflect on their own practice”. Furthermore, as many teachers view their role as being heavily concerned with fostering in their students “a disposition towards lifelong learning”, undertaking a formal tertiary course can be perceived as being an excellent way for teachers to “demonstrate their own commitment towards and enthusiasm for lifelong learning”.

## **MAINSTREAM INTEREST IN OTHER CULTURES**

Any consideration of what might motivate someone from the cultural mainstream to become interested in and study other cultures raises the question of what ‘mainstream’ might entail in an Australian context. Lo Bianco (1996) refers variously to “Anglo-Celtic Australians” and “Anglo-Australians”, while Singh (2000) uses the term “Anglo-ethnic”. Lo Bianco depicts this group as

being “homogenously white”, Euro-centric in outlook, and with a heritage of “monolingual/unicultural ambition”. While also referring to “whiteness” as a characteristic, Singh (2000) adds a “patriarchal” dimension. Cope and Kalantzis (2000) see “mainstream” as a construct relating to “power”, “dominant groups” and “institutional structures”. Both Singh (1996) and Williamson-Fien (1996) suggest that so-called mainstream Australians’ views of the world have been developed within Western, modernist frameworks, characterised by ‘orientalist’ and ‘dominant discourse’ perspectives, resulting in stereotypical depictions of ‘the other’.

A problem with attempting to classify too tightly mainstream Australians is that it can lead to equally unproductive stereotypes. As Singh (2000) indicates, there is considerable diversity within white culture, arising from a range of factors, including as class, religion, gender and space. Alba and Nee (2003) suggest that “mainstream culture is more malleable than monolithic” and that all cultures, whether mainstream or minority, are constantly changing through a process “less to do with one group adapting to another than with the blurring of boundaries among groups”. Thus there is no particular reason why someone from a mainstream cultural background should be any less interested in a range of cultures than anyone else. This is in line with Bhabha’s (1990) concept of ‘cultural hybridity’ and a ‘third space’, whereby people of all cultural backgrounds can cherish and be enriched by their cultural past, while assimilating into and being enriched by the present.

Certainly, the reasons for such interest may vary widely from any one individual to the next. Singh (2000) offers a range of possible reasons, from a postcolonial perspective. ‘Conservatives’, as a group or as individuals, for example, might show interest in other cultures as a way of keeping them under control and thus preserving their own cultural hegemony. ‘Liberals’ might be looking for ‘commonalities’ in order to render ‘differences’ invisible, while ‘pluralists’ might be attracted by ‘differences’ to the extent of exoticising or fetishising aspects of other cultures. ‘Essentialists’ might seek “unchanging, authentic properties” as a way of keeping cultural groups clearly defined and separate. For ‘social critics’, the main interest might lie in exploring “different ways of reading the world”, with the aim of enhancing “inter-cultural solidarity”. While these groupings are neat, it is entirely possible that individuals may be influenced by a number of these motivations, depending on time, place and circumstance.

Halse (1996a) offers another range of possible reasons, from those with “innate interest in other cultures”, to those with an “altruistic value system in which understanding of cultural difference is perceived as crucial to the attainment of universal, humanitarian goals”, to those seeking a “generational break with past conceptualisations of cultural identity”. Utilitarian and professional reasons may also play a part, whereby a teacher may feel that cross-cultural understanding will advantage them in the job market, assist them to teach more effectively, or enable them to communicate better with particular members of their personal or professional communities (Prudhomme, 1996).

Just as reasons for seeking cross-cultural understanding will vary, so will the level at which the understanding is sought, ranging from “the ‘gee whiz’ phase of initial discovery” and the “wide-eyed tourist” level (Prudhomme, 1996), to a deeper understanding of particular issues or areas of interest, to an “examination of one’s own involvement in particular socio-cultural processes, rather than making ‘the other’ the only focus of study” (Cultures and Communities Program, 2004).

### **WHY ASIAN SOCIETIES AND CULTURES?**

As to why a study of Asian societies and cultures might be attractive to some teachers, those at the “gee whiz” level can find much to draw them in, especially those elements described by Halse (1996a) as “a melange of exotic elements different from and alien to Australia”. Drawing on the

ideas of Said, Singh (1995) postulates that an orientalist perspective has led many Australians to develop “a contradictory and ambivalent desire for and derision of Asia and its peoples”, whereby all Asian peoples are reduced to an imaginary ‘other’, at one and the same time exotic, remote, inferior, threatening and alluring.

Because of Australia's proximity to the Asian region and the fact that the region contains many countries which might be described as “developing”, some teachers may also be attracted by the idea of trying to find ways of helping to redress what they see as “the inequitable differences between two geographically close nations” (Halse, 1996b). Miller (1994) suggests that as well as “exotic Asia” and “underdeveloped Asia” there also exists “Asia, source of wisdom”. Thus, a study of Asia can seem attractive to some, as it appears to offer a way of filling a void left as a result of a perceived “feeling or experience of the inadequacy of one's native ... wisdom” (Miller, 1994). In *Cultures of Change*, Halse (1996b) also refers to the impact of “positive resonances” arising from prior personal interaction with people of Asian background or travel to an Asian country.

### BACKGROUND TO THE STUDY

The 1990s witnessed an emphasis by successive Australian Governments on developing and implementing policies to strengthen Australia's political, economic and social engagement with the countries of the Asian region. Although the precise nature and pace of the thrust varied in accordance with global, regional and internal factors pertaining at different times, education was seen as having a pivotal role to play in enabling Australia to reconfigure its place in the Asian region (Hamston, 2000).

The Asia Education Foundation was established in 1992, followed by the National Asian Languages and Studies in Australian Schools Strategy in 1996. These national initiatives aimed to promote widespread studies of Asian languages and Asian societies and cultures in Australian schools. Teachers were seen as being a focal point in ensuring the successful introduction of the desired educational changes and accordingly substantial funding was directed towards professional development programs for teachers (Halse and Baumgart, 2000).

In South Australia a major response to the national initiatives was to place high priority on the establishment of a professional development pathway that would enable teachers to have access to a variety of high quality options. By the mid-1990s, the foundation plank of the pathway was in place – the *Including Studies of Asia in Curriculum Professional Development Program*, a 40-hour introductory level program developed initially by the Asia Education Foundation. The program proved to be popular with both primary and secondary teachers and by the end of 1999 had been taken by over 700 South Australian teachers.

As identified in the national evaluation of the program (Halse, 1996a), although it provided a very effective introduction to ways of including studies of Asia into the school curriculum and enhanced understanding of a range of aspects of Asian societies and cultures, many teachers expressed a desire for follow up advanced courses to extend their skills, knowledge and understandings. The idea of having a tertiary accreditation option available for studies of Asia professional development courses was seen as an added attraction.

In response to the need for advanced options, a number of Studies of Asia Professional Development Modules were developed nationally in 1998 and 1999 under the NALSAS Strategy. In all, ten modules were developed, two general ones and two each relating to the Arts, SOSE (HSIE), English and Asia In-Country Experience. Each module was designed to be of tertiary postgraduate standard.

Recognising the Studies of Asia Professional Development Modules as an excellent vehicle for achieving the desired professional development pathway, the Studies of Asia program of the Department of Education and Children's Services in South Australia entered into partnership with Flinders University to establish a Graduate Certificate in Education (Studies of Asia). Accreditation from the *Including Studies of Asia in Curriculum Professional Development Program* was able to be applied directly to the named Graduate Certificate. For teachers claiming the credit, a further two modules were required to complete the Graduate Certificate. The first delivery occurred in late 1999.

Following demand from teachers who had completed the Graduate Certificate in Education (Studies of Asia) for additional advanced study options, arrangements were made in 2001 to enable a Master of Education degree to be completed using further Studies of Asia modules. The first group of students to complete the entire professional development pathway from introductory level to advanced level to mastery level graduated at the end of 2001.

As the principal instigator of the Studies of Asia professional development pathway in South Australia and the person responsible for the ongoing delivery of the respective programs, I had developed a strong interest in the teachers undertaking the pathway, particularly at the individual level. Understanding what motivated the participants and how their studies of Asia professional development related to their personal and professional lives appeared to offer a productive source of information as a basis for ensuring that the respective programs continued to attract teachers and meet their needs. After initial studies of the *Including Studies of Asia in Curriculum professional Development Program* (see Trevaskis, 2004a and b), a study encompassing the entire professional development pathway now seemed timely.

### OVERVIEW OF THE STUDY

This study adopts the approach to teacher biography described by James (2002) as seeking to provide "contextual understanding of how historical, political, cultural, societal, institutional, familial and personal circumstances have shaped [an individual's] life and role as a teacher".

Beth was selected for the study partly on the basis of her willingness to participate and partly because she approximated the typical participant in the Studies of Asia professional development pathway – a primary teacher, female and with extensive teaching experience, but little formal background in studies of Asia. On the other hand, as with many participants, there were some atypical variations that invited further investigation. It is fair to say that Beth was challenged academically and personally at times with the Graduate Certificate and Masters components of the pathway, both in terms of motivation and the demands of the respective courses, yet she persisted. She was in late career and she had also intimated that she had not received whole-hearted support from her school administration to continue to pursue her chosen professional development pathway. Additionally, at critical points in her study, Beth had undertaken extended visits to two different Asian countries. Her story, therefore, appeared likely to be multi-dimensional and of interest both to other participants and professional development program organisers.

In the first stage of the study, Beth provided written responses to a series of questions relating to her life prior to becoming a teacher, as well as her current personal and professional situation. The purpose of the questionnaire was to provide some background information that would enable the subsequent interview to focus principally on the period from becoming a teacher to completing the Studies of Asia professional development pathway. At the same time the intention was that the background profile would provide some interesting threads that could be probed more fully in the interview context, as for example family and social contexts, attitudes to schooling, and intercultural influences.

Following examination of the data provided by the written responses and based on the approach to life history arising from the work of Butt et al. (1992) and also James (2002), the questions which would form the basis of a face-to-face interview were determined. The questions were communicated to Beth prior to the interview so that she would be aware of what to expect and be able to advise if she was uncomfortable with any of the proposed lines of enquiry. A suitable date was determined and the interview was conducted in my office at the university, surroundings which were quite familiar to Beth given her years of postgraduate study there. The interview, which was recorded, was of two hours' duration and following the interview the conversation was transcribed. After some initial questions following up on matters arising from the questionnaire, such as familial attitudes and aspirations and specific early experiences that had aroused Beth's interest in cultures other than her own, the interview questions related to three main threads: a 'nature of teaching' thread; a 'professional development' thread; and a 'cross-cultural' thread. In each case, both personal and professional responses were sought. The questions also progressed chronologically across a number of stages, from pre-service education and career commencement, to early and mid career, to later career, and finally future aspirations. Beth was invited to view and to comment on the transcript of the interview, following which the data were analysed and then, in the light of the data and relevant professional literature, conclusions were drawn.

## **BETH'S STORY**

### **Life before teaching**

Beth spent the first four years of her life in rural South Australia before moving to a then outer suburb of Adelaide, where her parents had purchased a home in a "working class ... post-war subdivision", with "no paved roads and no footpaths". She lived there for the rest of her childhood and teenage years, only moving out to take up a country teaching appointment. Beth's family comprised her mother and father, herself, three younger brothers and, for a few years, a foster sister of aboriginal descent.

The three principal influences during Beth's formative years appear to have been her family, the Church, and the school system. Beth's mother and father had both "missed out on opportunities due to the Depression". Her mother had been forced to leave school at 11 years of age. Her father, although matriculating, had been unable to proceed to university at that stage because his family needed him to earn an income. While Beth was growing up, her father did study a number of subjects at university, but "never gained a degree". Consequently, her parents were determined that their children should have "the best opportunities that they could provide", by which, Beth explained, they meant "university", as they were not "business people".

All family members were closely involved with the Church, for both religious and social purposes and the family's outlook and actions were thus strongly influenced by Christian values. The two main values identified by Beth were "commitment" and "sacrifice", with her mother in particular "always seeking out those in need", including "the poor, the lonely [and] the burdened" and trying to assist them. The fostering of an aboriginal child was one manifestation of this outlook, as was support for missionary activities.

Most of Beth's schooling occurred in state schools; she attended a local primary school until part way through Year 5, before switching to another nearby primary school. She commenced her secondary schooling at the local high school, remaining there for two years and then switching to a private business college for two years before returning to the local high school for a further year.

The impact of these influences on Beth took various forms. She clearly recognised the struggles her parents had endured and appreciated that it was their overwhelming desire for their children to "get ahead". She also admired her father's persistence in undertaking some university study, while

empathising with the fact that circumstances prevented him from completing any particular award. On the other hand, as the eldest child and only female, she took the brunt of her mother's frustrated hopes, which sometimes boiled over into verbal abuse and physical mistreatment – partly excused by Beth who depicted herself as a “troublesome child”.

Similarly, while admiring her parents' service ethic on the one hand, which meant that they “gave things away, shared their money”, she was acutely aware of and resented being poor. Even when the family went on holiday, Beth felt that other people “looked down their noses” because of their “battered car” and “clapped out little caravan”. A further result of the fact that her mother was “always out helping other people” was that Beth finished up becoming the virtual mother of her youngest brother. On the other hand, she recalled with pride that she grew up in a family “where it didn't matter what your colour was, or what your race was”. And despite her mortification at the family's mode of transport, she also developed a love of travel, admiring the way her father was able to turn visits to places into learning experiences.

Ironically enough, perhaps, for one who became a teacher, Beth “hated school and ... hated teachers”. Her negative impressions seemed to arise from three main sources: lack of academic progress; teacher attitudes and actions towards her; and a sense of class consciousness. One of Beth's earliest memories from her primary school days involved her Year 2 teacher begrudgingly giving her a brooch for “best person in the class for the day”, while at the same time remarking, “I don't know how **you** won it, because you can never keep quiet”. She also formed the impression that her primary school was an “undesirable school”, compounded by her Year 5 male teacher, an apparently embittered war veteran, who “kept telling us how we were nobodies and nothings”. Then, when she changed primary schools, she was further alienated when she found herself with a teacher who “smacked me every time I went to her”. At high school, Beth felt that she and three other girls were moved out of an all girls' Latin class into a boys' class because they were the “dumbest” of the girls. Also she felt let down when she badly lacerated her foot at school and “teachers wouldn't come and help me”.

These events and general lack of progress prompted her parents to enrol her in a private business college, but she failed her Leaving examination. With her parents unwilling to pay fees for a repeat year at the private school, she returned to her local high school where she “played hookey a lot”. If her formal education did not provide many positive outcomes, her informal education included some rather more enjoyable elements, particularly her love of reading about people and places.

When asked about cultural influences during her childhood and teenage years, Beth recalled that her mother's best friends were “a Sri Lankan lady and a Russian lady”. She also clearly remembered the arrival of a Dutch girl at her school when she was in Year 3, and wanting to be a Dutch girl herself because she was fascinated by “anyone that had a national costume”. Perhaps the biggest cultural influences came from reading about missionaries and, through her family and Church, actually meeting some people engaged in missionary work. In learning about these people and their work, Beth felt that she was able to be “transported ... to places outside myself”. She particularly tended to associate these memories with Asian countries, referring to Gladys Aylward, who walked with 100 orphans across China to escape the invading Japanese. She also remembers being fascinated when a missionary who had worked in Japan showed her some “exquisite” artefacts, leading her to conclude that “these people had beautiful things and it was exotic and it was colourful”.

At one time, Beth aspired to be a missionary herself, but as she grew older that changed to wanting to be a doctor, not so much for the service element of that profession but “more because somebody looked up to you”. When her grades made it apparent that medicine was not an option, her parents suggested various possibilities, such as working in an office, but when Beth showed

no interest in that direction they did not push her. Eventually, Beth firmed on two choices, teaching and nursing. Interestingly, apart from the fact that they were careers open to girls at that time, Beth's paramount reason for favouring them was that "both of them got me away from home". Teaching had an added attraction, in that so-called Leaving Scholarships were available to provide some income while the prospective student teacher was still at school.

### **Becoming a teacher – the first ten years**

After two years at Teachers' College, Beth "wasn't chosen to do a third year" and exited with a Certificate of Teaching to take up her first appointment – to a school within driving distance, much to her disappointment. When asked what, as a beginning teacher, she thought the role of a teacher was, she observed that in those days "you just went out teaching, didn't you". She recalled feeling that it was an "expectation from above" that teachers would "get good results" from their students in weekly and end-of-term tests. She also had a strong desire to "make them [the children] feel comfortable about it".

Overall, she found her first year of teaching "horrific", particularly after an unpleasant discipline episode involving a "reluctant" student that left her feeling, on the one hand, that she had "failed him" and, on the other, that she had been inadequately supported by the Principal "who sat in his office and whenever you came in he would spray the air for germs". On the positive side, she did get satisfaction from being involved in a training program for the 'New Maths' and then passing on that knowledge to other teachers, parents and students, with the result that she "had a lot of children who loved me". She also enjoyed helping a hearing-impaired student. Nevertheless, she regarded herself as "a pretty terrible teacher".

In those early days, Beth had no concept of a career path in teaching, her primary life ambition being that she "wanted to be married, someone who would just accept me for what I was". Shortly thereafter, Beth did marry and then took accouchement leave to have her first child. She returned to work for a year when the child was one year old and then resigned to have second child, thinking that once the children were back at school if she wanted she could just "pick up and go back".

There, Beth's teaching career might have ended, but when it came time for her elder child to attend school, she decided that sending him to a private school was a better option. To be able to afford that, she needed to return to work. By that time permanent teaching positions were hard to come by and so began what was to turn into a 20 year saga of contract appointments. By the time she had completed her first ten years of teaching, she still did not feel confident as a teacher, attributing this to the fact that as a person she "had not had very high self-esteem". However, she was starting to feel that her teaching approaches were "kind of right". To Beth, the most positive aspect of the job remained the interaction with children, particularly "kids who were in trouble", because she "identified with them".

### **The middle years**

During Beth's mid-career, her main challenge was to obtain a permanent position and this became an "all-consuming goal". Thinking that upgrading her qualifications might help, she enrolled in a Diploma of Teaching course at a College of Advanced Education. Despite misgivings about having to do subjects she "didn't want to know about, curriculum development and all that sort of ... rubbish", she received high grades for most of her subjects, leaving her with the feeling that "for the first time in my life, I was fairly successful".

Although she and her husband were willing to accept country appointments, suitable placements did not eventuate and so the "merry-go-round" continued, with the challenge of a new school almost every year. Because contract teachers often tended to be placed in "difficult schools" and

many such schools were in parts of the metropolitan area some distance from her home, Beth also often found herself facing long drives to and from work. The frustrations of being unable to achieve permanency led her to start “getting really negative”, which she explained manifested itself through “whinging”. In order to channel these emotions more positively, she became involved in establishing an “employable teachers branch” of the teachers’ union in her area.

One of the things that Beth found most difficult during this period was the attitude of other teachers towards those who had been contract teachers for a long time, as “people kept saying if you were any good you’d be permanent”. Conversely, she did feel that her experiences did have the effect of making her a better teacher in some respects, through having to develop strategies to “immediately fit in” and “fight for your rights”. Some of her contracts had also involved her in promotion positions, such as being a learning area coordinator, and this had helped to boost her confidence. By the time Beth had been teaching for about 30 years, she had finally reached a point where she believed that her teaching could be said to be “good”. “I knew that I didn’t care what I taught, so long as I could get to the kids then I could teach them anything.”

During this period, Beth perceived an increasing tendency for the Department to try to set the professional development agenda. She noted that she failed to see the relevance of most of it, considering it “faddish and trendy”. By way of example, she cited a time when teachers were encouraged to just let children write, without teaching them any formal writing skills. If, on occasion, she found something from this imposed professional development that interested her and appeared to have a direct application to her classroom, she would adopt those particular elements only.

### **Late career**

In the early 1990s, noting that Japanese was becoming a popular language in schools and because she “loved things Japanese”, Beth completed an adult education Japanese language course. It was this decision that was to lead to her fulfilling the elusive dream of gaining a permanent position. After responding to a newspaper advertisement for “junior primary teachers with an interest in Japanese”, Beth was able to convince a staffing officer to appoint her to a school as a junior primary teacher of Japanese language. Initially it was a one-year contract, but permanency was confirmed the next year, followed in turn by a transfer to a school closer to her home, where she currently holds a position as a primary school Japanese teacher.

After the long wait, Beth found permanency threatening at first, compounded by the fact that as a language teacher she took other teacher’s classes during their non-instruction time. Although a couple of the other teachers have shown some interest in the Japanese program, she has tended to feel “isolated”, because “nobody understands Japanese, and they’re not interested, they don’t want to know”. That notwithstanding, as a sign of her increasing confidence in her own ability, Beth applied for and successfully obtained an Advanced Skills Teacher classification, in spite of her Principal saying that he didn’t think it was a good idea.

Beth continues to view the Department with suspicion, considering that “they really have lost touch with the classroom teachers” and have become “faddish and self-serving”. Despite that attitude, or perhaps because of it, the latter stage of Beth’s career has been the period when she has been most involved in professional development. She partly attributed this to the fact that in the past she had “put the family first”, but now that her children had left home she was more able to focus on her own needs. She also noted that she has never minded hard work, as long as she is interested in the task and it suits her learning style; otherwise “it becomes a chore”. When asked to clarify what she meant by “interested”, she explained that the subject matter had to strike a personal chord and have the potential to be applied to her classroom context.

Given that the major component of Beth's professional development in recent times has involved postgraduate study, she was asked about her attitude to the value or otherwise of formal academic qualifications. She commented that this was an area where she had undergone some change of heart. When the basic qualification for teaching had become a Bachelor of Education, which she didn't have, her feeling at the time was that the "piece of paper" did not "make people a better teacher". She also referred to her father's wide knowledge of scientific principles and his common sense, despite his lack of a formal qualification, as opposed to some people of the scientific establishment who had qualifications but "didn't have the understanding that goes with it". Now, however, Beth's view is that it is important for teachers to do some additional academic training, but only if it is "in areas that they feel it's going to be relevant to them, rather than prescriptive areas".

Although she had previously heard of the Including Studies of Asia in Curriculum professional development course, it was a phone call from a colleague that led to Beth commencing her Studies of Asia professional development journey. As a Japanese language teacher, she felt "that would enhance it", while at the same time she was looking for something that would take her beyond what she perceived as the fairly narrow focus of some of her fellow Japanese hub group teachers, "because they weren't really interested in anything but the language, and I was interested in the culture and in the culture of the neighbouring countries around them". The fact that the costs of participating in the Including Studies of Asia in Curriculum course were covered by the Department was another motivating factor.

It was the availability of some initial fee sponsorship that also led Beth to continue on to the Graduate Certificate in Education (Studies of Asia) and subsequently the Master of Education (Studies of Asia). Equally important was the coursework nature of the two awards, which enabled her to proceed "in little bites" that were manageable and not overwhelming. Having to pay for some of her final Master of Education units added a further spur, in that even when she felt she was "struggling", she persevered so that she didn't "waste that money". There was also an element of 'I'll show you' in her dogged determination to complete. At one stage, when her Principal, who was "paranoid that it was going to detract from my [teaching] program", suggested that she give up her studies, she responded that "that was the last thing I was doing". Likewise, when some of her peers indicated they "thought I was mad", because, she considers, "they felt threatened", it only steeled her resolve.

Above all, however, it was the enjoyment angle that sustained Beth. She loved "learning about societies" and having the freedom to choose what countries or issues she would research.

## CONCLUSIONS

Beth's story reinforces the observation of James (2002) that a life history is an individual's interpretation of events and experiences viewed from their current perspective. Beth's account also demonstrates Beattie's (1995) view of the value of narrative inquiry in interconnecting a person's past and present and their personal and professional selves.

A number of themes run through Beth's story, many of them consistent with Raymond, Butt and Townsend's (1992) finding of the enduring impact of "pre-training experiences" in framing a teacher's identity. The influence of Beth's parents was significant in framing her view of the world and of herself, with ongoing effect on her life choices and directions. Much of her childhood was characterised by feelings of alienation and inadequacy that carried over into her teaching career, particularly in the early stages, helping to explain her strong interest in so-called 'difficult' and 'troubled' students, because "the children accept you as you are, not for what you are, or who you are, or anything else, or what you look like".

Her clashes with her mother and with a number of her teachers left her with a distrust of authority figures and a determination to defend herself from those she perceived as misusing their authority, including various Principals at schools where she worked and officials of the Department. Her sense of poverty and deprivation as a child led to strong desire to escape from and rise above that world in terms of both security and esteem. She saw the keys to achieving that freedom as coming from some combination of factors such as a loving family context of her own, a well-esteemed and well-remunerated job, or gaining acceptance in a culture totally different from her own. Although understated by Beth, it was apparent that notions of Christian service were also strongly embedded in Beth's pre-training days and remained a lifelong influence.

After Beth commenced teaching, the first ten years pretty much equated to Day's (1999) "survival and discovery" phase, with some "consolidation" in so far as she gained satisfaction from working with particular types of students. However, there was very little in the way of "emancipation" because of the fractured nature of her career to that point as well as her low self-esteem. Likewise, even after 30 years there was very little in terms of "serenity" because of a prolonged lack of permanence, although Beth was increasingly confident in herself as a teacher.

Beth entered the final phase of her teaching career feeling that she still had a number of things to prove – that she was worthy of a permanent position, that she could teach as well as, if not better than, anyone else; that as a classroom teacher she was every bit as good as those in promotion positions; that independence of thought and action were the attributes that had enabled her to survive and thrive and these attributes must be maintained and defended at all costs; that she was intellectually able and capable of reaching the highest academic levels; that her chosen areas of interest (Japanese and Studies of Asia), and hence herself, were worthy of a respected place in her school community; and that she had achieved what her father had been prevented from achieving. Thus, while there might have been continuing scepticism about the education system, this has not been a phase characterised by a "contraction of professional activity and interest" – quite the opposite in fact. Huberman's (1992) view that there are certain kinds of instructional mastery that teachers value and that can help to stave off a "closing down" syndrome in late career was evident in Beth's case, as she valued mastery from both a professional and a personal perspective, indicative also of Nolder's (1992) "accelerated development" concept.

Although when she was asked about "critical incidents" affecting her career, Beth tended to talk more about interactions with particular teachers and students, there were a number of occurrences that significantly affected her career and life directions. The first was being forced by circumstance to become a contract teacher and the long lasting consequences of that. Another was finally gaining a permanent position in late career. Beth identified active support from particular Principals to undertake certain career steps as important, as, conversely, was lack of support from other Principals. Her decision to study and then teach Japanese language was very influential, as was her decision to undertake an initial professional development course in Studies of Asia.

Beth's attitudes to professional development, in keeping with other aspects of her life and career, showed something of a rebellious streak. She neither respected nor responded positively to Department imposed professional development and when she did undertake professional development it was not to benefit the organisation, nor indeed her school. Rather, she did it for herself as a person and as a teacher, seeing that as likely to have the most benefit for her students.

The Asia-related nature of the professional development that Beth devoted so much time to struck a chord at the right time, revealing a dynamic interaction between her context and her personal biography. Her interest in societies and cultures of Asia had deep personal origins extending right back to her childhood, as well as more recent resonances with her focus on Japanese language and culture. It also linked with her notions of Christian service – her trip to the Philippines, for example, coming about because of a decision to visit a student her family was sponsoring.

The pursuit of formal postgraduate qualifications through the Studies of Asia professional development pathway in many ways represented unfinished business for Beth, enabling her to address a perceived lack from her past. Obtaining the awards provided her with a sense of achievement not only at the personal level, but also professionally, as she had carved out a niche for herself and was now better qualified than most of her peers. From a cultural standpoint, Beth now felt a closer sense of identification with those cultures she had admired for so long in comparison to the perceived deficiencies she perceived in her own culture.

Beth's story shows that in one sense she was a product of the 'mainstream', in terms of the social attitudes and values context in which she grew up, while in other ways she was quite different from the 'mainstream' stereotype, in terms of her family's poverty, her negative views about her own culture and her deep interest in other cultures. As she matured she demonstrated, as Halse (1996b) found, that people's interest in other cultures can arise from "genuine compassion and empathy", and can lead to the development of an "altruistic value system" with understanding "cultural difference" as a central element.

Although it was not the purpose of this study to investigate in any depth shifts that might have occurred over time in Beth's attitudes towards the various societies and cultures of Asia, it was apparent that Beth had made a considerable transition from the "gee whizz" sentiments of her childhood – although some elements of that still remain – to a deeper understanding based on more extensive knowledge as well as interaction with and mutual respect for people in and from the Asian region. Her story thus reinforces Hamston's (2000) view that "our values and our ways of seeing the world ... are never complete, finished; each individual's 'becomingness' is open and dialogue keeps this process alive".

It is fitting that Beth should have the last word as to how her life journey had led her to an extensive involvement in a Studies of Asia professional development pathway, through her poignant reflection,

"It was Asia, wasn't it. It was Asia."

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# Reconceptualising childhood: Children's rights and youth participation in schools

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*Article 12 of the United Nations Convention on the Rights of the Child holds that young people have a right to participate in matters affecting them. While all members of the United Nations have ratified the Convention (with the exception of the United States and Somalia), there are numerous challenges associated with implementing the participatory principle in schools. In response to some of these challenges, this paper examines how western conceptions of childhood, which associate the child with innocence and dependence, have worked to undermine youth participation in the school environment. It explores alternative understandings of children as put forth by child liberationist theorists and international commitments such as the UN Convention on the Rights of the Child. Moreover, it calls upon schools to re-evaluate their hierarchical structure in order to uphold the participatory rights of children.*

UN Convention on the Rights of the Child, participatory rights, social construction of childhood, child liberationist theory, school hierarchy

## AN INTRODUCTION TO PARTICIPATORY RIGHTS IN SCHOOLS

The *United Nations Convention on the Rights of the Child* (1989) is an international legal instrument that outlines a specific body of identifiable rights for children. One of its guiding principles, age-appropriate participation, holds that young people have the right to express their views in matters affecting them (Article 12). While all members of the United Nations have ratified the Convention (with the exception of the United States and Somalia), there is still a great deal of controversy surrounding the participatory principle. Critics argue that children do not possess the emotional or cognitive capabilities needed to make rational choices (Purdy, 1992). Following from this, they believe that adults should paternalistically choose for children. While the Convention seeks to challenge this ideology by granting children the right to participate in the decision-making process, its application has been somewhat unsuccessful. For example, in institutions that are responsible for the socialisation of young people, such as schools, educational officials are still not required to share power with youth (Bickmore, 2001). Consequently, the voices of children are often excluded from the decisions that take place in the school environment. Although such educational practices are often carried out with the intention of protecting children, at the same time they may also violate their right to participate in decisions that affect them.

In light of this problem, the purpose of this paper is to explore some of the assumptions we have about children and their ability to make rational decisions. To this end, this paper first discusses how the social construction of childhood within western societies has resulted in the creation of an immature and dependent representation of young people. As we see, the conception of childhood that we hold as natural may actually be a result of certain historical and social factors. The next section examines alternative understandings of childhood as put forth by child liberationist theorists and the UN Convention on the Rights of the Child. It demonstrates that children may have the ability to make thoughtful choices and thus, should be given greater opportunities to

influence the decision-making process. Last, this paper argues that school practices often overlook the ability of children to engage in autonomous reflection. Consequently, educational institutions have largely neglected to harmonise their policies with the participatory principle embodied in the Convention. In summary, an examination of the aforementioned areas reveals that the dominant conception of childhood in western societies can sometimes undermine the ability of young people to participate in institutions such as schools. Despite efforts to guarantee children greater autonomy, through international legal instruments such as the Convention, educators still exercise a disproportionate amount of control over children. If schools are to respect and uphold the participatory rights of youth, educational officials need to provide young people with greater opportunities to influence the decisions that take place within the school environment.

### **THE SOCIAL CONSTRUCTION OF CHILDHOOD IN WESTERN SOCIETIES**

In exploring the nature of children and their ability to act as social actors capable of engaging in autonomous reflection, one of the most crucial places to commence is with an overview of the social construction of childhood. Scholars such as Freeman (1998) have articulated the need to merge child rights discourse and sociological research in the area of child studies given that these disciplines possess overlapping interests and congruent understandings of children. In particular, sociological arguments in relation to the social construction of childhood provide a great deal of clarity in unravelling some of the assumptions that we have about the nature of children. Such research is pivotal for taking the child rights debate forward, especially in relation to the right of children to participate in the decision-making process, because it allows us to determine the extent to which child autonomy could be justified within the context of sociological findings. While there are several points of interest that could be pursued for the purposes of such a discussion, perhaps one of the most practical approaches involves an overview of how conceptions of childhood are both socially and historically situated. This allows us not only to see how childhood has changed and evolved over time but also to challenge the notion that childhood is a static concept. With this in mind, the work of Philippe Ariès provides a starting point for understanding the dynamic nature of childhood as both an ideological and social construct.

The most significant contribution from Ariès (1962) stems from his argument that childhood was not regarded as an important stage in life during the middle ages. Although few records from this period provide detailed accounts about the lives of children, Ariès is able to argue this point by drawing upon historical evidence such as artistic representations of children. For example, in his seminal work *Centuries of Childhood*, Ariès shows that in a French miniature of the late eleventh century children were merely painted as small characters who possessed the expressions and features of adults. Moreover, he notes that literary historians, such as Mgr Calve, have shown that in the epic child prodigies behaved with the strength and courage of warriors. Based on the notion that children were often represented with adult-like characteristics, he concludes that during the medieval period people did not possess a distinct image for children. This suggests that the separation between child and adult worlds that is commonplace within modern societies may not have existed to the same extent in previous centuries.

Ariès also argues that an affection for children may have been somewhat lacking. This point is indicated by the fact that the life expectancy of the child was considerably low. Given that people would not become too attached to something that was regarded as a probable loss, Ariès believes there was a general indifference or callousness expressed toward children. Although he acknowledges that religious iconography may have shown a somewhat sentimental view of children as early as the twelfth century, this sentimental realism did not extend into lay works until the sixteenth century. However, even during the latter period the child was not portrayed alone but rather was always situated with others. It was not until the seventeenth century that art

started to give children a distinct place. Ariès believes that this represents the beginnings of a more idealised and affectionate image of children.

The work of Ariès has been extremely significant not only in examining historical images of childhood, but also in contesting the notion that childhood is a natural phenomenon. When we consider that previous centuries did not possess a distinct image of childhood in artistic representations, we might expand this understanding to society at large and conclude that childhood itself was not present as an ideological construct. However, before we can make this claim, it is important to note that not all scholars agree with his conclusions. For example, Cunningham (1995) argues that the varying pictorial representations of children throughout the centuries merely tell us about changes in art and not the way in which childhood was perceived by people. Moreover, Cunningham also shows that the medieval world not only recognised *infantia* (the first seven years of life) as a significant and separate stage but that religious writings also urged mothers to bring up their children with kindness. This not only demonstrates that medieval society may have had affection for children but that there was also a clear concept of childhood based upon age.

While Ariès does not completely dismiss the notion that medieval society may have had some recognition of the characteristics of childhood, he maintains that childhood was not valued, given that artistic works did not have a distinct place for them. However, more recent scholarship shows that there was an appreciation for the young as evidenced by writings from the sixth century, which clearly mourn the loss of children (Cunningham, 1995). Indeed, there is mounting evidence that indicates that childhood was regarded as a separate and important stage during the medieval period. Therefore, contemporary scholarship shows that the Ariès thesis, namely that the separation of child and adult worlds did not emerge until the seventeenth century, cannot be fully sustained (Cunningham, 1995).

Although the above discussion suggests that Ariès may have been somewhat flawed in his assumptions, scholars such as Archard (1993) provide a useful way of restating the conclusions that can be derived from his work. First, it is important to draw a distinction between the meaning of a concept and a conception. For example, Archard argues that to have a concept of childhood merely means to recognise that children differ from adults. Certainly, this was the case in the medieval period as there was a clear language to distinguish various stages in life such as *infantia* and *pueritia* (Cunningham, 1995). Even though Ariès shows that there were similarities between children and adults that we do not see today, such as the inclination for children and adults to be glad in similar garments, this does not prove that earlier societies lacked a concept of childhood – they merely lacked our concept (Archard, 1993). In comparison, Archard shows that a conception outlines a particular view of the characteristics that make adults and children different. For example, in past centuries people did not always believe children should be kept innocent of sexual knowledge (Shahar, cited in Cunningham, 1995). Indeed, this differs from present-day conceptions of childhood in many western societies whereby children are often protected from such information. With this in mind, Ariès helps us to see that conceptions of childhood have somewhat transformed.

Based on the notion that conceptions of childhood are socially and historically situated, we would be wise to consider the more recent roots of our own treatment and perception of children. To this end, it is crucial that we understand the impact of literary works in shaping the attributes that we ascribe to the young. For example, during the eighteenth century, Rousseau presented a new understanding of childhood in his seminal work *Emile* which emphasised the natural goodness of children. Unlike previous centuries that saw children as adults in the making, Rousseau argued that childhood was a stage in life to be valued in and of itself. This idea was expanded by Romantic writers such as Blake who argued that childhood was a source of innocence, and also by

Wordsworth who saw great virtues in the child (Hendrick, 1997). These representations are significant because they demonstrate the beginnings of a new understanding of children – one that clearly defines the characteristics of their separate and unique nature. Although this ideology was somewhat lost with the rise of industrialisation and the placement of children as factory workers, it was later revived by welfare reformers to challenge this very practice. For instance, during the child labour debates that took place from 1780-1840 in Britain, reformers drew upon the Romantic and Rousseauian ideal arguing that factory work was an unnatural practice for such young and innocent members of society. These debates have largely influenced and shaped present-day conceptions of childhood, which hold that children should be protected from the harsh realities of the adult world (Hendrick, 1997).

The protectionist ideology that became prominent in the late eighteenth century laid the groundwork for the implementation of mass education. Following from this, the government was able to create a homogenised construction of childhood that was enforced by schools. For example, Hendrick (1997) notes that schools ignored the knowledge that children derived from outside influences and, instead, favoured a complete state of ignorance. In addition, they demanded a certain standard of behaviour that was often upheld using physical force. This deference to authority that was expected of school children reinforced their vulnerability and dependence. Moreover, the institutionalisation of children not only deepened their distinct place in society but also was an attempt to keep them innocent and pure by removing them from the austere factory setting. Hendrick argues that the school was able to impose this vision of childhood upon children because it had legal authority to demand their attendance. In other words, the school was an unavoidable institution that was used to shape and mould the docile behaviour and innocent character of its pupils.

The protection of childhood reached its height during the twentieth century when political parties started to place children as a top priority on their agendas, noting that children were the key to the future. Cunningham (1995) believes that this was largely a result of the international rivalry between states during this period. For instance, children were regarded as the most valuable asset of a nation and therefore, its future strength and power depended upon their proper development. Accordingly, governments began to draft policies and laws securing greater services for the child. This helped to make the dominant conception of childhood even more coherent and pervasive, and also created a vulnerable, innocent and dependent image of children (Hendricks, 1997).

Although the image of children has somewhat evolved since the nineteenth century, Stasiulis (2002) shows that contemporary practices regarding children still reflect the dominant ideology from this period. For instance, she argues that the nineteenth century conception of childhood emphasised the innocence and frailty of children. This conception has profoundly shaped and limited their ability to participate as active citizens today because children are still believed to lack the wisdom and competence to make their own decisions. In other words, the mere fact that children are excluded from the political sphere is testament to the fact that society still views them as dependent upon adults and the state.

More recently, scholarship regarding the 'end of childhood' has charged the media with adultifying children (Medved 1998 and Postman, 1982 cited in Stasiulis, 2002). Although this may be somewhat true given that children have greater access to the adult world through media such as television and the internet, there are still several aspects of their existence that remain unchanged. For instance, schools still play a role as one of the dominant socialising forces in their lives. Moreover, with international movements to universalise primary schooling, the school is an institution that still retains tremendous amount of influence and control. In the Canadian context, recent legal decisions that permit teachers and parents to use minor corrective force on children also restricts their autonomy rights and renders them somewhat vulnerable to authority. This is not

to suggest that conceptions of childhood have not evolved since the nineteenth century. However, it is important to note that children are still not, to a large extent, treated as legal subjects but rather as objects that require protection, thus causing them to be viewed as the mere property of their parents and the state (Stasiulis, 2002).

The above discussion offers a historical sketch of the social construction of childhood in western societies. Certainly, this topic is a very complex and much debated area of interest, and this examination does not claim to provide a comprehensive overview of the subject. Moreover, it would be unfair to suggest that all western societies have the same conception, although there are some dominant themes that seem to pervade our understanding. However, what our discussion does highlight is that the institutionalised concept of childhood has been very much influenced by factors such as industrialisation, welfare reform, government policies and mass schooling. Although conceptions of childhood have somewhat shifted, of great interest is the notion that most societies have recognised it as a distinct and separate stage in life. Furthermore, scientific findings seem to validate this separation, showing that there are both cognitive and developmental differences between children and adults (Stasiulis, 2002).

Certainly, we cannot deny that children possess some distinguishing features, yet we also must be aware that how we respond to their differences has varied over time. For example, during both the medieval and modern period, children were immersed into the workforce at a young age. This does not mean that adults did not recognise the distinct nature of youth, but it does show that children were believed to have the ability to participate in the adult world. While mass schooling sought to provide children with greater opportunities to develop their cognitive capabilities, it also created a separate space for children. This space organised itself as an authoritative structure where adults were responsible for enforcing a standard of behaviour and choosing the daily activities of children. In other words, the school reinforced the notion that children should have a distinct place in society that is controlled by adults. Arguably, this has resulted in a conception of childhood that constructs the child as a vulnerable object in need adult guidance and protection. However, if we conclude that childhood is social construct that has varied over time, we might want to question if an authoritative treatment of children recognises and cultivates their true capacities. As discussed below, there are several arguments that indicate that children are not afforded the amount of autonomy necessary for their success and development.

### **RECONSTRUCTING CHILDHOOD WITHIN THE CONTEXT OF THE CHILD RIGHTS MOVEMENT**

During the eighteenth and nineteenth centuries, a dominant image of childhood was universalised with the introduction of mass schooling and new laws that sought to provide children with greater protection. As previously noted, this resulted in a more sentimental view of children that emphasised their innocence and vulnerability. However, with the rise of feminism and other movements that sought to emancipate humanity, people also began to question the institution of childhood. For example, Archard (1993) points out that in the late 1960s feminists argued that the subordinate role of women was not indicative of their female nature, but rather it was a result of patriarchal influences. Moreover, feminists showed that the notion that women were weak, emotional and dependent was a social construct that was used in the justification of their oppression. This argument was later applied to our understanding of children by child liberationist theorists, such as Holt and Farson, who argued that the vulnerable and helpless image that we ascribed to children was unrepresentative of their true nature. In other words, given that childhood itself was a social construct, we could not assume that childishness was necessarily a biological trait. The child liberationist argument, which gained momentum in the 1970s, sought to reinvent our understanding of children and emancipate them from their helpless state.

In highlighting the oppressive nature of childhood, child liberationists make several observations about our treatment and expectations of children. Some of the most notable are put forth by Holt (1974), a pioneer of the child liberationist movement. First, he discusses the notion that children are considered to be incompetent and argues that this may be somewhat of a self-confirming ideology. To illustrate this point, he draws our attention to the Japanese musician Suzuki who taught young children how to play violin with great proficiency. He compares this to American pre-school programs where children often form rhythm bands in which they are required to play bells and cymbals and merely mimic the rhythm that the teacher plays for them. Although Americans are often astonished by the magnificent musical talent that Suzuki's students possess, Holt reminds us that these Japanese children are not considered to be prodigies within their own society, but rather they represent the norm. In other words, when we place high expectations upon children they will often rise to the challenge and develop great skills and capacities. By the same token, if we view children as being incompetent, they too may be socialised into viewing themselves in this manner and, as a consequence, their learning will be dramatically stifled.

Holt also argues that children often feel an inclination to escape from the institution of childhood. For example, in a classroom discussion he conducted at a high school in America, he asked the students if they could legally live away from home, how many would actually consider this option. All students raised their hands with great enthusiasm. Holt argues that this is indicative of their desire to be seen and treated as adults rather than as children. Moreover, while we often have the tendency to view childhood as a garden that protects children from the outside world, Holt believes that many young people experience their childhood not as a garden but as a prison from which they want to escape. Therefore, he believes that our traditional view of childhood may be somewhat oppressive as it denies children opportunities to exercise their autonomy and cultivate their true capacities.

The arguments developed by Holt were instrumental in the child liberationist movement, and later became a foundation upon which people advocated for the equal rights of children. For example, child liberationists argued that children needed to emancipate themselves from the oppressive institution of childhood. To this end, they believed that children should not only be provided with welfare rights (which had largely already been secured for them) but also agency rights, such as the right to vote and work. While they acknowledged that agency rights would require an ability to make rational choices, and indeed not all children possess this capacity, the same could be said of adults. In other words, liberationists felt that categories of meaning such as 'child' and 'adult' provided an arbitrary measure of one's capacity for autonomous reflection. Moreover, they believed that children were members of a society, and therefore they should be able to shape and influence its organisation. Accordingly, they argued that children should have their voices considered equally in the formation of laws and social policy (Dwyer, 1998). In essence, child liberationists sought to overturn the dominant ideology that equated children with incompetence and helplessness in order to help them realise their full potential and become more independent at an earlier stage in life.

Although the child liberationist argument has been considered and debated within scholarship over the past thirty years, its application has been less successful. For instance, children still do not possess the right to vote in most countries, and unquestionably there is still a clear separation between children and adults whether it is shown explicitly through the clothes they wear or implicitly through institutions such as schools that shelter children from the outside world. However, with that said, there has also been an international movement to secure greater autonomy rights for children. For example, in 1989 the United Nations general assembly adopted the Convention on the Rights of the Child. On the one hand, this international legal instrument is still very much a protectionist document, as it calls upon states to secure services for young people, such as a minimum standard of health care and education. On the other hand, the

document is also extremely emancipating as it is the first legal instrument to grant participatory rights for children.

As previously noted, article 12 of the Convention states that young people have a right to participate in matters that affect them according to their age and level of maturity. Certainly, this does not provide children with all the rights that were articulated by child liberationists. However, it does draw upon this philosophy to a certain extent as it recognises children as having the capacity to make meaningful decisions (Stasiulis, 2002). Although most members of the United Nations have ratified the Convention, the majority of these states have been reluctant to adopt domestic policies that make youth participation a reality. For instance, few states provide structures that allow children to voice their concerns in government, and in the institutions that are responsible for nurturing children, such as schools, young people are usually not provided with representation on decision-making bodies. Arguably, this is largely because the notion that children have the capacity to make rational decisions is a concept that challenges the dependent and child-like nature of young people. However, if we assume that childhood is a construct, and also consider alternative understandings of children, we might want to question if excluding children from the decision-making process is in fact in their best interest.

In assessing the validity of youth participation, scholars such as Limber and Kaufman (2002) remind us, that when children are provided with opportunities to express their feelings, it signals a respect for them as human beings, and correspondingly allows them to develop a greater sense of respect for themselves. Moreover, when it comes to social policy, it is quite clear that government decisions impact the lives of children. As noted by Stasiulis (2002), neo-liberal governance has resulted in the erosion of funding in areas such as education. While we would like to believe that adults will always act in the best interest of the child, it is quite easy for them to overlook how their policies impact young people when the voices of youth are excluded. Furthermore, it would be much easier to respond to the needs of children if adults were to listen to them. For example, in the educational context, decisions regarding curriculum are often made without any input from students. Perhaps if young people were given greater opportunities to influence such decisions, educators could build a curriculum that is more motivating for students (Johnny, 2005). This does not mean that young people should be granted equal power, because adults often have more experience and knowledge to draw upon. Therefore, it stands to reason that adults would be given a more central role in decision-making bodies. However, we must consider that our inclination to exclude the voices of children may underestimate their capacity to articulate their own needs and desires. Certainly, the UN Convention recognises this point as it provides a framework for re-conceptualising the role of children within society by providing them with the right to influence the decisions that impact their lives. Yet as experience has shown, the challenges associated with implementing this principle are numerous, especially in institutions such as schools that have traditionally operated as authoritative structures.

### **THE RIGHT TO PARTICIPATE VS. PROTECTIONIST SCHOOL POLICIES**

While human rights advocates widely agree that providing children with greater opportunities to participate is a more ethical way of treating young people, youth participation in schools is still wanting. For example, in the Canadian context scholars such as Howe and Covell (2000) have found schools possess few structures of opportunity that allow students to contribute to the decision-making process. Although it is true that some educational institutions provide student councils that allow youth to learn about democratic participation these councils are instituted at varying degrees and usually do not provide opportunities for students to make substantive decisions about the school (cited in Johnny, 2005). In America there are similar problems as students are provided with few individual rights in the school setting; their voices are often excluded on matters regarding curriculum and school rules and regulations are promulgated

without opportunities for student debate (Sudbury Valley School, 1970). Moreover, as noted by Hart (cited in John, 1995, p. 115) "there is no nation where the practice of democratic participation in schools has been broadly adopted. The most fundamental reason seems to be that, as primary socialising instrument of the state, schools are concerned with guaranteeing stability; and this is generally understood to mean preserving the very conservative systems of authority." Indeed, in many cases, schools are not run as democratic structures, but rather they provide educational officials with the power to make decisions unilaterally.

When we consider the hierarchical nature of the school system, it is clear that the authoritative ideology that has propelled the operation of schools since the inception of mass schooling is still very much rooted within present-day practices. Based on this notion, we might conclude that the treatment of children in schools does not reflect contemporary understandings of children and their rights. Indeed, policies and laws, such as the UN Convention, can be drafted, but their implementation will not be effective unless we work toward restructuring the authoritative organisation of our educational institutions. Frequently when educators engage in dialogue about reform, the focus tends to be centred on curriculum and educational standards. Very little thought is given to the actual structure of operation in the school and the placement of student voices within it. Unquestionably, the initiation of such dialogue is often ignored because our tendency to view children as wholly dependent upon adults is deeply engrained within the history of western societies.

With this in mind, we might want to question not only how childhood is understood amongst teachers and other education officials but also how these perceptions are constructed. For instance, would it be beneficial to examine the extent to which teacher education programs reinforce a vulnerable image of childhood and how this might impact the power dynamics that are played out in the school? It would seem that such an understanding is crucial when we consider that teachers will ultimately hold the power to include the voices of children in the decision-making process. In other words, the manner in which teachers construct age, maturity and capability will largely influence the amount of power that they afford to young people (Smith, 2002). With international agreements such as the UN Convention, there is an urgent need for schools to create opportunities for youth participation because it is a fundamental and universally recognised right of children. Therefore, it is essential that we try to construct a more empowering image of childhood in our schools.

### **CONCLUDING REMARKS AND FINAL REFLECTIONS**

In summary, our discussion shows that conceptions of childhood have transformed throughout the centuries. Although it is likely that childhood has always been regarded as a distinct stage in life, the image that is attributed to children has shifted according to social influences. The notion that children are vulnerable and dependent is largely a product of the eighteenth and nineteenth centuries whereby people came to appreciate the natural goodness of children. This led to protectionist policies that sought to remove children from the adult world of work, and instead place them within the school environment. Mass schooling contributed to a universalised conception of childhood as it allowed the government to socialise all young people in a uniform manner. In many respects, the school has perhaps had the most profound influence on shaping our understanding of children. With its authoritative and orderly operation, the school was able to reinforce the dependent and vulnerable nature of young people.

While this ideology was challenged in the 1970s by child liberationists who sought to give children greater equality and autonomy, the school continued to operate as a hierarchical structure. In more recent years, the international community has also tried to provide children with more freedom with the implementation of the UN Convention and its participatory principle. However, child participation has been extremely difficult to implement and uphold, because many people

argue that children do not have the capacity to make rational decisions. Arguably, this ideology stems from the social construction of childhood that was developed during the eighteenth and nineteenth centuries. Moreover, it is still apparent in schools where students are continually excluded from participating in the decision-making process. While teachers and other education officials often make decisions for children because it is believed that adults have more foresight, it should be noted that such actions are a violation of children's right to participate in the decisions that affect them. Indeed, the UN Convention on the Rights of the Child is calling upon educators to rethink their pedagogical strategies and school-based procedures. If we are to create an ethical educational system that respects the rights of children it is time to reinvent our understanding of childhood and provide children with greater opportunities to participate in the decision-making processes that take place in the school.

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# Interculturality for Afro-Peruvians: Towards a racially inclusive education in Peru

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*Intercultural education policy and programs in Peru emerged as a response to the right of education for marginalised indigenous populations. Under the influence of international dialogue regarding education for all, Peruvian policy has recently proposed interculturality as a guiding principle of education for all Peruvians. In this context, institutions advocating for the rights of people of African descent are proposing intercultural education as a right for Afro-Peruvian marginalised populations. This paper discusses the challenges facing interculturality and racially inclusive education in Peru.*

Interculturality, Afro-Peruvian movements, indigenous language, Peruvian education policy, race and education

## INTRODUCTION

Interculturality, ... assumes the richness of cultural, ethnic and linguistic diversity and finds in the acknowledgment and respect for differences as well as in the mutual knowledge and learning attitude of the other, support for harmonious coexistence and exchange among the diverse cultures in the world (Article 8 - Principles of Education; *Ley General de Educación*).

Intercultural education has emerged in the context of the reform of Latin American educational policies towards the configuration of more equitable, inclusive and democratic education systems. In the last decade, Latin American governments in over a dozen countries have acknowledged the multicultural, multiethnic and multilingual nature of their societies, and thus have admitted the urgency to respond to historically excluded populations. Intercultural education policies in Peru emerged first as a proposal aiming to address the educational rights of indigenous non-Spanish speaking populations. In 1997, almost two decades after the creation of the first intercultural education programs and ten years following its incorporation into the law, interculturality was defined as a guiding principle of Peruvian education. The discourse defining interculturality as educational proposal stresses the strengthening of democracy but fails to address exclusionary practices and profound social inequalities also affecting Spanish-speaking non-indigenous groups.

Socio-economic and educational marginalisation is not exclusive to indigenous populations in Peru. Peoples of African descent, who with approximately 2.5 million inhabitants living in Black communities comprise ten per cent of the total population, are also among the poorest and the least educated in the country (CEDET, 2003). While the intercultural policy promises equal access and quality education for all, this policy is characterised by an apolitical discourse that has largely ignored factors exacerbating inequalities in the Peruvian educational system: it lacks an analysis of race as a separate vector of inequality. This article argues for the incorporation of issues of racial exclusion in the educational policy discourse as an alternative in the formulation of inclusive intercultural education policies in Peru.

First, this article offers a historical review of bilingual intercultural education in Peru focusing on how the Peruvian education policy has used the concept of language diversity to define cultural difference and interculturality. In a discussion regarding inclusive policies and exclusive social practices towards Afro-Peruvians, this paper pinpoints the contradictions between policies of inclusion and pervasive practices of racial discrimination in the Peruvian context. This article proceeds to question the apolitical tone of inclusive intercultural policies that utilise a discourse of harmonious dialogue while masking existing racial tensions in society. At this point, the author argues for the addition of the analysis of racial discrimination in the intercultural discourse, as an effective step towards the inclusion of traditionally marginalised populations in a traditionally exclusionary education system. In a second section, the article offers a description of the work and challenges encountered by Black social movements in Peru in their effort to incorporate populations of African descent in the intercultural policy debate. This section describes some actions to promote social change undertaken by the social movement MNAFC as well as the role of Afro-Peruvian organisations in Intercultural Education.

### **BILINGUAL INTERCULTURAL EDUCATION IN PERU: A HISTORICAL REVIEW**

Bilingual education in Peru is not a twentieth century invention. The use of multiple languages together with some version of bilingual instruction had been taking place throughout the Americas before Spanish colonisation. During colonial times, encompassing the sixteenth to nineteenth centuries, the Spanish throne supported the teaching of the Spanish language in its new territories. Members of the church in charge of 'educating' the people of the New World, however, realised that evangelisation in the Spanish language alone was nearly an impossible task. Throughout the colonies and among numerous indigenous languages, Nahuatl, Chibcha, Tupi-Guarani and Quechua were chosen as *lenguas generales* and thus used to communicate with indigenous pupils in an effort to transmit knowledge of the catholic religion, which was intended to 'civilise' them. Aside from religion, the aim of this mode of instruction was *castellanización*, or the teaching of the Spanish language with the subsequent suppression of the mother tongue.

As the fervour of Enlightenment replaced religious devotion and power in the Spanish throne, the *castellanización* of the colonised populations in the Americas became a central mission. In 1782, King Charles III ordered the extinction of other languages and the exclusive use of Spanish in all colonies. Arguably, exclusionary practices against the indigenous populations during colonial times paralleled those of African slaves whose presence in the Peruvian Colony date back to the early sixteenth century. Still, indigenous people were recognised by law as natural inhabitants of the colonial territories and as such, were to be explicitly included in policies as determined by the Throne. Conversely, because of their condition as slaves, Africans and their descendants in the colony were not granted any recognition similar to that of indigenous people.

People of African descent were brought to the Peruvian colony from Europe experiencing Spanish customs and instruction in the Spanish language before arriving in the New World. While colonial policy would discourage the instruction of slaves, some Africans became literate in the Spanish language, and others, especially the *mulato* children, the offspring of white and Black parents, were eventually freed allowing subsequent access to some form of instruction. A small minority of children of mixed race who were born free in wealthy homes received privileged education and eventually became part of the colonial elites. In the last decades of the colonial rule, educated elites of *mulatos* and *mestizos* (of Spanish and indigenous descent) led the independence movement in South America.

After independence from Spain, the new Peruvian elite who seized political power maintained the beliefs that legitimised colonial relations towards indigenous populations (Freeland, 1996, Gonzales Mantilla, 1999). Thus, when the first Peruvian constitution was written in 1823, Spanish was designated as the official language. The choice of a language spoken only by ten per cent of

the population ignored the existence of hundreds of indigenous languages utilised as the main means of communication by most Peruvians. Moreover, it has been pointed out that, at that time, the “intention to enclose the diverse cultural communities of this country in an imaginary concept of unity that is functional to the construction of the nation-state [was] already present” (Gonzales Mantilla, 1999, p.28). Meanwhile, historical and legislative traditions ignored the conditions of people of African descent in Peru. Thus Blacks remained invisible to most Peruvian national undertakings.

The common denominator of the educational policies in the decades to come was the identification of linguistic difference as a central issue to be addressed. In that light, the problem of indigenous people ought to be addressed through *castellanización*. Meanwhile issues of racial discrimination of non-indigenous peoples, in particular of Afro-Peruvians, were simply obviated. The law of education in 1941 defined the goals of indigenous education as the learning of the Spanish language and the habits of civilised life. Ideas of liberalism and progress gave education the power to become a nation-building and a race-homogenising tool (De La Cadena, 2000). During the 1960s in the frame of the development discourse, politicians would refer to education as *un símbolo de redención social*, a symbol of social redemption (Navarro Grau, 1966). While the policies of independent Peru identified indigenous people either as a social problem to the advancement of the nation, or as an unfairly marginalised group, other groups experiencing a similar burden are obviated. Policies of equal education and social redemption left Afro-Peruvians untouched and their condition invisible to a society clearly divided by class and blinded by its own racially discriminatory practices against indigenous as well as Afro-Peruvians. De La Cadena (2000, p.2) attributes these “exculpations of racism” in the Peruvian society to a definition of race “rhetorically silenced by the historical subordination of phenotype to *culture* as a marker of difference.” Indeed, discriminatory practices in the Peruvian society are not considered racist in the sense that they connote cultural differences as opposed to biological ones.

As a top-down initiative, interculturality in Peru has been treated as a concept strongly linked to linguistic diversity. Guido Pílares from the Bilingual Intercultural office in the Ministry of Education (Personal interview, June 2003), notes that this linkage was established because bilingual education as legally proposed in the early 1920s did not include elements of culture or ethnicity. In the specific case of national educational policies, particularly those of the first half of the twentieth century, there was a culturalist definition of race revealed in an emphasis on the assimilation of the population identified as socially marginalised, namely, the indigenous people, to a rationally superior culture through education and specifically to the learning of the Spanish language. Although not unanimously, leading Peruvian intellectuals of those decades referred to education as the opportunity to improve even the most ‘inferior’ of races (De La Cadena, 2000).

Bilingual intercultural programs and policies in Peru were the result of an historic event which initiated one of the most significant educational reforms in the country. In October 1968, General Juan Velasco Alvarado established the Peruvian revolutionary military government after a *coup d’etat*. This government presented itself as a regime with a moralising mission that would transform the structures of an oligarchic state, through working in favour of the neediest social sectors whose effective inclusion and participation in the national life would constitute the base of the unification and the development of the Peruvian nation. A general educational report prepared by the Reform Commission in 1970, described the situation of the country as one of internal underdevelopment and external dependence (Comisión de Reforma de la Educación, 1970). Underdevelopment was attributed to profound social inequalities that were reflected in an unfair economic distribution, where a small sector of the population monopolised the resources of the country at the expense of the great majority of Peruvian society. These unfair structures, as expressed in this report, had been reinforced through political ideologies that served dominant

groups to the detriment of rural peoples in the interior of the country (Comisión de Reforma de la Educación, 1970, p.11).

The Peruvian education reform proposed by the revolutionary military government in 1972 was considered, at its time, one of the innovative educational reforms undertaken in Latin America (Bizot, 1975; Churchill, 1976; Freeland, 1996). Reform documents stated the aim to build the country along humanistic, democratic and nationalistic ideals. In the light of this humanistic spirit, education would contribute to the structural transformation and development of Peruvian society. The reform proposed flexible and diversified education with a spirit of justice which would take into account the social and regional variety of the country. Reform documents also criticised traditional education, namely the form of education that alienated the poor from the life of the nation. Distancing itself from this form of alienation, the educational reform emphasised the recovery of linguistic and cultural space for indigenous people (Hornberger, 1988, 1997, 2000), but it also constituted the continuation of invisibility for Peruvians of African descent.

The reform calling for national unification and bilingual education offered the possibility of fulfilling one of the greatest promises of long-term improvement and societal integration for indigenous people. Some stated that this reform demanded “the most fundamental shift in attitudes on issues of culture and race” (Churchill, 1976, p.50). The specific policies on bilingualism assumed in the educational reform became most demanding not only in terms of implementation. The new policies demanded a substantial paradigmatic change among different sectors of society. With such ideological baggage, several bilingual intercultural programs were initiated as pilot programs during this regime.

Among the elements representing the social and political impact of this reform was the introduction of the conceptualisation of bilingual education as a ‘valid form’ of educational development (Churchill, 1976). The reform stated the exigency to replace violent *castellanización* with the recognition of cultural differences (Hornberger, 1988). Parallel to these efforts early in General Velasco’s government, a decree substituted the term indigenous with the term *campesino* (peasant) to refer to indigenous populations. Gonzales Mantilla (1999) observes that such a shift attempted to blur “the collective perception of the real complexity of the multiethnic essence of the country” (p. 34). Mirroring the government’s Marxist orientation, this change of terms aimed to reduce a cultural, social and political phenomenon that carries within itself an intense and complex historical weight to a mere economic dimension. However, the introduction of the word *campesino* did not erase the consensual acceptance of the inferior social condition of the indigenous person. The word ‘indigenous’ or *indio*, maintained its pejorative charge associating it with rural, illiterate and impoverished.

The educational reform and the efforts of the revolutionary government were finalised when illness forced General Velasco to leave government in 1974. Bilingual intercultural programs for indigenous people continued operating long after the return to democratic rule in 1980 through the support of international NGOs. The subsequent governments remained concerned with their own political and economic stability, and thus abandoned the original commitment for most education related projects, among those, bilingual programs serving rural minority populations. By the mid 1980s and because of continuous research and publications abroad, intercultural education programs had become well known internationally and would be used to model intercultural education in other Latin American countries. In Peru, it was not until the 1980s that intercultural education would be incorporated into government education policy, as an alternative form of education for indigenous people. In the context of international dialogues advocating the rights of all people to education, the intercultural concept was defined as a guiding principle of the Peruvian education system in 1997.

### **AFRO-PERUVIANS: INCLUSIVE POLICIES AND EXCLUSIVE SOCIAL PRACTICES**

Historically, national educational and social policies in most Latin American governments have overlooked and failed to address the situation of people of African descent (Wade, 1997). Peru is no exception. Since President Ramón Castilla abolished slavery in 1856, under the Peruvian law people of African descent, as all people born in Peruvian territory, are citizens sharing equal rights. Traditionally, however, this population has experienced exclusion from the social, economic and political life of Peruvian society. Afro-Peruvians as most people of African descent in Latin America continue to confront issues of pervasive racial discrimination, extremely high rates of poverty and illiteracy, and limited access to education, health and other public services (Inter-American Dialogue, 2000).

In the Peruvian context, intercultural policy has emerged as a governmental effort to serve populations who have suffered socio-economic marginalisation, a great responsibility of which is placed on a school system traditionally aiming to eliminate the indigenous language and cultural practices. Linguistic and cultural revitalisation are concepts often discussed among policy architects as the dichotomy of indigenous versus non-indigenous is incorporated in debates addressing social inequalities and marginalisation, where the indigenous sector is placed at the bottom of society. Paradoxically, in its attempts to face the most poignant social problems present in school and the overall national society, the intercultural policy discourse overlooks the realities of people of African descent as a clearly marginalised Spanish-speaking sector of the population. In the intercultural discourse, the lack of knowledge of the Spanish language is perceived as the cause for the indigenous ‘distance’ from the mainstream society. Such rhetoric ignores that the issues of discrimination in this context are not limited to linguistic differences. It is not my intention in this paper to analyse the conditions that exacerbate socio-economic differences and the perceived causes of marginalisation in Peruvian society, but to urge for a conceptual broadening of an educational policy formulated to include so-called ‘excluded’ groups in order for this policy truly to address, at least in its design, those it is supposed to serve.

### **A HARMONIOUS DIALOGUE MASKING RACIAL TENSIONS**

Intercultural education policy (BIE) has tended to emphasise a benign and apolitical tone when addressing the relationships among different groups in Peru, thus ignoring the existence of racial tensions, discrimination and the exclusion that has tainted the relations between ethnic groups for centuries. BIE policies have been subject to criticism for ignoring substantial issues of inequality and of internal domination often present in encounters among cultures (Hornberger, 2000). Definitions of interculturality present in official documents portray a harmonious relationship between groups. Government documents establishing the benchmarks of Bilingual Intercultural Education state: “Interculturality means horizontal dialogue, agreement and shared activity between people from diverse groups and cultures in our country” (Proyecto CRAM II, 2003, p.1). In this light intercultural education is understood as necessary in order to strengthen cultural identity and self-esteem of marginalised peoples, as well as to foster respect and cross-cultural understanding.

The existing perception is of celebrated diversity in Peruvian society, where symbols such as music, dances, food and language, have been the main denominators of cultural difference. At the same time, the common discourses alluding to the inexistence of racism in this society build upon what is understood as a traditional practice of racial mixture (miscegenation) and thus the absurdity of racial purity and racial difference because in this country after all *el que no tiene de inga, tiene de mandinga* (who doesn’t have indigenous blood does have it African). In this context of contradictory discourses of cultural difference and racial mixture, which all together deny discrimination and social tensions, Afro-Peruvian groups strive to define themselves as a distinct group with distinct rights. Conversely, initiatives advocating for indigenous peoples’ rights have

been more easily undertaken, although not always successfully, under the umbrella of intercultural policies.

Among the few efforts to address the existence of social and group tensions there is a document produced in 1995 as the result of a national forum on interculturality where academics, indigenous non-governmental organisations and some indigenous leaders developed a definition of interculturality. It was defined:

...as a process of social negotiation which aims to construct dialogical and more just relations between social actors belonging to different cultural universes on the basis of recognition of diversity...It is a notion which encompasses the global society and helps to overcome dichotomies, particularly that of indigenous/non-indigenous...There cannot be interculturality without democracy. (Cusco Seminar, cited in Aikman, 1997, p.469)

Regardless of the relevance of the event, the Cusco Seminar as well as other similar efforts was overlooked when the state defined and designed its intercultural policy. Interestingly, the government law continues to emphasise interculturality as a given respectful exchange of knowledge and mutual learning between cultures. The policy goes as far as to define interculturality as the guiding principle throughout the educational system, which serves all Peruvians (Hornberger, 2000). In this way, the discourse in the law evokes an ideal model of society, failing to address social tensions and violence between groups.

In order to promote actions aiming for the transformation of the Peruvian society, various social movements and organisations representing marginal groups such as the peoples of African descent have begun to call attention to existing group divisions and particularly to racial tensions. The following section describes the emergence of Afro-Peruvian initiatives and their efforts in the promotion of social change in connection to intercultural education.

### **BLACK SOCIAL MOVEMENTS IN PERU**

The first actions to organise Black Peruvians began in the late 1950s, but it was until 1986 in the city of Lima, that the first Black movement called *Movimiento Negro Francisco Congo* (MNFC) was founded. The name Francisco Congo was chosen to honour a Black rebel and leader, captured and executed by colonial authorities in the eighteenth century. According to Newton Mori from CEDET (personal communication, July 2003), much of the work done during the first years after the creation of the MNFC focused on organising and defining the movement's ideology and on selecting its representatives who, in most cases, came from leftist political parties as did many of the participants in the movement in those times. Several members of Francisco Congo worked on community development activities including workshops on racism, racial discrimination, identity and self-esteem. Much of the work undertaken in this time was influenced by Freirian approaches to grassroots organisation development. In this perspective what exacerbated the marginalisation of Afro-Peruvians was these peoples' acceptance and therefore passiveness towards their condition of subordination. Thus, it was necessary for the marginalised Afro-Peruvian community to become conscious about their condition in order to become agents of their own liberation. This approach has been maintained by many of the different Afro-Peruvian organisations nowadays. One of those main social movements today is the National Afro-Peruvian Movement FC (MNAFC), created after the reorganisation of the original MNFC.

### **SOME ACTIONS TO PROMOTE SOCIAL CHANGE**

The social movement MNAFC is active in three regions along the Peruvian coast. Its members spread across 12 cities, with a director in each city. MNAFC members continue to meet and organise periodically the movement's plan of action. In a personal interview, in June 2003,

Emmer Casas, current president of the MNAFC and director of the movement in the southern city of Ica, referred to the social and political establishment and further recognition of the movement as one of the greatest challenges of Black advocates. Moreover, referring to the Afro-Peruvian situation in education, he added that “any changes at the educational level will happen once and only when we become recognised as *Afro-Peruvians* through the legislation.” Mr. Casas referred to having Afro-Peruvian communities acknowledged as a minority group with specific rights, so laws could be subsequently created to protect Afro-Peruvians from discrimination and to aim social services and education to their needs as a community.

In an effort to promote awareness about the contributions of Afro-Peruvians to Peruvian history and society, the MNAFC movement developed *Palenque Congo, Manual para líderes y lideresas afroperuanas*, a manual for Afro-Peruvian leaders, which the MNAFC currently distributes among members of the movement or other organisations and also schools. In its content, the manual presents a section on the contributions of Afro-Peruvians throughout history, with facts about Afro-Peruvians who participated in the revolutionary actions during colonial times and the independence war. As a teaching material for schools, the manual shows a clear departure from the government school curriculum that makes no reference to the participation of Afro-Peruvians in events identified as historical and crucial to the construction of the present country. In fact, school textbooks tend to explain the Afro-Peruvian presence through the economic reasons and functions of slavery. Conversely, the manual developed by MNAFC contains sections devoted to explaining the social, political and economic conditions experienced by Afro-Peruvians from colonial times to the present. A paragraph explains that the geographical placement of African slaves was in the coast and not in the highlands due to the need for slave labour in that region, contradicting in this way the traditional explanation for this placement. The manual explains, “this [placement] was not because there were ‘biological causes’ impeding their adaptation to the high altitude...” A second paragraph explains that the slaves “who came to Peru” belonged to highly developed societies and that many had already been trained in European customs. This point clarifies “only a small number of the slaves came directly from Africa...Senegal, Angola, Congo, Nigeria and Mozambique.” Perhaps with the intention to fight the common knowledge that connects African slaves to a presumably underdeveloped world, it is interesting to observe that the wording of this point becomes confusing, conveying a dichotomy of development versus underdevelopment and connecting it with the notions of European versus African societies, all of which may backfire on the initial intent of this argument.

There is a section stating that many of the Africans brought to Peru were priests, musicians, kings, artisans and midwives. To close the section there is a phrase reading “This is why we should not forget that we are the heir and descendants of a great civilisation and cultures” (p. 12). Several statements in the manual convey a message of pride and the urgency to learn the true facts about the presence of Africans and their descendants in the country, since most historical knowledge about them has tended to belittle the value of their socio economic and political participation in national life.

The questions in the manual are an invitation to interaction, but sometimes offer few possibilities for debate. For example one reads: “Talk to your classmates and older people in your community, why didn’t our situation change after the abolition of slavery?” (MNAFC, 2002, p.11). However there are also questions inviting readers to engage in further discussion. Some examples are:

1. In your opinion, what factors explain the problems affecting Afro-Peruvians?
2. Talk to your classmates and explain whether, according to the history of Afro-Peruvians, we are better off now or not. (MNAFC, 2002, p.16)

The last section of the manual addresses the MNAFC movement, referring to its history and the challenges it faces. It also shows the Plan of Action of the Movement for the years 2002-2004.

Interestingly, the questions included in this section invite the reader to discuss the challenges faced by the movement and propose ways to overcome them. It is not clear, however, whether the reader's opinion would be actually communicated to MNAFC or remain unheard.

The information provided in the manual is brief, offering no further analysis of events or facts. At the same time, it can be accessible to a wide range of audiences. The manual is presented as "a tool for the strengthening and mobilisation of the MNAFC as well as a tool to develop the commitment to fight racism, racial discrimination, and to build peace and the respect of human rights" (p.5). While the manual per se may not help to develop commitment to the cause of the MNAFC, the information it provides may change some perceptions of Afro-Peruvians. In addition, this manual would need to provide options for further exploration and questioning, especially when there is acknowledged need – among people in the Afro-Peruvian movement and other organisations – to develop a political proposal.

### **AFRO-PERUVIAN ORGANISATIONS IN INTERCULTURAL EDUCATION**

The study on which this article is based coincided with perhaps one of the most significant efforts to incorporate the demands of the Afro-population for intercultural education: the first forum on intercultural education directed to people of African descent was held in June 2003. The title of the event was: *Los Afroperuanos Hacia una Educación Intercultural* (Afro-Peruvians towards an intercultural education). The forum was organised by the NGO ODACH (Organisation for the Development of the Afro-Chalacos) and CONAPA (Commission of Andean, Amazonic and Afro-Peruvian Affairs), a government organisation created during the present regime of President Alejandro Toledo. Guillermo Muñoz, a well-regarded school teacher who represents Afro-Peruvians in CONAPA, and is also a directive member of ODACH, was in charge of the organisation of this event. For him the event was significant as this was the first time the government sponsored Afro-institutions to bring to the fore issues specific to the Afro-community in Peru. Even though the event was co-sponsored by CONAPA, Muñoz and the members of ODACH worked around the clock with minimal resources, in fact, with money from their own pockets to organise the entire event. Muñoz said the work had been quite exhausting and costly for people.

One of the main challenges faced by the organisers was to make of this forum a national event. For members of the Afro-organisations in the rest of the country, a trip to the capital can represent a major expense they are not always in a position to assume. Thus, the event was attended by Afro-Peruvian organisations mostly from Lima and few nearby cities. Among the rest of the audience in the forum were Afro-Peruvian artists, and a few Black politicians. Interestingly, the co-sponsors of the forum – members of the Peruvian congress and some of the principal key-note speakers of the event – were not present.

The forum was held in one of the auditoriums at the Peruvian Congress, a monumental neo-classical building located in historic downtown Lima. The event consisted of three main panels discussing the following issues: the historic contributions of Afro-Peruvian culture, the current situation of the Afro-Peruvian interculturality, and interethnic education from the Afro-Peruvian perspective. The panels had a main 20-minute presentation by the head of the panel followed by three panellists who would present for about five minutes each. The discussants represented academic institutions, social movements and NGOs.

Although the title of the forum read "Afro-Peruvians towards an intercultural education", the program provided at the forum suggested a different aim for the event. According to the program, the forum's objective was "to analyse the historic and cultural contributions of the Afro-Peruvian people in order to reinforce their identity and their socio-economic development." In fact, in a significant part of the presentations, it was mentioned that Afro-Peruvians had made very important contributions to the Peruvian society. As one panellist mentioned, "Peru cannot be

understood without the Afro-Peruvians component.” Some panellists, referred to the need to include such contributions in the school curriculum, Milagros Ramirez, one of the panellists, clarified that Afro-Peruvian had offered significant contributions to society beyond sports, arts and cooking. This clarification joined other voices in the demand to stop the most common stereotypes used to define peoples of African descent in Peru, while it also seemed to acknowledge that such aspects were indeed Afro-Peruvian contributions, although not the only ones, to society.

Intercultural education was, nonetheless, an issue raised throughout the forum. Echoing the current debates regarding interculturality in Latin America – debates which for reasons of space I have chosen not to explain in the present paper – Guillermo Muñoz proposed that interculturality should not only be an educational but also a national project. In the same light, Mr. Muñoz questioned the fact that the efforts of intercultural education in Peru continued to be aimed at rural and indigenous communities in the highlands and the Peruvian Amazon. Other panellists referred to interculturality as the dialogue between cultures, with this recalling the definition delineated in the government education policies, but adding that interculturality begins from the recognition of difference, putting tolerance into practice, to bring it to the interrelation of those who are different. Adding to Muñoz’s proposal of interculturality as a national project, Professor Ruth Lozano referred to interculturality as a political, social and educational process. Among the presenters, only one engaged in clarifying a definition of interculturality.

An interesting aspect of the terminologies used during the forum was the utilisation of the terms ‘intercultural’ and ‘interethnic’. Apparently, these terms were used interchangeably. Signs and posters to the event announced it as “Intercultural Education for Afro-Peruvians”, while materials provided to the attendees used the word Interethnic Education. Days after the forum, during a conversation with a member of CEDET – one of the presenting NGOs in the forum – he mentioned that it was known that Colombian proposals of education for peoples of African descent used the terms interethnic and interethnic education, and that in that sense the word interethnic could be considered more accurate to address the specific educational demands of Afro-Peruvians. This was, however, not a shared view among Afro-Peruvian organisations. The use of the two terms during the forum showed the existence of still unclear definitions of the message that events like this one want to convey for Afro-Peruvians, and also the public this forum aimed to reach.

## **CONCLUSIONS**

Identity development has become the priority mission of Afro-Peruvian NGOs, but in this effort, the tensions and inequalities between different ethnic groups are obviated, portraying instead a rhetoric which parallels that of intercultural education where revalorisation of the marginalised by the marginalised (be this Afro-Peruvian or indigenous) becomes the solution to marginalisation. This tendency clearly leaves central issues untouched. While, at different levels, Afro-Peruvian movements and organisations acknowledge the need of developing a concrete proposal at the political level, the attempts to voice their demands have not yet found a space that would make it possible to dialogue with other sectors of society. On the other hand, the emphasis many Afro-Peruvian organisations have placed on the development of identity and self-esteem of Afro-Peruvians as their main objective, risks limiting their actions to fighting discrimination only from within, failing to address exclusionary practices of other groups which have so profoundly affected the lives of Afro-Peruvians.

In the need to channel their educational demands as a minority group, Afro-Peruvian organisations have begun to use the intercultural platform, a platform also used by indigenous organisations perhaps in a more successful way due to eminent issues of linguistic difference that Afro-Peruvians do not share. This constitutes only a limitation for Afro-Peruvians to the extent that

intercultural education is aimed at attending to populations who speak an indigenous language and not other minorities who share with them marginalisation and socio-economic and political exclusion. However, such purpose, as it has been mentioned throughout this paper, is being contested. Several institutions, aside from Afro-Peruvian organisations, are proposing intercultural education as education for all Peruvians and interculturality as a national and not only educational project. It is important to add here that, as promising as these proposals may sound, there are relevant issues that have been left untouched especially in the design of intercultural education policies at the government level. The focus on linguistic and then cultural difference addressed in the intercultural discourse, masks racial issues which feed exclusionary social practices against, although not exclusively, people of African descent in Peru.

While ideologically, Black movements seem to represent different voices, the messages conveyed are not contradictory: there is a consensus when acknowledging the stereotyped view of the Afros in Peru. There is also agreement on identifying education as crucial to the transformation of such views. What is still lacking is a consensual proposal of an intercultural educational policy that aims to effectively address the conditions of peoples of African descent.

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# Investigating the integration of everyday phenomena and practical work in physics teaching in Vietnamese high schools

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*Making science relevant in students' learning is an important aspect of science education. This involves the ability to draw in examples from daily contexts to begin with the learning or to apply concepts learnt into familiar everyday phenomena that students observe and experience around them. Another important aspect of science education is the integration of practical work in students' learning. Both these aspects of learning actively engage students in their own construction of understanding and are particularly relevant in physics education where many of the concepts are abstract and are generally found to be difficult. This paper investigates the extent to which physics teachers in Vietnam integrate practical work and context-based approaches into their teaching, and explores the how, what, and why they do it. The findings indicate that the Vietnamese teachers value the benefits of both practical work and contextual approaches to teaching and learning physics, but the environment that they are in does not provide sufficient opportunities to implement these methods of teaching.*

Vietnamese high school physics teachers, constructivism, learning using contexts, practical work

## INTRODUCTION

General education in Vietnam is made up of primary and secondary education with the secondary component divided into basic secondary education (Years 6-9) and general secondary education (Years 10-12). The National Assembly of the Socialist Republic of Vietnam (1998) stipulated in Vietnam's Education Law that a requirement for the method of general education is to:

...consist in developing the activeness, voluntariness, initiative and creativeness of the pupils in conformity with the characteristics of each form and subject, fostering the method of self teaching, training their ability to apply knowledge to practice, and impact on the sentiments, bring joy and enthusiasm in studies for the pupils.

The statement indicates that the focus in education at the school level is the developing of students' creativity as well as active and independent thinking, and the teaching of skills that will enable students to apply knowledge gained to practical situations. In their learning, it is desirable that students are motivated and enjoy the learning.

In the last twenty years, the Vietnamese education system has undergone much reorganisation and reform. These reforms have ranged from curricula and pedagogical redesigning, textbook rewriting and the education management system restructuring. The reforms aimed at improving the quality of teaching and learning in schools where developing students' ability to apply

knowledge to real life situations are considered the main objectives of general education. These objectives have arisen in response to the demands of socio-economic developments and the rapid pace of scientific and technological development in the country. The VIII Congress of the Vietnamese Communist Party has stated that, on the basis of two strategic tasks of building socialism and defending the country, in the year 2020, Vietnam must basically become an industrialised country with modern technical infrastructure. To achieve this, industrialisation and modernisation need to be accelerated. In terms of production, there will be a shift from using mainly manual labour to using advanced technology and modern production tools and control systems. Therefore, training the future labour force with basic technological and practical skills in order to fulfill the government's visions of new modes of production is of top priority on the government's agenda. The practical skills we mean here, similar to those used in a science laboratory, are those 'life skills' that will enable a person to survive well in a workplace environment. Such skills include critical thinking and problem-solving skills, being able to work in teams and being able to take responsibility and initiatives for one's own work. Schools, especially high schools, play an important role in guiding the development of these skills in students, many of whom will enter the workforce upon completing their education in high schools. Science especially is well placed in helping with the development of many of these skills.

Despite the Vietnamese government having spent vast amounts of money on improving the quality of teaching and learning at the school levels, the outcomes achieved to date are somewhat insignificant. According to a recent report from the Vietnamese Ministry of Education and Training (2001), the current education system in Vietnam has basic weaknesses. These weaknesses are:

The teaching, learning and assessments and evaluation are mainly for the purpose of driving learners to mechanical memory, paying little attention to training independent and creative thinking abilities and applying knowledge and skills into real life the majority of teachers still uses very old and out-of-date teaching and educational methods which are heavy on imparting knowledge and do not emphasize on training students the independent and creative thinking methods as well as right attitudes towards learning and life. The capacity of practical training for students is very weak. The curricula and textbooks are heavy on theory, insufficient in application knowledge and practical skills, inadequate in training thinking methodologies and do not make their active contributions to the formulation and development of necessary abilities for people in real life. General education graduates are usually confused when entering real life.

This 'out-dated', transmissive mode of teaching and students' mechanical and rote manner of learning have been traditional forms of teaching and learning for many years in the education system of the country. Government policies now imply more student-centred modes of delivering the curriculum, where student engagement and more active participation in learning need to take place. In many western education systems such as in Australia, New Zealand, the United States and United Kingdom, student-centred teaching and learning have been promoted for more than three decades. Student-centred learning has been brought about by research into how children learn and the formulation of the constructivist theory of learning as one of the effective means of learning science. This theory is discussed in the next section.

There are values, attitudes and skills inherent to science education that are useful for students to develop and adopt in preparing them for life beyond school, and for a lifetime of participation in society. Science education fosters thinking and communicative skills. It promotes reinforcement of general social values – science questions our understanding of the world and ourselves, and systematically applies a set of highly regarded human values such as integrity, diligence, fairness,

curiosity, openness to new ideas, skepticism and imagination to seeking answers to these questions. Science lends itself to creative thinking which is characterised by fluency, flexibility, originality of ideas, openness to experience, courage, and imagination. Science is seen as a subject that stimulates students' curiosity and enquiring minds, and requires students to solve problems. The practical (experimental) nature of the subject fosters teamwork and manipulative skills of objects as well as promoting observational, deductive and evaluative skills. These are skills that sit well within the Vietnamese government's vision of training the future workforce to be comprised of creative and independent people. The fact that science is about learning about the real world and how things work within it means that science teachers are expected to teach students knowledge that they can apply to real life situations. Hence it is not surprising that policy makers put much of the blame on teachers, especially science teachers, for the lack of creativity and practical skills in students. There has been little research conducted in Vietnam to investigate the ways science teachers deliver their lessons to high schools students, their perceptions of the type of science teaching and learning that is beneficial for students' learning, and the issues faced by them in their delivering of the teaching. The aim of this research study is to begin the exploration of one aspect of physics teachers' beliefs and practices in the teaching of physics in secondary classrooms: the integration of everyday phenomena and practical work into their teaching. While there are many strategies that can be incorporated into physics teaching that are deemed effective for learning, these two teaching strategies are the focus for this study due to their explicit identification in the Vietnamese Education Law. The research questions are:

1. To what extent do physics teachers in Vietnamese high schools integrate everyday phenomena and practical work into their teaching?
2. What are their perceptions of the importance of these integrations?
3. How, if they do, do physics teachers bring about this integration?
4. What are the issues, if any, of integrating everyday phenomena in their teaching and incorporating practical work into students' learning?

In the next section we present the theoretical framework underpinning this investigative study. In order to critique different methods of teaching science, such as the use of a contextual approach and practical work in this study, the aims of science education at the school level are discussed first. This is followed by a discussion of the contextual approach to learning where study of concepts are related to real-life everyday situations, and the role of practical work in science learning. The benefits and drawbacks of each is discussed, with emphasis on physics teaching and learning.

## **THEORETICAL FRAMEWORK UNDERPINNING THIS STUDY**

### **Aims of science education**

Millar (2004, p.1) in his article on *The role of practical work in the teaching and learning of science* summed up broadly two main aims of science education:

- To help students gain an understanding of as much of the established body of scientific knowledge as is appropriate to their needs, interests and capacities
- To develop students' understanding of the methods by which this knowledge has been gained and our grounds for confidence in it (knowledge *about* science).

The first aim is about understanding the content of science and the second is about understanding the nature of science. An understanding of how science and the scientific community work will help students learn the content of science better. This includes understanding of the processes

involved in the conducting of a scientific enquiry, the intellectual reasoning used by scientists to analyse data and produce evidence in order to make a claim or propose a theory, and how this evidence is verified by the scientific community,

Most schools across the globe have science as a compulsory subject in high schools. Why is it necessary for all students to have basic content knowledge about science or to have an understanding of the nature of science? A socio-economic argument by governments, as in the vision of the Vietnamese government, is that science and technology research and development will bring health to the nation's people and wealth to the nation economy. Creating a 'clever' country where the training of future scientists and engineers begins in the classroom is worth investing in. A more inclusive argument would be the importance of fostering 'science literacy' in students, and the community at large, as a major purpose of science education.

### **Scientific literacy**

The OECD/PISA<sup>1</sup> (2003, p.133) defines scientific literacy as:

The capacity to use scientific knowledge, to identify questions and to draw evidence-based conclusions in order to understand and help make decisions about the natural world and the changes made to it through human activity.

Similar assertions are made by the American Association for the Advancement of Science (1993) in Project 2061, Goodrum, Hackling and Rennie (2001), the National Research Council (1996) and Whittle and Maharjan (2000). Shen (1975) breaks the broad definition of scientific literacy into three components: practical, civic, and cultural. Science is an integral part of everyone's life, and science knowledge and skills provide practical assistance in helping people make informed decisions and choices of the way of life that are best suited for them. The civic aspect of Shen's scientific literacy enables citizens to be able to read and understand reports and articles in the media and to engage in social conversations about ethical and moral issues, for example issues about cloning, the use of nuclear energy and nano-technology research, and have influence over government decision making. The cultural aspect of science literacy emphasises the importance of learning about the nature of science in its social and human context.

Scientific literacy can have diverse and important roles in people's lives, and its values, inherent in the knowledge and processes of science, provides a strong justification for education in science. In preparing for a scientifically literate population, science education prepares for future scientists, engineers and technologists as well as a citizenship that has sufficient knowledge and understanding to enable them to think critically to make sensible decisions about science related matters that affect their lives. In addition, the skills developed from science learning are valued by employers across the board and provide opportunities for students for a broad range of careers apart from preparing them to be future scientists.

### **Teaching students to be scientifically literate**

#### ***Disengagement with learning physics***

To effectively achieve the goal of teaching all students to be scientifically literate, science curriculum design and approaches to its teaching need to cater for the diverse range of interests and capabilities in most school populations, and to help students to be more engaged with the learning of science. Disengagement of secondary school students in science learning is a problem in many countries. For example, in Vietnam the main method of teaching is often the transmissive mode where teachers read while students listen and write down mechanically word-by-word what

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<sup>1</sup> Organisation for Economic Co-operation and Development/Programme for International Student Assessment

is read. In Australia, student numbers enrolling in science subjects, particularly physics, in the final year of their secondary schooling are low in comparison to that of other subjects (Goodrum et al., 2001; O'Keefe, 1997). In the research report *The Status and Quality of Teaching and Learning of Science in Australian Schools*, prepared for the Department of Education, Training and Youth Affairs, Commonwealth of Australia, Goodrum et al. (2001) highlighted the high level of disengagement of Australian students in high school science as being associated with the lack of relevance in the science that they are taught. Karplus (1969, p.3) in his book *Introductory Physics* asserted that science, once a branch of philosophy, has been fragmented into discipline areas such as physics where it is no longer familiar to every educated person. He suggested four reasons for this: (i) people no longer see the need for formal studies of science, (ii) many of the questions addressed in the sciences, particularly physics seem detached from their everyday experiences, (iii) science often use indirect evidence to base conclusions, and (iv) people identify science with destructive weapons and technologies that threaten the environment that they are in. In today's society, these reasons are cause for the decline in science enrolment numbers at senior secondary and tertiary levels. The worldwide concern with declining numbers of students undertaking physics at senior secondary and introductory university courses has also been addressed by Hewitt (2004).

### ***Physics teaching using contexts***

The lack of relevancy in physics education has been an issue in many countries. In response to this, different projects and/or curriculum restructuring have been initiated. Most of these projects place emphasis on the everyday application of physics in students learning, that is, context-based learning (Wilkinson, 1999b). In his article *The contextual approach to teaching physics*, Wilkinson (1999b) reviewed the move of physics education towards context-based teaching and learning since the 1970s. The contextual approach to teaching places the learning of physics in real-life contexts where phenomena familiar to students' personal experiences are used as contexts for learning or otherwise incorporated as much as possible into the teachers' teaching. The approach further integrates the learning of science concepts with technological and social issues – the Science, Technology and Society (STS) approach to content. Such a framework has seen many initiatives (cited in Wilkinson, 1999b) developed, such as the Dutch PLON (a Dutch acronym for Physics Curriculum development Project) in 1972; the Canadian large context problem (LCP) approach in the 1980s; the Scottish applications-led approach in the late 1980s; the event-centred learning approach in Brazil and the United Kingdom in the early 1990s and more recently (1994-5) the Supported Learning in Physics Project in the United Kingdom Open University. In Australia, the Victorian Certificate of Education (VCE) 1992 physics course was developed using the context-based approach.

Wilkinson (1999b) outlines the benefits of learning through contexts to include (i) student motivation and engagement as a result of perceived relevant learning drawn from everyday real-life examples and phenomena and (ii) the development of critical thinking and problem-solving skills with questions centred around a familiar context would lead to more effective learning. He also discussed the drawbacks to this approach to learning citing Stinner's (1994, p. 49) findings that 'physics teachers often encountered problems when trying to incorporate large contextual settings, such as LCPs, into the conventional textbook-centred teaching of physics...' This is due to students' inability to deal with context generated problems 'unless they already have content knowledge' (Stinner, 1994, p.49). In dealing with contexts in their teaching, VCE physics teachers have also indicated that it 'took time away from teaching content' (Wilkinson 1999a, p.63).

Pedagogically, an important aspect of teaching through contexts is the fostering of active construction of knowledge by students (Fensham, 1996). The next section of this paper deals

briefly with the learning theory of constructivism and its significance in learning science effectively.

### ***Teaching constructively***

There is an enormous amount of literature on constructivism and education. Over the last thirty years, some 5000 scholarly articles on various aspects of constructivism and education (Matthews, 1998) have been published. Educational constructivism, as applied in many science classrooms, draws on both the cognitive and the social theories of Piaget (1955, 1972) and Vygotsky (1962, 1978) respectively.

Central to the constructivism learning theory is the belief that the learner is active in shaping how new knowledge is taken in and shaped and, furthermore, that new understandings emerge progressively as learners develop hypotheses, test those hypotheses and re-shape their understandings on the basis of experiences. It sees learning as a dynamic and social process where students bring into the classrooms strongly established views of the world, or prior understandings, which have been formed by years of experience. The construction of these views is a result of their own personal experiences in interacting with objects or phenomena around them or by being exposed to various sources of media. This prior knowledge, that learners possess influences their learning process, they are not passive recipients of knowledge and conceptual changes will result from their prior understandings being challenged and revised (de-constructing and re-constructing where necessary). The role of the teacher is to provide students with opportunities to be actively engaged in their own learning by ensuring that teaching is student-centred with opportunities for exploration, discussion, working in groups and problem solving. 'Hands-on' approaches are advocated in constructivist-based learning. By using contexts that incorporate real-life phenomena, students are provided with opportunities to review and assess their own world-views and be actively involved in the refining of the understandings held prior to the learning. In schools, the role of the teacher is to guide the construction of 'new' understandings and meanings closer to a body of knowledge that has been accepted in the scientific community.

Another constructivist learning strategy is the use of practical work in science teaching/learning. As the use of practical work in Vietnamese high schools is the focus of this study, its role in science learning is discussed in the next section.

### ***The role of practical work in the teaching and learning of physics***

For the rest of this paper, practical work is defined according to Millar (2004, p.2):

any teaching and learning activity which involves at some point the students in observing or manipulating real objects and materials.

Practical work in this sense includes fieldwork, laboratory work and experimental work. In the context of our study with Vietnamese high school physics teachers, classroom teaching was the focus of our study but not fieldwork, and the wordings of 'practical work', 'laboratory work' and 'experimental work' are used interchangeably in this paper to have similar meanings in Millar's context.

Tamir (1991) has established five major rationales for school science laboratory work. These are (i) laboratory work provides students with opportunities for understanding and manipulating the highly complex and abstract nature of science in inducing effective conceptual change, (ii) working with the actual investigations helps students develop procedural knowledge, promote problem-solving and analytical skills as well as fostering scientific attitudes and values such as honesty, patience, acknowledgment of failure, understanding experimental limitations and being

able to critically assess results, (iii) the development of skills, such as creative and critical thinking skills, which are essential for survival and success, (iv) laboratory work helps identify, diagnose, and remediate students' misconceptions, and (v) practical work motivates and interests students in science. These reasons were derived from Tamir's earlier work with Shulman (1973) where groups of objectives that could be achieved through the use of laboratory work in science classes were listed.

Advocates of the benefits of practical work in science and physics learning include Escobar, Hickman, Morse, and Preece (1992) who stated that the laboratory plays a central role in high school physics courses in providing experiences where testing will promote development of systemic reasoning and predictive ability in students. Millar (2004, p.7) has argued, based on the work of Jean Piaget and constructivism, that:

We construct increasingly sophisticated and powerful representations of the world by acting on it in the light of our current understandings, and modifying these in the light of the data it generates. Through action on the world, we generate sensory data which can either be assimilated into existing schemas or require that these be changed to accommodate the new data, in order to re-establish equilibrium between the internal and external realities. Through such action, we construct a view of what objects these are in the world, what they are made of and what can be made from them, what they can do and what can be done to them.

Student laboratory activities should be designed to develop 'higher' cognitive skills that underpin scientific methods of working (Woolnough, 1991). However, research studies have shown that most practical tasks in science laboratory manuals are prescriptive, providing little or no opportunities for open-ended or enquiry-based learning and that practical work can be unproductive and little learning of science goes on with students in practical classes (Berry, Mulhall, Gunstone, and Loughran, 1999; Clackson and Wright, 1992; Harrison, Fisher, and Henderson, 1997).

Effective science practical work, including physics, need to consider the following:

- Students must be provided with opportunities to manipulate equipment and materials while working cooperatively with others in an environment in which they construct their scientific knowledge and engage in processes of investigation and enquiry (Tobin, 1990).
- The intended learning outcomes of doing the practical work must be made clear in students' minds so that students will not be confused with the complexity of the practical task while carrying it out (Millar, 2004).
- The practical tasks are well-designed and focus on certain and in depth topics to help students acquire and develop science concepts or frameworks of concepts (Hofstein and Lunnetta, 2002).
- In order for learning to occur with practical work, students need to be given sufficient time to interact, reflect and discuss (Gunstone and Champagne, 1990).
- Students be taught how to take control of their own learning and provide opportunities for metacognitive activities, rather than concentrating on technical ones (Gunstone 1991).

Karplus (1969) asserts that a progression from exploratory activities to laboratory-type investigative activities is necessary for effective science learning. Based on the learning theory of Piaget, Karplus (1969), and Karplus and colleagues (1977) at the University of California, developed a three-stage cycle of learning that optimises effective learning in science. These stages involve (i) exploration stage which is based on students' experiences and they are challenged to make connections with their existing experiential background with the areas of study, (ii) concept

introduction stage where the teacher guides the students toward a model/theory which can be used to explain the observations made in the exploratory stage, and (iii) concept application stage where students undertake problem solving and laboratory investigation tasks, applying the knowledge in the second stage to new situations. Many teachers, however, focus only on the third stage and omitting the first two stages, which inevitably leads to the perception of physics being too difficult by students who will stay away from the subject.

## METHOD

The instrument used in this exploratory study is a questionnaire constructed in an Australian university. The questionnaire is an adaptation of the questionnaire in *Labwork in Science Education*, published by the European Commission (EC) in 1998. The EC questionnaire was used to survey laboratory work carried out by high school physics teachers in several European countries. The questionnaire that this study is based on probed Vietnamese high school teachers' views on the integration of laboratory work, as well as the use of real life contexts in their physics instruction to years 10, 11 and 12 students. The seven-page questionnaire surveyed the teachers on the following categories: the frequencies of integrating everyday phenomena and practical work (demonstrations, and laboratory-based work), the reasons for the integrations, examples of integrations, and how the integrations were carried out. The questionnaire was reviewed and tested on two Vietnamese physics teachers studying at the Australian university.

The questionnaires and letters of invitation to participate were translated into Vietnamese and 20 questionnaires were mailed and distributed to physics teachers in seven Vietnamese high schools in the two central provinces of Vietnam – Nghe An and Ha Tinh. The socio-economic background of these two provinces is similar to those of the larger cities of Hanoi and Ho Chi Minh where living conditions are generally good. The quality of education in schools in these provinces is considered good in terms of the number of successful students progressing to tertiary education. Depending on the size of the school population, the schools typically have between two to four physics teachers whose sole job is to teach physics to senior secondary students. This is unlike the Victorian education system in Australia where specialist physics teachers almost always have to take general science classes at the junior secondary levels, and hence are required to teach biological and chemical sciences as well. All the questionnaires sent out to the Vietnamese teachers were returned. The teachers responded by filling in all the closed questions, but with varying degrees of gaps in the responses for the open type questions. The 100 per cent return is based on the assumption that teachers who did not want to fill in the questionnaire would pass it onto those who were willing to do so. In this regard, the sample might be slightly skewed. However, in the smaller schools, the entire cohort of physics teachers would have filled in the questionnaires, making the spread more even. The responses were translated into English for analysis.

## RESULTS

### Profile of physics teachers

The 20 physics teachers who participated in this study were evenly split in terms of gender, with 35 per cent of them having more than 10 years of teaching experience, as shown in Table 1. A majority of these teachers come from public schools and 30 per cent of these teachers have had education up to the Masters level. Table 1 also shows the year levels or combination of year levels these teachers were teaching in and the topics that they taught.

### Integrating everyday phenomena into physics instructions

Table 2 shows the extent of the use of everyday phenomena in the teaching of the physics teachers. Sixty-five per cent of these teachers provided examples of everyday life phenomena in

their teaching most or all of the time. However, they less often discuss in depth with their students the physics concepts or theories associated with these phenomena. The vast majority of the teachers think that using everyday contexts help students understand physics concepts better and learn physics in a meaningful way (Table 3). Furthermore, being able to see the practical use of physics in their everyday experiences also helps students develop good attitudes towards the study of physics and to a slightly lesser extent to be more creative. A sample of the types of examples used as everyday phenomena, and the manner the teachers integrated them into their teaching is shown in Table 4. There were, however, a substantial number of responses that did not provide direct examples that are drawn from everyday type of experiences. For example, one teacher when teaching about the concept of gravity and free falling bodies, provided as an example ‘two bodies with different masses falling with the same accelerations’ and no explicit naming of familiar objects was given. Another example of the lack of specific illustrations using real life situations is in the study of forces: the example provided was ‘a body moves when applying forces on it’. This demonstrates a possible lack of understanding of what constitutes ‘everyday phenomena’.

**Table 1. Profile of physics teachers who participated in the research (N= 20)**

Descriptions	Number of teachers	
Gender	Males	10
	Females	10
Teacher qualifications	Bachelor	14
	Masters	6
Type of school	Public school	18
	Private school	2
Years of teaching experience	< 4 years	5
	4-10 years	8
	10-20 years	5
	> 20 years	2
Year level(s) currently teaching	Grade 10	9
	Grade 11	12
	Grade 12	10
Physics topics currently teaching	Mechanics	18
	Heat and Thermodynamics	12
	Electricity and Magnetism	10
	Optics	7
	Nuclear physics	6

**Table 2. Teachers’ responses to the extent of integration of daily experiences into their physics teaching**

Aspects of integration	All the time	Most of the time	Sometimes	None of the time	No response
Integrate everyday life phenomena in teaching	10%	55%	25%	5%	5%
Discuss relations of physics concepts and the corresponding everyday world	5%	40%	45%	5%	5%
Ask students to relate law and theories of physics with their everyday life experiences	-	40%	60%	-	-

### The integration of practical work in physics teaching

As indicated in Table 5, all the teachers participating in this study carry out demonstrations as part of their teaching of physics. The frequency of these demonstrations, however, is low with 80 per cent of the teachers citing that they demonstrate to convey physics principles/concepts less than every fourth session of their teaching time. There are two teachers who use demonstrations to teach physics every lesson.

**Table 3. Teachers' responses to the purpose of the integration**

Everyday life physics phenomena help students:	Agree	Almost agree	Almost disagree	Disagree	No response
Understand physics concepts better	90%	5%	-	-	5%
Be more creative	65%	15%	-	5%	15%
See the practical use of physics theories in everyday life	65%	25%	-	5%	5%
Have good attitude towards studying physics	65%	20%	10%	-	5%
Learn physics in a meaningful way	50%	45%	-	-	5%

**Table 4. Examples of everyday physics phenomena that Vietnamese high school teachers integrate into their physics teaching**

Topic	Examples of integrating everyday life physics phenomena	Method of integration
Kinematics	Motions of cars and motorbikes	Observation and explanation
Newton's 3 <sup>rd</sup> law	Why in collision, both two cars are damaged	Explanation and illustration
Surface tension	Why some small insects can walk on water surface	Explanation and experimentation
Conservation of momentum	The gun pulls back when firing	Explanation
Conditions to consider a body is a point	The earth is considered as a point in relative to the Sun	Explanation
Mechanical waves	Propagation of waves	Demonstration
Harmonic oscillator	Oscillation of spring pendulum. Oscillation of tree's branches in windy days	Observation and explanation
Capillary action	Capillary action of oil along a lamp's wick. The height of liquid increases in a capillary tube	Illustration, explanation
Humidity	Fog on grass in a sunny morning	Illustration
Thermal expansion	Solid objects are expanded when heating e.g. the joins of railroad track must have some space to avoid buckling. Thermal automatic turn off device	Illustration Explanation Experimentation
3- phase alternative current	Electricity transmission lines have 3 or 4 wires	Explain (using delta/star methods)
Electrostatics	One object is electrified by rubbing it	Using demonstrations

**Table 5. Frequency of use of practical work in physics teaching**

	Demonstrations	Practical work
Using experiments in teaching	100%	0%
The frequency of doing experiments		
Every session	10%	-
Every other session	-	-
Every fourth session	10%	-
Less than every fourth session	80%	-

Table 6 shows that 75 per cent of the teachers believe that carrying out experiments in the form of demonstrations helps students with their development of conceptual understanding while 50 per cent of them said that they demonstrate because students enjoy the demonstrations. There were three teachers who said that they integrate experiments via demonstrations to help develop students' practical skills. Since none of the teachers engage their students with practical work (see Table 5), it is unclear if these three teachers meant that by watching demonstrations conducted by other people, students are able to develop practical skills, or whether there is actual participation by students in the demonstrations.

As mentioned in the previous paragraph and shown in Table 5, none of these teachers engage their students with practical work at any time. There is no laboratory or experimental work carried out by their students and the major reason, given by 90 per cent of the teachers (see Table 7), is that their schools are not satisfactorily equipped for students to carry out this type of activity. The other main reason for not including practical work in their teaching is the time constraint imposed

on them to get through the curriculum. Other disincentives to carry out practical work with their students are: experiments do not always work, time is needed to prepare for classes (there are no laboratory assistants in schools), and that practical work is not assessed. One teacher said that (s)he has not been trained to teach practical work. However, none thought that it is a waste of time.

**Table 6. Teachers' responses to the reasons for integrating experiments in physics instructions**

Reasons for integrating experiments	Response
Because students expect it	-
Because students enjoy it	50%
Because it aids conceptual development	75%
To develop practical skills for students	15%
Because doing experiments is compulsory	25%

**Table 7. Factors that discourage Vietnamese physics teachers from doing practical work**

Discouraging factors	Response
The school is not satisfactorily equipped for experiments	90%
Experiments need time for preparation	25%
The time restriction of the curriculum	55%
Experiments do not always work	35%
Lack of new technologies in school	35%
I haven't trained to teach experiments	5%
Experiments is a waste of time	-
Experiments is not assessed (not compulsory)	25%

Examples of demonstrations carried out by the Vietnamese physics teachers are given in Table 8. For a majority of these teachers, as shown in Table 9, the source of ideas for demonstrations came from personal teaching experiences, teaching training and student text books.

**Table 8. Some demonstrations used in physics teaching**

Topics	Demonstrations
Thermal expansion	Heating a long metal rod makes it bend
Electric break out in inert gases	Using Comcop machine and tubes containing inert gases at different pressure
Standing waves	Using computer simulation
Acceleration measurement	Measuring the acceleration of a body moving on a slope surface
Projectile motions	Determine the horizontal distance in projectile motions
Harmonic oscillation	Motion of a spring; Oscillation of a pendulum
The interference of light	Young's experiment
Ohm's law	Plot the typical Volt-Ampere line, using voltmeter and ammeter
Newton's first law	An object moving on an air layer; Balance of an object
Magnetic force	Interaction between two magnets, between a magnet and a current, and between two currents
Freely falling body	Drop a paper sheet and a book; Measure the gravity constant
Capillarity	Using capillary tubes; Put a lamp's wick into water
Magnetic field lines	Using a magnet and sprinkling iron
Electromagnetic inductance	Using a magnet and a loop, when magnet moves through the loop, a current appears in the loop
Gravity	Determine the mass of the earth
Dispersion of light	Using a laser, and a prism
Lenses	Formation of the image of an object through a lens
Photoelectric effect	Using a photoelectric cell
The refraction of light	Refraction of light
Forces	Interaction between a magnet with an iron rod; Adding two parallel force vectors

## DISCUSSION

This exploratory study seeks to capture the beliefs of a group of physics teachers and their teaching of physics to years 10 to 12 students in Vietnam. The focus of the study has been on the

teachers' use of daily contextual experiences and practical work, including demonstrations, in their teaching. There are two approaches to teaching physics, where teachers could integrate physics concepts to the real world contexts. The more traditional approach would be where concepts are taught first and then related to real life contexts, that is, the application of concepts studied to these situations. In the second approach, the physics concepts are drawn out along the way of the teaching and learning that focus on real world contexts, for example, in using the sun as the context for study, students learn about concepts of heat, light and nuclear reactions. Wilkinson (1999b) argues that the latter approach is superior to the former in terms of the meaningfulness and relevance to learning but that both approaches to teaching and learning of physics are important because both methods link physics concepts to real life contexts, which will motivate and enhance students' interest in science. Karplus (1969) contends that the experiences are important and supports Wilkinson's argument. In this study, the teachers' responses indicate that the first approach is used in their classrooms as none of the open comments obtained from the questionnaires suggested otherwise.

**Table 9. The sources of the experiments used in physics teaching**

The sources of the experiments	Percentage of teacher using these sources
Initial teacher training	55%
Personal teaching experience	60%
Collective files held in department	20%
Specialised journals	5%
Students text books	55%
Teachers text books	45%
The Internet	5%

The Vietnamese teachers in this study value and see the benefits of the use of contextual approaches in their teaching. This is further supported by open comments such as:

“Should have regular outdoor activities for students”

“Exams should have some questions relating to everyday life physics phenomena”

“Should integrate more physics phenomena of everyday life into teaching, and the phenomena should be closely focus on topics teaching”

“Should put more physics phenomena in grade 11 physics text book, because there are not many phenomena in the text book”

These views and the views that real life contexts make physics more relevant to learning and will enhance students' interest in physics are similar to those of Australian academics and teachers teaching physics at the senior levels in Victorian schools (Brass, Gunstone and Fensham, 2003; Wilkinson, 1999a). The perception that is dissimilar is that while 95 per cent of the Vietnamese teachers in this study (N=20) thought that drawing in real life contexts will help students with conceptual understanding; only 16 per cent of the Victorian teachers in Wilkinson's (1999a, p.64) study (N=100) thought that this approach helps improve students' understanding. The interpretation of 'context' appears to be varied in both groups of teachers. In the Vietnamese context, the inability of a number of teachers to articulate examples that are deemed real-life suggests that the concept of 'everyday phenomena' and teaching in context is not clear in their minds.

The approach to integrating real-life contexts into physics teaching in the Vietnamese classes is mostly explanations and illustrations by the teachers themselves. Discussion and drawing on students' experiences and prior knowledge do not appear to be evident from both closed and open responses to the questionnaire. A possible inference drawn from this is that the ways of teaching physics are still very much non-constructivist and teacher-centred. The responses of the Vietnamese physics teachers in regards to integrating practical work into their teaching further

support this inference. All the teachers surveyed made use of demonstrations in their teaching but none engage their students in practical work. However, the majority (75%) of the teachers acknowledged the usefulness of practical work in helping students with conceptual development. Six teachers commented openly that doing experiments helps students understand physics concepts better, and develop their practical skills. The constraints with practical work, as shown in Table 6, was reiterated by four teachers that ‘there is a lack of equipment, especially modern equipment’ available for their teaching in this area. Other open comments about the constraints with carrying out practical work in class include:

“Restriction in time for doing experiments”

“The contents of text books should be changed”

“Teachers do not have enough enthusiasm in doing experiments”

“The curriculum should have more time for experiments”

The responses of the Vietnamese physics teachers in this study indicate that while they value the benefits of laboratory work, the context that they are in does not allow them to reap the benefits.

### IMPLICATIONS

While it would not be possible to generalise the findings from the relatively small sample of responses that we have obtained in this study, they provide some insights into the perceptions and concerns of what physics teachers may be holding in Vietnam. The fact that the group of 20 teachers in this study are located in reasonably ‘well-off’ environments, both socially and economically, provides validity to the study. The findings in this study indicate that the type of teaching in Vietnamese high schools is still very traditional and teacher-centred. The lack of students’ active engagement in constructing science knowledge is evident from the data presented in this paper.

In view of the reforms that the Vietnamese government is planning for, it faces huge challenges to successfully meet them. The desire for more student-centred modes of teaching needs to be met with provision of a number of things by the government to assist teachers to engage students actively in the learning and to develop their skills so that they are able to apply what has been learnt to real life situations (see Education law in Introduction section). These things include:

- Money to purchase laboratory equipment and employ laboratory assistants
- Financial support for professional development for teachers in a number of areas:
  - The use of practical work with their students as well as other hands-on ways of engaging students.
  - Teaching in context where students are encouraged to question and develop other cognitive and critical thinking skills.
  - The use of technology such as spreadsheets and simulations in physics teaching.
  - The advantages of action research and how teachers could go about carrying it out.
- Re-designing the content for study at each year level. Based on the three-stage learning cycle of Karplus (1969, 1977), there should be more emphasis on qualitative questions and discussions in the ‘concept introduction’ stage rather than quantitative mathematical-based learning of introductory concepts.
- Re-aligning of assessment tasks to concord with student-centred ways of learning, with the inclusion of assessment of practical work and qualitative-type questions in examinations as possibilities.

Reforms that change teachers' ways of teaching or the rewriting of text books should be based on what research has shown to be effective learning, both at the cognitive and affective levels. There should also be financial assistance to support ongoing research studies that are well conducted at the local levels. There is no quick-fix in any educational reform but carefully planned strategies may be able to bring about some desired changes at an earlier rather than a later time.

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# Student teachers' attitudes concerning understanding the nature of science in Turkey

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*Nature of science is defined as one of the directions of scientific literacy. The main aim of this study was to investigate both secondary school social and science branch post-graduate (non-thesis master) teacher candidates attitudes about the Nature of Science (NOS) and compare their attitudes towards NOS. A 12-item Likert type scale for teacher candidates was used, based on responses of 207 participants. The results indicated that teachers had low positive attitudes towards NOS, but found some significant understanding differences against scaled items between social and science teacher candidates. There was no relationship between the attitudes to the NOS, and the scientific disciplines.*

Nature of science, teacher attitudes, scientific literacy, secondary school teachers

## INTRODUCTION

Over the last three decades, a number of researchers used a wide range of probes and instruments to examine what teachers understood about the nature of science (Hamrich, 1997; Nott and Wellington, 1998). We do not have the space here to summarise them, but we can say that some have involved written tests and questionnaires, some have involved lesson observation, others have been based on interviews with teachers, and others have involved a mixture of classroom observations and interviews.

Lederman and Zeidler (1987) described the Nature of Science (NOS) as an individual's values inherent to his or her development of scientific knowledge. The NOS is about how science proceeds, how the scientific community decides what to accept and reject, and how much faith there is in a large body of scientific knowledge and beliefs that are continuously developing (Hamrich, 1997). Recently, the NOS is defined as the epistemological underpinnings of science, which includes empirically-based, tentative, subjective, creative, unified, and cultural and socially embedded characteristics. Individuals who understand the NOS can recognise the functions of their subject matter and distinguish the differences among observations, inferences, scientific facts, laws, and theories (Gess-Newsome, 2002).

Philosophers of science, historians of science, sociologists of science, and science educators are quick to disagree on a particular definition for NOS. However, at any given in time and at a certain level of generality, there is agreement about some important aspects of NOS among philosophers, historians, sociologists, and educators (Abd-El-Khalic, 2001).

In the past several decades, the goals of most science programs have included developing an adequate understanding of the NOS and understanding science as a way of knowing. Scientific literacy involves understanding not only scientific knowledge, but also understanding the NOS (Tobin and McRobbie, 1997). Teachers translate the written curriculum into a form required for classroom application and decide what, how and why to learn. Despite the pervasive and critical role of curricula, evidence is clear and substantial that teachers are the most influential factor in educational change (McComas and Almazroa, 1988). Thus science teachers need to understand the NOS in order to improve the scientific literacy of their students (Abd-El-Khalic, 2001).

Turkey is currently undergoing a process of educational reform in teacher training as well as primary and secondary education. In 1992, the two-year classroom teacher training program became a four-year program, and teaching became a university graduate profession. In 1997, the Basic Education Law was implemented, increasing the length of compulsory primary schooling from 5 to 8 years. A system of faculty-school partnerships was set up in 1998 by The Council of Higher Education (YOK) and the Ministry of National Education. To assist these developments, school teachers began to be more involved with student teachers' school experience and teaching practice activities. In the new teacher training system, science graduates from different faculties except the faculty of education graduates (with a degree in physics, chemistry, biology, history, philosophy) have a 2 or 3-semester postgraduate university education centred primarily around their field of study. In these degree courses, graduate students take a brief post-graduate pedagogical course and a short period of teaching practice in a secondary education centre (YOK, 1998 p.18).

## **METHOD**

### **Instrumentation**

In order to assess teacher understanding of the NOS, a modified form of an existing scale (Rutlage and Warden, 2000) was used. A modified form of this scale containing 12 items was used in the present study. Scoring for the items was performed by Likert scaling of responses. Answers to items indicating a low acceptance received a score of 1, while answers indicating a high acceptance received a score of 5.

### **Participants**

The population of interest in this study consists of 207 post-graduate student teachers; they have graduated in the 2002-2003 academic years from either social or natural science post-graduate for Secondary School Education program. They had their graduate education in various disciplines in 37 different universities in Turkey.

### **Procedures**

The questionnaires were filled by the participants. The cover note also served to assure them that the research was not focused on any one individual and that their responses would be strictly confidential and anonymous.

We analysed scaled items using descriptive statistics (counts, means, and percentages). In addition to computing descriptive statistics, we performed an analysis (ANOVA) for items to determine the differences and explore relationships ( $p < 0.05$ ) between the variables and respondent groups. In terms of reliability in tested populations, a Cronbach alpha was calculated for the items ( $\alpha = 0.71$ ). The SPSS for Windows (ver.10) statistical software package was used in all analyses.

## RESULTS

Among the student teachers generally a low level of understanding of the NOS was obtained through Likert-scaling of teacher responses, presented in Table 1. Characteristics of science particularly was not well understood including the independence of scientific knowledge from religious affirmation (Item 6), direct observation (item 8), and the limits of science (Item 12). The characteristics of science best understood by the student teachers were the goals of science (Item 1), scientific theories (Items 2 and 11), scientific experiments (Items 5 and 7), and the inability of science to address ultimate causation (Item 9), which were correctly answered as a mean by 80 per cent of the both social and natural science student teachers.

**Table 1. Teacher responses to scale items pertaining to the understanding of the NOS**

		#	N	Totally disagree %	Disagree %	Undecided %	Agree %	Totally agree %	Mean
1	The goal of science is the improvement of man's quality of life.	NS	108	8.3	6.5	0.9	26.0	58.3	4.13
		SS	99	5.1	11.1	1.0	39.0	43.4	4.05
2	A theory has been corroborated by many scientific ideas.	NS	108	6.5	4.6	5.6	44.0	38.9	3.99
		SS	98	7.1	7.1	4.1	51.0	30.6	3.91
3	Scientist must be accepting of all findings of their fellow researchers.	NS	108	28.7	36.1	7.4	19.0	9.3	2.44
		SS	96	22.9	46.9	12.0	18.0	1.0	2.27
4	If an experiment yields results which are contradictory to one's hypothesis, one should find other ways to corroborate the hypothesis.	NS	108	10.2	15.7	14.0	41.0	19.4	3.43
		SS	98	12.2	12.2	16.0	40.0	19.4	3.41
5	Scientific experiments must be repeatedly performed to be considered valid.	NS	108	12.0	8.3	8.3	36.0	35.2	3.74
		SS	98	3.1	4.1	12.0	40.0	40.8	4.13*
6	Any scientific finding that contradicts religious doctrine should be discarded.	NS	108	29.4	25.7	12.0	17.0	15.6	2.8
		SS	96	16.7	29.2	27.0	19.0	8.2	2.73
7	A hypothesis must be capable of being tested in order for it to be in the realm of science.	NS	109	11.1	10.2	9.3	37.0	32.4	3.69
		SS	97	3.1	4.1	7.2	47.0	38.1	4.13**
8	To make any scientific determinations about historic occurrences in nature, there must be direct human observation.	NS	104	12.5	27.9	22.0	30.0	7.7	2.92
		SS	98	6.1	21.4	19.0	44.0	9.2	3.28*
9	As a result of scientific methods, definite conclusions can be made to the absolute and ultimate cause behind an event.	NS	106	8.5	5.7	1.9	44.0	39.6	3.99
		SS	98	5.1	4.1	3.1	53.0	34.7	4.08
10	Science is well-prepared to investigate the validity of miracles.	NS	107	14.0	43.9	13.0	23.0	5.6	2.64
		SS	96	11.5	41.7	10.0	33.0	3.1	2.74
11	A hypothesis which has been validated by an experiment is elevated to the level of theory.	NS	107	9.3	8.4	11.0	54.0	16.8	3.59
		SS	98	3.1	12.2	6.1	57.0	21.4	3.83
12	A fact in science is a truth which can never be changed.	NS	109	22.9	36.7	10.0	20.0	10.1	2.61
		SS	99	9.1	32.3	14.0	31.0	13.1	3.07**

# NS; natural science. SS; social science. \* $p < 0.05$ ; \*\* $p < 0.01$  in comparing NS and SS graduates (ANOVA).

Significant relationships were found between responses (Item 5, 7, 8, and 12) comparing natural and social science student teachers. According to results obtained from present investigations, it is observed that most of the student teachers possessed inadequate viewpoints on the NOS. The

teachers' academic backgrounds were not significantly related to their understanding of concepts of science (Table 1). For all disciplinary fields, (i.e. philosophy, biology, physics) a lack of understanding of the nature of scientific knowledge was detected. In the Items 5, 7, 8 and 12 statistically meaningful results were found in favour of social science graduates (Table 2). In other scaled items, most of the teachers held traditional (positivist) attitudes.

**Table 2. ANOVA of the significant teacher responses to scaled items**

Item		Sum of Squares	Df	Mean square	F
5		7.09	1	7.09	5.05*
	within group	286.51	205	1.40	
7		9.87	1	9.87	7.37**
	within group	272.17	203	1.34	
8		6.64	1	6.64	5.12*
	within group	259.38	201	1.30	
12		12.60	1	12.60	7.70**
	within group	337.09	207	1.64	

\* $p < 0.05$ ; \*\* $p < 0.01$

This result might indicate the beneficial effect of some courses such as philosophy and sociology taken during the graduate education of the social science teacher students. It was not a surprise that teachers' views of the NOS did not correlate with their previous academic history. As Lederman (1992) pointed out, very few science teachers had formally studied the NOS at a school, a college or a university. There are a number of studies confirming students' misconceptions concerning the NOS. The researchers found that they confused science with technology, and they were only superficially aware of the private and public side of science and the effect that values had on scientific knowledge (McComas and Almazroa, 1988).

## DISCUSSION

A dynamic understanding of science requires significant background in the social studies of science. However, present undergraduate science and science teacher education curricula in Turkey do not emphasise the philosophical background of science content. One of the causes of the failure of many science courses and programs lies in the ambiguity of their philosophical standpoints, and their confused conceptions about the NOS. Philosophy of science is little taught in science teacher education programs (Mellado, 1997). This study showed that teachers in the sample held traditional (positivist) views about the nature of science.

Static knowledge is necessary for science teachers, but it is insufficient for them to learn how to teach. Teachers' understandings of the NOS are rooted as much in their practice as in their formal education (Nott and Wellington, 1998). Furthermore, teachers' understanding of the NOS can influence their approach to science teaching and even their teaching behaviours (Eichinger et al., 1997).

In recent years, research into teachers' conceptions of the NOS has become a priority theme of educational research. In order to improve conceptions of the NOS, some studies primarily focused on curricular improvements while the others focused on teachers. There is a general agreement that the NOS has for many years been absent both from science curricula and from teacher education.

The evidence suggests that teachers' beliefs concerning science affect not only the lessons on NOS but also the curricular material dealing with the nature of scientific knowledge. When the prospective teachers begin at university, they carry with them academic knowledge, certain values, beliefs and attitudes about science, teaching and so forth (Mellado, 1997). A person's beliefs about the NOS are coherent with the view of science as it is embedded within the enacted curriculum from which they learn (Tobin and McRobbie, 1997).

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# Student participation and responsible citizenship in a non-polyarchy: An evaluation of challenges facing Zimbabwe's schools

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*This article discusses perceptions on child participation and responsible citizenship in Zimbabwe's secondary schools. A brief outlook on Zimbabwe's values education is provided followed by a discussion of theoretical frameworks on citizenship and polyarchy and what these mean to the school. The article analyses teacher and student perceptions on student participation and responsible citizenship and discusses the outcomes, noting the challenges facing schools in a non-polyarchical environment.*

Zimbabwe, child participation, responsible citizenship, democratic education, values education

## INTRODUCTION

Zimbabwe continues to be faced by numerous challenges, probably more than any other country in the history of the earth (Norwegian People's Aid, 2003). Some of these are the AIDS scourge that wipes out thousands of lives a year, the resistant malaria, ethnic conflict, corruption, hunger and deprivation, street kids, dilapidated schools and hospitals, lower life expectancy, political turmoil and socio-economic meltdown which has condemned many to squalor and poverty.

This study departs from an understanding that schools have a moral responsibility not just to teach, but above all, to **practise** democratic values (Griffith, 1998). At best, school life should seek to foster **tolerance**, right to **participation**, **empowerment** and respect for human dignity and individual views. Though intertwined, the micro-politics of the school and macro-politics are somewhat separate, implying that teachers may have some autonomy to provide an environment conducive for the practice of democratic values. The study observes that without the creation of a democratic environment, individual ideas and voices, especially those of children will continue to be stifled.

## THE ZIMBABWEAN CONTEXT IN CITIZENSHIP EDUCATION

As part of its values education at secondary school level, Zimbabwe has subjects such as Education for Living, Guidance and Counselling, and Aids Education (Ministry of Education Sports and Culture, 2005). In the majority of schools, these subjects are not taught and in the few schools where they are taught, numerous inhibiting factors abound. On evaluation of these programs, the Ministry records some of the predicaments as weak delivery in the classroom, apathy from school heads and teachers due to lack of knowledge and skills and the psychological impact at a personal level. There are high cases of child abuse, child headed families and an influx of children orphaned by AIDS, leaving teachers with no knowledge of how to handle the students (Ministry of Education Sports and Culture, 2005). Further observation is made that schools are highly examination centred and tend to marginalise non-examinable subjects. Other factors include lack of community involvement and high teacher turn over especially among those trained to handle these subjects. Teachers could also be in difficulty dealing with political questions as

they are often seen as sympathetic to opposition political parties and civil bodies and thus become targeted by the ruling elite (Raftopoulos, 2003). In such a socio-politically challenging environment, fostering active student participation on all aspects of school life could be the only viable route and a great enabler to responsible citizenship education.

### **RESPONSIBLE CITIZENSHIP**

Educating towards responsible citizenship explores the notion that children have a sacred, moral, and legal right to be active participants in the search for solutions bedeviling their world of existence. For example, children may benefit from taking a leading role in the fight against AIDS for it is amongst them that infection is greatest. As primary customers of education, it is the children who are daily subjected to the educational process, and thus may contribute constructively to the search for solutions. The notion that children are ‘citizens to be and not active citizens’ as they pass through school needs revisiting. Parents and teachers must consider striking a proper balance between protecting the child and allowing each child the full right to participate (Flekky and Kaufman, 1997, p.32), as enshrined in the United Nations Convention on the rights of the child, Article 12.1 to which Zimbabwe is signatory.

This study takes the view that there are two tendencies in citizenship education. The first one is that which is passive, non-questioning and deferring towards the status quo (Balet and Burton, 2000, p.5). A good example in Zimbabwe is where the government has narrowed national patriotism and citizenship to partisan dictates. This is evidenced in the indoctrination of the youth militia by the ruling Zanu PF, aiding them to be intolerant and violent towards those seen or perceived as ‘different’ (*Daily News*, 7/09/2003) and the sending of some headmasters to militia camps for so-called ‘re-orientation’ (Raftopoulos, 2003). The second and most important form of citizenship education is that which is active, responsible and critical of institutional arrangements (Garratt and Piper, 2002). Twine (1994, p.9) states that in citizenship:

We are concerned with what kinds of persons we are able to be and the kinds of persons we might be. What kinds of opportunities and constraints confront people in terms of current institutional arrangements?

Responsible citizenship will concern itself with social relationships between people and relationships between people and the institutional arrangements in place, such as the presidency, the judiciary, the parliament, the monarchy or any system of governance. The interdependence of self and society is the focal point of citizenship education since “individuals cannot abstract themselves from their natural and social bonds and still understand themselves” (Parry, cited in Twine 1994, p.10). Responsible citizenship education will create opportunities for pupils to participate actively, debate and appreciate critically the institutions that exist including those within the school, which affect them on a daily basis. In developing responsible citizenship, Freire (1970) argues that educators should socialise learners into active ‘namers’ of the world and not let others name the world for them. Popper (1945), cited in Bailey (2000, p.11), once said:

Adoption of rationality is actually a moral decision by society, for its rejection – total surrender to irrationality or blind obedience to other’s decisions – invites all the brutalities of totalitarian regimes.

It is no secret that Africa has a catalogued history of brutal regimes that brought untold suffering to its peoples. From current world rankings on democracy, Zimbabwe ranks among the worst nations (World Audit, 2005). School leavers are often recruited under the guise of national service to perpetrate horrendous crimes against citizens (*Daily News*, 7/9/2003). Besides promoting rationality amongst students, responsible citizenship affords students the ability to empathise (to walk in someone’s shoes). Tolerance is the key word. As they actively participate and debate issues, they may come to appreciate the challenges and constraints that face different players in

decision-making processes. Beyond the decision-making process is action and that is where empowerment and self-esteem (Bailey, 2000) are crucial. Responsible citizenship will take a risk and allow students opportunities to take a lead and act.

## THE STUDY

Following a qualitative approach, the study evaluated the micro-politics of five secondary schools in Zimbabwe against a contextual macro-politics. In an endeavour to explore the two main sub-cultures (rural and urban), two of the schools were urban and the other three were rural. Interesting links were discovered that suggest a strong interrelatedness between the school's micro-politics and macro-politics. Through poetry and written submissions, the so-called 'silent voices' of pupils are afforded the opportunity to be heard, commenting intelligently on wide-ranging issues affecting school life. Referring to "silent voices", Rudduck, cited in Schartz (1993, p.6), defines them as "individuals or groups who have been denied the right to contribute or who have simply not been heard". The study recorded observations on general teacher-pupil relationships and explored cartoons and articles on national media so as to understand the possible impact of macro-politics. Headmasters and teachers were also interviewed to establish their perceptions on student participation and responsible citizenship.

## ANALYSIS AND RESEARCH FINDINGS

During transcribing of recorded interviews, there was difficulty in retaining the nature and context of the original, and as Cohen, Manion and Morrison, (2000, p.282) noted, the social encounter is often lost and only data remain. Transcriptions are decontextualised and frozen. As a result, interviews done with headmasters and teachers were replayed on tape while themes and categories on child participation were sought. During tape playing, account was taken of tone of voice, its inflection, pauses, mood, and way of speaking. These helped towards interpreting the meanings in full. In coding the interviews, Strauss and Corbin's (1998, p.120) third way was used. This is where one perused the entire document or replays the tape and established what was the same or different with earlier or already coded documents as laid down below. Some of the words were italicised as part of the coding process. The italicised and bold words helped to form categories. The same was done to all data collected.

### Activity 1: Teacher-pupil interaction (Summary of Observations)

The narrative covers some aspects of teacher-pupil interaction.

It is the month of June and the temperatures are freezing. At this time of the year, daytime is slightly shorter, which means that the sun rises late and sets early. When the school bell rings, those students approaching school *run for dear life* [**authoritarian**] fearing they will be closed out of the assembly point and face punishment. Those arriving a few minutes late soon go into the prefect's notebook [**policing**]. *As usual, the senior teacher conducts* [**element of control**] the assembly. Songs are led and prayers made, then it is class time. But as they jostle into their classrooms, there are *murmurs of disapproval* [**voicelessness**] of the school starting times. Those not boarding at school may have a point because they walk long distances to school. Some claim that leaving their homes early (obviously when it is dark) exposes them to dangerous wild animals. But avenues of *communication seem closed* [**voicelessness**], and *none seems to mind* [**non-caring**]. The school always starts at 7:20 a.m. and ends at 4 p.m., regardless of changing seasons. For teachers, it is easy because they are housed a stone's throw from the school [**inequality**].

In the classroom it is common that a teacher's question brings dead silence, but the *teacher has to complete the syllabus* [**non-caring**] so she goes on anyway. Every afternoon, approximately 20

per cent of the pupils face punishment based on a variety of offences (lateness included), *and some pretend to like it* [**denial**], [**challenging status quo**]). While some go for sports or social clubs or studies, those punished have to work under *stern supervision* [**policing**], at any designated site. Staff meetings are held fortnightly. Pupils are *talked about* [**misrepresentation**] *and not talked with*. Issues such as the selection of prefects, school trips, sports and social programs are decided upon *by teachers in their wisdom* [**misrepresentation**]. One teacher suggests involving pupils in teacher appraisal. *He is ridiculed* [**intolerance**] and the suggestion shot down. He is told that the *calibre of pupils is inadequate* [**prejudicial**]. Before the last bell a number of pupils would have *slipped away* [**challenging status quo**] only to face punishment in future, usually after *days of non-attendance* [**non-caring**]. In their dealing with parents (while promoting projects), teachers are always quick to point out that all is done *in the interest of the child* [**hypocritical**][**misrepresentation**].

### Activity 2: Students written comments

The contributions are intelligent and show a greater degree of knowledge as to what issues need addressing in the schools. Some of the comments are as follows:

*I want my school to develop and become better than it is.*

*My school is very poor and that we have no qualified headmaster.*

*Our library is empty, we need help.*

*There is too much favouritism in this school. Our class always gets torn books.*

From some of the comments made, one is left wondering why pupils are left out in reaching workable decisions, since they are often the ones who are primarily affected and genuinely concerned. Issues range from personal welfare to teacher performance. Indications are that pupils are not consulted on wide ranging issues such as learning and management processes or on their social activities.

### Activity 3: Students' poetry

The study critically analyses poetry from secondary school students to establish themes and perceptions on issues affecting the micro-politics of the school. The study weighs their tone so as to understand the micro-politics of the schools and how it also over-extends into macro-politics. Though there is often ridicule of some issues happening in the school, such as 'dagga' or 'marijuana' smoking, the tone of most pupils is one of despair and disillusionment. For example, one poem on national economic meltdown reads, "Gone are the days when the dollar used to be a dollar" and "gone are the days when Zimbabwe used to be Zimbabwe". A lot of sad things are happening around students, some of them unknown to teachers, for example, drug abuse and teenage pregnancy. But because students are not active participants in the micro-politics of the school, they do not have a sense of ownership and responsibility to find or assist in reaching solutions. More often, their poetry is that of raising issues and not suggesting solutions.

[ <b>critical of peers</b> ]	They (students) are lazy and impolite.
[ <b>challenge authority</b> ]	They drag their feet.
[ <b>element of control</b> ] [ <b>passive</b> ]	Wait for the teacher to instruct them.
[ <b>peer pressure</b> ]	Laugh at nothing.
[ <b>misunderstandings</b> ]	When the teacher asks a question in class, there is a dead silence.

### Activity 4: Head-teachers and teachers interviews

Interviews were made with teachers and head-teachers to gauge the mood amongst them as so-called 'gatekeepers' of schools on issues of child participation and to explore possibilities for generating commitment in this area. All the head-teachers fully agreed that child participation was minimal both inside and outside the classroom. Some noted that even teachers were constrained by the education process. Teachers often focused on completing the syllabus (teaching the subject as opposed to teaching children). The interaction helped take on board contexts that created less democratic teachers. One head-teacher repeatedly expressed the fear that child participation if not closely monitored could be disruptive. The notion that children could not responsibly participate kept reverberating. Some headmasters noted the importance of sharing information especially with elected students such that students did not participate with so-called 'empty heads.'

- [Self-aware] Non-participation still prevalent. Pupils' viewpoints are not taken.
- [Authoritarian] Teachers also receive commands.
- [Non-caring] Syllabus coverage is paramount as required by the Ministry of Education. (Teaching the subject and not pupils)
- [Information] Our teaching should arm students with information so as to enable them to participate.
- [Progressive] Pupils need guiding by adults in their participation.
- [Non-caring] The school is examination-centred.
- [Information] Should teach civil rights and promote democratic lifestyles.
- [Element of control] Too much freedom to pupils can be disastrous.
- [Progressive] Prefects often participate responsibly in society after leaving school. Maybe we should allow more students to participate.

### Activity 5: The schools micro-politics and the macro-political dimension

The study collected a profile of cartoons and excerpts on topical issues from a daily newspaper in order to reflect on these macro-politics in the country and how these related to the micro-politics of the school. The tendency just to raise issues and not seek solutions (as seen in children's poetry) was also prevalent in national politics. There was an element of passivity, as shown in the cartoon where after a failed weak push to dislodge the ruling party, people's hands appeared folded, (*Daily News*, 6/6/2003) and responsibility was left to other citizens. In another cartoon, the Minister of Information was seen struggling, carrying a massive knobkerrie, which was meant to suppress press freedom and punish journalists (*Daily News*, 25/1/2003). In a bid to oppress, he seemed himself oppressed and he followed his masters passively. More striking resemblances were formed as one scurries from one cartoon or item to the next, with regard to issues of passivity and non-participation by pupils at school. Oftentimes pupils could not express their views, because the culture in the school was sometimes that of "see no evil, hear no evil, and speak no evil" as in national politics (*Daily News*, 7/9/2003). One also noted that at times, what the administration would like to project as happening in the institution was often different from the actual, whether it was by design or accident. Sometimes the punishment of pupils was unorthodox, as in national politics. One of the cartoons depicted a woman, (mother Zimbabwe) being physically abused by her husband (the Government), yet purporting to love her, just the same as teachers who claimed to be doing everything in the interest of the child.

## Summary of all Categories

From italicised codes at every instance to developing categories, the depiction presented in Table 1 is a summation of outcomes (categories) on child participation outlook in the secondary schools studied.

**Table 1. Summary of perceptions on child participation**

A.	Intolerance Authoritarian Non-caring Policing	B.	Controlled Participation Element of control Irresponsible	C.	Inequality Hypocritical and prejudicial Adult freedom
D.	Silent voices Voicelessness Denial	E.	Challenging status quo Misrepresentation Disillusionment Peer pressure	F.	Information/knowledge Self-awareness Progressive Critical of peers

## DISCUSSION OF CHALLENGES

From Table 1, it is noted that child participation and freedom are greatly curtailed in Zimbabwe's secondary schools. There is a saying that 'Freedom and responsibility are two sides of the same coin'. The lack of student freedom to participate in the educational process has adverse consequences for responsible citizenship. Though schools are often seen as a mirror of their societies (Forster 1977, cited in Gould 1993), it is also true that for time immemorial, education has served as an agent for cultural change (Griffith, 1998), and that seems to be an urgent challenge facing Zimbabwe's schools in citizenship education, if a truly democratic and polyarchical culture is to be established and sustained.

### A Polyarchical Model: A Challenge to Zimbabwe's Schools

Polyarchy is a paradigm of democracy that seeks the empowerment of individuals and communities in a way that neither they (individuals or communities) nor the state dominate the other (Dahl 1989). In many parts of Africa, totalitarian democracy often takes root where the state, under the guise of sovereignty, brutalises the minority and individuals. Such democracy becomes characterised as "everything for the state, from the state and by the state" (Polyarchy Organisation 2002). Despite gross violation of human rights, such countries still claim to be democracies. For Africa we remain stuck with an empty word, democracy. In the twenty-first century, polyarchy may offer hope to African communities who are largely divided by ethnicity (Salih 2001). While conscious of universal principles, communities use local custom to address specific general realities. It is on this understanding that the study of responsible citizenship in Zimbabwe's secondary schools is based. In a polyarchy, communities and individuals actively participate and are free to link up with or in with any community, and also free to opt out or split up (Polyarchy Organisation 2002).

Zimbabwe experienced ethnic conflict soon after independence in 1980 (Human Rights Forum, 2003), and more than 20 years on, the nation still faces political and economic demise through internal strife (Raftopoulos, 2003). Against this background, citizenship education in Zimbabwe's secondary schools should seek to bolster issues of participation, tolerance, accountability and empowerment. Furthermore, schools need not just adopt but adapt forms of democratic practices that nurture the community spirit and meet global demands. The so-called 'gatekeepers' of a school have a duty to create a satisfactory educational environment (Bernstein 1970) upon which a polyarchical culture can be founded. A commitment to **practise** and not just teach polyarchical values needs generation.

Any situation in which some individuals prevent others from engaging in the process of enquiry is one of violence. (Freire 1970, p.66)

The challenge to educators is that every child passing through the schooling system possesses unique ideas and individuality, and thus an opportunity presents itself to engage the child actively so as to influence positively the sustenance of a polyarchical culture.

### **Independent Learning**

Reflecting on the education system in Zimbabwe's secondary schools, one is astounded by levels of lack of participation or non-participation by students. As Harber (1995, p.5) noted in his wide-ranging study:

In most African schools, the classroom is highly structured ... The teacher ... exercises unquestioned authority in such matters as seating arrangements, movement, controlling and initiating all types of interaction within the group.

The fact that the teacher exercises unquestioned authority in the classroom perpetuates a culture of non-tolerance. As a result, students gradually become moulded into passive, non-questioning citizens who will worship the leader or any institutional arrangement and dare not oppose the tide. Aristotle once wrote:

It is useless to have the most beneficial rules of society fully agreed on by all who are members of the polity if individuals are not going to be trained and have their habits formed for that polity. (Harber 1995, p.1)

Teachers may not be able to draw up a curriculum based on democratic values or have the opportunity to teach these values because of the macro-political environment, but they have ample opportunity to practise and apply democratic values across the whole spectrum of the educational process within the school and that comes across as the major challenge.

### **The Macro-Political Dimension**

In the macro-politics, where passivity is reflected, one can safely allude to claims that "blind obedience to other's decisions invites all the brutalities of totalitarian regimes" (Popper 1945, cited in Bailey 2000). A strong case for child participation still stands if quality education and the quality of life in the school and beyond is to be enhanced. If schools are to be sensitive and quality-conscious institutions, the bringing of children into the realm of decision-making processes will go a long way in addressing despondency and poor quality of education. Moreover, students will learn not just to address school problems but the challenges that face them as adult national citizens after schools.

### **Voicelessness**

The voicelessness of students within the educational process is counter-productive to responsible citizenship. As children grow, so does their capacity to make decisions. Freire (1970, p.69) observes that, "human existence cannot be silent, nor can it be nourished by false words ... human beings are not built in silence, but in word, in work in action-reflection".

Zimbabwe and many of its schools are passing through forms of a crisis of development (a battered economy and dilapidated schools). Oftentimes those in the lead are starved of ideas. This study explores an argument that children are a source for a wealth of ideas if properly nurtured and encouraged to participate, as evidenced in the Madagascar case where 90 students from schools presented an action plan to the National Assembly (Unicef, 2004). Furthermore, the study argues that since children are the primary customers of education (Sallis 1996, p.25), educators cannot easily dismiss them out of hand if schools are to be quality-conscious organisations. For some in leadership, the process of consultation is like taking a step backward, and as Tocqueville (cited in Wepman 1985, p.9) observes, "it is easy to issue commands and enforce them."

However, the wise words of Confucius are worth reflecting on: “Sometimes, in order to go forward, one must take a step backward”.

### **Real Student Participation**

“Half-hearted attempts at pupil involvement are seen as worse than useless, a smokescreen which is easily seen through” (*The Guardian*, 17/7/90, cited in Harber 1995). Most students are likely to notice a patronising staff that keeps them away from significant issues and the consequences could be adverse, for example, strikes or disruptive tendencies. **Co-operation** across relationships existent in a school are vital. The “banking” concept of education as described by Freire (1970), where teachers are ‘the haves’ and students ‘the have nots’, is discouraged. The banking concept of education is seen as mechanistic (as evidenced in the examination centred curriculum), static and naturalistic and it promotes a spatial view of consciousness, which transforms students into receiving objects. If a school decides to have a student council, teachers should be prepared to broker an honest two-way relationship, and students should be encouraged not to see each other as competitors but partners in an education process:

Banking education resists dialogue; problem-posing education regards dialogue as indispensable. Banking education treats students as objects of assistance; problem-posing education makes them critical thinkers. (p.64)

Problem-posing education (responsible citizenship) to this end empowers teachers and students to become subjects (not objects) of the educational process by overcoming authoritarianism and an alienating intellectualism. It enables them to overcome false consciousness. Marshall (1997) warns that, in their effort to produce responsible citizens, teachers should not mistake presence for participation. Students should not just be present as hearers, but should be encouraged to talk and act within a process.

### **The Challenge at Secondary School**

Without necessarily implying that democratic education can only work at secondary levels, the study observes that the majority of students at secondary school can “formulate views and opinions” (United Nations Convention on the rights of the child, Article 12:1). Gould (1993, p.65) also notes that in Africa:

The political role of schools is greater at secondary and higher levels where not only are the institutions more prestigious and command more resources, but the students are politically aware and politically active.

The role of responsible citizenship education at secondary level would be to inculcate political values and lifestyles that are akin to a polyarchical culture, where the state, school authorities or any polity (including the student council) does not exercise absolutist power. Teachers and Head-teachers often wield massive power within the school environs. The challenge for them is to be mindful of the culture they bring into the school by creating opportunities for power sharing, not as an end in itself, but as a means to an end.

### **Limitations of the Study**

Though the study has achieved a deeper understanding of teacher and pupils’ perceptions on student participation in Zimbabwe’s secondary schools, an opportunity still exists for deeper exploration of the phenomenon through case studies, paying particular attention to different sub-cultures and educational levels.

## CONCLUSIONS

Most of the activities in the research process have overwhelmingly helped the study to conclude safely that for Zimbabwe's schools the path towards responsible citizenship will continue to elude educators unless child participation is taken seriously. Democratic education seeks to liberate thought, promote tolerance, build meaningful relationships and empower. The learning and work processes in schools seem not to favour such an ethos. Many schools still operate like factories (Harber 1995), of which the end products are children "fit for a purpose" (Sallis 1994). In view of existing levels of intolerance, authoritarianism, non-caring attitude, student voicelessness, Zimbabwe's teachers are faced with a challenge to rethink and redefine the school culture. There is also a need to equip teachers and headmasters with knowledge and skills on how best to handle students in a way that will perpetuate a polyarchical culture in the school and beyond. Structures such as school councils may be set up and assisted towards this goal.

It is also noted that most governments (especially in a non-polyarchy) may not be interested in educating towards responsible citizenship because of future implications if the government is irresponsible. In such a challenging environment, schools, often seen as custodians of culture, may not need to wait for an official curriculum but may, through a conscious decision, strive to incorporate democratic values in the way they relate, teach and manage student affairs.

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# Reconstruction of the teacher education system in China

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*This article proposes a conceptual framework to examine the development of the teacher education system in contemporary China. Within the framework, three development periods, including the era of shifan<sup>1</sup>, and the era of post-shifan, the era of professional teacher education, are investigated in terms of governance, institutional structures, and resource allocation. With the central government decentralising managerial control over education, the governance issue of teacher education is becoming significant in the era of post-shifan. At the end professional teacher education is suggested as the future long-term goal for reforming the teacher education system.*

China, teacher education, reconstruction, governance, professional education

## INTRODUCTION

International studies show that teacher education and teacher training programs in many countries have been gradually promoted from low-ranked institutions to universities. In China, with the fast economic growth over the past decades, many normal schools where elementary school teachers are trained and junior teacher colleges where middle school teachers are educated are being upgraded into universities to meet the increasing needs for high quality teachers. For examining the historical and current development of the teacher education system, this paper proposes a conceptual framework that identifies three eras of the teacher education system in China – era of *shifan*, era of post-*shifan*, and era of professional teacher education. In this framework, time is the significant distinction among the three concepts although it is used as a reference in discussion. Two questions are addressed in this study. If there is a transition period between the era of *shifan* and the era of professional teacher education – the era of post-*shifan*, what kinds of changes have occurred to the teacher education system? How should we reconstruct the teacher education system?

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<sup>1</sup>Shifan refers to teacher education in Chinese, literally meaning “teacher model”. After the Peoples Republic of China was founded in 1949, normal schools, teacher colleges and normal universities where teachers were trained were widely established and called “shifan” schools or “shifan” colleges or universities. Normal schools were four-year institutions that enrolled graduates of junior high schools. They trained elementary school teachers. Teacher colleges had two types: two- or three-year and four-year. Normal universities, the highest rank among the old teacher education system, educated teachers for secondary schools and some junior colleges. However, now there is a discourse change from *shifan* to teacher education, which seems to distinguish the old teacher training system from the newly reconstructed teacher education system.

In the era of post-*shifan* Chinese teacher education programs are becoming diversified while the discourse of *shifan* is still dominant. The key characteristic of this era is the plurality of teacher education programs, which corresponds to different approaches to reforming teacher education programs. The proposed approaches include ending the *shifan* system consisting of normal schools, junior teacher colleges and normal universities, promoting normal schools and teacher colleges into universities, integrating normal schools and teacher colleges into universities, and allowing non-normal universities to involve in teacher preparation. It comes as no surprise that teacher education programs become diversified in the era of post-*shifan* as the teacher education system is being shifted from the old *shifan* model to the new professional teacher education model. The era of professional teacher education means reconstructing teacher preparation programs after the post-*shifan* period. Reconstruction of teacher education programs aims at establishing teacher education programs at universities where a college of education collaborates with other academic colleges to educate prospective teachers. In the scholarly discourse of preparing teachers, teacher education will take the place of *shifan* education. The old teacher education system, the *shifan* system is hierarchical and monopolised. The system is made of normal schools, teacher colleges, and national and local normal universities that respectively trained prospective teachers for preschools, elementary schools and secondary schools.

In what follows, the three eras are examined in several aspects: models of resource allocation, institutional structures of the teacher education system, and models of preparing and training teachers. Especially, the issue of 'governance' of teacher education in the era of post-*shifan* is discussed in detail.

### THE ERA OF SHIFAN

In the era of *shifan*, normal schools, two- or three-year teacher colleges, four-year teacher colleges, and normal universities constituted a hierarchical and monopolised teacher education system<sup>2</sup> that received all kinds of resources allocated by governments. Because governments provided tuition waivers, stipends and fellowship for the students who attended the teacher education programs, many top graduates of junior high schools and senior high schools competed hard to get into these schools, colleges and universities. Internationally teacher education programs are usually housed in public institutions. For example, although in the United States some private research-oriented universities have teacher education programs, state universities and colleges prepare the majority of the teacher pool. Similarly, in China, normal schools, normal colleges and universities were public, managed in accordance with the model of the central planning economy. The resources, recruitment of faculty and enrolment of students, purposes and approaches of teacher education, allocation of graduates were all decided and controlled by governments under the central planning economic system. Therefore, governments were the sole voices that had determinant authority over teacher education programs in the era of *shifan*. The managerial rules made by governments prevailed in the era of *shifan*. Governments exerted exclusive influences on the teacher education institutions, which resulted in a hierarchical and monopolised teacher education system with nationally consistent curriculum and instructional goals. This system was representative of the central planning economy model.

This hierarchical teacher education structure corresponded to the public school system that was viewed to be a stratified structure in terms of disciplinary knowledge. Teachers, the important roles in the school system were thought to need different levels of disciplinary knowledge, which

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<sup>2</sup> Graduates from non-normal colleges and universities have been allowed to teach in public schools over the past several decades. For example, a key educational reform document issued by State Council and the Central Committee Party of China in 1985 encouraged graduates from non-normal colleges and universities to take the teaching profession for solving the issue of teacher shortage.

meant that elementary school teachers finished the normal school education equivalent to senior high schools in terms of disciplinary knowledge, junior high school teachers graduated from two- or three-year teacher colleges or three-year programs at some normal universities, and senior high school teachers needed to achieve bachelor degrees in a discipline. This rigid teacher education structure did not allow teachers to move from the “low-ranked” elementary schools to secondary schools. With the economic growth and educational development, the legitimacy of this hierarchical and monopolised teacher education system was challenged. There were calls for a new era – the era of post-*shifan*.

### THE ERA OF POST-SHIFAN

In the era of post-*shifan* teacher education programs are becoming diverse. On the one hand, the old teacher education system is being reformed; on the other hand, non-normal universities are being involved in teacher preparation. Normal schools training preschool and elementary school teachers have been gradually changed to secondary schools or promoted to five-year junior teacher colleges that enrol graduates of junior high schools. The number of normal schools has decreased from 892 in 1997 to 430 in 2002 under the backdrop of increasing preschool and elementary school teachers’ education credentials (Ministry of Education, 1999, 2005). Teachers who graduate from these junior teacher colleges are awarded an associate degree. In 2003 about 40 per cent of elementary school teachers held at least an associate degree (Ministry of Education, 2003).

The two- or three-year teacher colleges have been upgraded into four-year teacher colleges, and four-year teacher colleges have been promoted to normal universities. In the meantime normal universities are trying to reshape their orientation from preparing teachers to educating students for all occupations and professions. Some normal universities pursue the aim of becoming research-oriented universities. It is noteworthy that some teacher colleges and normal universities have become multipurpose higher educational institutions by combining with normal schools, other colleges and universities. For example, in 2002 Xingtai Teacher College in Hebei Province was changed into Xingtai University.

To follow the trend of developed countries that the majority of school teachers are trained at comprehensive universities, the central government encouraged establishing teacher education programs in those higher education institutions. In 1999 the State Council released the “Decisions on deepening the educational reform and improve quality-oriented education in an all-round way” that called for multipurpose universities to set up schools of education and prepare schoolteachers. Currently some provincial and local multipurpose universities and a few of the national selective universities responded to this call (Cheng, 2000).

In general, in the era of post-*shifan*, five approaches to changing the institutional structure of teacher education have emerged. The first approach is that selective normal universities are changing from institutes preparing teachers to multipurpose universities.<sup>3</sup> Currently there are 36 normal universities in China. Some national selective normal universities are transformed into multipurpose universities by expanding the scope of their programs, such as establishing law programs and schools of business. Some colleges combine with each other to form a new normal university. For instance, Tanjin Normal University is made of Tanjin Teacher College, Tanjin

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<sup>3</sup> In fact, over the past two decades six national selective normal universities and some provincial selective normal universities have expanded their programs gradually and invisibly for becoming comprehensive universities. In 2002 when Beijing Normal University celebrated its centennial, the ex-president, Jiang Zeming encouraged BNU to pursue the goal of becoming a research-oriented and comprehensive worldwide-known university with specialty in teacher education.

Institute of Education and Tanjin Junior Teacher College; Hebei Teacher College and Hebei Institute of Education combine into Hebei Normal University; Shanxi Normal University incorporates Linfen Teacher College and Shanxi Teacher College. Among 36 normal universities, there are some universities that have been promoted from teacher colleges to normal universities.

The second approach is that municipal normal schools, two- or three-year teacher colleges, institutes of education and teacher training schools<sup>4</sup> are incorporated into four-year teacher colleges. For instance, Huzhou Junior Teacher College, Huzhou Teacher Training School and Huzhou Normal School combined together to form Huzhou Teacher College. Now there are 60 four-year teacher colleges throughout the whole country.

Thirdly, some normal schools, two- or three-year teacher colleges, institutes of education, teacher training schools and vocational colleges combined together to become three-year multipurpose colleges. For example, Luliang College was made of Luliang Teacher College and Luliang Technology College; Sanming College was established on the basis of Sanming Teacher College, Sanming Vocational College, Sanming Teacher Training School and Sanming Normal School. So far in China there are 61 three-year colleges that have teacher education programs.

Fourthly, some teacher colleges incorporate other kinds of colleges to become universities. Suzhou University was the first case. It was transformed into a comprehensive university from a teacher college in 1982. Hubei University was upgraded from Wuhan Teacher College in 1984. Another case is Guangzhou University that incorporated Guangzhou Teacher College, Guangzhou Junior Teacher College, Guangzhou Institute of Education, Guangzhou Construction University and Guangzhou Vocational University of Architecture Corporation in 2000. Nationally 33 universities take this approach to promote themselves to universities while keeping teacher education programs. The last approach is to establish four-year colleges by merging municipal and provincial four-year teacher colleges, two- or three-year teacher colleges, and institutes of education.

The traditional teacher education system is being transformed into a new direction. Teacher education programs are not solely housed in normal colleges and universities; instead, more and more comprehensive colleges are being involved in preparing teachers. The expansion of teacher education programs into comprehensive colleges and universities is the most radical change in the institutional structure of teacher education in the era of post-*shifan*. This indicates an interim from the *shifan* era to the era of professional teacher education. Not only the structure of the old teacher education system is changed from within, but also outside the system changes have occurred – teacher education programs become seated in many comprehensive colleges and universities. But till now this kind of change has limited impact on the teacher education system as the majority of teachers are still educated in teacher colleges and normal universities. Locating teacher education programs in comprehensive universities is the long-run goal for the reform of teacher education in China.

In the era of post-*shifan* who should prepare teachers becomes one of the major concerns in terms of reforming teacher education. Those institutional changes discussed above occurred under the background of merging and incorporating universities and colleges with various academic focuses in the past decade. Along with the diversified institutions that take responsibility for educating teachers, educational researchers debate over several issues, such as closed teacher education

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<sup>4</sup> Institutes of education, usually supervised and governed by provincial departments of education or municipal bureau of education, provide teacher degree programs in education and professional development programs. Over the past decade many institutes of education have been integrated to universities, but they still keep these two functions, including in-service teacher training. Teacher training schools are located at districts, offering teachers regular in-service training.

system versus open teacher education system, *shifan* students versus teacher candidates, and academic disciplines versus professional education. The diversity of teacher education discourse in the era of post-*shifan* is recognised both in educational research and government documents.

Regional needs for teachers play a significant role in reforming the institutional structure of teacher education as China is a country with regional diversity, including the different development levels of economy. In economically advanced areas, like the eastern parts of China, normal schools no longer exist, teacher colleges are promoted to universities, normal universities become comprehensive universities, liberal art colleges and comprehensive universities are involved in preparing teachers; in the western regions, on the other hand, normal schools continue to play a large part in preparing elementary school teachers. Table 1 shows the numbers of teacher education institutions in different provinces.

**Table 1. GDP of provinces <sup>a</sup> and numbers of teacher education institutions**

Provinces	GDP (RMB)	Number of Teacher Education Institutions				
		Normal University	Four-year Teacher College	Two- or three- year Teacher College	Comprehensive University	Liberal or Comprehensive College
Beijing	19846	2	0	0	0	1
Tanjin	15976	1	1	0	0	0
Hebei	6932	1	1	3	0	5
Shanxi	4727	1	3	0	0	3
Inner Mogolia	5350	1	0	1	2	2
Liaoning	10086	2	1	5	3	3
Jinlin	6341	2	4	0	2	0
Heilongjiang	7660	1	2	0	2	2
Shanghai	30805	2	0	0	0	0
Jiangsu	10665	2	3	3	4	2
Zhejiang	12037	1	3	1	1	5
Anhui	4707	1	5	4	0	5
Fujian	10797	1	2	3	1	2
Jiangxi	4661	1	3	1	0	4
Shandong	8673	2	2	2	4	6
Henan	4894	1	6	3	1	4
Hubei	6514	1	2	2	3	4
Hunan	5105	1	1	2	3	8
Guangdong	11728	1	2	0	2	5
Guangxi	4148	1	2	6	0	1
Hainan	6383	0	1	1	1	0
Chongqing	4826	2	1	0	0	1
Sichuan	4452	2	3	3	1	3
Guizhou	2475	1	2	6	0	1
Yunnan	4452	1	3	4	0	3
Tibet	4262	0	0	0	1	0
Shanxi	4101	1	2	2	0	5
Gansu	3668	1	1	4	0	2
Qinghai	4662	1	0	2	0	0
Ningxia	4473	0	0	1	0	0
Xinjiang	6470	1	2	1	1	1
Total (258)		36	60	61	33	78

<sup>a</sup> Source: Hu, A. (2003). *The second transformation: Reconstruction of national systems*. Beijing, China: Tsinghua University Press.

Meanwhile, in the post-*shifan* era the central government seeks to control the professional quality of teachers by creating standards for teacher preparation. In 2004 the Ministry of Education launched *2003-2007 New Action Plan to Revitalise Education* in which drafting standards for accreditation of teacher education institutions, curriculum of teacher education and quality of teacher education was outlined. But teacher quality can be controlled and standards can be

established and implemented only when a new professional teacher education system is established. That is to say that the nationally consistent teacher education system is the premise of creating and implementing standards for teacher education. During the post-*shifan* era with much diversity, it is hard to guarantee teacher quality by one standard. However, we do not say that the central government cannot set up standards to control and improve teacher quality. The post-*shifan* era is a period in which we experiment at establishing professional standards for teacher education. A professional standard for teacher education that spells out purposes and rationales aims at professionalising teaching and teacher education. The history of teacher education in some developed countries such as the United States (Clifford and Guthrie, 1988; Herbst, 1989) demonstrates that teacher education coming into universities paved the way for professionalising teaching and teacher education.

### **CHANGES IN GOVERNANCE OF TEACHER EDUCATION IN THE ERA OF POST-SHIFAN**

It is clearly seen that changes of the teacher education system have led to changes in governance of teacher education programs. Currently more players claim their parts in the governance of teacher education compared to the exclusive governments' control over teacher education in the past several decades. Professional organisations, colleges and universities, social organisations and market all begin to involve in governing teacher education programs. The Department of Teacher Education at the Ministry of Education, the highest office to manage teacher education programs, is transforming its role from making regulations to monitoring quality of teacher education through professional standards. Several steps have been taken to proceed to the role transformation since 2001, including establishing a teacher certification system, creating teachers' professional development certification and connecting this certification with renewal of teacher certification, and setting off to develop accreditation standards of teacher education institutions, and curriculum and assessment standards of teacher education programs. At the same time the Department of Teacher Education is decentralising its management of teacher education through allowing institutions of teacher education to have autonomy in enrolment, curriculum design, instructional methods, and job allocation of graduates. In the future for the purpose of professionalising teaching and teacher education, the department needs to control standards of teacher certification for exerting influences on goals and graduate requirements of teacher education institutions.

Responding to changes in how the Department of Teacher Education manages teacher education institutions, Bureaus of Teacher Education in the provincial and municipal governments have minimised their decision-making powers, which gives local teacher education institutions certain autonomy in operation and administration. However, one coin has two sides. On the one hand, along with the decreasing control from bureaus of teacher education, institutions of teacher education are expected to enjoy certain autonomy; on the other hand, bureaus of higher education begin to involve in governance of teacher education while more and more teacher education institutions are promoted to colleges and universities that should be under the governance of bureaus of higher education. Therefore, some researchers are concerned that power transition and allocation would result in a dilemma in which bureaus of teacher education exert influences and bureaus of higher education do not know how to manage. Not surprisingly, they worry that quality of teacher education is damaged under this predicament. During the ongoing curriculum reform, conflicts also occur between bureaus of teacher education and bureaus of basic education that are supposed to take charge of the curriculum reform. They compete for the power to prepare and train teachers in the reform.

In market economy parents and students are important players in the governance of teacher education. Because public teacher colleges and normal universities charge tuition and no longer

provide stipends and fellowships for students, attending those colleges and universities is not attractive any more for those students from economically disadvantaged families. Those students used to constitute the majority of prospective teachers in teacher education institutions. Thus some teacher education programs have difficulty in enrolling enough students or recruiting top students.

### **THE ERA OF PROFESSIONAL TEACHER EDUCATION: PROFESSIONAL EDUCATION AT UNIVERSITIES<sup>5</sup>**

Reconstruction of teacher education refers to educating professional teachers in four-year colleges and universities. Reconstruction does not mean discarding the previous teacher education system; instead, governments need to re-organise teacher education institutions and re-create a new teacher education system. In the era of post-*shifan* the old teacher education system – the *shifan* system consisting of normal schools, teacher colleges and normal universities coexist with comprehensive colleges and universities that involve in teacher preparation. In the era of professional teacher education, a new system will be established while normal schools, teacher colleges and normal universities will be incorporated into or promoted to comprehensive colleges and universities. As a result, reconstruction of the teacher education system indicates the end of the *shifan* system. We propose that universities establish professional teacher education programs in professional schools of education. As a professional school at universities, schools of education will enjoy as much respect as other professional schools do.

The reform of teacher education came along with the reform of higher education in China. In the reform, institutions of post-secondary education were re-organised, re-constructed into different levels of colleges and universities, which was also reflected in the teacher education system. Recently some research-oriented universities have become involved in teacher preparation. Teacher education at graduate school level is expected to become a trend in the future, which helps improve quality of teacher education and research on teacher education.

### **CONCLUSIONS**

In China the closed old teacher education system is being transformed into a more open system to improve teachers' educational credentials and quality, which responds to the need of preparing qualified talents for the booming market economy and comes along with the reorganisation of higher education institutions. Calls for reconstruction of the teacher education system aim at establishing a new system that has diversified teacher education programs housed at universities and implemented according to national standards of accreditation and curriculum. In this paper we suggest that the long-term goal of the teacher education reform is to educate prospective teachers in professional schools of education at universities.

However, some caveats have to be taken into account in the process of reforming the teacher education system. Huge economic discrepancy among regions is a significant factor that has a say in how to reconstruct the teacher education system in different regions. It is unrealistic that all regions adopt the same approach to reforming teacher education. Some researchers (Cheng, 2000; Zhou and Reed, 2005) suggest that normal schools should be retained in poor and rural areas because college graduates usually find no attraction to work in these regions. Each province is suggested to support a key normal university with multipurpose while keeping those single-purposed teacher colleges to prepare elementary and junior high school teachers. In addition, since the Teacher Act (1993) claimed teaching as a profession, professionlisation of teachers has

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<sup>5</sup> In 1954 the central government divided comprehensive colleges and universities into special higher institutions with concentrations on certain disciplines. Since then in China colleges and universities had become liberal arts colleges or professional colleges.

occurred in the discourse of educational policies and studies. But it is necessary to define clearly what that means in a social context in which national curriculum standards and textbooks are prescribed, and student test scores are highly emphasised, whereby we can reorganise and redesign teacher education. Studies on how to keep the alignment between teacher education programs and teaching practice at schools, between national curriculum standards for teacher education and national curriculum standards for elementary and secondary education, are urgently needed.

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## Forms of infringement of the right to education in contemporary Greek educational structures

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*The classical philosophical distinction between positive and negative rights poses the question about where education stands and draws an invaluable opportunity to explore the implications of this distinction in the context of modern Greek educational reality. This paper discusses education as touching the sphere of both right categories, by incorporating simultaneously a) prerequisites of state financing obligations (positive dimension), and b) patterns of people's free choice with respect to the received education (negative dimension).*

*Contrary to these conditions, it is argued that the Greek educational system proves condemnatory for the realisation of education as a fundamental human right for two reasons. First, poor state financing pushes families to extended private expenditures, creating class dichotomies and making education a 'public' good to be 'purchased' on basis of people's social profile and economic ability. Secondly, the overwhelmingly centralised administration of education, in conjunction with the frequent legislative intervention of the state, diminishes liberal possibilities of free choice, since a) parents are unable to decide for the school of their children or get involved in educational planning, and b) young people are not granted entrance to universities in line with their cognitive preferences and inclinations, but rather according to a central allocating system tightly supervised by the Ministry of Education that blindly decides student placement.*

Accessibility to tertiary education, state coercion, socio-economic inequities, rights,  
liberalisation of education

### INTRODUCTION

A basic distinction that is classically drawn on rights is between **positive** and **negative** ones<sup>1</sup>. Positive rights are referred to as assertive entitlements that grant access to a good – as rights to the exercise of which others must provide fruitful preconditions. The right to medical care falls into this category, since it calls for practical conditions (doctors, hospitals, insurance policies) that will ensure respectful attention of people's health worries. Negative rights imply freedom from coercive actions of others, in that others must refrain from obstructing the exercise of one's right. Freedom of religion is a typical example of a negative right, since it refers to an individual as an agent free from outside interferences to express his worshipping faith.

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<sup>1</sup> The distinction is attributed to Immanuel Kant's influential interpretation of the morality of rights. For him, humanity must always be treated as an end, not merely as a means. To treat a person as a mere means is to use a person to advance one's own interest. But to treat a person as an end is to respect that person's dignity by allowing each the freedom to choose for himself or herself. Kant's principle is often used to justify both a fundamental moral right, the right to freely choose for oneself, and also rights related to this fundamental right.

The right to education is distinctively both a positive and a negative right, requiring helpful state policies and financial investments in human and material infrastructure for its realisation and bringing forward liberal aspects of free choice with respect to people's received education. It occupies a central place in the human rights agenda and is indispensable for the exercise of a myriad other rights and for development. At the home page of its official website, UNESCO states that as an empowerment right, education is the primary vehicle by which economically and socially marginalised people can fit themselves out of poverty and obtain the means to participate fully in their communities (<http://portal.unesco.org/education/en>).

Extensive research shows that education is linked to market-based and other non-market and social returns to individuals. The value of the increase in knowledge, skills, and productivity is reflected in earnings differences between identical individuals with different levels of schooling (Becker, 1964; Mincer, 1962; OECD-UNESCO, 2002; Schultz, 1961). One's own education is also proved to affect positively his health status and the efficiency of choices made, as well as helps prevent criminal activity, enhance political participation and empowerment, diminish risks of social exclusion, and lessen economic and psychological costs of job search and turnover (McMahon, 2000; Wolfe and Haveman, 2002). Further to the future success of individuals, education is increasingly considered an investment in the collective future of societies and nations.

Education in Greece is state-provided and constitutionally safeguarded. Article (16) of the Greek Constitution prescribes that "education constitutes a basic mission for the State...", and that "all Greeks are entitled to free education on all levels at State educational institutions...". The state explicitly wraps education in a rights-language, thus assuming the responsibility to treat and respect it in both its positive and negative dimension.

The perception of education as a free of charge and equal provision to all citizens comprises the main political stance upheld by Greece in domestic and international foray. Based on fiscal and demographic research, this paper argues that such perception is largely a lip-service political slogan that lacks practical confirmation and that, contrary to constitutional provisions, the domestic educational system encourages, rather than diminishes, social inequalities. Further, it is explained that the centralist tradition of educational management inherent in the administrative temperament of the Greek state leaves plenty of room to wonder whether people are truly free in exercising unobstructed choices when it comes to the planning of their educational objectives.

## **PARAMETERS OF SOCIAL INEQUALITY**

The basic Anglo-Saxon framework of general governmental obligations includes basic steps as to make education available and accessible to citizens on a non-discriminatory basis (Tomasevski, 2001). In terms of participation to education, Greece acquires a favorable (well above European averages) position in international statistics. According to Eurostat, the European Commission and Eurydice (2002), 77.8 per cent of twenty-two year-olds have completed secondary education, while 18 per cent of the population is in tertiary education (Table 1). Similar favorable statistics are documented in OECD studies (2002 and 2003). Beyond the expansion of educational opportunities, however, background problems related to the growth of inequalities do exist.

### **Funding of Education**

Maintaining equitable access to education is inextricably linked to issues of education finance. Having a right to a public good means that the government should subsidise and deliver whatever service is associated with the actualisation of such right. Free public education assumes that the state provides all necessary funds to the educational structure so that families, especially poor ones, do not have to contribute financially at a large scale. Under this view, the state plays a redistributive role transferring funds from rich to poor families, the offsprings of which would not

have otherwise the chance to go to school and acquire adequate qualifications in the quest of future employment and a better life (Antoninis and Tsakloglou, 2001).

**Table 1. Percentage of those aged 22 who have successfully completed secondary education, and students in tertiary education as a percentage of all pupils and students, 2000**

Country	Secondary	Tertiary
Belgium	82.9	13
Denmark	75.2	15
Germany	78.5	12
Greece	80.5	21
Spain	69.3	21
France	83.7	14
Ireland	81.3	16
Italy	70.7	17
Portugal	44.7	17
Netherlands	73.1	14
Austria	85.9	16
Finland	89.8	21
Sweden	85.0	14
England	-	13
EU mean	75.5	15

Source: Eurostat, European Commission and Eurydice (2002), Figures E14 and F3.

However, Greece spends only as little as 3.6 per cent of the GDP in education, relative to an average 5.4 per cent of the European Union (Eurostat, European Commission and Eurydice, 2002). More specifically, in the absence of proper private universities, which are constitutionally banned and therefore lack domestic official recognition status as providers of tertiary education, the Greek educational system at the upper secondary level (*lyceum*) is characterised by competition for entry into public universities through the government-controlled Pan-Hellenic National Examinations. The intensity of the competition is being reflected through the small number of entrants, compared to the large body of candidates (Table 2).

**Table 2. Upper secondary candidates and total entrants into higher education, 1993-2003**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Candidates	118855	124656	119662	116910	118810	119290	179285	-	-	134565	146700
Entrants	45382	45338	46494	47429	52224	56342	68025	81635	79370	78120	76315

Source: National Statistical Service of Greece (1992/93-1997/98), and Statistical Department of the Ministry of Education and Religious Affairs.

Note: Accurate data missing for candidates of 2000 and 2001.

Traditional high social demand for monopolised state tertiary education, which has increased dramatically during the past decade, forces households into spending vast amounts of money for private and other forms of preparatory courses in cram schools called *frontisteria*, in order to raise their children's possibilities of entry. According to recent estimations of the General Consumers' Federation of Greece (2003; see also Psacharopoulos, 2003a), the total annual top private cost for these courses and other miscellaneous expenses reaches up to 4 millions euro, when the state spends accordingly almost one million less (European Commission, 2002; Ministry of Finance, 2004 - Table 3). No wonder that private expenditure in Greece equals the largest proportion of the family budget (2.4%) compared to other European Union countries (Eurostat, 2001).

Once into a university, families continue bearing most of the financial burdens of their children throughout the whole course of studies. Annual private costs per student are estimated from 6000 to 7000 euros (Katsikas, 2003), when in other European countries costs range from as little as 1830 to 5300 euros (University of Buffalo, 2000-2003). At the same time, the Greek state spends only 1797 to 3951 euros for student purposes, with a tendency to lower funding every subsequent year (as recorded in the state budgets, the overall decline the past five years in 2003 constant

prices has been 21.5 per cent for students in higher education and 47.2 per cent for students in higher technical institutions<sup>2</sup>). It is comic-tragic that for every tertiary education student Greece spends half of what Sweden spends for primary students.

**Table 3. Greek public and private expenditures per educational level, 2003 (in thousand euros)**

Educational level	Public expenditure <sup>1</sup>	Private expenditure <sup>2</sup>	
		TOP	BOTTOM
Primary	1.363.048	1.349.830	847.955
Secondary	1.669.215	2.720.448	1.948.769
Total	3.032.263	4.070.278	2.796.725

Source: <sup>1</sup> Ministry of Finance (2004); <sup>2</sup> General Consumers' Federation of Greece (2003).

Private expenditure on education is a rather urban phenomenon, associated with more profitable parental professions. While the Greater Athens area represents only 35.6 per cent of the country's households, its share of education spenders is 41.1 per cent. On the other hand, while households of rural areas represent 35.3 per cent of the sample, spenders account for only 26.4 per cent (Kanellopoulos and Psacharopoulos, 1997). Generally, better-off families spend four to five times more compared to poor ones.

The 'free' system clearly privileges better-off families, while leaving poor ones to their unfortunate luck. The obligation of the state to supplement the latter in order to equal the quality and quantity of educational opportunities through generous student-aid schemes is rather debatable. Eurydice statistics (1999) reveal that Greece comes last in providing scholarships, student loans, lodging, and other tax relief to needy students. Overall, public expenditure is judged insufficient to deal with demands of adequate finance and come up to constitutional promises about free education. Despite the steady rise in the number of students over the years, public subsidies remain considerable low and ineffective, calling families upon to fill in the huge financial gaps of the state budget, irrespective of their actual ability to do so (OECD, 1997).

### **'Social Ingredients' of the Student Population**

It is documented that the economically higher layers of society are over-represented in public tertiary education (Psacharopoulos and Kazamias, 1985). As with private expenditure, access to higher education is closely linked to parents' profession and education, as well as to geographical region.

On the one hand, and in relation to the Pan-Hellenic university entrance examinations, the demographic data reveal that candidates coming from urban and major city areas have a 22.6 per cent failure (meaning that three out of four candidates are successful in entering tertiary education). At the same time, the failure proportion is more than double (49.6%) for those originating from rural and smaller city regions (Psacharopoulos and Tasoulas, 2004). This has mainly to do with the proportional difference in private spending intended for pre-university preparatory courses between families of urban (3.11%) and rural (1.61%) areas (ICAP, 2003): given the intense competition of the examinations, it is inevitable that candidates whose parents are in the privileged position to spend more on their preparation have higher success possibilities.

When examining the socio-economic background of the student population in universities (AEI's), on the other hand, we discover that the parents' profession and education is also a determining factor of access to tertiary institutions. According to the latest data of the National Statistical Service of Greece (1999), 55.3 per cent of the total entrants have a father with an

<sup>2</sup> Tertiary education in Greece is divided into a) AEI's with a length of study of four+ years, and b) TEI's shorter cycle Technological Institutes of two-three years duration.

executive, white collar, or higher clerical profession, in contrast to the smaller proportion (26.4%) of those whose father is a farmer, manual or technical worker, or simply unemployed. Similarly, 66 per cent of the entrants come from well-educated parents holding graduate and postgraduate qualifications, while students with less-educated fathers (with lower secondary training or no schooling at all) comprise only 25.4 per cent of the total body of entrants.

In these circumstances, the Greek educational system turns out to be considerably selective, allowing university entry not on sole criteria of meritocracy (cognitive proficiency), but on socio-economic origin. Even in the event of failure in the Pan-Hellenic National Examinations, better-off households can still cater for the educational needs of their children by registering them in reputable universities abroad – a far remote choice for poor students who are doomed to low quality education, or no education at all<sup>3</sup>.

### **PARAMETERS OF FREE CHOICE LIMITATIONS**

Free choice that affects fulfillment of the personal aspirations of people is considered a fundamental individual right largely embedded in the philosophical tradition of the West. Despite being a declared ideological member of this tradition, the Greek system lacks those mechanisms that could encourage people's autonomous decisions with respect to the received education.

#### **Entry in Higher Education and Implications for Employment**

'Proper' (recognised) higher education in Greece is, as already mentioned, a state monopoly. Students enter universities not on basis of their top preferences for specific cognitive areas, but according to a central allocating system tightly supervised by the Ministry of Education and Religious Affairs. The fact that universities lack the power to control student entrance relates with their limited administrative autonomy, given the state's tight control over strategic issues of organisational and financial nature. The government's accompanying argument to justify central involvement in the student selection process is that state supervision guarantees an even distribution of the young human capital among universities for the benefit of the country's long-term developmental goals.

Paradoxically, though, the Ministry offers limited spaces in university departments of high student demand and market value (such as Economics, Business Administration, and Informatics), while being big-hearted in allowing entrance to outdated, practically unwanted departments – from both students and the job market (such as Theology, Anthropology, Sociology, and Geography). State financial provisions towards higher institutions are not sufficient to catch up with increasing enrolments, making higher education to suffer from severe austerity (Stamoulas, 2005). Therefore, the reason the Ministry fails to satisfy contemporary market trends and student preferences lies in the different running cost: departments offering purely theoretical studies and demanding very little investments in running laboratory and technology-based courses are cheaper and, therefore, easier to offer. Ultimately, however, the result is that the right of students to orient their studies freely is rather manipulated (Table 4).

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<sup>3</sup> Indeed, Greece has a world record of young people studying in universities abroad. Foreign students amount to approximately 60,000 (almost one fifth of all domestic students), leading the country to an annual loss of 1 billion euros in foreign exchange.

**Table 4. Indicative cognitive preferences of candidates taking the Pan-Hellenic examinations and offered positions by the Ministry of Education**

Subject / higher institution	Student preferences	Offered positions
Economics / University of Piraeus	4734	165
Informatics / Athens University of Economics and Business	2252	145
Business administration / University of Macedonia	1602	275
Social theology / Kapodistrian University of Athens	212	225
Social anthropology / Aegean University	79	160
Geography / Aegean University	29	80

Source: Stamellos (2002).

What is more, in its effort to maintain the myth of free education and satisfy superficially the growing social demand for attainment of tertiary qualifications, the state creates more and more universities around the country, the academic areas of which show little, if any, connection with market demands and student inclinations (Massalas, 2002). This practice has triggered opposition even from the very academic community on grounds of being dually oxymorous: the state enlarges its financial responsibilities in running new universities, when it does so insufficiently for the already existed. Second, enlargement of the area of public tertiary education undermines future rights of graduates in finding a descent and rewarding job, when such education offers anachronistic and non-competitive qualifications in market terms.

At this point, graduates' certainty for a future white collar, high-skilled, well-paid job falls apart in the sight of a non-competitive degree, the acquisition of which has nevertheless drained them both financially and psychologically<sup>4</sup>. On the contrary, Greece has the largest proportion (40%) after Italy (48%) of young graduates who are forced to find employment that has no relevance to their university specialisation (Eurostat, 2003). This has particularly negative implications for their monthly income and their more general integration with a full-time, safe, and satisfactory employment environment.

### Centralisation

The tight state control of university entry processes is an exemplification only of the overwhelmingly centralised structure of the Greek educational system, contrary to current international decentralisation trends. These trends pertain to the growing administrative and pedagogical autonomy of institutions, the enhanced participation of social partners (parents, students, teachers, local authorities) in educational planning, the accountability of institutions to society regarding their efficiency, and of course comprehensive evaluation systems that objectively judge their performance. None of these is being satisfactorily performed in Greece. Far from it, the presence of the state is so intense that:

- Due to the lack of long-term educational planning throughout the passing from one government to another, it legislates frequently even to arrange matters that normally should fall within the responsibility of local institutions (for example, which pages from a book must be taught to pupils, or the appointment of a cleaner), instead of occupying the heads of central policy makers.
- Defines administrative aspects of secondary and tertiary institutions. In the case of secondary schools, the state chooses to ignore the historical evolution of administrative patterns that have expanded the managerial role of schoolmasters, setting it free from the coercive infiltration of

<sup>4</sup> According to OECD estimations (2003), Greek 15 year-olds occupational expectations show the highest degree of certainty (72.3%) among OECD countries (62.2%) that by the age of 30 they will be employed in a white collar, high-skilled, well-paid job.

central government, and assigning to it enhanced responsibilities (OECD, 2001). In the case of higher education, the Ministry of Education determines human resource issues, including all human resource policies and management systems, the number of staff posts allocated to individual universities and departments, as well as recruitment regulations, faculty remuneration, staff appointment and promotion. It also exerts catalytic influence on abolishing faculties, departments and post-graduate programs, on internal organisational structures for support services, and on the role, responsibility and functioning of governing bodies and their election (Bourantas et al, 2001).

- Dictates procedures of secondary educational evaluation and arranges centrally promotions of the educational staff, all of which have triggered skepticism about the reliability and meritocracy of the system (Psacharopoulos, 2003b).

Further, as with the zero chance of students to choose their preferred studies in universities, the centralised system in Greece offers limited opportunity for parental involvement in choosing the school of their children throughout the whole spectrum of public primary and secondary education. Such choice is made by the state judging by criteria of the households' geographical proximity to the school. Criteria of a liberal choice of the best educational institution in terms of quality and other personal reasons are simply out of the question, unless parents can afford to 'buy' their way out by turning to private education. Certainly, not all public schools are the same. Some are below average and some are not, depending on their output. School choice on basis of their performance would be an indispensable tool in the hands of the state for maintaining the high quality of the latter and responding appropriately to improve the former.

#### **IMPLICATIONS OF SOCIO-ECONOMIC INEQUALITIES AND STATE COERCION: THE CALL FOR THE LIBERALISATION OF EDUCATION**

The rhetoric of equality of educational opportunity has figured prominently in the Constitution and other discussions in Greece. The substantial increase in participation rates at secondary education and the growing number of entrants into public universities have often been thought to imply progress in pursuit of this target. Despite this optimism, the Greek system as it stands is essentially one that recycles social inequities through its reluctance to satisfy positive conditions for the right to education. This is because university entrance proves to be linked to parents' social profile, educational background and economic ability, rather than on meritocracy and adequate public funding that would benefit all population – especially the poor. Education and other associated rights, such as low risk employment, are practically not an issue for those who lack the enabling socio-economic status in an over-centralised structure for taking decisions and making choices concerning the kind of schooling they wish for their children and themselves. This not only comprises a complete misinterpretation of constitutional prescriptions, but also is inconsistent with a view of education as a public good. Further, it directly opposes recent guidelines of the European Commission (2001) that bind member states to promote equal educational opportunities and strengthen social cohesion by supporting vulnerable groups and individuals, especially those living in rural or remote areas and those faced with problems reconciling their schooling needs with family disadvantages.

In fact, the lurking association between education and socio-economic origin, in conjunction with the prevalence of underlying processes favoring the established social order, appears to be an integral part of the domestic social reproduction mechanism and a perpetuating factor of greater social inequalities. From this perspective, the system in Greece may not be far from Breen's and Goldthorpe's model (1997), which assumes that families from different classes seek to ensure that their children acquire a class position at least as advantageous as that from which they originate or, in other words, that they seek to avoid downward mobility. Historically, this brings up the

concept of education as a means of reproducing country elites – a notion that has been nevertheless questioned and transformed since the end of World War II.

On the other hand, the over-centralised administration of education, itself being a side only of a generally over-protective state that knows what is best for everyone and leaves little room for personal initiative and involvement, is incompatible with any sense of the individual gaining validity through or assuming responsibility for the fulfillment of certain, well-defined courses of personal action<sup>5</sup>. The state forces enrollment to secondary schools on pure geographical criteria that in many cases can be judged inconsistent with the demands of educational ‘consumers’. It also decides university attendance irrespective of students’ real preferences and professional aspirations. It is as if individuals are considered *a priori* incapable of making correct choices and looking after their educational goals and for that reason they need the ‘benevolent’ interference of the state. The penetrating tendency of the state to substitute personal choice of school and type of university studies is an essentialisation of a despotic state that openly contrasts the classical concept of Western individualism, as this has been a structural component of the human rights tradition. It also ignores that different people have different educational objectives, depending on their philosophy of life. The arbitrary willingness of the government to assume the responsibility of educating young people runs the danger of undermining the achievement of those objectives, for it equals people’s needs without considering the fact of their rich variation.

The combined effects of low public funding, centralised administration and monopolised provision of higher education have been widely accepted to be the culprits of the misinterpretation of constitutional definitions about the human rights dimension of education, as well as of the overall poor performance of the Greek educational system, regarding both its inputs and outputs. The government poses the lack of funds for greater investments on education given the need to diffuse state subsidies for other competing public needs. It also ‘sits’ conveniently on article 16 of the Constitution, which has long infused Greek society with the propaganda and the alleged benefits of the public system, in order to avoid the political cost (loss of votes from traditionalists who cross their fingers to anything that bears the label “private”) of bold reforms.

Events, however, are now on a turning point. The momentum of internationalisation in the globalised age of new information and communication technologies encourages contention within and between educational structures (universities, for example, are increasingly competing for students, research funds and academic staff – both with the private sector and internationally). The emerging scheme of things proposes that the authority of the state and the power of markets are being redefined. Internationally, one can see already that the funding role of governments is losing its strength because of budgetary constraints to devote higher proportions of public expenditure to formal education and the need for introducing higher private contributions in addition to public funding. In Europe, signs of public under-investment have generated a debate around investment policies that will better take into account the new requirements of the knowledge society in the highly competitive international context of today. The conversation focuses especially on the clear deficit in private funding on education and its necessity to increase, given that private sources have always been regarded as an addition to, rather than a substitute for public funding in the European social model. Although in this sense some theorists (those who view education as primarily the flourishing of each individual intellectually to that person's fullest potential) might dislike the treatment of education as a commodity, the truth is that education is a booming business sector driven by globalisation, knowledge expansion and technological change (Middlehurst, 2001). The World Trade Organisation views in fact education as a service that can

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<sup>5</sup> The origins of a mighty, over-protective state are rooted back to German political influences brought by King Otto on Greece’s liberation from Turkish occupation in 1833. Centralised protrusions of the state have remained considerably unaltered to the present day.

be traded and OECD (2002) estimates this trade to have grown over the last few years into a global market of around \$30 billion in 1999.

For opponents of the liberalisation of education, the adoption of denationalised attitudes coupled with market-oriented reforms will do nothing to address the socio-economic inequalities discussed in this paper. They fear that divorcing educational structures from state protection and public funding will cause the gap between rich and poor to grow bigger. This would be a possible scenario only if the state was to withdraw completely from providing a comprehensive social welfare system to alleviate the poor. Liberalisation, however, does not necessarily imply social apathy. No one would reasonably stand for turning society into a bloodthirsty arena, where educational opportunities would be allocated to people in terms of their social and economic bargaining power. In fact, we have seen that the role of the socio-economic outlook of citizens may well be stronger in less liberal educational environments, such as the Greek, where the state appears in theory as guarantor of equal educational opportunity. Talking about liberalisation, the state should clearly refrain from intrusive actions that manipulate the educational choices of citizens, without abolishing its responsibilities to provide financial support for them. In Rawlsian terms (1971), this would mean that social and economic inequalities are to be arranged so that they are to the greatest benefit of the least advantaged, and inequalities of opportunity are to enhance the opportunities of those with the lesser opportunity. Wrong impressions about the outcomes of a liberal educational system stem from severe misinterpretations or ignorance of the operational targets that we wish to achieve through such system. A few clarifications in the Greek case are, therefore, needed.

At the primary and secondary educational level, withdrawal of the state must be thought as taking place in at least two cases. First, parents must be assigned a more essential role in school choice and in expressing their opinions on the administration and the pedagogical orientation of schools (Martin and Vincent, 1999). Secondly, at the upper secondary level, decentralisation must take the form of allowing complete freedom to candidates of the Pan-Hellenic Examinations to choose their preferred course of studies. It must even be thought as questioning the very existence of an intensely competitive examination-like procedure, in view of the fact that the majority of European and other non-European countries allow either free access to universities or access according to the teaching capacity of academic institutions, which retain rights of final choice. Abolition of the Pan-Hellenic Examinations in this instance would eliminate the need for extended private expenditures for preparatory courses, thus making selection procedures not to be based on economic and parents' social background factors. At the same time, Greek higher institutions would acquire the respected status of autonomous bodies that would be empowered to design course curricula in line with student preferences and market trends, excluding the arrogant role of the state to make such arrangements on behalf of the students.

Financial austerity torturing public universities could be battled by cultivating the appropriateness of tuition fees and by granting status of official recognition to their private counterparts, disburdening the obligation of the state to subsidise a large number of public institutions, which are anyhow under-financed (Stamoulas 2005). The state has long been proved unable to cover the extended financial needs of public higher education, so alternative ways of private funding and of channelling the huge wave of those seeking tertiary qualifications must be considered. To avoid economic injustices at the expense of the poor, ensuring that low-income students are not denied access to tertiary education, tuition fees in public universities should be charged depending on the wealth of students' parents. Poor students could also be assisted through a comprehensive system of scholarships or loans to be repaid in small instalments analogous to the monthly income they will receive from their future employment.

While the application of such measures is widespread in many countries abroad, it remains *terra incognita* for the Greek state. The reluctance to veer off educational reforms towards a liberal direction is based more on narrow-mindedness and a superstitious fear towards the power of markets generated by the propaganda of a status quo public system, rather than on putting forward sustainable arguments to doubt the effective consequences of such reform. In light of the implications described, however, the quest of educational modernisation and liberalisation calls for an enactment of a democratic educational community, modeling the type of democracy that is appropriate for enhancing free choice and transforming the basic causes of inequality in an increasingly diverse society (Callinicos, 2000; Furman and Shields, 2003). In plain words, it calls for an enlightened state that will limit its suffocating control on educational affairs and encourage people's autonomous educational decisions, without abolishing its welfare obligations to provide financial and infrastructural support for them.

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# Measurement of education achievement in human development: Evidence from India

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*This paper analyses the measurement issues in education achievement, and integration of education goals and targets, in the context of human development in India. Measurement issues are distinguished by (a) choice of indicators and variables and (b) data used in estimation/projection/computation of indicators and variables in the global human development reports (HDRs) and in India's national and sub-national HDRs. This analysis establishes the non-comparability of measurement of the education achievement by indicators and variables, and shows a case for integration of education goals and targets between global, national and sub-national levels. Policy implications and imperatives from these analyses of the Indian experiences offer lessons for measurement of education achievement in developing countries.*

Human development report, gross enrolment ratio, literacy rate, education achievement in India

## INTRODUCTION

The United Nations Development Programme (UNDP) has been preparing the global Human Development Report (HDR) since 1990. Each year, the HDR focuses on a distinct theme that has implications in explaining and measuring of multidimensional nature and process of human development. The HDR presents a concise indicator on the level of human development in each country. This indicator is called Human Development Index (HDI) and is composite of life expectancy, education and GDP indices. Countries are ranked according to the value of the HDI. For instance, UNDP-HDR 2004 (UNDP, 2004) ranks India 127<sup>th</sup> among 177 countries as per the value of HDI (=0.595). Of the three sub-indices, the value of life expectancy index is highest (=0.64) and is followed by education index (0.59) and GDP index (=0.55). Thus, HDI is indicative of broad source/s of poor or high performance of a country's human development. As the indices are constructed on an annual basis, they serve as useful policy tools for (a) monitoring of nature/direction and magnitude of changes in human development and (b) design and implementation of development policies from the viewpoint of improving human development. In view of above policy benefits, the HDI and its methodology in UNDP-HDRs have been adopted at the national and sub-national (or State) levels in India.<sup>2</sup>

<sup>1</sup> The author is grateful to Mr Ali Al-Shaabi in the Literacy Team of the UNESCO Institute of Statistics (Paris) for sharing the latest figures and estimation methodology of global adult literacy and enrolment rates; and to Professor A.S. Seetharamu of ISEC for useful discussions. However, the usual disclaimers apply.

<sup>2</sup> For instance, the HDR of Karnataka State in 1999 (Government of Karnataka, 1999) showed that the education index (=0.596) contributed to 42.3 per cent of total human development in the State. This contribution is slightly smaller than the contribution of health index (43.8%), but far higher than the contribution of income index (13.9%). Most recently, the report of the High Power Committee on Redressal of Regional Imbalances [Government of Karnataka, 2002a) has constructed the HDI for the reference year 1998. The value of HDI (=0.63) is higher than in 1991 (=0.47). This indicates an improvement in the overall level of human development in the State.

Literacy and enrolment in formal education are the main indicators in the construction of education achievement index (or, in brief, education index throughout). These indicators are measured by variables, depending on the availability of data. Thus, in general, measurement has two dimensions: (a) choice of indicators and variables and (b) data issues (for example, availability of reliable data by sources and years, and nature of data adjustments). Variations in these dimensions, other things remain the same, contribute to spatial and temporal variations in estimated/computed/projected value of education index.

The main objective of this paper is to analyse the measurement of education indicators and variables in India's national and sub-national HDRs, and to compare India's experiences with the UNDP-HDRs. This analysis is intended for three purposes. First, to establish comparability in measurement of education indicators and variables between global and India's national and sub-national HDRs. Second, to demonstrate a case for policy integration in education indicators and variables between global and India's national and sub-national HDRs. Third, to offer India's experiences in the measurement of education indicators and variables, and integration of policy goals and objectives in human development, as lessons to developing countries.

The above implications seem to be underderived in the policy and professional literature on India's human development.<sup>3</sup> This is evident, for instance, in Kaur and Misra's (2003) empirical analysis of the nature and impact of education expenditure on educational achievement in 15 non-category states in India during 1985-86 to 2000-01.<sup>4</sup> That is, impact of (a) education spending, (b) extent of economic development (that is, per capita State income), (c) level of development of physical infrastructure (that is, number of schools per 1000 population), (d) social factors (that is, share of girls in secondary enrolment), and (e) other specific indicators (for example, pupil/teacher ratio) are estimated on education indicators (that is, gross enrolment ratio by primary and secondary education and by secondary education) in panel data models. The results show that, when linear functional form is used, the coefficient of all the explanatory variables (or except pupil/teacher ratio) are positive and statistically significant in explaining the variations in gross enrolment ratio of primary and secondary (or secondary) education. The estimated coefficient of education spending shows a smaller magnitude in determining gross enrolment ratio of secondary education, probably due to neglect of private expenditure that is more important for secondary education.<sup>5</sup>

The rest of the paper is organised as follows. Section 2 describes the choice of indicators and variables in India's national and sub-national HDRs in a global perspective. In section 3, data issues in measurement of these educational indicators and variables are analysed. Section 4 highlights India's experiences in integrating education goals and objectives between global, national, regional and departmental levels. Section 5 includes conclusions and implications.

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<sup>3</sup> At the global level, measurement issues in human development have been focused on HDI in general, and income index in HDI in particular. This is evident, for instance, in Sagar and Najam (1998).

<sup>4</sup> For descriptive purposes, however, the following indicators are used. First, for international comparisons, (a) public expenditure on education as a percentage of national income and (b) gross enrolment ratio in primary, secondary and tertiary education are used as performance indicators. Second, for inter-state and inter-temporal comparison, (i) education expenditure as a percentage of State income and (ii) composition of education expenditure by primary, secondary and others, and cost recoveries as a percentage of revenue expenditure on education, are used.

<sup>5</sup> In addition, to capture the impact of income levels on education achievement, the States are divided between poor (per capita State income below the national average) and non-poor (per capita State income above the national average). The pooled regression results show that education spending has a larger positive and significant coefficient on (a) primary enrolment in poor states than in non-poor States, and (b) primary education than on secondary education in non-poor States. Thus, public spending has more positive impact on primary enrolment than on secondary enrolment. Inefficient provision of services and poor targeting in poorer States are mentioned as probable reasons for this result.

## CHOICE OF EDUCATIONAL INDICATORS AND VARIABLES

The World Bank's World Development Indicators (WB-WDI) provide a framework for identification and measurement of education indicators and variables in international development (World Bank, 2001). Education indicators include education input, participation, efficiency and outcomes. Different variables and their measurement characterise each of these indicators. For instance, expenditure per student is one of the variables of education input indicator and is measured separately by expenditure per student in primary, secondary and tertiary education as a percentage of gross national income per capita. Gross Enrolment Ratio (GER) is one of the variables of education participation indicator and is measured separately by GER in primary, secondary and tertiary education as a percentage of relevant age groups. Number of repeaters is one of the variables of education efficiency indicator and is measured by repeaters as a percentage of total enrolment of students by primary and secondary education. Adult literacy rate is one of the variables of education outcomes indicator and is measured by percentage of male and female literacy. Using the above framework, measurement of education indicators and variables is analysed in global and in India's national and sub-national human development reports.

### Choice of indicators and variables in global HDRs

Education indicators and variables and their measurement in the construction of HDI in the UNDP-HDRs are well known. Education outcome (or adult literacy rate) was the single education indicator (or variable) in UNDP-HDR 1990. In UNDP-HDR 1991, the number of variables was increased to 2 with differential weight: 2/3 weight for adult literacy rate and 1/3 weight for mean years of schooling. In UNDP-HDR 1995, mean-years of schooling had replaced combined gross primary, secondary and tertiary enrolment ratio. This replacement added education performance as a new education indicator in the construction of HDI. Subsequently, no change is evident in the nature and number of indicators and variables and their weight.

In addition, the UNDP-HDRs provide additional education variables for measurement of supplementary human development indices. A comparison of additional variables and supplementary indices in UNDP-HDR 1991 and 2004 shows wide diversity in the nature and number of indicators and variables. For instance, 4 (or 6) indicators and 26 (or 23) variables are included in UNDP-HDR 1991 (or 2004). The indicators in UNDP-HDR 1991 include profile of human development and human deprivation, trends in human development, human capital formation and education profile. Literacy and enrolment variables are (a) dominant under the profile of human development and trends in human development and (b) relevant under the human capital formation and education profile. On the other hand, indicators in UNDP-HDR 2004 include commitment to education public spending, literacy and enrolment, technology diffusion and creation, priorities in public spending, gender-related development index and gender inequality in education. Literacy and enrolment variables are dominant under the literacy and enrolment, gender-related development index and gender inequality in education.

An important feature of the additional indicators and variables is their composition of public finance indicators. In the UNDP-HDR 1991, three indicators are listed. First, public expenditure on education as a percentage of GNP. Second, public expenditure on education as a percentage of total public expenditure. Third, public expenditure on primary education as a percentage of all levels of education. On the other hand, this list is modified and extended in UNDP-HDR 2004 by including (a) public expenditure on pre-primary and primary education as a percentage of all levels of education;<sup>6</sup> (b) public expenditure on secondary education as a percentage of all levels

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<sup>6</sup> As noted in UNESCO (2002), "pre-primary education refers to programs at the initial stage of organised instruction, which are primarily designed to introduce very young children, usually from age 3 or so, to a school-type environment, i.e. to provide a bridge between home and school. Such programs are variously referred to as infant education, nursery education, pre-school

of education; and (c) public expenditure on tertiary education as a percentage of all levels of education.<sup>7</sup>

In the recent past, the role of education indicators/variables is explicitly noted in global competitiveness of countries. This is evident, for instance, in the hard data-based education indicators in the World Economic Forum's Global Competitiveness Report,<sup>8</sup> International Institute of Management Development's World Competitiveness Yearbook,<sup>9</sup> World Bank's Competitiveness Indicators,<sup>10</sup> International Telecommunication Union's Digital Access Index<sup>11</sup> and World Economic Forum and the World Bank's Network Readiness Index.<sup>12</sup> The most common education variables in these indices include (a) primary and secondary enrolment ratio, (b) average years of schooling, and (c) adult literacy rate. Hence, measurement of human development is contributory to measurement of inter-national competitiveness, as it is related to education variables.

### **Choice of indicators and variables in India's national and sub-national HDRs**

Table 1 presents a summary of education participation and outcomes indicators in the construction of HDI in India's national and sub-national HDRs. First, unlike in the UNDP-HDRs, total literacy rate is used in the national and in all the State level HDRs. Second, weight given to the literacy is the same in both national and sub-national HDRs in India, as in UNDP-HDRs. Third, GER in India's HDRs differs from the UNDP-HDRs by exclusion of tertiary enrolment. At the same time, marked difference are evident in inclusion of higher secondary enrolment between national and sub-national HDRs and between sub-national HDRs. Fourth, Maharashtra HDR is a special case for using mean years of schooling rather than GER, as in UNDP-HDR 1991.

Interestingly, in India's national and State level HDRs, education finance variables are listed separately from the education indicators. For instance, in India's national HDR 2001, education expenditure indicators (under Governance indicators, however) include education expenditure ratio and as a part of public expenditure ratio, development expenditure ratio and social sector expenditure ratio.<sup>13</sup> In the context of Karnataka HDR 1999, education finance variables are related to: (i) sectoral outlay for general education by primary education, secondary education, university and higher education, adult education and language development; (ii) education budget by revenue

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education, kindergarten, or early-childhood education" (p.306). Anganwadi Centres (under the Integrated Child Development Scheme in the Department of Women and Child Welfare) are a typical example for pre-primary education in India.

<sup>7</sup> In general, public expenditure here refers to total public finance (i.e. capital expenditure + current expenditure) devoted to education by federal, regional and local level of governments.

<sup>8</sup> Under human resource and technology indicators: (a) Average years of schooling - Average years of schooling by population age 25 and up; (b) Primary education - Primary education enrolment indicator; (c) Secondary education - Secondary education enrolment indicator; and (d) Tertiary education - Tertiary education enrolment indicator.

<sup>9</sup> Under Economic Performance Indicators: (a) Total public expenditure on education as a percentage of GDP; (b) Pupil-teacher ratio in primary education; (c) Pupil-teacher ratio in secondary education; (d) Secondary school enrollment - Percentage of relevant age group receiving full-time education; (e) Higher education achievement - Percentage of population that has attended at least tertiary education for persons 25-34; and (f) Illiteracy - Adult (over 15 years) illiteracy rate as a percentage of population.

<sup>10</sup> Under Human Capital and Intellectual Capital Indicators: (a) Literacy rate (Growth in literacy rate: percent); (b) Primary school enrolment (percent of school-aged children); (c) Secondary school enrolment (percent of school-aged children); (d) Tertiary school enrolment (percent of school-aged children); (e) Secondary technical enrolment (percent of secondary enrolment); (f) Science graduates (percent of total graduates); (g) Scientists and technicians (number per 1000 people); and (h) average research and development expenditure as a percent of GNP.

<sup>11</sup> Under Infrastructure and Knowledge Indicators: (a) Primary, secondary and tertiary enrolment level; and (b) adult literacy.

<sup>12</sup> Under Social Capital Micro Index: (a) No schooling in the total population; and (b) average years of schooling in the total population.

<sup>13</sup> This implies that education finance indicators are treated as part of human development finance indicators. This is also evident at the international level, for instance, in the UNDP-HDR 1991 (UNDP, 1991) in terms of public expenditure ratio, social allocation ratio, social priority ratio and human expenditure ratio.

and capital expenditure; (iii) education outlays, i.e., share of education in annual plan outlay by State sector and District sector and share of education in non-plan expenditure; and (iv) total State expenditure on education, share of expenditure on education in total expenditure, and share of expenditure on education as a percentage of total State Income. Of these variables, (i) and (iv) are relevant in other State level HDRs, such as, Himachal Pradesh HDR 2002. In the case of Tamil Nadu HDR 2003, public expenditure on education per student by levels of education is used and role of private sector and international funding (for example, World Bank, UNESCO and UNICEF) for education is noted. Expenditure indicators are not highlighted in Madhya Pradesh HDR 2002 and Rajasthan HDR 2002. Thus, in general, financing of education is a neglected issue in India's sub-national HDRs.

**Table 1. Education indicators and variables in India's national and State level HDRs**

Level and year of HDR	Measurement of education indicators and variables
National HDR	
India's HDR 2001	Literacy rate (weight=0.35): Proportion of literates to the population in the age group of 7 years and above Estimated Adjusted Intensity of Formal Education in years (weight=0.65): Weighted average of the enrolled students from Class I to Class XII (where weight equal to 1 for class I, 2 for Class II and so on), adjusted by proportion of total enrolment to population in age group 6-18
Sub-national HDRs	
Karnataka HDR 1999	Literacy rate (age 7+) with 2/3 weight. Combined gross primary and secondary (Classes I to X) enrolment ratio with 1/3 weight
Maharashtra HDR 2002	Literacy rate (age 7+) with 2/3 weight Mean years of schooling (Standard I to Standard 7) with 1/3 weight
Madhya Pradesh HDR 2002	Literacy rate (age 6+) with 2/3 weight Combined school level enrolment (ages 6-14) with 1/3 weight
Tamil Nadu HDR 2003	Literacy rate (age 7+) with 2/3 weight. Combined gross enrolment ratio for primary, middle, high and higher secondary schools with 1/3 weight
Rajasthan HDR 2002	Literacy rate (age 6+) with 2/3 weight Combined school level enrolment (ages 6-14) with 1/3 weight
Himachal Pradesh HDR 2002	Literacy rate (age 7+) with 2/3 weight. Combined gross primary and secondary (Classes I to X) enrolment ratio with 1/3 weight
Sikkim HDR 2001	Literacy rate (age 7+) with 2/3 weight Combined gross primary, secondary and higher secondary enrolment ratio with 1/3 weight
Punjab HDR 2004	Literacy rate (age 7+) with 2/3 weight. Combined primary school enrolment ratio with 1/3 weight
West Bengal HDR 2004	Literacy rate (age 7+) with 2/3 weight. Combined primary school enrolment ratio with 1/3 weight
Nagaland HDR 2004	Literacy rate (age 7+) with 2/3 weight. Combined primary, secondary and higher secondary school enrolment ratio with 1/3 weight
Assam HDR 2003	Literacy rate (age 7+) with 2/3 weight. Combined primary and middle school (Class I to Class VIII) enrolment ratio with 1/3 weight
Orissa HDR 2004	Literacy rate (age 7+) with 2/3 weight. Combined gross enrolment ratio (6-14 years) with 1/3 weight
Gujarat HDR 2004	Literacy rate (age 7+) with 2/3 weight. Combined gross enrolment ratio (6-14 years) with 1/3 weight

Source: Compiled from Government of India (2002), Government of Karnataka (1999), Government of Maharashtra (2002), Government of Madhya Pradesh (2002), Government of Tamil Nadu (2003), Government of Rajasthan (2002), Government of Himachal Pradesh (2002), Government of Sikkim (2001), Government of Punjab (2004), Government of West Bengal (2004), Government of Nagaland (2004), Government of Assam (2003), Government of Orissa (2004) and Mahatma Gandhi Labour Institute (2004).

It should be emphasised that measurement of above education finance variables is limited to public expenditure on education. Thus, the role of private institutional expenditure on the provisioning of educational services, and household expenditure accessing of educational services

are ignored.<sup>14</sup> Lack of time series data on private institutional and household expenditure is the major reason for its non-inclusion in the HDRs.<sup>15</sup>

### DATA ISSUES

Data issues on education indicators and variables present another measurement dimension in human development. Data issues are related to nature and sources of data and method (including timing) of its collection; and methodology for estimation/computation and projection of indicators. In the ultimate analysis, comparability education index in human development calls for uniformity in indicators and variables as well as in data issues. In what follows, the data issues are presented by global and by India's national and sub-national HDRs.

#### Data issues in global HDRs

Estimated and projected adult literacy rate and gross enrolment ratio by the UNESCO are bases for construction of education index for India in UNDP-HDRs.<sup>16</sup> This is evident in different forms of cited sources of data in the UNDP-HDRs. For instance, UNESCO is cited as a primary source of data on literacy and enrolment in HDR-1990 (UNDP, 1990: p.189) and HDR-1992 (UNDP, 1992: p.216]. In HDR-1994, key to indicators distinguished UNESCO as the only source of data (UNDP, 1994: pp.118-119). Since 1995, reference to data is given in terms of correspondence on adult literacy rates and gross enrolment ratios, based on UNESCO's estimations and projections.<sup>17</sup>

Table 2 presents the estimates of education variable for India in UNDP-HDRs from 1990 through 2004. It is apparent that variation in adult literacy rate and gross enrolment ratio is marked by estimated rate/ratio and reference year of the estimate.<sup>18</sup> Thus, for instance, the estimates are not comparable with the decadal census figures (for example, the adult literacy rate is equal to 40.8% in Census of India 1981, 48.5% in Census of India 1991 and 61.3% in Census of India 2001) or with national sample survey estimates (for example, 54.3% based on NSSO 52<sup>nd</sup> Round 1995-96).<sup>19</sup>

#### Data issues in India's national and sub-national HDRs

India's national HDR in 2001 and sub-national HDRs since 1999 present divergent data issues. This is evident in Table 3.

Three prominent data issues for literacy variable, in contrast with UNDP-HDRs, are as follows. First, all the HDRs in India use the census data for literacy variable. Second, no HDR in India uses adult literacy rate. Third, between sub-national HDRs, use of census data is distinguished between 1991 and 2001. In particular, non-availability of district level and adult literacy data from

<sup>14</sup> Two major sources of survey data on household expenditure on primary and secondary education in India are NSSO (2000), conducted during July 1995-June 1996, and NCAER (1999) conducted during January-July, 1994. The patterns of household expenditure in NSSO are summarised in Panchamukhi (2004).

<sup>15</sup> Prasad and Rao (2002) confirm this for Karnataka State in 1990's. However, Panchamukhi's study on private expenditure on education for late 1980's, as summarised in Chapter IV (B) in Panchamukhi (2004), is not updated subsequently.

<sup>16</sup> For instance, the UNESCO Institute of Statistics (UIS) provides with, among others, India's adult literacy rate (=61%) for 2000-2004 (UNESCO, 2005a). The source of data is Census of India 2001. In fact, the national estimates of literacy or illiteracy differs between countries by data sources, year of estimate, literacy description and mode of data collection. Thus, "the resulting literacy estimates are not comparable and should be used with caution". (UNESCO, 2005b). In the same way, lack of comparability in measurement of global education indicators and variables is self-recognised by the UNDP (UNDP, 1999: p.143).

<sup>17</sup> A description of methodology for estimation and projection of adult literacy is available in UNESCO (1995).

<sup>18</sup> In fact, variations in annual estimate of adult literacy rate are higher (coefficient of variation is equal to 6.84 percent) than combined gross enrolment ratio (coefficient of variation is equal to 1.15 percent) during 1995 to 2004.

<sup>19</sup> These figures are taken from the Government of India (2002), except for Census of India 2001 taken from UNDP (2004).

Census of India 2001 (at the time of preparing the HDRs, however) are the main reasons for using literacy rate from Census of India 1991 in Karnataka, Tamil Nadu and Rajasthan HDRs.

**Table 2. Estimates of education variables for India in UNDP-HDRs: 1990 to 2004**

<b>Year of UNDP-HDR</b>	<b>Estimated adult literacy rate and reference year of estimate</b>	<b>Estimated mean years of schooling* or combined gross enrolment ratio and reference year of estimate</b>
1990	43.0% - 1985	Not applicable
1991	44.1% - 1985	2.20* - 1980
1992	48.2% - 1990	2.40* - 1990
1993	42.8% - 1990	2.40* - 1990
1994	49.8% - 1992	2.40* - 1992
1995	49.9% - 1992	55% - 1992
1996	50.6% - 1993	55% - 1993
1997	51.2% - 1994	56% - 1994
1998	52.0% - 1995	55% - 1995
1999	53.5% - 1997	55% - 1997
2000	55.5% - 1999	54% - 1999
2001	56.5% - 1999	56% - 1999
2002	57.2% - 2000	55% - 1999
2003	58.0% - 2001	56% - 2000-01
2004	61.3% - 2002	55% - 2001/02

Source: Compiled from UNDP-HDRs – various issues.

Data issues in enrolment variable are remarkable in two respects. First, no measurement of enrolment variable in India's HDRs includes tertiary enrolment due to lack of data.<sup>20</sup> This is in contrast with the enrolment variable in the UNDP-HDRs. Second, measurement of enrolment variable varies between national and sub-national HDRs, and between sub-national HDRs, in terms of nature of data collection (that is, survey versus administrative registry methods), inclusion or exclusion of higher secondary education in computing gross enrolment ratios, and in giving weights for different levels of primary and secondary education. Use of mean years of schooling, instead of GER, singles out Maharashtra HDR 2002 from the rest of sub-national HDRs in India.

In essence, three data issues explain non-comparability of education indicators and variables between global and Indian HDRs. First, data on tertiary enrolment is lacking at all levels in India. Second, adult literacy from the census data and total literacy rate for inter-census years are not estimated for India's HDRs. Third, lack of district level data is a major constraint for preparation of India's sub-national HDRs.

### **Empirical Implications**

In view of the above differences in data issues, level of education achievement in Indian HDRs are not comparable with global HDRs. In the same way, education achievement between national and sub-national HDRs, and between sub-national HDRs, are not comparable, notwithstanding they are prepared for the same year.

<sup>20</sup> This is evident in Karnataka HDR in 1999 and Himachal Pradesh HDR in 2002. "Since reliable enrolment figures were not available for tertiary education at the district level, combined enrolment ratios for the primary and secondary levels (classes I to X) have been used" [Government of Karnataka (1999), p.189]. "Enrolment ratios for tertiary levels of education could not be incorporated because of non-availability of the same" [Government of Himachal Pradesh (2002), p.371].

**Table 3. Database of education variables in India's HDRs**

Year of HDR	Source of basic data, reference year, and level of disaggregation	
	Literacy variable	Gross enrolment ratio or mean years of schooling variable
National HDR		
India's HDR 2001	Census of India 2001 for the national level as well as for 25 States and 7 Union Territories	Computed at the national level and for 25 States and 7 Union Territories by using the enrolment data and estimated population (age group 6-18 years) from the Sixth All India Educational Survey by the National Council for Educational Research and Training in 1993.
Sub-national HDRs		
Karnataka HDR - 1999	Census of India 1991 for the State level and for 20 districts	Computed at the State level and 20 districts by using the enrolment data in 1991 from Commissioner of Public Instruction, Department of Primary and Secondary Education, Government of Karnataka, and child population in the age group of 6-16 years from the Census of India 1991.
Maharashtra HDR - 2002	Census of India 2001 for the State and 35 districts	Computed by using mean years of schooling for the State and 35 districts in 1999-00 from the enrolment data in the Directorate of Economics and Statistics.
Madhya Pradesh HDR - 2002	Census of India 2001 for the State as well as for 45 districts	Computed for the State and 45 districts from the child to child, and habitation to habitation, of children in the State in 2000 under Lok Sampark Abhiyan by the Rajiv Gandhi Shiksha Mission, Government of Madhya Pradesh.
Tamil Nadu HDR - 2003	Census of India 1991 for the State level and for 29 districts	Computed for the State and 29 districts by using enrolment data in 1998-99 from the Education Department, and estimated school age population (using Census of India 1991 data for share of school age population) by the Department of Economics and Statistics, Government of Tamil Nadu .
Rajasthan HDR - 2002	Census of India 1991 for the State and 32 districts	Estimated for the State and 32 districts by using the (a) enrolment rate in 1994-95 from the Department of Education, Government of Rajasthan, and (b) applying share of children in age group 6-14 in Census of India 1991 to the estimated population in 1994-95.
Himachal Pradesh HDR - 2002	Census of India 2001 for the State and 12 districts	Computed for the State and 12 districts by using the (a) actual enrolment data in 1999-00 from the Department of Primary and Secondary Education, and (b) estimated school age population by the Planning Department, Government of Himachal Pradesh.
Sikkim HDR - 2001	Census of India 2001 for the State and 4 districts	Computed for the State and 4 districts by using data on weighted average enrolment ratio in 1998 with following weight: 10% for primary enrolment ratio, 40% for secondary enrolment ratio, and 50% for higher secondary enrolment ratio.
Punjab HDR - 2004	Census of India 2001 for the State level and for 17 districts	Computed at the State level and 17 districts by using the primary enrolment data in 1999 from Directorate of Public Instruction (Schools), and estimated number of children in school going age from the projected populations by age group 6-14 years from the Census of India 1991 and 2001.
West Bengal HDR 2004	Census of India 2001 for the State level and for 18 districts	Estimated at the State level and 18 districts by using primary school enrolment rate in 1995, based on the school enrolment rate provided by the 52 <sup>nd</sup> Round National Sample Survey of the National Sample Survey Organisation for age group 6-14 years.
Nagaland HDR 2004	Census of India 2001 for the State level and for 8 districts	Computed for the State and 8 districts by using actual enrolment data up to higher secondary level in 2002 from the Department of Economics and Statistics (Government of Nagaland), and by applying the proportion of population in the age group 6-18 in Census of India 1991 to the total population in Census of India 2001. The resultant figures is called enrolment ratio in 2001.
Assam HDR 2003	Census of India 2001 for the State level and for 23 districts	Computed for the State and 23 districts by using data on enrolment of students from Class I through Class VIII in 1991 as a percentage of child population in the age group 6-14 from the Census of India 1991.
Orissa HDR 2004	Census of India 2001 for the State level and for 30 districts	Combined gross enrolment ratio (age 6-14) years in 2003-04 is obtained for the State and 30 districts, as estimated by the Office of the District Primary Education Programme (DPEP), Government of Orissa.
Gujarat HDR 2004	Census of India 2001 for the State level and for 25 districts	Per cent attending school (age 6-14) in 1999-00 for the State, as estimated from the NSS 55 <sup>th</sup> Round of National Sample Survey by the National Sample Survey Organisation. Per cent attending school (age 6-14) in 1991 for the district, as per Census of India 1991.

Source: Same as in Table 1.

Since 1990, UNESCO's methodology has provided estimates of annual adult literacy rate and combined GER for India in UNDP-HDRs. Reference year for most of the adult literacy estimates is for inter-census years. For GER, the reference year is less than five years to the HDRs' publication year. Nevertheless, no reference to this important methodology, or explanation for its inapplicability, seems to have figured in India's HDRs. In fact, UNESCO's methodology is of utmost relevance for improving the measurement and enhancing empirical validity of education indicators and variables in India's HDRs.

### INTEGRATION OF POLICY GOALS AND TARGETS

The goals and targets for education indicators are set at global, national, and State level HDRs and vision documents. In addition, the goals and targets are set at the Departmental level. These goals and targets are analysed below for the purpose of finding their integration at different levels.

Table 4 lists the goals and targets of the education sector in the (a) United Nations' Millennium Development Goals (MDGs), (b) Government of India's 10<sup>th</sup> Five Year Plan, (c) India Vision 2020 by the Planning Commission, and (d) Future Vision and Current Action of the Government of Karnataka.<sup>21</sup>

A comparison of the above goals and targets imply the following. First, education goals and targets are most focused on primary and secondary education, or education participation and outcomes indicators are most influenced by achievement of goals and targets for the primary and secondary education. Thus, goals and targets of primary and secondary education have direct impact on human development. Second, education participation and outcomes indicators are most important in development goals and targets at the international, national and the State level. As these indicators are of importance for achieving human development, there exists complementarity between goals and targets of economic development and human development at all levels of development. This establishes a case for integration of education goals and targets between international, national and State levels.

Another important aspect of policy integration in India's human development is evident, for instance, at the departmental level in Karnataka State. The structure of primary and secondary education in Karnataka State is as follows. The elementary education is composed of 8 years of schooling: Lower Primary Schooling (Class I through Class V)<sup>22</sup> and Higher Primary Schooling (Class VI and Class VIII).<sup>23</sup> The secondary education is of 4 years in duration: lower secondary (or high) schooling (Class IX and Class X) and higher secondary schooling or Pre-University or Vocational education (Class XI and Class XII).

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<sup>21</sup> Another important attempt to set education goals at the international level is evident in the Dakar Framework (UNESCO, 2002) The adopted goals include (a) ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality; (b) achieving a 50% improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults; and (c) eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality. It is apparent that goal (a) and (b) are the same as in the MDGs for education sector.

<sup>22</sup> This structure is effective from 2001-02 with the inclusion of Class 5 in the lower primary education.

<sup>23</sup> This structure is effective from 2003-04 with the inclusion of Class 8 in the upper primary education.

**Table 4. Education goals and targets in development reports and vision documents**

	<b>Goals</b>	<b>Target</b>	<b>Indicators</b>
1. Millennium Development Goals	Achieve universal primary education	Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.	Net enrollment ratio in primary education; Proportion of pupils starting grade 1 who reach grade 5; Primary completion rate; Literacy rate of 15 to 24-year-olds.
	Promote gender equality and empower women	Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015.	Ratio of girls to boys in primary, secondary and tertiary education; Ratio of literate females to males among 15-to-24-year-olds.
2. Monitorable targets for the education sector in the national 10 <sup>th</sup> Five Year Plan of India		All children in school by 2003; All children to complete 5 years of schooling by 2007; Reduction in gender gap in literacy by at least 50% by 2007; Increase in literacy rates to 75% within 2002-03 to 2006-07.	
3. India Vision Document: Development Indicators Current level (target for 2020)			1. Male adult literacy rate: 68 (96)% 2. Female adult literacy rate: 44 (94)% 3. Net primary school enrolment ratio 77.2 (99)% 4. Public expenditure on education as % of GNP 3.2 (4.9)%
4. Karnataka: Future Vision and Current Action		Achieve 100% literacy by the year 2005.	

Source: Compiled from (a) <http://www.developmentgoals.org/Education.htm>, (b) <http://www.undp.org.in/ihdg.htm>, (c) Government of India (2004), and Government of Karnataka (2000).

The Departmental Medium Term Fiscal Plan (DMTFP) of the Department of Primary and Secondary Education in the Government of Karnataka is an important policy approach to link between objectives, goals and finances of primary and secondary education in the State.<sup>24</sup> The Plan is prepared on annual basis and provides with details, among others, on objectives and goals, and current achievements and future targets for performance indicators. Table 5 summarises the select objectives, goals, current achievements and future targets in the DMTFP 2003.

The objectives and goals of the Department include specific indicators of education input, participation, outcomes and efficiency. In particular, the indicators reflect the policy concern with (a) enhancement of literacy rates, enrolment of students, and achievement levels in public examinations; and (b) reduction in disparities in gender and social groups, and spatial disparity in enrolment and achievements in public examinations.

It should be emphasised that increase in enrolment is aimed to be achieved in three ways: increase in gross enrolment ratio, increase in survival rate and reduction in out-of-school children. The achievement levels are to be improved by targeting a higher pass per cent in Class VII and in Class X. Achievement in gender, social and regional disparity is targeted at reducing the gap in per cent of out-of-school children and pass per cent in Class X, between (a) boys and girls, (b) total and SC students, (c) total and ST students, and (d) the State and northeastern region.

<sup>24</sup> The bases for setting these goals and targets are evident in Government of Karnataka (2002b).

**Table 5. Goals and targets of primary and secondary education in Karnataka State**

Goals	Performance targets from 2002-03 (actual level) to 2006-07 (targeted level)
1. Enhance literacy rates	1.1. Increase in literacy rate from 67.04% in 2001 to 80% by 2004-05
2. Ensure that all children complete eight years and enable 80% of those who complete eight years to pursue secondary schooling, and acquire the knowledge, skills and qualifications for further education or for employment	2.1. Reduction in per cent of children aged 6-14 who are out-of-school from 7.38% to 0% 2.2. Increase in survival rate of class 1 children reaching class 5 from 88.82% to 100% 2.3. Increase in survival rate of class 1 children reaching class 8 from 48% to 85% 2.4. Increase in survival rate of class 1 children reaching class 10 from 41.35% to 80% 2.5. Increase gross enrolment ratio in classes 1 to 10 from 84.5% to 100%
3. Increase achievement levels	3.1. Increase in pass% in class 7 from 94.96 in 2002-03 to 100 3.2. Increase pass per cent in class 10 from 55.57% in 2002-03 to 65%
4. Reduce income, gender, caste, religious, rural and regional gaps in enrolments, retention, completion, achievement and progression to higher education	4.1. Reduction in gap in per cent of out-of-school children between boys and girls from 0.4% to 0% 4.2. Reduction in gap in per cent of out-of-school children between total and SC from 2% to 0% 4.3. Reduction in gap in per cent of out-of-school children between total and ST from 5% to 0% 4.4. Reduction in gap in per cent of out-of-school children between State and NE region from 6.19% to 0% 4.5. Reduction in gap in pass per cent in class 10 between boys and girls from 4.75% to 0% 4.6. Reduction in gap in pass per cent in class 10 between total and SC/ST from 14.20% to 2% 4.7. Reduction in gap in pass per cent in class 10 between State and NE region from 10.98% to 0%

Notes: SC (or ST) refers to scheduled castes (or tribes), and NE refers to north-eastern.

Source: Compiled from Government of Karnataka (2003).

In essence, the objectives and goals of the Department of Primary and Secondary Education are ultimately aimed at improving the education participation, outcome and efficiency indicators. These indicators are of crucial importance for education achievement in State's human development. This establishes a case for integration of education goals and targets between international, national, State and departmental levels in India.

### CONCLUSIONS AND IMPLICATIONS

This paper analyses the measurement of education indicators and variables in the context of human development in India. Using the framework in WB-WDI and UNDP-HDRs, measurement of education indicators and variables in India's national and sub-national level HDRs are distinguished. Further, policy integration in terms of education goals, targets and objectives are highlighted at global, national, regional and departmental levels with special reference to Karnataka State. These analyses lead to the following conclusions and policy implications.

First, the nature of education indicators used in the construction of HDI in India's national and sub-national human development reports correspond with the UNDP-HDRs. At the same time, measurement of education indicators in terms of literacy and enrolment variables differs from the UNDP-HDRs. This difference is mainly attributable to lack of (a) data on tertiary enrolment, (b) estimate of adult literacy from the census data and literacy rate for inter-census years, and (c) district level data on education indicators and variables. These differences call for improvement in data collection and estimation of education indicators and variables as pre-conditions for refinement of measurement of education achievement in India's HDRs and to establish comparability with global HDRs on empirical grounds. In this regard, applicability of UNESCO's methodology for estimation and projection of India's adult literacy rates and combined GER deserves to be explored for future preparation of India's HDRs at the national and sub-national levels.

Second, additional education variables lack comparability (in terms of nature and number of variables) (a) between global and India's national and sub-national HDRs, (b) between India's

national and sub-national HDRs, and (c) between India's sub-national HDRs. This implies that measurement of additional education variables is unique to each HDR. In future, however, collection of additional variable should be focused to measurement of education indicators and variables (for instance, as given in Table 1). This shall broaden the nature and scope of measurement of education achievement in the process of India's national and sub-national human development.

Third, India's experiences present a mix of measurement divergences and policy integration in education goals and targets between global, national and sub-national HDRs. In fact, the policy integration provides a basis to resolve the divergences in measurement of education achievement index in human development at all levels. Otherwise, education achievement index, as a policy instrument for monitoring the achievement of education goals and targets, will remain less useful for India's policy makers.

Fourth, private corporate and philanthropic organizations (for example, Infosys Foundation, The International Society for Krishna Consciousness (ISKCON), Azim Premji Foundation) have extended various support facilities for India's primary education in regard to library, computer education, nutritious food scheme and quality education schemes. These sources of private sector financing are not integrated in human development for lack of published data. Thus, policy attention is needed for measurement of private education sector's financing to India's human development.

The above conclusions and implications for India are of relevance for other developing countries for (a) improvement of measurement of education indicators and variables in their national and sub-national HDRs, and (b) integration of global, national and sub-national education goals and targets in human development.

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## Do International Baccalaureate programs internationalise or globalise?

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*This paper attempts to show that International Baccalaureate (IB) programs contribute to a process of internationalisation, not globalisation. As necessary background, a definition of international education, with particular reference to UNESCO, and how each of the three IB programs fits that definition is outlined. Holistic and transdisciplinary elements of the programs are specially considered followed by a discussion of the terms “internationalisation” and “globalisation” and how they might be applied to the international education programs of the IBO. The paper concludes with a section on whether the IBO is imposing a western model of education on the world, in particular on non-western cultures which adopt IB programs.*

International education, internationalisation, globalisation, transdisciplinary education, holistic education

### INTRODUCTION

The impetus for this paper came from reading Paris' (2003) contribution to the *International Education Journal* entitled “The International Baccalaureate: A case study on why students choose to do the IB.” In the “Theoretical Framework” section of his article Paris made important observations about the IB diploma program and saw it predominantly as contributing to a process of globalisation with the potential to usurp national cultures and values. This paper extends that debate. It includes reference to the other two programs of the IBO and comments on the related issue that the IB diploma program is not in tune with holistic learning “as experienced by many cultures, even indigenous cultures” (Paris 2003 p.235).

The discussion begins with an attempt to define international education since that is what IB programs claim to offer. A brief description of each program (primary, middle years and diploma) includes an identification of their transdisciplinary aspects – this is treated separately for the diploma program. This is followed by a discussion of globalisation and internationalisation as applied to IB programs. The paper concludes with a discussion of the extent to which IB programs represent a western-dominated educational paradigm that might conflict with education values and practices in non-western countries.

### WHAT IS INTERNATIONAL EDUCATION?

National public and private schools can, and do, offer excellent international education programs – the latter is not restricted, as was once implied, to international schools with a multicultural student body only. An “internationally-minded” school (see Hill 2000) embraces the above international education components. It is the attitude of mind reflected in both the teaching and administration of the school, rather than the cultural composition or location, which is important.

A curriculum imparts (or causes students to discover) knowledge, and develops skills and attitudes. Most national programs have always included elements which oblige students to know something about the geography and history of other countries, artistic expression from other places, and to learn another language. Alone, these aspects do not constitute an international education, above all if they remain at the level of knowledge only. Students need skills to interpret knowledge which, in turn, leads to the formation of positive attitudes about people whose origins are different from theirs – this is fundamental to the concept of international education at the school level.

The aims of international education were reaffirmed by a UNESCO 1996 (p.9) declaration from the International Conference on Education (ICE), Geneva, 1994 attended by ministers of education of member states. The aims are to develop:

- a sense of universal values for a culture of peace,
- the ability to value freedom and the civic responsibility that goes with it,
- intercultural understanding which encourages the convergence of ideas and solutions to strengthen peace,
- skills of non-violent conflict resolution,
- skills for making informed choices,
- respect for cultural heritage and protection of the environment, and
- feelings of solidarity and equity at the national and international levels.

It is significant that this declaration was accepted by ministers of education representing, of course, *national* education programs. UNESCO's wish has always been that national education systems would inculcate these elements of an international education. Note the use of the words 'respect' and 'feelings' which are attitudinal traits implying values – the culminating aspect of an international education. Note also that each of the above elements, with the exception of the first, can be applied to topics and issues within national borders; when they are applied to topics and issues beyond the nation, they enter the realm of international education.

The *Report to UNESCO of the International Commission of Education for the Twenty-First Century* (Delors 1998) identified four pillars of education: learning to know, learning to do, learning to live together, and learning to be. The pillar which underpins international education more than any other is "learning to live together" and it requires, on a global scale, a high degree of intercultural understanding and empathy.

The essential elements of an international education are:

- understanding cultural identities across national frontiers,
- knowledge about global issues and the interdependence of nations,
- critical thinking skills applied to trans-national issues and world cultures, and
- an appreciation of the human condition around the world.

There are degrees of intercultural understanding that move from the cognitive to the affective domains: from knowledge about other cultures, including language, to skills in speaking other languages and critically analysing the reason behind certain behaviours, to empathy for those of another culture (which does not necessarily mean that we agree with all that the culture represents). The term 'intercultural literacy' (see Heyward's 2002 analysis of the literature) has been coined to explore this complex field. Heyward's model of the development of intercultural

literacy includes degrees of cross-cultural engagement (via friendships and ‘living in’ rather than ‘living alongside’ another culture), language proficiencies, the skill of analysing multiple perspectives, and identity.

Cultural identity is not static: it moves over time and defines itself, in part, by the way it interacts with other cultures. It links closely with an appreciation of the human condition on a global scale. At an extreme, monocultural level, individuals will only see worth in their own cultures and be suspicious of, and even antagonistic towards, others. At a truly intercultural level, individuals attain a transcultural identity, which enables them to shift effortlessly between multiple cultures, at least in their thinking (Heyward 2002 p.17). This is in line with the Lebanese writer Maalouf (2002) who urges us to see a thread of cultures with links to our own or a “multiplicity of allegiances” each with valid points of view. When cultural isolation occurs, it can lead to humiliation, or to being manipulated to feel humiliated. With the right inducement, humiliated people retaliate.

Knowledge about global issues such as lack of fresh water, protection of the environment, maintaining or replacing natural sources of energy, alleviating pollution, economic inequities in trading, and HIV/AIDS, brings out the interdependent nature of global issues. The need for international cooperation and understanding multiple, often competing perspectives becomes apparent.

Critical analysis engages students in reflection on the interpretative nature of knowledge. It makes them aware of the validity and limitations of their own points of view and the extent to which they are influenced by the norms of the cultures to which they belong. As a result, biases may be retained, revised or rejected based on a serious attempt to understand others’ perspectives. The application of critical thinking skills to trans-national, cultural issues, with a view to suggesting solutions, might be illustrated with reference to the fourth aspect of international education.

The nature of the human condition is that there is still an astonishing level of poverty in many countries, deaths through famine and conflict, human rights abuses, and a western suspicion of Islam<sup>1</sup> as a breeding ground for terrorist activity. Unfortunately terrorism is now an international issue that requires careful analysis. Maalouf’s explanation is that terrorists perceive the most developed western countries as contributing to, rather than alleviating these problems. They feel humiliated and “represent” the oppressed through their acts of violence. This is one point of view. Students would need to explore others.

After this brief overview of international education, the next section attempts to indicate how IB programs interpret the concept of international education, and to what extent they adhere to the description of international education above.

### **THE NATURE OF IB PROGRAMS**

Part of the genesis of the IB diploma program during the 1960s was a reaction against the emphasis placed on rote learning and didactic teaching. The new program, like the Middle Years Program (MYP) and the Primary Years Program (PYP) that followed much later, promoted a pedagogy of inter-active class discussion and critical thinking skills, which would recognise a range of perspectives on any issue, particularly global issues. Intercultural understanding and respect for human dignity were threads that ran through the subjects, more apparent in some than

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<sup>1</sup> Of course, the vast majority of Muslims condemn violence. However, as has happened with Christianity over the years, and more recently in Northern Ireland, a minority of people are willing to use religion as a scapegoat for their own political ends.

in others. Preparing students for life-long learning was also important. At the same time, the new program had to satisfy the most stringent university entry requirements so that it would become a recognised passport to higher education, thus facilitating international mobility.

For the IB diploma program, all students must choose a subject from six major discipline areas: a first language, a second language, mathematics (including information sciences), experimental sciences, individuals and societies (humanities), and the arts or another choice from one of the previous groups. Three subjects must be taken at higher level and three at standard level. All students must also complete an extended essay (4,000 words), the theory of knowledge course and creativity, action, service (CAS). These components emphasise respectively research skills, critical thinking skills, and the development of the whole person. The first official IB diplomas were awarded in 1970. In March 2006 there were 1,373 diploma schools in 121 countries.

The MYP, for children from 11 to 16 years, covers the five years of secondary education prior to the IB Diploma Program. It consists of eight major subject groups that must be studied during five years: a first language, a second language, humanities, technology, mathematics, sciences, the arts, physical education. Five “areas of interaction,” or transdisciplinary themes, are at the core of the MYP and find their expression through the traditional subject areas: approaches to learning, community and service, health and social education, environment, and *homo faber*. It is holistic, developing the whole person cognitively and affectively. In March 2006 there were 491 MYP schools in 64 countries.

The IBO offered the PYP in 1997 for children from 3 to 11 or 12 years of age. Six themes – who we are, where we are in time and place, how we express ourselves, how the world works, how we organise ourselves, sharing the planet – provide the framework for exploring traditional subject areas through transdisciplinary units of study with titles such as “childrens’ rights” and “fresh water in the developing world”. The emphasis is on inquiry and the approach is holistic. Identified concepts, skills, attitudes, action, and knowledge provide the structure for purposeful exploration. In March 2006 there were 259 PYP schools in 61 countries.

The IBO’s mission statement of 2003 reads as follows:

The International Baccalaureate Organisation aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the IBO works with schools, governments and international organisations to develop challenging programs of international education and rigorous assessment.

These programs encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right. ([www.ibo.org](http://www.ibo.org))

The statement refers to knowledge, skills and attitudes (“caring,” “compassionate,” “respect”) that support an holistic education and are very much in line with the previous section’s discussion of international education. “Intercultural understanding” requires students to analyse their knowledge about cultural identities to arrive at respect for, but not necessarily agreement with, others.

The text of IB program curriculum guides contains ample evidence of aims, objectives, content and teaching approaches that develop critical thinking skills, an understanding of cultural identities, an appreciation of the interdependence of global issues, and an awareness of the human condition. The following examples are from IB diploma subjects other than literature, languages, social sciences and the arts, which more obviously promote intercultural understanding.

The IB diploma economics guide refers to the commercial inter-dependence of countries and the need to consider different solutions in different cultural circumstances. In business and

management “students should be able to make sense of the forces and circumstances that drive change in an interdependent and multicultural world” (*Business and Management* IBO 2000, p.3).

The first aim for the experimental sciences is to “provide opportunities for scientific study and creativity within global contexts which will stimulate and challenge students” (*Chemistry* IBO 2001, p.6). The moral and ethical implications of scientific advances are explored. The first stated aim of all mathematics programs is to “appreciate the international dimensions of mathematics and the multiplicity of its cultural and historical perspectives” (*Mathematics Higher Level* IBO 2001, p.5).

One of the key aims of the compulsory theory of knowledge course is to “identify values underlying judgements and knowledge claims pertinent to local and global issues” (*Theory of Knowledge* IBO 2001, p.5). The curriculum guide abounds with topic questions such as:

- “What might this Ghanaian proverb mean? ‘If the frog tells you that the crocodile is dead, do not doubt it.’” (p.9)
- “What is the role of culture and language in the perceptual process?” (p.10)
- “Is it correct to think that what constitutes [good logic] varies from discipline to discipline and from culture to culture?” (p.14)
- “Is the scientific method a product unique to western culture, or is it universal?” (p.19)

In March 2006 the total number of IB world schools was 1,765 in 121 countries: 80 of these teach all three IB programs and 198 teach any two programs. Buenos Aires, with 33 IB schools, has the largest number of any city in the world <sup>2</sup>. Today 47 per cent of all IB world schools are public with no tuition fees. The largest number of public schools is in North America, then the Nordic countries, the United Kingdom, The Netherlands, Spain plus a small number elsewhere. IB programs are gaining increasing attention by Australian education authorities with a small number of public schools already authorised by the IBO, particularly in South Australia where Adelaide has the largest number of IB schools (24) of any city in the country and the second largest in the world. The Queensland Studies Authority formally recognised the IB Diploma Program in June 2005; this allows IB diploma holders also to qualify for the award of the Queensland Certificate of Education from 2007. The University of Melbourne, in cooperation with Wesley College and the IB Asia-Pacific regional office, has been offering a Graduate Certificate in International Education for teachers interested in the PYP from 2005.

### **HOLISM AND TRANSDISCIPLINARITY IN THE IB DIPLOMA PROGRAM**

Miller (1991 p.3) has described four characteristics of holistic education:

- development of the whole person at cognitive and affective levels,
- benefiting from relationships through mutual respect for the beliefs and values of others,
- gaining life experience through internal growth, understanding and learning, and
- critical self-evaluation.

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<sup>2</sup> Curiously Heggan (quoted in Paris 2003 p233) states that Adelaide is the second largest city for IB schools after Quebec (presumably the author meant the city and not the province with 109 schools, otherwise we would not be comparing like with like). IBO statistics in March 2006 indicate that there are 24 schools in Adelaide and six in Quebec city, both behind Buenos Aires.

According to the president of the International Centre for Research in Transdisciplinary Studies, the term 'transdisciplinarity' in education refers at once to links from one subject to another, topics that can be treated across subjects, and the idea that 'unity of knowledge' assists us to understand our world (Nicolescu 2005). There may be some similarity between 'holism' and 'unity of knowledge'. This is not the place to explore or challenge these definitions; they are accepted for the purpose of this paper.

Paris (2003 p.235) feels that the IB diploma program is compartmentalised "rather than opting for a holistic approach to education, as experienced by many cultures, even indigenous cultures." He attributes this to the demands of western universities who determine entrance criteria based on the compartmentalisation of knowledge. It is true that the IB diploma program is the more "traditional" and the more compartmentalised of any of the three IB programs because the IB diploma must defer to the entry criteria of universities world wide (although it has also been successful in changing those criteria in a small number of cases). Many higher education institutions remain quite traditional. So, curriculum innovation within the IB diploma program has to be undertaken prudently.

However, in spite of the demands of universities, there **are** holistic and transdisciplinary features of the diploma program. The compulsory theory of knowledge (TOK) course explores and compares knowledge claims across the major discipline areas and across cultures using critical thinking skills. It is often delivered by teachers from different subject areas sharing their perceptions with the TOK class. TOK encourages staff to identify links with other subject areas when teaching their own subject. The content of TOK goes beyond western thinking as the example above has already shown. There is also a group science project that must be done as part of internal assessment across two physical sciences or a physical science and one other subject. This promotes cooperation amongst students working in a group and develops an appreciation of the connectedness of knowledge. Compulsory creativity, action and service (CAS) takes place as a regular activity and often involves creative action and service elements occurring at the same time. CAS contributes to holistic education as it develops the whole person through experiential learning, encouraging empathy and respect for others and critical self-reflection.

Finally, the IBO has developed three transdisciplinary diploma subjects at standard level that have been piloted by a small group of schools before they are adjusted and placed on so-called 'open offer':

- Text and Performance (literature and the arts),
- Ecosystems and Societies (humanities and experimental sciences), and
- World Cultures (humanities and the arts).

Paris (2003, p.242) rightly points out that the IB diploma program is not a pathway into vocational education. However, during the latter part of 2004, the IBO commenced two pilot projects with national authorities in Finland and Quebec to explore the offering of some generic IB courses that would lead to more specialised vocational programs. This includes the development of a vocational theory of knowledge course which emphasises the inter-relatedness of learning.

All IB programs encourage students to understand that knowledge is usually inter-related, reciprocally influential and mutually supportive<sup>3</sup>.

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<sup>3</sup> The IB program guides and details on the philosophical and pedagogical underpinnings (the series *A basis for practice*) can be downloaded from [www.ibo.org](http://www.ibo.org)

## GLOBALISATION AND INTERNATIONALISATION APPLIED TO IB PROGRAMS

Paris (2003, p.235) defines globalisation as an imposition “of ideas involving a dominant-recessive relationship. Internationalisation occurs when there is a sharing of ideas, where ideas are utilised, agreed upon, and mutually accepted.” In the same vein, Vidovich (2004 p.444), with reference to Taylor *et al.* (1997), notes that ‘internationalisation’ refers more to multi-lateral relationships between nation states, whereas ‘globalisation’ focuses on the supranational level and tends to be interpreted as an ideology which privileges market approaches to public policy making. Gough (2003, p.54) confirms Paris’ distinction between internationalisation and globalisation when he says:

... producing a global knowledge economy in/for an internationalised curriculum field can be understood as creating transnational *spaces* in which local knowledge traditions can be performed together, rather than trying to create a global common market in which representations of local knowledge must be translated into (or exchanged for) the terms of a universal discourse.

The negative connotations of the term ‘globalisation’ are reiterated by Smith (2003, p.36):

So it is that globalisation is fraught with various new kinds of identity crises, ranging from eroding senses of national identity to unprecedented losses of indigenous languages and cultures under the homogenising pressures of global capital.

Smith’s paper is an *exposé* of three forms of globalisation commencing with radical liberalism in the 1980s, which then led to reactions of accommodation or resistance. The third globalisation is an emerging world-wide dialogue about sustainable human development for the future, which the author hopes will lead to internationalisation as defined above.

Walker (2004, p.78-79) also discusses three theories of globalisation that coincide quite nicely with those of Smith although they were arrived at independently. “Hyperglobalists” see the nation states subsumed by single, overarching world policies. As Walker notes, this means, in educational terms, that the IBO would be offering a single system of education that is not only validated across the world but is used by all the world – that is, globalised – in the same way that the World Trade Centre attempts to develop a global trading system. “Global sceptics” (the resistance movement in Smith’s model) do not like world systems and see the importance of regions and countries working in harmony. From this perspective, IB programs assist internationally mobile parents to educate their children and provides an interesting alternative in schools in some national systems but it does not supplant any national system. The third group, “transformationalists,” consider how global trends might transform what is national and local without losing the national identity. IB programs have influenced the educational offerings of a number of governments<sup>4</sup> and not detracted from their distinctiveness.

The fact is that education will remain a national or regional priority. It was because of national sovereignty concerning education that UNESCO decided not to take the IBO under its wing in 1976 (Peterson 2003, p.97). UNESCO has a ‘definition’ of education as the reader has seen above, but it is encouraged, not imposed, and it leaves much room for national curriculum content and pedagogy. Underwriting any one educational system, even an international one, would have

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<sup>4</sup> Here are three examples. In 1989 the subject “Systems of Knowledge,” inspired by the IBO’s Theory of Knowledge, was introduced into the Maltese national curriculum. In Switzerland a “Travail de Maturité”, based on the IB diploma Extended Essay, was introduced in 2001. From 2002 a new elective called Knowledge and Inquiry, inspired by the IB Theory of Knowledge course, has been offered in Singapore.

been politically difficult as well as technically impossible to implement (given the large discrepancies of resources between developed and developing nations); it would have been outside the remit of UNESCO, which is to promote cooperation and best practice between its nation states. IB programs do not seek to supplant or over-ride national systems; national (government and private) and international schools choose to do them or not. IB programs are developed by sharing ideas amongst practising teachers and curriculum writers from different corners of the globe and program committees, representing different cultures, make collective decisions about curriculum, assessment and pedagogical approaches.

The IBO provides extensive published material, on-line support and teacher training workshops around the world for all its programs. Paris (2003, p.235) sees this as globalisation with a potential danger: a homogenisation of educational ideas which subsumes cultural and national diversity. The MYP and PYP have very little prescribed content – they offer rather a pedagogical framework in which skills to be developed are identified – so they are more amenable to the inclusion of national or local content. The diploma program is the most prescriptive in terms of content; even so, a degree of choice is given within some subjects. More importantly, deference to cultural diversity is one of the planks on which all IB programs are based. The IB diploma history course is based on the premise that the same historical event will be seen through different cultural and national lenses which can lead to quite varied points of view. Each year the history examination paper has a question asking students to analyse critically two different texts written by historians from varied cultural backgrounds about the same event.

### **WESTERN DOMINATION VIA IB PROGRAMS?**

Paris (2003, p.235) states:

Fundamentally, each culture that chooses to run with the IB-DP [diploma program] potentially relinquishes its values and practices of education in exchange for those of the western world. From this perspective, the IB-DP is very much a process of globalisation rather than a process of internationalisation.

Paris is right in that the IBO promotes a style of international education that requires an open-minded, inter-active teaching approach and the development of critical thinking skills, neither of which sits well in some non-western cultures. But is it true that a non-western culture that adopts an IB program virtually relinquishes its values and educational practices? Yes and no. The following comments are based on this writer's experience during 12 years of professional visits to schools and ministries of education in many different countries.

No one culture adopts an IB program. The situation is more nuanced. It is individual schools that are approved to offer IB programs, not any particular culture as such. As Paris (2003, p. 234) has noted, state schools at the local level have the autonomy to offer an IB program in highly decentralised national systems like the United States, the United Kingdom and Australia. An international school will have a large mix of cultures; these schools usually choose IB programs because they accommodate different cultural viewpoints without imposing any one of them. Most national schools – private or state – will have a preponderance of students from the culture(s) found in the country, or the particular part of the country, together with some students from other cultures. It is in national schools where we usually find a dominant culture.

In the Middle East, for example, a number of national private schools in Bahrain, Jordan, Lebanon, Qatar, and the United Arab Emirates have adopted the IB diploma program. In these schools the majority of students are from the country itself or neighbouring Arabic nations with a smaller number of students from India and Pakistan. There are few students in these schools from a western culture. Why did these schools adopt the IB diploma program? They did so in order that

their students could improve their English, could qualify to attend universities in North America, the United Kingdom or Australia, and could develop intercultural understanding<sup>5</sup>. These students and their parents represent those of the national culture who see value in international connections and moving beyond their own frontiers. They do not relinquish their national culture to do so; they adopt Maalouf's (2000) "multiple allegiances" approach to other cultures. They have an enriched, international cultural perspective in which their own culture is an important point of reference for understanding the others. Now this already requires an attitude open to other ideas. Within any one culture there is rarely a uniform set of behaviours except for honoured traditions. The test of openness is to see how people react to behaviour and ideas from other cultures ... and this openness depends very much on upbringing, education and experience. All developed countries have pockets of their populations, some of them isolated from the main urban centres, who are suspicious of so-called 'strangers' coming from the next town or province, not to mention coming from another nation. They cling to local traditions and are not interested in other perspectives. Their view is strengthened when the government education program is parochial. They would not adopt an IB program in their schools. Others of the same national culture are curious about different customs and prepared to meet with strangers, to learn of new ideas, and to empathise. It is those parents who enrol their children in an IB program.

IB philosophy has always championed the importance of one's own culture in developing a multicultural perspective. A former Director General of the IBO encapsulated it this way, and at a time when only the IB diploma program existed:

The honesty of the IB stems from the fact that we require all students to relate first to their own national identity - their own language, literature, history and cultural heritage, no matter where in the world this may be. Beyond that we ask that they identify with the corresponding traditions of others. It is not expected that they adopt alien points of view, merely that they are exposed to them and encouraged to respond intelligently. The end result, we hope, is a more compassionate population, a welcome manifestation of national diversity within an international framework of tolerant respect. Ideally, at the end of the IB experience, students should know themselves better than when they started while acknowledging that others can be right in being different (Peel 1988).

The IBO does not, however, promote infinite tolerance. Actions such as denying basic human rights and killing innocent people are not, of course, condoned for any reason. On the other hand, the IBO wants its students to try to understand what drives people to such extremes in an effort to identify the causes and suggest ways of removing those causes where this is possible.

It is interesting to note on a national scale that a number of western countries accept IB programs in their state schools – for example, United States, Canada, United Kingdom, all Nordic countries, the Netherlands, Spain, Poland, Croatia, Hungary, Australia. On the other hand, there are virtually no non-western countries with an IB program in a state school. This might indicate that the government authorities are afraid of their own national values being contaminated or diminished (which would support Paris' claim) by an external program or, as this writer has experienced, that the quality of their own educational approach will be questioned if they introduce a 'foreign' program. Either way it is understandably a question of national pride.

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<sup>5</sup> The pragmatic reasons are essential for the financial viability of the schools and are verifiable by looking at the destinations of the IB diploma graduates each year. The idealistic reason of intercultural understanding is less verifiable: it may not initially be paramount in the minds of school administrators, parents and students, but it can become an important "by-product" in their eyes as students progress through the courses.

However, Cambodia is an exception. The IBO signed a contract with the Ministry of Education in October 2003 to provide training of lecturers, administrators and teachers in “child centred” and “child friendly” interactive primary school learning based on PYP pedagogy, adapted to local conditions and needs, but not using the PYP *per se*. The training will be completed in December 2006 and is successfully done through translation into Khmer. This project is impacting on the whole of primary school teaching in the country. The lecturers, teachers and ministry of education are fully supportive and positive results have already been noticed in a number of schools. Local content preserves a national dimension, but the approach is that of dialogue, questioning and critical thinking skills, not attributes which one might readily associate with an Asian country’s education system. Is it that Pol Pot’s appalling suppression of expression and intellectual endeavour for so many years has produced an incentive to move dramatically in the opposite direction? In any case, here is a whole government system at primary level happily espousing IB educational philosophy that has been developed from a western humanist tradition of learning, but which, because of that very tradition, seeks to accommodate and validate other modes of thinking and acting.

A much smaller project, again using PYP pedagogy adapted to local conditions and undertaken jointly with the Ministry of Education, is taking place in a state primary school in Casablanca, Morocco in French and Arabic. This is regarded as a model school for action research into curriculum development and teacher training that could have more wide-ranging effects in that country.

However, it would take some careful research to see just how far the Cambodian and Moroccan ministries have been able to accommodate the western educational paradigm, particularly concerning critical thinking skills.

## CONCLUSIONS

So, are IB programs a process of globalisation? Walker (2004 p.79) thinks not: “The IBO offers an education system throughout the world but not **for** the world.” International education must remain flexible enough to accommodate local educational needs if it is to exist in national systems. The relationship between national systems and international education should be one of symbiosis (as Paris 2003 p.242 notes), not one of supranational sovereignty.

The development of IB programs are based on the sharing of ideas with stakeholders. Staff from schools that have chosen to offer IB programs participate: some through membership on curriculum revision and other academic committees (such as research or professional development), others on governance committees; many teachers and school administrators become assistant examiners or workshop leaders. The IBO also consults all schools when curriculum changes are proposed. Projects to provide more access to IB-style education (as distinct from the full IB programs themselves) for those who cannot afford it have been accepted and successfully implemented, even in some non-Western cultures that wish to adopt more dynamic pedagogical models *à la IBO*. This changes the teaching methodology in the country but does not seem to impinge on the cultural values of the societies concerned (although this needs confirmation through research).

The IBO furnishes an un-imposed, international education whose philosophy and pedagogical approach stem from western traditions but which explores and legitimises non-western modes of expression and thought. This is internationalisation, not globalisation.

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